Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6

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1.4 coreutils 8.30 3

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1.6 tzdata 2021e 0ubuntu0.20.04

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1.7 opencv 4.1.1

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1.11 swagger-integration 2.1.9

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Manifest-Version: 1.0
Bundle-Description: swagger-integration
Automatic-Module-Name: io.swagger.v3.oas.integration
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package: io.swagger
Bundle-SymbolicName: io.swagger.core.v3.swagger-integration
implementation-version: 2.1.9
Built-By: runner
Bundle-ManifestVersion: 2
Bundle-DocURL: https://github.com/swagger-api/swagger-core/modules/swagger-integration
Import-Package: com.fasterxml.jackson.annotation;version="[2.12,3)",com.fasterxml.jackson.databind;version="[2.12,3)",com.fasterxml.jackson.databind.annotation;version="[2.12,3)",io.github.classgraph;version="[4.8,5)",io.swagger.v3.core.converter;version="[2.1,3)",io.swagger.v3.core.jackson;version="[2.1,3)",io.swagger.v3.core.util;version="[2.1,3)",io.swagger.v3.oas.annotations;version="[2.1,3)",io.swagger.v3.oas.integration,io.swagger.v3.oas.integration.api,io.swagger.v3.oas.mo
1.12 **libjpeg 8d**

1.12.1 **Available under license**:

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It is partly based on the libjpeg6a package originally put together by Andy Guy <awpguy@acs.ucalgary.ca> and later maintained by Mark Mickan.

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This package was created by Mark Mickan <mmickan@debian.org> from sources which can be found at ftp://ftp.uu.net/graphics/jpeg/jpegsrc.v6b.tar.gz

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1.13 webrtc m44

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common_audio/signal_processing/spl_sqrt_floor_arm.S
modules/audio_coding/codecs/g711/main/source/g711.c
modules/audio_coding/codecs/g711/main/source/g711.h
modules/audio_coding/codecs/g722/main/source/g722_decode.c
modules/audio_coding/codecs/g722/main/source/g722_encode.c
modules/audio_coding/codecs/isac/main/source/fft.c
modules/audio_device/mac/portaudio/pa_memorybarrier.h
modules/audio_device/mac/portaudio/pa_ringbuffer.c
modules/audio_device/mac/portaudio/pa_ringbuffer.h
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system_wrappers/source/condition_variable_event_win.cc
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common_audio/signal_processing/spl_sqrt_floor_arm.S

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 * Date: Fri, Jun 24, 2011 at 3:20 AM
 * Subject: Re: sqrt routine
 * To: Kevin Ma <kma@google.com>
 * Hi Kevin,
* Thanks for asking. Those routines are public domain (originally posted to
* comp.sys.arm a long time ago), so you can use them freely for any purpose.
* Cheers,
* Wilco
*
* ----- Original Message ----- 
* From: “Kevin Ma” <kma@google.com>
* To: <Wilco.Dijkstra@ntlworld.com>
* Sent: Thursday, June 23, 2011 11:44 PM 
* Subject: Fwd: sqrt routine
* Hi Wilco,
* I saw your sqrt routine from several web sites, including
* http://www.finesse.demon.co.uk/steven/sqrt.html.
* Just wonder if there's any copyright information with your Successive
* approximation routines, or if I can freely use it for any purpose.
* Thanks.
* Kevin
*/

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modules/audio_device/mac/portaudio/pa_memorybarrier.h
modules/audio_device/mac/portaudio/pa_ringbuffer.c
modules/audio_device/mac/portaudio/pa_ringbuffer.h

License:
/
* $Id: pa_memorybarrier.h 1240 2007-07-17 13:05:07Z bjornroche $
* Portable Audio I/O Library
* Memory barrier utilities
*
* Author: Bjorn Roche, XO Audio, LLC
*
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*/
/*
 * $Id: pa_ringbuffer.c 1421 2009-11-18 16:09:05Z bjornroche $
 * Portable Audio I/O Library
 * Ring Buffer utility.
 *
 * Author: Phil Burk, http://www.softsynth.com
 * modified for SMP safety on Mac OS X by Bjorn Roche
 * modified for SMP safety on Linux by Leland Lucius
 * also, allowed for const where possible
 * modified for multiple-byte-sized data elements by Sven Fischer
 *
 * Note that this is safe only for a single-thread reader and a
 * single-thread writer.
 *
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modules/audio_processing/aec/aec_rdft.c

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1.14 curl 7.68.0 1ubuntu2.7

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==============
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Gnomovision version 69, Copyright (C) year name of author
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This is free software, and you are welcome to redistribute it under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may
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file_io/unix/mktemp.c, strings/apr_strings.c:

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From network_io/unix/inet_ntop.c, network_io/unix/inet_pton.c:

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From strings/apr_strnatcmp.c, include/apr_strings.h:

strnatcmp.c -- Perform 'natural order' comparisons of strings in C.
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1.23 ldns 1.7.1

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*/
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* FILE: sha2.c
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*
* Modified by Jelte Jansen to fit in ldns, and not clash with any
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* Changes:
* - Renamed (external) functions and constants to fit ldns style
* - Removed _End and _Data functions
* - Added ldns_shaX(data, len, digest) convenience functions
* - Removed prototypes of _Transform functions and made those static
*
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1.25 util-linux 2.20.0

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* /opt/cola/permits/1135864284_1613618157.58/0/spring-retry-1-2-5-release-sources-1-jar/org/springframework/retry/policy/CircuitBreakerRetryPolicy.java
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/* nicstar.c  v0.22  Jawaid Bazyar (bazyar@hypermall.com)
 * nicstar.c, M. Welsh (matt.welsh@cl.cam.ac.uk)
 */

* Hacked October, 1997 by Jawaid Bazyar, Interlink Advertising Services Inc.
* http://www.hypermall.com/
* 10/1/97 - commented out CFG_PHYIE bit - we don't care when the PHY
* interrupts us (except possibly for removal/insertion of the cable?)
* 10/4/97 - began heavy inline documentation of the code. Corrected typos
* and spelling mistakes.
* 10/5/97 - added code to handle PHY interrupts, disable PHY on
* loss of link, and correctly re-enable PHY when link is
* re-established. (put back CFG_PHYIE)
* 
* Modified to work with the IDT7721 nicstar -- AAL5 (tested) only.
* 
* R. D. Rechenmacher <ron@fnal.gov>, Aug. 6, 1997
* 
* Linux driver for the IDT77201 NICStAR PCI ATM controller.
* PHY component is expected to be 155 Mbps S/UNI-Lite or IDT 77155;
* see init_nicstar() for PHY initialization to change this. This driver
* expects the Linux ATM stack to support scatter-gather lists
* (skb->atm.iovcnt != 0) for Rx skb's passed to vcc->push.
* 
* Implementing minimal-copy of received data:
* IDT always receives data into a small buffer, then large buffers
* as needed. This means that data must always be copied to create
* the linear buffer needed by most non-ATM protocol stacks (e.g. IP)
* Fix is simple: make large buffers large enough to hold entire
* SDU, and leave <small_buffer_data> bytes empty at the start. Then
* copy small buffer contents to head of large buffer.
* Trick is to avoid fragmenting Linux, due to need for a lot of large
* buffers. This is done by 2 things:
* 1) skb->destructor / skb->atm.recycle_buffer
* combined, allow nicstar_free_rx_skb to be called to
* recycle large data buffers
* 2) skb_clone of received buffers
* See nicstar_free_rx_skb and linearize_buffer for implementation
* details.
* 
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M. Welsh, 6 July 1996

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for his contributions to the dvb-net driver

Diego Picciani <d.picciani@novacomp.it>
for CyberLogin for Linux which allows logging onto EON
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for merging the nxt2002 and nxt2004 modules into a 
single nxt200x frontend driver.

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That's all there is to it!
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  Many optimizations in libsensors and sensors.
  Configuration file converter.
  Rewrite of sensors-detect.
  Support for multiple configuration files in libsensors.

1.32 bolt 1.2.1
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1.49 flex 2.5.35

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1.50 libatomic-ops 1.2

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* /opt/ws_local/PERMITS_SQL/1081949386_1599626452.65/0/spring-security-config-5-3-4-release-sources-jar/org/springframework/security/config/provisioning/UserDetailsManagerResourceFactoryBean.java
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To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

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Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using
a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

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A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification").

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

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2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

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If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)
Otherwise, if the work is a derivative of the Library, you may
distribute the object code for the work under the terms of Section 6.
Any executables containing that work also fall under Section 6,
whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or
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modification of the work for the customer's own use and reverse
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directing the user to the copy of this License. Also, you must do one
of these things:

a) Accompany the work with the complete corresponding
machine-readable source code for the Library including whatever
changes were used in the work (which must be distributed under
Sections 1 and 2 above); and, if the work is an executable linked
with the Library, with the complete machine-readable "work that
uses the Library", as object code and/or source code, so that the
user can modify the Library and then relink to produce a modified
executable containing the modified Library. (It is understood
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to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the
Library. A suitable mechanism is one that (1) uses at run time a
copy of the library already present on the user's computer system,
rather than copying library functions into the executable, and (2)
will operate properly with a modified version of the library, if
the user installs one, as long as the modified version is
interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at
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than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy
from a designated place, offer equivalent access to copy the above
specified materials from the same place.
e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

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It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

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Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

The precise terms and conditions for copying, distribution and modification follow.

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To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work.

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The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

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org.ehcache.jsr107.internal.Jsr107CacheConfigurationParser

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1.76 jackson-datatype-jsr310 2.11.2

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* /opt/cola/permits/1258059359_1643027217.37/0/ehcache-107-3-8-1-sources-jar/org/ehcache/jsr107/ConfigurationMerger.java
* /opt/cola/permits/1258059359_1643027217.37/0/ehcache-107-3-8-1-sources-jar/org/ehcache/jsr107/config/Jsr107Configuration.java
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Contributors to bttv:

    Michael Chu <mmchu@pobox.com>
    AverMedia fix and more flexible card recognition

    Alan Cox <alan@lxorguk.ukuu.org.uk>
    Video4Linux interface and 2.1.x kernel adaptation

    Chris Kleitsch
    Hardware I2C

    Gerd Knorr <kraxel@cs.tu-berlin.de>
    Radio card (ITT sound processor)
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[Mathis the first released version of the library GPL. It is
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/* nicstar.c v0.22  Jawaid Bazyar (bazyar@hypermall.com)
* nicstar.c, M. Welsh (matt.welsh@cl.cam.ac.uk)
*
* Hacked October, 1997 by Jawaid Bazyar, Interlink Advertising Services Inc.
* http://www.hypermall.com/
* 10/1/97 - commented out CFG_PHYIE bit - we don't care when the PHY
* interrupts us (except possibly for removal/insertion of the cable?)
* 10/4/97 - began heavy inline documentation of the code. Corrected typos
* and spelling mistakes.
* 10/5/97 - added code to handle PHY interrupts, disable PHY on
* loss of link, and correctly re-enable PHY when link is
* re-established. (put back CFG_PHYIE)
*
* Modified to work with the IDT7721 nicstar -- AAL5 (tested) only.
*
* R. D. Rechenmacher <ron@fnal.gov>, Aug. 6, 1997
*
* Linux driver for the IDT77201 NICStAR PCI ATM controller.
* PHY component is expected to be 155 Mbps S/UNI-Lite or IDT 77155;
* see init_nicstar() for PHY initialization to change this. This driver
* expects the Linux ATM stack to support scatter-gather lists
* skb->atm.iovcnt != 0) for Rx skb's passed to vcc->push.
*
* Implementing minimal-copy of received data:
* IDT always receives data into a small buffer, then large buffers
* as needed. This means that data must always be copied to create
* the linear buffer needed by most non-ATM protocol stacks (e.g. IP)
* Fix is simple: make large buffers large enough to hold entire
* SDU, and leave <small_buffer_data> bytes empty at the start. Then
* copy small buffer contents to head of large buffer.
* Trick is to avoid fragmenting Linux, due to need for a lot of large
* buffers. This is done by 2 things:
* 1) skb->destructor / skb->atm.recycle_buffer
* combined, allow nicstar_free_rx_skb to be called to
recycle large data buffers
2) skb_clone of received buffers
See nicstar_free_rx_skb and linearize_buffer for implementation
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* M. Welsh, 6 July 1996

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for CyberLogin for Linux which allows logging onto EON
(in case you are wondering where CyberLogin is, EON changed its login procedure and CyberLogin is no longer used.)

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 */

/**
 * Determines if the {@link #getAuthentication()} has permission to access the target
 * given the permission
 * @param target the target domain object to check permission on
 */
* @param permission the permission to check on the domain object (i.e. "read", "write", etc).
* @return true if permission is granted to the {link getAuthentication()}, else false
*/

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* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-jar/org/springframework/security/authorization/AuthorityReactiveAuthorizationManager.java
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* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-jar/org/springframework/security/provisioning/JdbcUserDetailsManager.java
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 */

/**
 * @param authentication represents the user in question. Should not be null.
 * @param targetDomainObject the domain object for which permissions should be
 * checked. May be null in which case implementations should return false, as the null
 * condition can be checked explicitly in the expression.
 * @param permission a representation of the permission object as supplied by the
 * expression system. Not null.
 * @return true if the permission is granted, false otherwise
 */

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 */
/**
 * Base64 encoder which is a reduced version of Robert Harder's public domain
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 * href="http://iharder.sourceforge.net/current/java/base64/"">http://iharder.sourceforge.net/current/java/base64/</a>
 * for more information.
 * For internal use only.
 * @author Luke Taylor
 * @since 3.0
 * @deprecated Use java.util.Base64
 */

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* <p>
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* {@link TokenService} are free to use encryption or encoding strategies of their choice.
* It is strongly recommended that keys are of sufficient length to balance safety against
* persistence cost. In relation to persistence cost, it is strongly recommended that
* returned keys are small enough for encoding in a cookie.
* </p>
* @author Ben Alex
* @since 2.0.1
*/

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* /opt/ws_local/PERMITS_SQL/1081949690_159626417.25/0/spring-security-core-5-3-4-release-sources-jar/org/springframework/security/access/method/AbstractFallbackMethodSecurityMetadataSource.java
* /opt/ws_local/PERMITS_SQL/1081949690_159626417.25/0/spring-security-core-5-3-4-release-sources-jar/org/springframework/security/core/authority/SimpleGrantedAuthority.java
* /opt/ws_local/PERMITS_SQL/1081949690_159626417.25/0/spring-security-core-5-3-4-release-sources-jar/org/springframework/security/core/authority/mapping/GrantedAuthoritiesMapper.java
* /opt/ws_local/PERMITS_SQL/1081949690_159626417.25/0/spring-security-core-5-3-4-release-sources-jar/org/springframework/security/authentication/InternalAuthenticationServiceException.java
* /opt/ws_local/PERMITS_SQL/1081949690_159626417.25/0/spring-security-core-5-3-4-release-sources-jar/org/springframework/security/access/prepost/PostInvocationAttribute.java
* /opt/ws_local/PERMITS_SQL/1081949690_159626417.25/0/spring-security-core-5-3-4-release-sources-jar/org/springframework/security/access/prepost/PostFilter.java
* /opt/ws_local/PERMITS_SQL/1081949690_159626417.25/0/spring-security-core-5-3-4-release-sources-jar/org/springframework/security/access/intercept/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949690_159626417.25/0/spring-security-core-5-3-4-release-sources-jar/org/springframework/security/access/prepost/PreInvocationAuthorizationAdviceVoter.java
* /opt/ws_local/PERMITS_SQL/1081949690_159626417.25/0/spring-security-core-5-3-4-release-sources-jar/org/springframework/security/core/authority/mapping/GrantedAuthoritiesMapper.java
jar/org/springframework/security/access/expression/SecurityExpressionHandler.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
jar/org/springframework/security/core/userdetails/cache/SpringCacheBasedUserCache.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
jar/org/springframework/security/task/DelegatingSecurityContextTaskExecutor.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
jar/org/springframework/security/access/method/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
jar/org/springframework/security/access/expression/method/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
jar/org/springframework/security/core/userdetails/memory/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
jar/org/springframework/security/access/hierarchicalroles/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
jar/org/springframework/security/access/hierarchicalroles/CycleInRoleHierarchyException.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
jar/org/springframework/security/core/CredentialsContainer.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
jar/org/springframework/security/authentication/AccountStatusUserDetailsChecker.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
jar/org/springframework/security/core/token/DefaultToken.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
jar/org/springframework/security/access/intercept/aspectj/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
jar/org/springframework/security/access/intercept/aspectj/DefaultToken.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
jar/org/springframework/security/access/intercept/aspectj/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
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* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/access/method/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/authentication/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/access/prepost/PreAuthorize.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/authentication/ JAAS/memory/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/access/prepost/ PostInvocationAuthorizationAdvice.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/core/ parameters/DefaultSecurityParameterNameDiscoverer.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/access/ expression/AbstractSecurityExpressionHandler.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/authentication/ dao/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/access/ prepost/PostInvocationAuthorizationAdvice.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/ authentication/AuthenticationEventPublisher.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/ crypto/codec/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/access/ core/authority/mapping/SimpleAuthorityMapper.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/access/ expression/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/access/ expression/method/PostInvocationExpressionAttribute.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/access/ annotation/Jsr250Voter.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/concurrent/ DelegatingSecurityContextExecutorService.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/core/ token/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/provisioning/ MutableUserDetails.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/access/ annotation/Jsr250SecurityConfig.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/access/ intercept/aopalliance/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/access/hierarchicalroles/ RoleHierarchy.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/access/hierarchicalroles/ NullRoleHierarchy.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/core/ authority/mapping/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/access/ expression/method/MethodSecurityExpressionHandler.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/authentication/ event/package-info.java
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jar/org/springframework/security/access/prepost/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
jar/org/springframework/security/access/prepost/PreInvocationAttribute.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
jar/org/springframework/security/access/expression/method/ExpressionBasedPostInvocationAdvice.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
jar/org/springframework/security/core/token/TokenService.java

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  jar/org/springframework/security/jackson2/CoreJackson2Module.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
  jar/org/springframework/security/jackson2/UserMixin.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
  jar/org/springframework/security/jackson2/UnmodifiableSetDeserializer.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
  jar/org/springframework/security/jackson2/UnmodifiableSetMixin.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
  jar/org/springframework/security/jackson2/RememberMeAuthenticationTokenMixin.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
  jar/org/springframework/security/jackson2/SimpleGrantedAuthorityMixin.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
  jar/org/springframework/security/jackson2/UsernamePasswordAuthenticationTokenMixin.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
  jar/org/springframework/security/jackson2/AnonymousAuthenticationTokenMixin.java

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jar/org/springframework/security/crypto/scrypt/SCryptPasswordEncoder.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
jar/org/springframework/security/converter/RsaKeyConverters.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
jar/org/springframework/security/core/userdetails/UserDetailsPasswordService.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
jar/org/springframework/security/crypto/argon2/Argon2PasswordEncoder.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
jar/org/springframework/security/authentication/ReactiveAuthenticationManagerAdapter.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
jar/org/springframework/security/authentication/ReactiveAuthenticationManagerResolver.java

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  jar/org/springframework/security/access/AccessDecisionVoter.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
  jar/org/springframework/security/access/intercept/MethodInvocationPrivilegeEvaluator.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
  jar/org/springframework/security/util/FieldUtils.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
  jar/org/springframework/security/core/session/SessionRegistry.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
  jar/org/springframework/security/authentication/rcp/RemoteAuthenticationManager.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
  jar/org/springframework/security/authentication/AuthenticationTrustResolver.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
  jar/org/springframework/security/access/annotation/Secured.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
  jar/org/springframework/security/access/event/PublicInvocationEvent.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
  jar/org/springframework/security/access/event/AbstractAuthorizationEvent.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
  jar/org/springframework/security/access/vote/AuthenticatedVoter.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
  jar/org/springframework/security/access/intercept/aopalliance/MethodSecurityInterceptor.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-
  jar/org/springframework/security/authentication/LockedException.java
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* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-jar/org/springframework/security/core/userdetails/UserDetailsService.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-jar/org/springframework/security/authentication/event/AuthenticationFailureCredentialsExpiredEvent.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-jar/org/springframework/security/authentication/event/AuthenticationFailureProviderNotFoundException.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-jar/org/springframework/security/core/SpringSecurityMessageSource.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-jar/org/springframework/security/core/context/InheritableThreadLocalSecurityContextHolderStrategy.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-jar/org/springframework/security/access/vote/UnanimousBased.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-jar/org/springframework/security/authenticationsrc/jaas/AuthorityGranter.java
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/**
 * Reviews the <code>Object</code> returned from a secure object invocation, being able to
 * modify the <code>Object</code> or throw an <code>AccessDeniedException</code>.
 * 
 * Typically used to ensure the principal is permitted to access the domain object
 * instance returned by a service layer bean. Can also be used to mutate the domain object
 * instance so the principal is only able to access authorised bean properties or
 * <code>Collection</code> elements.
 * 
 * Special consideration should be given to using an <code>AfterInvocationManager</code>
 * on bean methods that modify a database. Typically an
 * <code>AfterInvocationManager</code> is used with read-only methods, such as
 * <code>public DomainObject getById(id)</code>. If used with methods that modify a
 * database, a transaction manager should be used to ensure any
 * <code>AccessDeniedException</code> will cause a rollback of the changes made by the
 * transaction.
 */
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* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-jar/org/springframework/security/access/intercept/AfterInvocationManager.java

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* /opt/cola/permits/1258059276_1643027393.71/0/ehcache-xml-3-8-1-sources-jar/org/ehcache/xml/exceptions/XmlConfigurationException.java
* /opt/cola/permits/1258059276_1643027393.71/0/ehcache-xml-3-8-1-sources-jar/org/ehcache/xml/jaxb/XmlModel.java
* /opt/cola/permits/1258059276_1643027393.71/0/ehcache-xml-3-8-1-sources-jar/org/ehcache/xml/provider/WriteBehindProviderConfigurationParser.java
* /opt/cola/permits/1258059276_1643027393.71/0/ehcache-xml-3-8-1-sources-jar/org/ehcache/xml/provider/ThreadPoolServiceCreationConfigurationParser.java
* /opt/cola/permits/1258059276_1643027393.71/0/ehcache-xml-3-8-1-sources-jar/org/ehcache/xml/provider/ThreadPoolServiceCreationConfigurationParser.java
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* /opt/cola/permits/1258059276_1643027393.71/0/ehcache-xml-3-8-1-sources-jar/org/ehcache/xml/ServiceConfigurationParser.java
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1.98 giflib 5.2.1

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1.106 jansi-osx 1.8

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* /opt/cola/permits/1257860178_1643019491.32/0/jansi-osx-1-8-sources-jar/org/fusesource/jansi/internal/Kernel32.java
* /opt/cola/permits/1257860178_1643019491.32/0/jansi-osx-1-8-sources-
1.107 sequence-generator 5.7.3

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Manifest-Version: 1.0
Bnd-LastModified: 1563545580901
Build-Jdk: 1.8.0_202
Built-By: jenkins-slave
Bundle-Description: A set of Java modules for management and monitoring, common to several Terracotta products
Bundle-License: http://www.apache.org/licenses/LICENSE-2.0.txt
Bundle-ManifestVersion: 2
Bundle-Name: Terracotta Management :: Sequence Generator
Bundle-SymbolicName: org.terracotta.management.sequence-generator
Bundle-Version: 5.7.3
Created-By: Apache Maven Bundle Plugin
Export-Package: org.terracotta.management.sequence;version="5.7.3",org.terracotta.management.sequence.perf;version="5.7.3"
Main-Class: org.terracotta.management.sequence.perf.PerfTest
Require-Capability: osgi.ee;filter="((&(osgi.ee=JavaSE)(version=1.8)))"
Tool: Bnd-2.4.1.201501161923

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* /opt/cola/permits/1258059180_1643027223.49/0/sequence-generator-5-7-3-jar/META-INF/MANIFEST.MF
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* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/cache/interceptor/BasicOperation.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/context/ApplicationContext.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/validation/beanvalidation/MessageSourceResourceBundleLocator.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/format/AnnotationFormatterFactory.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/validation/annotation/Validated.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/scheduling/config/ContextLifecycleScheduledTaskRegistrar.java
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* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/format/datetime/joda/LocalDateParser.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/format/datetime/joda/LocalDateTimeParser.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/format/datetime/joda/ReadablePartialPrinter.java
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* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/context/i18n/ LocaleContext.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/context/support/MessageSourceResourceBundle.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/format/datetime/joda/MillisecondInstantPrinter.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/format/datetime/joda/DateTimeParser.java
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* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/context/annotation/Description.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/context/annotation/BeanDefinition.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/validation/beanvalidation/OptionalValidatorFactoryBean.java

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* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/instrument/classloading/websphere/WebSphereLoadTimeWeaver.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/stereotype/Controller.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/stereotype/Component.java
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- jar/org/springframework/context/config/LoadTimeWeaverBeanDefinitionParser.java
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- /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/jmx/export/assembler/MethodExclusionMBeanInfoAssembler.java
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* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources.jar/org/springframework/jmx/export/metadata/ManagedNotification.java
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* [@linkplain #value specified conditions] match.
*
* <p>A <em>condition</em> is any state that can be determined programmatically
* before the bean definition is due to be registered (see {@link Condition} for details).
*
* <p>The [@code @Conditional] annotation may be used in any of the following ways:
* <ul>
* <li>as a type-level annotation on any class directly or indirectly annotated with
* [@code @Component], including [@link Configuration @Configuration] classes</li>
* <li>as a meta-annotation, for the purpose of composing custom stereotype
* annotations</li>
* <li>as a method-level annotation on any [@link Bean @Bean] method</li>
* </ul>
*
* <p>If a [@ Configuration] class is marked with [@Conditional],
* all of the [@Bean] methods, [@Import] annotations, and
* [@ComponentScan] annotations associated with that
* class will be subject to the conditions.
*
* <p><strong>NOTE</strong>: Inheritance of [@Conditional] annotations
* is not supported; any conditions from superclasses or from overridden
* methods will not be considered. In order to enforce these semantics,
* [@Conditional] itself is not declared as
* [@java.lang.annotation.Inherited]; furthermore, any
* custom <em>composed annotation</em> that is meta-annotated with
* [@Conditional] must not be declared as [@Inherited].
*
* @author Phillip Webb
* @author Sam Brannen
* @since 4.0
* @see Condition
*/

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* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/context/support/ApplicationContextAwareProcessor.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/context/support/BeanDefinitionDsl.kt
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/context/support/AbstractMessageSource.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/context/support/ReloadableResourceBundleMessageSource.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/jndi/support/SimpleJndiBeanFactory.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/context/annotation/Import.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/cache/CacheManager.java
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  jar/org/springframework/jmx/export/annotation/ManagedMetric.java
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  jar/org/springframework/format/datetime/joda/PeriodFormatter.java
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  jar/org/springframework/jmx/export/annotation/ManagedOperation.java
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  jar/org/springframework/messaging/annotation/ManagedOperationParameters.java
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  jar/org/springframework/jmx/export/annotation/ManagedOperation.java
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* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources.jar/org/springframework/format/datetime/standard/MonthFormatter.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources.jar/org/springframework/format/support/FormattingConversionService.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources.jar/org/springframework/remoting/support/RemoteInvocation.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources.jar/org/springframework/context/EmbeddedValueResolverAware.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources.jar/org/springframework/ejb/access/LocalStatelessSessionProxyFactoryBean.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources.jar/org/springframework/ejb/access/AbstractSlsbInvokerInterceptor.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources.jar/org/springframework/cache/interceptor/CacheOperation.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources.jar/org/springframework/validation/Validator.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources.jar/org/springframework/scheduling/concurrent/ThreadPoolExecutorFactoryBean.java
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* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/jmx/export/assembler/MetadataMBeanInfoAssembler.java
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* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/context/annotation/BeanAnnotationHelper.java
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* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/jndi/IndiCallback.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/jmx/export/assembler/MethodNameBasedMBeanInfoAssembler.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/jndi/JndiCallback.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/context/i18n/LocaleContextHolder.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/jmx/export/MBeanExportOperations.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/jndi/JndiTemplate.java
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* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/jmx/export/metadata/ManagedAttribute.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/context/MessageSourceAware.java
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* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/validation/validation/ValidationUtils.java
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* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-
jar/org/springframework/context/annotation/Configuration.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-
jar/org/springframework/scheduling/annotation/ScheduledAnnotationBeanPostProcessor.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-
jar/org/springframework/context/support/PostProcessorRegistrationDelegate.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-
jar/org/springframework/context/annotation/ScopedProxyMode.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-
jar/org/springframework/scheduling/concurrent/ThreadPoolTaskExecutor.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-
jar/org/springframework/context/support/AbstractRefreshableApplicationContext.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-
jar/org/springframework/validation/AbstractErrors.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-
jar/org/springframework/context/annotation/ScannedGenericBeanDefinition.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-
jar/org/springframework/context/annotation/LoadTimeWeavingConfiguration.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-
jar/org/springframework/cache/concurrent/ConcurrentMapCacheManager.java
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jar/org/springframework/validation/AbstractBindingResult.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-
jar/org/springframework/scheduling/config/TaskExecutorFactoryBean.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-
jar/org/springframework/context/support/SimpleThreadScope.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-
jar/org/springframework/context/support/AbstractResourceBasedMessageSource.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-
jar/org/springframework/jmx/export/metadata/AbstractJmxAttribute.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-
jar/org/springframework/context/annotation/Bean.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-
jar/org/springframework/context/annotation/ContextAnnotationAutowireCandidateResolver.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-
jar/org/springframework/scheduling/concurrent/DefaultManagedTaskExecutor.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-
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* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-
jar/org/springframework/context/support/ConditionContext.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-
jar/org/springframework/cache/interceptor/CacheAspectSupport.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-
jar/org/springframework/context/annotation/MBeanExportConfiguration.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-
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 */

/**
 * FactoryBean that obtains a WebSphere MBeanServer reference through WebSphere's proprietary AdminServiceFactory API,
 * available on WebSphere 5.1 and higher.
 *
 * Exposes the MBeanServer for bean references.
 *
 * This is a direct alternative to MBeanServerFactoryBean, which uses standard JMX 1.2 API to access the platform's MBeanServer.
 *
 * See the javadocs for WebSphere's
 *
 * and
 */
* @author Juergen Hoeller
* @author Rob Harrop
* @since 2.0.3
* @see javax.management.MBeanServer
* @see MBeanServerFactoryBean
*/

Found in path(s):
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/jmx/support/WebSphereMBeanServerFactoryBean.java
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* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/context/annotation/Primary.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/cache/interceptor/KeyGenerator.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/remoting/rmi/RmiClientInterceptorUtils.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/jndi/JndiPropertySource.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/jndi/JndiLocatorDelegate.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/scripting/bsh/BshScriptFactory.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/format/Parser.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/context/config/PropertyOverrideBeanDefinitionParser.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/context/annotation/ScopeMetadataResolver.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/scheduling/config/ScheduledTasksBeanDefinitionParser.java
* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/cache/annotation/Cacheable.java
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* /opt/cola/permits/1301486311_1649248799.8/0/spring-context-5-2-20-release-sources-jar/org/springframework/context/LifecycleProcessor.java

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1.110 xerces-c 3.2.2+debian-1build3

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  jar/com/google/gson/internal/GsonBuildConfig.java

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  jar/com/google/gson/internal/reflect/ReflectionAccessor.java
jar/com/google/gson/internal/reflect/UnsafeReflectionAccessor.java
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* /opt/cola/permits/1108597571_1606176527.27/0/gson-2-8-6-sources-1-jar/com/google/gson/JsonPrimitive.java
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* /opt/cola/permits/1108597571_1606176527.27/0/gson-2-8-6-sources-1-jar/com/google/gson/stream/MalformedJsonException.java
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  */opt/cola/permits/1108597571_1606176527.27/0/gson-2-8-6-sources-1-jar/com/google/gson/json/JsonSyntaxException.java
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* /opt/cola/permits/1108597571_1606176527.27/0/gson-2-8-6-sources-1-jar/com/google/gson/FieldAttributes.java
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1.115 goprotobuf 2.4.1

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Index: tdbsa/tdb.c

--- tdbsa.org/tdb.c
+++ tdbsa/tdb.c
@@ -4,11 +4,11 @@
    Last Changed Date: 2007-06-06 20:14:06 -0400 (Wed, 06 Jun 2007)
 */
 /*
 - Unix SMB/CIFS implementation.
 + trivial database library - standalone version

 - trivial database library - private includes
 -
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This is the Debian GNU/Linux prepackaged version of the EXT2 file system utilities (e2fsck, mke2fs, etc.). The EXT2 utilities were written by Theodore Ts'o <tytso@mit.edu> and Remy Card <card@masi.ibp.fr>.

Sources were obtained from http://sourceforge.net/projects/e2fsprogs

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Theodore Ts'o
23-June-2007
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That's all there is to it!
This package was added to the e2fsprogs debian source package by Theodore Ts'o <tytso@mit.edu> on Sat Mar 15 15:33:37 EST 2003

It is part of the main e2fsprogs distribution, which can be found at:

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Upstream Author: Theodore Ts'o <tytso@mit.edu>

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This package was put together by Yann Dirson <dirson@debian.org>, from sources obtained from a mirror of:
\texttt{tsx-11.mit.edu:/pub/linux/packages/ext2fs/}

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#
# This is a Makefile stub which handles the creation of BSD shared libraries.
#
# In order to use this stub, the following makefile variables must be defined.
#
# \texttt{BSDLIB\_VERSION} = 1.0
# \texttt{BSDLIB\_IMAGE} = libce
# \texttt{BSDLIB\_MYDIR} = et
# \texttt{BSDLIB\_INSTALL\_DIR} = $(SHLIBDIR)
#

all:: image

real-subdirs:: Makefile
@echo "MKDIR pic"
@mkdir -p pic

BSD\_LIB = $(BSDLIB\_IMAGE).so.$(BSDLIB\_VERSION)
BSDLIB\_PIC\_FLAG = -fpic

image:$(BSD\_LIB)
This is the Debian GNU/Linux prepackaged version of the Common Error Description library. It is currently distributed together with the EXT2 file system utilities, which are otherwise packaged as "e2fsprogs".

This package was put together by Yann Dirson <dirson@debian.org>, from sources obtained from a mirror of:
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Gadi Oxman, August 1995

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1.122 acpid 2.0.27

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* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/config/RuntimeBeanReference.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/config/BeanFactoryPostProcessor.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/config/BeanPostProcessor.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/config/BeanDefinitionBuilder.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/xml/BeansDtdResolver.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/config/TypedStringValue.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/propertyeditors/CustomMapEditor.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/annotation/InitDestroyAnnotationBeanPostProcessor.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/config/BeanDefinitionBuilder.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/config/BeanDefinitionBuilder.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/propertyeditors/UUIDEditor.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/support/AbstractBeanDefinitionReader.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/PropertySource.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/config/PreferencesPlaceholderConfigurer.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/support/MethodOverrides.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/support/InjectionPoint.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/parsing/ReaderEventListener.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/support/MethodOverrides.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/support/InjectionPoint.java

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* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/service/service/ServiceFactoryBean.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/service/service/ServiceFactoryBean.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/service/service/ServiceFactoryBean.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/service/service/ServiceFactoryBean.java

Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6 1435
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* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/propertyeditors/InputStreamEditor.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/propertyeditors/ReaderEditor.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/propertyeditors/FileEditor.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/propertyeditors/NullValueInNestedPathException.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/config/Scope.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/support/ResourceEditorRegistrar.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/parsing/SourceExtractor.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/parsing/UtilNamespaceHandler.java

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* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/ObjectProvider.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/InitializingBean.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/config/CustomScopeConfigurer.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/config/AbstractFactoryBean.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/config/CustomEditorConfigurer.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/parsing/FailFastProblemReporter.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/factory/support/SimpleInstantiationStrategy.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-
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* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/BeanInfoFactory.java
* /opt/cola/permits/1301486271_1649248813.39/0/spring-beans-5-2-20-release-sources-jar/org/springframework/beans/SimpleTypeConverter.java
1.129 e2fsprogs 1.45.5 2ubuntu1

1.129.1 Available under license:

This is the Debian GNU/Linux prepackaged version of the static EXT2 file system consistency checker (e2fsck.static). The EXT2 utilities were written by Theodore Ts'o <tytso@mit.edu> and Remy Card <card@masi.ibp.fr>.

Sources were obtained from http://sourceforge.net/projects/e2fsprogs

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#
# This is a Makefile stub which handles the creation of BSD shared libraries.
# In order to use this stub, the following makefile variables must be defined.
# # BSDLIB_VERSION = 1.0
# BSDLIB_IMAGE = libce
# BSDLIB_MYDIR = et
# BSDLIB_INSTALL_DIR = $(SHLIBDIR)
#
all:: image

real-subdirs:: Makefile
@echo "MKDIR pic"
@mkdir -p pic

BSD_LIB = $(BSDLIB_IMAGE).so.$(BSDLIB_VERSION)
BSDLIB_PIN_FLAG = -fpic

image:$(BSDLIB)

$(BSDLIB): $(OBJ)
(cd pic; ld -Bshareable -o $(BSDLIB) $(LDFLAGS_SHLIB) $(OBJ))
$(MV) pic/$(BSDLIB) .
$(RM) -f $(BSDLIB)
(cd ..; $(LN) $(LINK_BUILD_FLAGS) | sed -e 's;lib/;;' $(BSDLIB) $(BSDLIB))

install-shlibs install:: $(BSDLIB)
@echo "INSTALL_PROGRAM $(BSDLIB_INSTALL_DIR)/$(BSDLIB)"
@$(INSTALL_PROGRAM) $(BSDLIB) $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSDLIB)
@-$(LDCONFIG)

install-strip: install

install-shlibs-strip:: install-shlibs

uninstall-shlibs uninstall::
$(RM) -f $(DESTDIR)/$(BSDLIB_INSTALL_DIR)/$(BSDLIB)

clean::
$(RM) -rf pic
$(RM) -f $(BSDLIB)
$(RM) -f ../$(BSDLIB)

This package was added to the e2fsprogs debian source package by
Theodore Ts'o <tytso@mit.edu> on Sat Mar 15 15:33:37 EST 2003

It is part of the main e2fsprogs distribution, which can be found at:

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---
+++  
@@ -4,11 +4,11 @@
Last Changed Date: 2007-06-06 20:14:06 -0400 (Wed, 06 Jun 2007)
*/
*/
- Unix SMB/CIFS implementation.
+ trivial database library - standalone version

- trivial database library - private includes
-
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Theodore Ts'o
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This package was added to the e2fsprogs debian source package by Theodore Ts'o <tytso@mit.edu> on Sat Mar 15 15:33:37 EST 2003

It is part of the main e2fsprogs distribution, which can be found at:

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This is the Debian GNU/Linux prepackaged version of the ss command-line interface parsing library. It is currently distributed together with the EXT2 file system utilities, which are otherwise packaged as "e2fsprogs".

This package was put together by Yann Dirson <dirson@debian.org>, from sources obtained from a mirror of:
tsx-11.mit.edu:/pub/linux/packages/ext2fs/

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1.139 icu 65

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```makefile
## Commands to generate dependency files
GEN_DEPS.c=$(CC) -E -MM $(DEFS) $(CPPFLAGS)
GEN_DEPS.cc=$(CXX) -E -MM $(DEFS) $(CPPFLAGS)

## Flags for position independent code
SHAREDLIBCFLAGS = -fPIC
SHAREDLIBCXXFLAGS = -fPIC
SHAREDLIBCPPFLAGS = -DPIC

## Additional flags when building libraries and with threads
THREADSCPPFLAGS = -D_REENTRANT
LIBCPPFLAGS =

```

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LD_RPATH_PRE=-Wl,-rpath,

## Compiler switch to embed a library name  
LD_SONAME = -Wl,-soname -Wl,$(notdir $(MIDDLE_SO_TARGET))

## Shared library options
LD_SOOPTIONS= -Wl,-Bs symbolic

## Shared object suffix
SO = so

## Non-shared intermediate object suffix
STATIC_O = ao

## Compilation rules
%.$(STATIC_O): $(srdir)/%.c  
$(COMPILE.c) $(STATICCPPFLAGS) $(STATICCFLAGS) -o $@ $<
%.o: $(srdir)/%.c  
$(COMPILE.c) $(DYNAMICCPPFLAGS) $(DYNAMICCFLAGS) -o $@ $<
%.$(STATIC_O): $(srdir)/%.cpp  
$(COMPILE.cc) $(STATICCPPFLAGS) $(STATICCXXFLAGS) -o $@ $<
%.o: $(srdir)/%.cpp  
$(COMPILE.cc) $(DYNAMICCPPFLAGS) $(DYNAMICCXXFLAGS) -o $@ $<

## Dependency rules
%.d: $(srdir)/%.c  
@echo "generating dependency information for $<"
@$(SHELL) -ec "$(GEN_DEPS.c) $<  
| sed "\%s/\([^ ]\)\.*.o\[ \: ]/\1.o $@ : /g\" > $@;\  
[ -s $@ ] \redirect rm -f $@"
%.d: $(srdir)/%.cpp  
@echo "generating dependency information for $<"
@$(SHELL) -ec "$(GEN_DEPS.cc) $<  
| sed "\%s/\([^ ]\)\.*.o\[ \: ]/\1.o $@ : /g\" > $@;\  
[ -s $@ ] \redirect rm -f $@"

## Versioned libraries rules
%.$(SO).$(SO_TARGET_VERSION_MAJOR): %.$(SO).$(SO_TARGET_VERSION)  
$(RM) $@ && ln -s ${<F} $@
%.$(SO): %.$(SO).$(SO_TARGET_VERSION_MAJOR)  
$(RM) $@ && ln -s {*F}.$(SO).$(SO_TARGET_VERSION) $@

## Bind internal references

# LDflags that pkgdata will use
BIR_LDFLAGS= -Wl,-Bsymbolic

# Dependencies [i.e. map files] for the final library
BIR_DEPS=

## Remove shared library 's'
STATIC_PREFIX WHEN_USED =
STATIC_PREFIX =

## End BSD-specific setup
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1.141 rsyslog 7.6.7

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/* zlib.h -- interface of the 'zlib' general purpose compression library
   version 1.2.11, January 15th, 2017

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Jean-loup Gailly          Mark Adler
jloup@gzip.org            madler@alumni.caltech.edu

The data format used by the zlib library is described by RFCs (Request for Comments) 1950 to 1952 in the files http://tools.ietf.org/html/rfc1950 (zlib format), rfc1951 (deflate format) and rfc1952 (gzip format).

*/

1.150 libvmtools 9.4.0.25793

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1.151 icu 66.1 2ubuntu2.1

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## Commands to generate dependency files
GEN_DEPS.c=$(CC) -E -MM $(DEFS) $(CPPFLAGS)
GEN_DEPS.cc=$(CXX) -E -MM $(DEFS) $(CPPFLAGS)

## Flags for position independent code
SHAREDLIBCFLAGS = -fPIC
SHAREDLIBCXXFLAGS = -fPIC
SHAREDLIBCXXFLAGS = -fPIC

## Additional flags when building libraries and with threads
THREADSCPPFLAGS = -D_REENTRANT
LIBCPPFLAGS =

## Compiler switch to embed a runtime search path
LD_RPATH=
LD_RPATH_PRE=-Wl,-rpath,

## Compiler switch to embed a library name
LD_SONAME = -Wl,-soname -Wl,$(notdir $(MIDDLE_SO_TARGET))

## Shared library options
LD_SOOPTIONS= -Wl,-Bsymbolic

## Shared object suffix
SO = so
## Non-shared intermediate object suffix
STATIC_O = ao

## Compilation rules
%.$(STATIC_O): $(srcdir)/%.c
$(COMPILE.c) $(STATICCPPFLAGS) $(STATICCFLAGS) -o $@ $<
%.o: $(srcdir)/%.c
$(COMPILE.c) $(DYNAMICCPPFLAGS) $(DYNAMICCFLAGS) -o $@ $<

%.$(STATIC_O): $(srcdir)/%.cpp
$(COMPILE.cc) $(STATICCPPFLAGS) $(STATICCXXFLAGS) -o $@ $<
%.o: $(srcdir)/%.cpp
$(COMPILE.cc) $(DYNAMICCPPFLAGS) $(DYNAMICCXXFLAGS) -o $@ $<

## Dependency rules
%.d: $(srcdir)/%.c
  @echo "generating dependency information for $<"
  @$(SHELL) -ec "$\$(GEN_DEPS.c) $< \n      | sed "\ s/(\$\*)/\o/:/g\" > $@; \n      \ -s $@ ] ] rm -f $@

%.d: $(srcdir)/%.cpp
  @echo "generating dependency information for $<"
  @$(SHELL) -ec "$\$(GEN_DEPS.cc) $< \n      | sed "\ s/(\$\*)/\o/:/g\" > $@; \n      \ -s $@ ] ] rm -f $@"

## Versioned libraries rules
%.$(SO).$(SO_TARGET_VERSION_MAJOR): %.$(SO).$(SO_TARGET_VERSION)
$(RM) $@ && ln -s ${<F} $@
%.$(SO): %.$(SO).$(SO_TARGET_VERSION_MAJOR)
$(RM) $@ && ln -s ${*F}.$(SO).$(SO_TARGET_VERSION) $@

## Bind internal references

# LDflags that pkgdata will use
BIR_LDFLAGS= -Wl,-Bsymbolic

# Dependencies [i.e. map files] for the final library
BIR_DEPS=

## Remove shared library 's'
STATIC_PREFIX_WHEN_USED =
STATIC_PREFIX =

## End BSD-specific setup
This package was debianized by Jay Berkenbilt <qjb@debian.org> on August 5, 2005.
The packaging was taken over by Laszlo Boszormenyi (GCS) <gcs@debian.org> on Tue, 17 Mar 2015.

The original source was downloaded from http://site.icu-project.org/download

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1.153 curl 7.62.0-DEV

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If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.
You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The
threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than
copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

@item
Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

@item
If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

@item
Verify that the user has already received a copy of these materials or that you have already sent this user a copy.
@end enumerate

For an executable, the required form of the ``work that uses the Library'' must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

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facilities. This must be distributed under the terms of the
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where to find the accompanying uncombined form of the same work.
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@page
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We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to
encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

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The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

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A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means
all the source code for all modules it contains, plus any associated
interface definition files, plus the scripts used to control compilation
and installation of the library.

Activities other than copying, distribution and modification are not
covered by this License; they are outside its scope. The act of
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a) The modified work must itself be a software library.

b) You must cause the files modified to carry prominent notices
stating that you changed the files and the date of any change.

c) You must cause the whole of the work to be licensed at no
charge to all third parties under the terms of this License.

d) If a facility in the modified Library refers to a function or a
table of data to be supplied by an application program that uses
the facility, other than as an argument passed when the facility
is invoked, then you must make a good faith effort to ensure that,
in the event an application does not supply such function or
table, the facility still operates, and performs whatever part of
its purpose remains meaningful.

(For example, a function in a library to compute square roots has
a purpose that is entirely well-defined independent of the
application. Therefore, Subsection 2d requires that any
application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.
If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

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When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

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a) Accompany the work with the complete corresponding
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to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the
Library. A suitable mechanism is one that (1) uses at run time a
copy of the library already present on the user's computer system,
rather than copying library functions into the executable, and (2)
will operate properly with a modified version of the library, if
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d) If distribution of the work is made by offering access to copy
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e) Verify that the user has already received a copy of these
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For an executable, the required form of the "work that uses the
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reproducing the executable from it. However, as a special exception,
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  jar/com/zaxxer/hikari/util/PropertyElf.java
* /opt/cola/permits/1257259274_1642793180.98/0/hikaricp-3-4-5-sources-
  jar/com/zaxxer/hikari/util/UtilityElf.java
* /opt/cola/permits/1257259274_1642793180.98/0/hikaricp-3-4-5-sources-
  jar/com/zaxxer/hikari/pool/ProxyStatement.java
* /opt/cola/permits/1257259274_1642793180.98/0/hikaricp-3-4-5-sources-
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  jar/com/zaxxer/hikari/HikariDataSource.java
* /opt/cola/permits/1257259274_1642793180.98/0/hikaricp-3-4-5-sources-
  jar/com/zaxxer/hikari/metrics/prometheus/PrometheusHistogramMetricsTracker.java
* /opt/cola/permits/1257259274_1642793180.98/0/hikaricp-3-4-5-sources-
  jar/com/zaxxer/hikari/hibernate/HikariConnectionProvider.java
* /opt/cola/permits/1257259274_1642793180.98/0/hikaricp-3-4-5-sources-
  jar/com/zaxxer/hikari/metrics/prometheus/PrometheusMetricsTracker.java
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  jar/com/zaxxer/hikari/hibernate/HikariConfigurationUtil.java
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  jar/com/zaxxer/hikari/HikariPoolMXBean.java
* /opt/cola/permits/1257259274_1642793180.98/0/hikaricp-3-4-5-sources-
  jar/com/zaxxer/hikari/pool/ProxyCallableStatement.java
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* /opt/cola/permits/1257259274_1642793180.98/0/hikaricp-3-4-5-sources-jar/com/zaxxer/hikari/HikariConfigMXBean.java

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jar/com/zaxxer/hikari/metrics/prometheus/PrometheusHistogramMetricsTrackerFactory.java
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jar/com/zaxxer/hikari/metrics/prometheus/PrometheusMetricsTrackerFactory.java

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/* zlib.h -- interface of the 'zlib' general purpose compression library
version 1.2.11, January 15th, 2017

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* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/server/util/matcher/ServerWebExchangeMatcher.java
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* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/server/DelegatingServerAuthenticationEntryPoint.java
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* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/server/header/XContentTypeOptionsServerHttpHeadersWriter.java
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- jar/org/springframework/security/web/server/ServerRedirectStrategy.java
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- /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources.jar/org/springframework/security/web/server/header/ServerHttpHeadersWriter.java
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- /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources.jar/org/springframework/security/web/server/authentication/rememberme/PersistentTokenBasedRememberMeServices.java
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* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/Jackson2ObjectMapperAware.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/authentication/preauth/J2ee/j2ee/WebXmlMappableAttributesRetriever.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/authentication/session/NullAuthenticatedSessionStrategy.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/authentication/session/LogoutSuccessHandler.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/authentication/session/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/context/HttpSessionSecurityContextRepository.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/authentication/ui/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/authentication/ui/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/authentication/ui/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/context/HttpSessionSecurityContextRepository.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/authentication/session/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/authentication/session/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/authentication/session/package-info.java
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* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources.jar/org/springframework/security/web/util/matcher/RegexRequestMatcher.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources.jar/org/springframework/security/web/firewall/HttpFirewall.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources.jar/org/springframework/security/web/access/channel/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources.jar/org/springframework/security/web/firewall/DefaultHttpFirewall.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources.jar/org/springframework/security/web/authentication/preauth/j2ee/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources.jar/org/springframework/security/web/firewall/RequestWrapper.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources.jar/org/springframework/security/web/authentication/preauth/package-info.java
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* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources.jar/org/springframework/security/web/authentication/preauth/RequestHeaderAuthenticationFilter.java
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* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources.jar/org/springframework/security/web/context/NullSecurityContextRepository.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources.jar/org/springframework/security/web/authentication/rememberme/InvalidCookieException.java
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* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources.jar/org/springframework/security/web/web/login/KerberosPrincipalIniAuthenticationDetailsSource.java
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* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/context/support/SecurityWebApplicationContextUtils.java
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* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-
  jar/org/springframework/security/web/session/InvalidSessionAccessDeniedHandler.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-
  jar/org/springframework/security/web/csrf/HttpSessionCsrfTokenRepository.java
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  jar/org/springframework/security/web/csrf/CsrfAuthenticationStrategy.java
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  jar/org/springframework/security/web/csrf/DefaultCsrfToken.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-
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  jar/org/springframework/security/web/authentication/session/ChangeSessionIdAuthenticationStrategy.java
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  jar/org/springframework/security/web/authentication/session/AbstractSessionFixationProtectionStrategy.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-
  jar/org/springframework/security/web/authentication/session/ChangeSessionIdAuthenticationStrategy.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-
  jar/org/springframework/security/web/csrf/CsrfException.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-
  jar/org/springframework/security/web/csrf/DefaultCsrfToken.java
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  jar/org/springframework/security/web/authentication/session/AbstractSessionFixationProtectionStrategy.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-
  jar/org/springframework/security/web/authentication/session/ChangeSessionIdAuthenticationStrategy.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-
  jar/org/springframework/security/web/csrf/MissingCsrfTokenException.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-
  jar/org/springframework/security/web/bind/support/AuthenticationPrincipalArgumentResolver.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-
  jar/org/springframework/security/web/bind/support/AuthenticationPrincipalArgumentResolver.java
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  jar/org/springframework/security/web/csrf/CsrfFilter.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-
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* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/server/authentication/server/SecurityHeader.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/server/authentication/server/SecurityHeaders.java
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* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/server/authentication/AnonymousAuthenticationWebFilter.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/server/authentication/preauth/AbstractPreAuthenticatedProcessingFilter.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/server/MatcherSecurityWebFilterChain.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/server/authentication/logout/DelegatingServerLogoutHandler.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/spring-security-web-5-3-4-release-sources-jar/org/springframework/security/web/server/authentication/ServerHttpBasicAuthenticationConverter.java

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1.160 ffmpeg 4.3.1
1.160.1 Available under license:

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Most files in FFmpeg are under the GNU Lesser General Public License version 2.1 or later (LGPL v2.1+). Read the file `COPYING.LGPLv2.1` for details. Some other files have MIT/X11/BSD-style licenses. In combination the LGPL v2.1+ applies to FFmpeg.

Some optional parts of FFmpeg are licensed under the GNU General Public License version 2 or later (GPL v2+). See the file `COPYING.GPLv2` for details. None of these parts are used by default, you have to explicitly pass `--enable-gpl` to configure to activate them. In this case, FFmpeg's license changes to GPL v2+.

Specifically, the GPL parts of FFmpeg are:

- `libpostproc`
- optional x86 optimization in the files
  - `libavcodec/x86/flac_dsp_gpl.asm`
  - `libavcodec/x86/idct_mmx.c`
  - `libavfilter/x86/vf_removegrain.asm`
- the following building and testing tools
  - `compat/solaris/make_sunver.pl`
  - `doc/t2h.pm`
  - `doc/texi2pod.pl`
  - `libswresample/tests/swresample.c`
  - `tests/checkasm/*`
  - `tests/tiny_ssim.c`
- the following filters in libavfilter:
  - `signature_lookup.c`
  - `vf_blackframe.c`
  - `vf_boxblur.c`
  - `vf_colormatrix.c`
  - `vf_cover_rect.c`
  - `vf_cropdetect.c`
  - `vf_delogo.c`
  - `vf_eq.c`
  - `vf_find_rect.c`
  - `vf_fsp.c`
  - `vf_histeq.c`
  - `vf_hqdn3d.c`
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Should you, for whatever reason, prefer to use version 3 of the (L)GPL, then the configure parameter `--enable-version3` will activate this licensing option for you. Read the file `COPYING.LGPLv3` or, if you have enabled GPL parts, `COPYING.GPLv3` to learn the exact legal terms that apply in this case.

There are a handful of files under other licensing terms, namely:

* The files `libavcodec/jfdctfst.c`, `libavcodec/jfdctint_template.c` and `libavcodec/jrevdct.c` are taken from libjpeg, see the top of the files for licensing details. Specifically note that you must credit the IJG in the documentation accompanying your program if you only distribute executables. You must also indicate any changes including additions and deletions to those three files in the documentation.

* `tests/reference.pnm` is under the expat license.

## External libraries

FFmpeg can be combined with a number of external libraries, which sometimes affect the licensing of binaries resulting from the combination.

### Compatible libraries

The following libraries are under GPL version 2:
- avisynth
- frei0r
- libcdio
- libdavs2
- librubberband
- libvidstab
- libx264
- libx265
- libxavs
- libxavs2
- libxvid

When combining them with FFmpeg, FFmpeg needs to be licensed as GPL as well by passing `--enable-gpl` to configure.

The following libraries are under LGPL version 3:
- gmp
- libaribb24
- liblensfun

When combining them with FFmpeg, use the configure option `--enable-version3` to upgrade FFmpeg to the LGPL v3.

The VMAF, mbedTLS, RK MPI, OpenCORE and VisualOn libraries are under the Apache License 2.0. That license is incompatible with the LGPL v2.1 and the GPL v2, but not with version 3 of those licenses. So to combine these libraries with FFmpeg, the license version needs to be upgraded by passing `--enable-version3` to configure.

The smbclient library is under the GPL v3, to combine it with FFmpeg, the options `--enable-gpl` and `--enable-version3` have to be passed to configure to upgrade FFmpeg to the GPL v3.

### Incompatible libraries

There are certain libraries you can combine with FFmpeg whose licenses are not compatible with the GPL and/or the LGPL. If you wish to enable these libraries, even in circumstances that their license may be incompatible, pass `--enable-nonfree` to configure. This will cause the resulting binary to be unredistributable.

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1.165 jackson-dataformat-yaml 2.11.2

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1.167 hibernate-commons-annotations

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*/

Found in path(s):
* /opt/cola/permits/1135864176_1613618002.1/0/jul-to-slf4j-1-7-30-sources-1-
  jar/org/slf4j/bridge/SLF4JBridgeHandler.java

1.175 gzip 1.9 3

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<card@masi.ibp.fr>.

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+++ tdbsa/tdb.c
Unix SMB/CIFS implementation.
+ trivial database library - standalone version

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This is the Debian GNU/Linux prepackaged version of the EXT2 file
system utilities (e2fsck, mke2fs, etc.). The EXT2 utilities were
written by Theodore Ts'o <tytso@mit.edu> and Remy Card <card@masi.ibp.fr>.

Sources were obtained from http://sourceforge.net/projects/e2fsprogs

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Theodore Ts'o
23-June-2007

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This package was added to the e2fsprogs debian source package by Theodore Ts'o <tytso@mit.edu> on Sat Mar 15 15:33:37 EST 2003

It is part of the main e2fsprogs distribution, which can be found at:

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This package was put together by Yann Dirson <dirson@debian.org>, from sources obtained from a mirror of:
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Gadi Oxman, August 1995

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* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-jar/io/netty/channel/epoll/EpollDomainSocketChannelConfig.java
* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-jar/io/netty/channel/epoll/EpollChannelConfig.java
* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-jar/io/netty/channel/epoll/EpollEventArray.java
* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-jar/io/netty/channel/epoll/EpollDomainSocketChannel.java
* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-jar/io/netty/channel/epoll/TcpMd5Util.java
* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-jar/io/netty/channel/epoll/EpollRecvByteAllocatorStreamingHandle.java
* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-jar/io/netty/channel/epoll/AbstractEpollServerChannel.java
* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-jar/io/netty/channel/epoll/EpollServerChannelConfig.java
* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-jar/io/netty/channel/epoll/EpollRecvByteAllocatorHandle.java
* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-jar/io/netty/channel/epoll/EpollDomainSocketChannel.java

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/**
 * Set the \{@code TCP_MD5SIG\} option on the socket. See \{@code linux/tcp.h\} for more details.
 * Keys can only be set on, not read to prevent a potential leak, as they are confidential.
 * Allowing them being read would mean anyone with access to the channel could get them.
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/**
* Set the {code TCP_MD5SIG} option on the socket. See {code linux/tcp.h} for more details.
* Keys can only be set on, not read to prevent a potential leak, as they are confidential.
* Allowing them being read would mean anyone with access to the channel could get them.
*/
/**
* Set the {code TCP_QUICKACK} option on the socket. See <a href="http://linux.die.net/man/7/tcp">TCP_QUICKACK</a> for more details.
*/

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* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-jar/io/netty/channel/epoll/EpollSocketChannelConfig.java

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* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-jar/io/netty/channel/epoll/NativeDatagramPacketArray.java
* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-jar/io/netty/channel/epoll/EpollDatagramChannel.java
* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-jar/io/netty/channel/epoll/EpollEventLoop.java
* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-jar/io/netty/channel/epoll/EpollEventLoop.java
* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-
jar/io/netty/channel/epoll/EpollEventLoopGroup.java
* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-
jar/io/netty/channel/epoll/EpollChannelOption.java
* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-
jar/io/netty/channel/epoll/AbstractEpollChannel.java
* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-
jar/io/netty/channel/epoll/EpollSocketChannel.java
* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-
jar/io/netty/channel/epoll/EpollTcpInfo.java

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jar/io/netty/channel/epoll/Native.java
* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-
jar/netty_epoll_native.c

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* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-jar/netty_epoll_linuxsocket.c
* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-jar/netty_epoll_linuxsocket.h
* /opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-jar/io/netty/channel/epoll/LinuxSocket.java

1.185 @tensorflow/tfjs-backend-wasm 3.11.0
1.185.1 Available under license:

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["version":3,"file":"GatherNd.js","sourceRoot":"","sources":[]]"mappings":"

import {gather_util, GatherNd, GatherNdInputs, KernelConfig, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmGatherNd: (
  xId: number, dtype: CppDType, indicesId: number, numSlices: number, sliceRank: number, sliceSize: number, strides: Uint8Array, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmGatherNd = backend.wasm.cwrap(GatherNd, null /*void*/, [
    'number',  // xId
    'number',  // dtype
    'number',  // indicesId
    'number',  // numSlices
    'number',  // sliceRank
    'number',  // sliceSize
    'array',   // strides
    'number'   // outId
  ]);}

function gatherNd(args: {backend: BackendWasm, inputs: GatherNdInputs}): TensorInfo {
  const {backend, inputs} = args;
  const {params, indices} = inputs;

  const [resultShape, numSlices, sliceSize, strides] = gather_util.prepareAndValidate(params, indices);
  const out = backend.makeOutput(resultShape, params.dtype);
  if (numSlices === 0) {
    return out;
  }

  const indicesShape = indices.shape;
  const sliceRank = indicesShape[indicesShape.length - 1];

  const xData = backend.dataIdMap.get(params.dataId);
  const xId = xData.id;
  const indicesData = backend.dataIdMap.get(indices.dataId);
  const indicesId = indicesData.id;
  const stridesBytes = new Uint8Array(new Int32Array(strides).buffer);

  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmGatherNd(xId, CppDType[params.dtype], indicesId, numSlices, sliceRank, sliceSize, stridesBytes, outId);

  return out;
}

export const gatherNdConfig: KernelConfig = {
  kernelName: GatherNd,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: gatherNd
};
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=============================================================================
*/

import {backend_util, Concat, ConcatAttrs, ConcatInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {concatImplCPU} from '../kernel_utils/shared';
import {identity} from './Identity';
import {reshape} from './Reshape';

export function concat(
    args: {inputs: ConcatInputs, backend: BackendWasm, attrs: ConcatAttrs}) {
  const {inputs, backend} = args;

  const axis = util.parseAxisParam(args.attrs.axis, inputs[0].shape)[0];

  let outShape = backend_util.computeOutShape(inputs.map(t => t.shape), axis);

  // Keep only non-empty tensors (ignore tensors with 0 in their shape).
  const $inputs = inputs.filter(t => util.sizeFromShape(t.shape) > 0);
  if ($inputs.length === 1) {
    return identity({inputs: {x: $inputs[0]}, backend});
  }

  const out = backend.makeOutput(outShape, inputs[0].dtype);
  if (util.sizeFromShape(outShape) === 0) {
    return out;
  }

  const shapes = $inputs.map(t => t.shape);
  backend_util.assertParamsConsistent(shapes, axis);

  if ($inputs[0].dtype === 'string') {
    // Any concat of n-dimensional tensors across any axis can be reduced to
    // a concatenation of two-dimensional tensors across the axis 1 by first
    // partitioning the axes of the original tensors into those less than
    // the axis to be concatenated and the rest. Then reshape the tensors
    // into a two-dimensional tensor by collapsing these two sets of axes and
    // concatenate the resulting matrices across the axis 1, finally reshaping
    // the result to have the proper shape.
    const inputs2D = $inputs.map(t => {
      const innerSize = util.sizeFromShape(t.shape.slice(axis));
      const shape = [-1, innerSize];
      return reshape({inputs: {x: t}, backend, attrs: {shape}});
    });

    const inputsValShapes = inputs2D.map(t => {
      return {vals: backend.readSync(t.dataId), shape: t.shape};
    });

    const outVals = concatImplCPU(inputsValShapes, outShape, inputs[0].dtype, false) as string[];

    const finalOutShape = backend_util.computeOutShape($inputs.map(t => t.shape), axis);

    out.shape = finalOutShape;
    const outData = backend.dataIdMap.get(out.dataId);
    outData.stringBytes = backend_util.fromStringArrayToUint8(outVals);
    $inputs.forEach(t => backend.disposeData(t.dataId));

    return out;
  }

  const batchDim = util.sizeFromShape($inputs[0].shape.slice(0, axis));
  let sumInnerDims = 0;
  const innerDims = $inputs.map(input => {
    const innerDim = util.sizeFromShape(input.shape.slice(axis));
    sumInnerDims += innerDim;
    return innerDim;
  });
  const inVals = $inputs.map(input => backend.typedArrayFromHeap(input));
  const outVals = backend.typedArrayFromHeap(out);

  for (let b = 0; b < batchDim; b++) {
    let outOffset = b * sumInnerDims;
    for (let i = 0; i < inVals.length; i++) {
      const innerDim = innerDims[i];
      const inOffset = b * innerDim;
      const vals = inVals[i].subarray(inOffset, inOffset + innerDim);
      outVals.set(vals, outOffset);
      outOffset += innerDim;
    }
    return out;
  }
}

export const concatConfig: KernelConfig = {
  kernelName: Concat,
  backendName: 'wasm',
  kernelFunc: concat as {} as KernelFunc,
};

Find path(s):
* /opt/cola/permits/12346000203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Concat.js.map

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 *=============================================================================

import {KernelConfig, KernelFunc, Select, SelectInputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmSelect: (
    conditionId: number, tId: number, eId: number,
    offset: number,
    outId: number) => void;

function setup(backend: BackendWasm) {
  wasmSelect = backend.wasm.cwrap('SelectV2', null, 
    [ // conditionId
      'number',  // tId
      'number',  // eId
      'number',  // offset
      'number']  // outId
  );
}

function select(args: {inputs: SelectInputs, backend: BackendWasm}) {
  const {inputs, backend} = args;
  const {condition, t, e} = inputs;

  const conditionId = backend.dataIdMap.get(condition.dataId).id;
  const tId = backend.dataIdMap.get(t.dataId).id;
  const eId = backend.dataIdMap.get(e.dataId).id;
  const out = backend.makeOutput(t.shape, t.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;

  const cRank = condition.shape.length;
  const tRank = t.shape.length;

  const offset = cRank === 0 || cRank > 1 || tRank === 1 ?
      util.sizeFromShape(t.shape.slice(1)) :
      0;

  wasmSelect(conditionId, tId, eId, offset, outId);
  return out;
}

export const selectConfig: KernelConfig = {
  kernelName: Select,
  backendName: 'wasm',
  kernelFunc: select as KernelFunc,
  setupFunc: setup
};

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Select.js.map
const t2 = tf.zeros([size]);
    const memOffset2 = backend.getMemoryOffset(t2.dataId);
    // This should fail in case of a memory leak.
    expect(memOffset1).toBe(memOffset2);
  });

  it('allocates buffers with byteOffsets', async () => {
    const data = [-0.5, 0.5, 3.14];
    const buffer = new ArrayBuffer(32);
    const view = new Float32Array(buffer, 8, data.length);
    // Write values to buffer.
    for (let i = 0; i < data.length; ++i) {
      view[i] = data[i];
    }
    const t = tf.tensor(view);
    // Tensor values should match.
    test_util.expectArraysClose(await t.data(), view);
  });

  beforeEach(() => {
    registerBackend('wasm-test', async () => {
      const {wasm} = await init();
      return new BackendWasm(wasm);
    }, 100);
  });

  afterEach(() => {
    resetWasmPath();
    removeBackend('wasm-test');
  });

  it('backend init fails when the path is invalid', async () => {
    setWasmPath('invalid/path');
    let wasmPath: string;
    const realFetch = fetch;
    spyOn(self, 'fetch').and.callFake((path: string) => {
      wasmPath = path;
      return realFetch(path);
    });
    expect(await tf.setBackend('wasm-test')).toBe(false);
    expect(wasmPath).toBe('invalid/path');
  });

  it('backend init fails when setWasmPaths is called with an invalid prefix', async () => {
    setWasmPaths('invalid/prefix/');
    let wasmPath: string;
    const realFetch = fetch;
    spyOn(self, 'fetch').and.callFake((path: string) => {
      wasmPath = path;
      return realFetch(path);
    });
    expect(await tf.setBackend('wasm-test')).toBe(false);
    expect(wasmPath).toContain('invalid/prefix');
  });

  it('backend init fails when setWasmPaths is called with an invalid fileMap', async () => {
    setWasmPaths({
      'tfjs-backend-wasm.wasm': 'invalid/path',
      'tfjs-backend-wasm-simd.wasm': 'invalid/path',
      'tfjs-backend-wasm-threaded-simd.wasm': 'invalid/path'
    });
    let wasmPathPrefix: string;
    const realFetch = util.fetch;
    spyOn(util, 'fetch').and.callFake((path: string) => {
      wasmPathPrefix = path;
      return realFetch(path);
    });
    expect(await tf.setBackend('wasm-test')).toBe(false);
    const validPaths = new Set(
      ['/base/wasm-out/tfjs-backend-wasm.wasm',
       '/base/wasm-out/tfjs-backend-wasm-simd.wasm',
       '/base/wasm-out/tfjs-backend-wasm-threaded-simd.wasm']
    );
    expect(validPaths).toContain(wasmPathPrefix);
  });

  it('backend init works when the path is valid and use platform fetch', async () => {
    registerBackend('wasm-test', BROWSER_ENVS, () => {
      const usePlatformFetch = true;
      const validPath = '/base/wasm-out/tfjs-backend-wasm.wasm';
      setWasmPath(validPath, usePlatformFetch);
      let wasmPath: string;
      const realFetch = fetch;
      spyOn(realFetch, 'fetch').and.callFake((path: string) => {
        wasmPath = path;
        return realFetch(path);
      });
      expect(await tf.setBackend('wasm-test')).toBe(true);
      expect(wasmPath).toBe(validPath);
    });
  });

  xit('backend init fails when the path is invalid and use platform fetch', async () => {
    registerBackend('wasm-test', BROWSER_ENVS, () => {
      const usePlatformFetch = true;
      const validPath = '/base/wasm-out/tfjs-backend-wasm.wasm';
      setWasmPath(validPath, usePlatformFetch);
      let wasmPath: string;
      const realFetch = fetch;
      spyOn(realFetch, 'fetch').and.callFake((path: string) => {
        wasmPath = path;
        return realFetch(path);
      });
      expect(await tf.setBackend('wasm-test')).toBe(true);
      expect(wasmPath).toBe(validPath);
    });
  });

  it('backend init works when the wasm paths overrides map is valid and using platform fetch', async () => {
    registerBackend('wasm-test', async () => {
      const usePlatformFetch = true;
      const pathOverrideMap = {
        'tfjs-backend-wasm.wasm': '/base/wasm-out/tfjs-backend-wasm.wasm',
        'tfjs-backend-wasm-simd.wasm': '/base/wasm-out/tfjs-backend-wasm-simd.wasm',
        'tfjs-backend-wasm-threaded-simd.wasm': '/base/wasm-out/tfjs-backend-wasm-threaded-simd.wasm'
      };
      registerWasmPaths(pathOverrideMap, usePlatformFetch);
      let wasmPath: string;
      const realFetch = fetch;
      spyOn(realFetch, 'fetch').and.callFake((path: string) => {
        wasmPath = path;
        return realFetch(path);
      });
      expect(await tf.setBackend('wasm-test')).toBe(true);
      expect(wasmPath).toBe('/base/wasm-out/tfjs-backend-wasm.wasm');
    });
  });
const usePlatformFetch = true;
let wasmPath: string;

const realFetch = util.fetch;

setWasmPath('invalid/path', usePlatformFetch);

setWasmPath = path => {
  return realFetch(path);
};

expect(await tf.setBackend('wasm-test')).toBe(false);

expect(wasmPath).toBe('invalid/path');

it('backend init succeeds with default path', async () => {
  expect(await tf.setBackend('wasm-test')).toBe(true);

  it('setWasmPath called too late', async () => {
    // Set an invalid path.
    setWasmPath('invalid/path');
    await tf.setBackend('wasm-test');
    // Setting the path too late.
    expect(() => setWasmPath('too/late'))
      .toThrowError(/The WASM backend was already initialized. Make sure/);
  });
});

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*/

import {FusedBatchNorm, FusedBatchNormAttrs, FusedBatchNormInputs, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmBatchNorm: (xId: number, meanId: number, varianceId: number, offsetId: number, scaleId: number, varianceEpsilon: number, outId: number) => void;

function setup(backend: BackendWasm): void {


found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/FusedBatchNorm.js.map

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=============================================================================
*/

// Import shared functionality from tfjs-backend-cpu without triggering side effects.
import {concatImplCPU, rangeImplCPU, sliceImplCPU} from '@tensorflow/tfjs-backend-cpu/dist/shared';

export {concatImplCPU, rangeImplCPU, sliceImplCPU};

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*=============================================================================

import {backend_util, FusedConv2D, FusedConv2DAttrs, FusedConv2DInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import
let wasmFusedConv2d:
    (xId: number, batchSize: number, inputHeight:
     number, inputWidth: number, filterId: number, filterHeight: number, filterWidth: number,
     biasId: number, dilationHeight: number, dilationWidth: number, strideHeight: number, strideWidth: number,
     inputChannels: number, outputChannels: number, activation: number, preluActivationWeightsId: number,
     leakyreluAlpha: number, outId: number) =>
        void;

function setup(backend: BackendWasm) {
    wasmFusedConv2d = backend.wasm.cwrap(FusedConv2D, null /* void */, 
        'number',  // xId
        'number',  // batchSize
        'number',  // inputHeight
        'number',  // inputWidth
        'number',  // filterId
        'number',  // filterHeight
        'number',  // filterWidth
        'number',  // biasId
        'number',  // padTop
        'number',  // padRight
        'number',  // dilationHeight
        'number',  // dilationWidth
        'number',  // strideHeight
        'number',  // strideWidth
        'number',  // inputChannels
        'number',  // outputChannels
        'number',  // activation
        'number',  // preluActivationWeightsId
        'number',  // leakyreluAlpha
        'number',  // outId
    );
}

function fusedConv2d(args: {
    inputs: FusedConv2DInputs,
    backend: BackendWasm,
    attrs: FusedConv2DAttrs
}) {n
    const {inputs, attrs, backend} = args;
    const {bias, preluActivationWeights} = inputs;

    if (bias != null) {
        const biasData = backend.dataIdMap.get(bias.dataId);
        if (biasData.shape.length !== 1) {
            throw new Error(`FusedConv2D bias shape (${biasData.shape}) does not match the number of output channels`);
        }
        const biasId = biasData.id;
    }

    const filterHeight = convInfo.filterHeight;
    const filterWidth = convInfo.filterWidth;
    const padTop = convInfo.padInfo.top;
    const padRight = convInfo.padInfo.right;
    const dilationHeight = convInfo.dilationHeight;
    const dilationWidth = convInfo.dilationWidth;
    const strideHeight = convInfo.strideHeight;
    const strideWidth = convInfo.strideWidth;
    const inputChannels = convInfo.inChannels;
    const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;
    const batchSize = convInfo.batchSize;
    const inHeight = convInfo.inHeight;
    const inWidth = convInfo.inWidth;
    const outHeight = convInfo.outHeight;
    const outWidth = convInfo.outWidth;
    const outChannels = convInfo.outChannels;
    const outDepth = convInfo.outDepth;
    const outputSize = convInfo.outputSize;
    const out = backend.makeOutput(convInfo.outShape, 'float32');
    const outId = backend.dataIdMap.get(out.dataId).id;
    const outId = backend.dataIdMap.get(out.dataId).id;

    return out;
}

export const fusedConv2DConfig:
    KernelConfig = {
        kernelName: FusedConv2D,
        backendName: 'wasm',
        setupFunc: setup,
        kernelFunc: fusedConv2D as {} as KernelFunc
    };

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/FusedConv2D.js.map
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 */

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* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernel_utils/shared.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Pack.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Mean.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/OneHot.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Identity.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Cumsum.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Select.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Prod.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Prod.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Step.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/NonMaxSuppressionV4.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Pack.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/base.d.ts
import {KernelConfig, Ceil} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const ceilConfig: KernelConfig = createUnaryKernelConfig(Ceil);

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 *=============================================================================
 */

import {KernelConfig, KernelFunc, Reverse, ReverseAttrs, ReverseInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {identity} from './Identity';
import {reshape} from './Reshape';

let wasmReverse: (xId: number, axes: Uint8Array, axesLength: number, outShape: Uint8Array, outShapeLength: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmReverse = backend.wasm.cwrap(Reverse, null, ['number', // x_id
    'array',   // axes
    'number',  // axes_length
    'array',   // out_shape
    'number',  // out_shape_length
    'number']);
}

export function reverse(args: {inputs: ReverseInputs, backend: BackendWasm, attrs: ReverseAttrs}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {dims} = attrs;

  const axes = util.parseAxisParam(dims, x.shape);

  if (x.shape.length === 0) {
    return identity({inputs: {x}, backend});
  }

  const out = backend.makeOutput(x.shape, x.dtype);
  const xId =
 ```javascript
backend.dataIdMap.get(x.dataId).id;
const outId = backend.dataIdMap.get(out.dataId).id;

const axesBytes = new Uint8Array(new Int32Array(axes).buffer);
const outShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);

wasmReverse(xId, axesBytes, axes.length, outShapeBytes, x.shape.length, outId);
const reshaped = reshape({inputs: [x], attrs: {shape: x.shape, backend}});

backend.disposeData(out.dataId);
return reshaped;
}

export const reverseConfig: KernelConfig = {
  kernelName: 'Reverse',
  backendName: 'wasm',
  kernelFunc: reverse as {} as KernelFunc,
  setupFunc: setup
};
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Reverse.js.map

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```javascript
"version":3,"file":"Exp.js","sourceRoot":"../src/kernels/Exp.ts","names":[]}
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Exp.js.map

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```javascript
"version":3,"file":"base.js","sourceRoot":null}
```

Found in path(s):
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```
import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;
export const greaterConfig: KernelConfig =
createBinaryKernelConfig(Greater, supportsFullBroadcast, 'bool');
```

Found in path(s):
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```
import {BackendWasm} from '../backend_wasm';

// Analogous to `struct Result` in
`non_max_suppression_impl.h`. ninterface Result {
  pSelectedIndices: number;
  selectedSize: number;
  pSelectedScores: number;
  pValidOutputs: number;
}
/**
 * Parse the result of the c++ method, which has the
 * shape equivalent to
`struct Result`.
 */
export function parseResultStruct(
    backend: BackendWasm, resOffset: number): Result {
  const result = new Int32Array(backend.wasm.HEAPU8.buffer, resOffset, 4);
  const
pSelectedIndices = result[0];
const selectedSize = result[1];
const pSelectedScores = result[2];
const pValidOutputs = result[3];
// Since the result was allocated on the heap, we have to delete it.
backend.wasm._free(resOffset);
return {pSelectedIndices, selectedSize, pSelectedScores, pValidOutputs};
}

Found in path(s): * /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/NonMaxSuppression_util.js.map
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{ "version":3, "file": "Abs.js", "sourceRoot": ", "sources": ["../src/kernels/Abs.ts"], "names": [], "mappings": "AAAA;;;;;:

.....:
GaGe:AAEH,OOAO,EAAC,GAAG,EAae,MAAM,UBBAUb,CAAC,AAExD,OOAO,EAAC,UBBAUb,EAAC,MAAM,UBBAUb,CAAC,AAeVd,MAAM,CAAC,MAAM,SAAS,GAAb,UBBAUb,CAAC,GAAG,CAAC,CA AC", "sourceContent": "/**
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 */

import {Abs, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from
'./unary_kernel';

export const absConfig: KernelConfig = createUnaryKernelConfig(Abs);

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{ "version":3, "file": "Conv2DBackpropInput.js", "sourceRoot": ", "sources": ["../src/kernels/Conv2DBackpropInput.js"], "names": [], "mappings": "AAAA;;;;;:

.....:
GaGe:AAEH,OOAO,EAAC,GAAG,EAae,MAAM,UBBAUb,CAAC,AAExD,OOAO,EAAC,UBBAUb,EAAC,MAAM,UBBAUb,CAAC,AAeVd,MAAM,CAAC,MAAM,SAAS,GAAb,UBBAUb,CAAC,GAAG,CAAC,CA AC", "sourceContent": "/**
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 */

import {Abs, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from
'./unary_kernel';

export const absConfig: KernelConfig = createUnaryKernelConfig(Abs);

Found in path(s): *
No license file was found, but licenses were detected in source scan.

{ "version":3, "file": "Conv2DBackpropInput.js", "sourceRoot": ", "sources": ["../src/kernels/Conv2DBackpropInput.js"], "names": [], "mappings": "AAAA;;;;;:

.....:
GaGe:AAEH,OOAO,EAAC,GAAG,EAae,MAAM,UBBAUb,CAAC,AAExD,OOAO,EAAC,UBBAUb,EAAC,MAAM,UBBAUb,CAAC,AAeVd,MAAM,CAAC,MAAM,SAAS,GAAb,UBBAUb,CAAC,GAAG,CAAC,CA AC", "sourceContent": "/**
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.....:
GaGe:AAEH,OOAO,EAAC,GAAG,EAae,MAAM,UBBAUb,CAAC,AAExD,OOAO,EAAC,UBBAUb,EAAC,MAAM,UBBAUb,CAAC,AAeVd,MAAM,CAAC,MAAM,SAAS,GAAb,UBBAUb,CAAC,GAAG,CAAC,CA AC", "sourceContent": "/**
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import {createUnaryKernelConfig} from
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 */

import {Abs, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from
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.....:
GaGe:AAEH,OOAO,EAAC,GAAG,EAae,MAAM,UBBAUb,CAAC,AAExD,OOAO,EAAC,UBBAUb,EAAC,MAAM,UBBAUb,CAAC,AAeVd,MAAM,CAAC,MAAM,SAAS,GAAb,UBBAUb,CAAC,GAAG,CAAC,CA AC", "sourceContent": "/**
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 */

import {Abs, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from
'./unary_kernel';

export const absConfig: KernelConfig = createUnaryKernelConfig(Abs);

Found in path(s): *
No license file was found, but licenses were detected in source scan.
import {backend_util, Conv2DBackpropInput, Conv2DBackpropInputAttrs, Conv2DBackpropInputInputs, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmConv2DBackpropInput: (
    dyId: number, filterId: number, batchSize: number,
    filterHeight: number, filterWidth: number, inHeight: number, inWidth: number, inChannels: number,
    outHeight: number, outWidth: number, outChannels: number,
    strideHeight: number, strideWidth: number,
    topPad: number, leftPad: number,
    fltS0: number, fltS1: number, fltS2: number, xBatchStride: number,
    xRowStride: number, xColStride: number, xChannelStride: number,
    yBatchStride: number, yRowStride: number, yColStride: number, yChannelStride: number,
    outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmConv2DBackpropInput = backend.wasm.cwrap(Conv2DBackpropInput, null, [
    'number',  // dyId
    'number',  // filterId
    'number',  // batchSize
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // inHeight
    'number',  // inWidth
    'number',  // inChannels
    'number',  // outHeight
    'number',  // outWidth
    'number',  // outChannels
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // topPad
    'number',  // leftPad
    'number',  // fltS0
    'number',  // fltS1
    'number',  // fltS2
    'number',  // xBatchStride
    'number',  // xRowStride
    'number',  // xColStride
    'number',  // yBatchStride
    'number',  // yRowStride
    'number',  // yColStride
    'number',  // yChannelStride
    'number',  // outId
  ]);
}

function conv2DBackpropInput(args: {
  backend: BackendWasm,
  inputs: Conv2DBackpropInputInputs,
  attrs: Conv2DBackpropInputAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {dy, filter} = inputs;
  const {strides, pad, dataFormat, dimRoundingMode, inputShape} = attrs;
  const convolution = backend.conv2DBackpropInput(dy, filter, dataFormat, inputShape);
  return convolution;
}
inputShape, filter.shape as [number, number, number, number], strides, \n dilations, pad, dimRoundingMode, false /* depthwise */, SdataFormat); const \n { \n  batchShape, filterHeight, filterWidth, inChannels, \n  inHeight, inWidth, outChannels, outHeight, outWidth, strideHeight, strideWidth \n } = \n convInfo; \n const topPad = filterHeight - 1 - convInfo.padInfo.top; \n const leftPad = filterHeight - 1 - \n convInfo.padInfo.left; \n const isChannelsLast = convInfo.dataFormat === \n 'channelsLast'; \n const dxStrides = \n util.computeStrides(convInfo.inShape); \n const dyStrides = util.computeStrides(dy.shape); \n const [fltS0, fltS1, fltS2] = util.computeStrides(filter.shape); \n const xBatchStride = dxStrides[0]; \n const xRowStride = \n isChannelsLast ? dxStrides[1] : dxStrides[2]; \n const xColStride = isChannelsLast ? dxStrides[2] : 1; \n const xChannelStride = isChannelsLast ? 1 : dxStrides[1]; \n const yBatchStride = dyStrides[0]; \n const yRowStride = \n isChannelsLast ? dyStrides[1] : dyStrides[2]; \n const yColStride = isChannelsLast ? dyStrides[2] : 1; \n const yChannelStride = isChannelsLast ? 1 : dyStrides[1]; \n const out = backend.makeOutput(convInfo.inShape, \n \n 'float32'); \n const outId = backend.dataIdMap.get(out.dataId).id; \n const dyId = \n backend.dataIdMap.get(dy.dataId).id; \n const filterId = backend.dataIdMap.get(filter.dataId).id; \n
 wasmConv2DBackpropInput( \n   dyId, filterId, batchSize, filterHeight, filterWidth, inHeight, inWidth, \n   inChannels, outHeight, outWidth, outChannels, strideHeight, strideWidth, \n   topPad, leftPad, fltS0, fltS1, fltS2, \n   xBatchStride, xRowStride, \n   xColStride, xChannelStride, yBatchStride, yRowStride, yColStride, \n   yChannelStride, outId); \n return out; \n } \n
 export const conv2DBackpropInputConfig: KernelConfig = { \n   kernelName: Conv2DBackpropInput, \n   backendName: 'wasm', \n   setupFunc: setup, \n   kernelFunc: \n   conv2DBackpropInput as {} as KernelFunc \n };
EAAE,KAAK;CACjB,CAAC","sourcesContent":"

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 */

import {ArgMax, ArgMaxAttrs, ArgMaxInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

let wasmFunc: (xId: number, dtype: number, outerSize: number, innerSize: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmFunc = backend.wasm.cwrap(ArgMax, null /* void */, [
    'number',  // x_id
    'number',  // dtype
    'number',  // outer_size
    'number',  // inner_size
    'number'   // out_id
  ]);
}

function argmax(
    args: {inputs: ArgMaxInputs, backend: BackendWasm, attrs: ArgMaxAttrs}) {
  const {backend, inputs, attrs} = args;

  const {axis} = attrs as {} as ArgMaxAttrs;
  const {x} = inputs as {} as ArgMaxInputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose of this
      // once we are done.
      input = transposed;
      inputId = transposedId;
    }
  }

  const outShape = input.shape.slice(0, -1);
  const out = backend.makeOutput(outShape, 'int32');
  const outId = backend.dataIdMap.get(out.dataId).id;

  const outerSize = util.sizeFromShape(out.shape);
  const innerSize = input.shape[axes[0]];

  wasmFunc(inputId, CppDType[input.dtype], outerSize, innerSize, outId);

  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  return out;
}

export const argMaxConfig: KernelConfig = {
  kernelName: ArgMax,
  backendName: 'wasm',
  kernelFunc: argmax as {} as KernelFunc,
  setupFunc: setup
};

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 */
Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Any.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/SpaceToBatchND.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/BatchToSpaceND.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/All.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/BatchToSpaceND.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/All.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/SpaceToBatchND.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/SpaceToBatchND.js
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* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Transform.js
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* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/MirrorPad.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Any.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/SpaceToBatchND.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/SpaceToBatchND.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/StridedSlice.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/StridedSlice.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Any.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/StridedSlice.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/All.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/StridedSlice.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/tf-backend-wasm.es2017.min.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Round.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/All.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Tan.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/MirrorPad.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/tf-backend-wasm.min.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/MirrorPad.ts

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import {_FusedMatMul, _FusedMatMulAttrs, _FusedMatMulInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {FusableActivation} from './types';

let wasmFusedMatMul:
    (aId: number, aShape: Uint8Array, aShapeSize: number, bId: number,
     bShape: Uint8Array, bShapeSize: number, transposeA: boolean, transposeB: boolean, activation: number, biasId: number, preluActivationWeightsId: number, leakyreluAlpha: number, outId: number) =>
     void;

function setup(backend: BackendWasm) {
  wasmFusedMatMul = backend.wasm.cwrap(_FusedMatMul, null /* void */, 
    ['number',  // a_id
     'array',   // a_shape
     'number',  // a_shape.length
     'number',  // b_id
     'array',   // b_shape
     'number',  // b_shape.length
     'number',  // transpose_a
     'number',  // transpose_b
     'number',  // activation
     'number',  // biasId
     'number',  // preluActivationWeightsId
     'number',  // leakyreluAlpha
     'number'   // out_id
  ]);}

function fusedBatchMatMul(args: {
  inputs: _FusedMatMulInputs,
  backend: BackendWasm,
  attrs: _FusedMatMulAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {a, b, bias, preluActivationWeights} = inputs;

  if (a.dtype !== 'float32' || b.dtype !== 'float32') {
    throw new Error(`_FusedMatMul for non-float32 tensors not yet supported.`);
  }

  const {transposeA, transposeB, activation, leakyreluAlpha} = attrs;
  const aId = backend.dataIdMap.get(a.dataId).id;
  const bId = backend.dataIdMap.get(b.dataId).id;

  let biasId = 0;
  if (bias != null) {
    const biasData = backend.dataIdMap.get(bias.dataId);
    if (biasData.shape.length !== 1) {
      throw new Error(`_FusedMatMul only supports rank-1 bias but got rank ${biasData.shape.length}.`);
    }
    biasId = biasData.id;
  }
  const preluActivationWeightsId = preluActivationWeights == null ?
      0 :
      backend.dataIdMap.get(preluActivationWeights.dataId).id;
  const fusedActivation =
      FusableActivation[activation as {} as keyof typeof FusableActivation];
  if (fusedActivation == null) {
    throw new Error(`_FusedMatMul for non-float32 tensors not yet supported.`);
  }

  const batchDim = a.shape[0];

  const out = backend.makeOutput([batchDim, leftDim, rightDim], a.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;

  const aShapeBytes = new Uint8Array(new Int32Array(a.shape).buffer);
  const bShapeBytes = new Uint8Array(new Int32Array(b.shape).buffer);

  wasmFusedMatMul(aId, aShapeBytes, aShape.length, bId, bShapeBytes, b.shape.length, transposeA, transposeB, fusedActivation, biasId, preluActivationWeightsId, leakyreluAlpha || 0, outId);

  return out;
}

export const fusedMatMulConfig: KernelConfig = {
  kernelName: _FusedMatMul,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: fusedBatchMatMul as {} as KernelFunc
};
// Register the wasm backend

import './index';

// tslint:disable-next-line: no-imports-from-dist
import {setTestEnvs} from '@tensorflow/tfjs-core/dist/jasmine_util';
import jasmine from 'jasmine';

Error.stackTraceLimit = Infinity;

process.on('unhandledRejection', e => {
  throw e;
});

setTestEnvs([{name: 'wasm-node', backendName: 'wasm', isDataSync: true}]);

const runner = new jasmine({});
runner.loadConfig({spec_files: ['src/**/*_test.ts'], random: false});

if (process.env.JASMINE_SEED) {
  runner.seed(process.env.JASMINE_SEED);
}

runner.execute();

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/test_node.js.map

No license file was found, but licenses were detected in source scan.
import {backend_util, KernelConfig, KernelFunc, Min, MinAttrs, MinInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils

function setup(backend: BackendWasm): void {
  wasmMin = backend.wasm.cwrap(Min, null /*void*/, [
    'number',  // x_id
    'number',  // dtype
    'number',  // reduce_size
    'number',  // out_id
  ]);}

function min(args: {backend: BackendWasm, inputs: MinInputs, attrs: MinAttrs}):
    TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} =
  permuteAxesAndTranspose(x, axis, backend);

  if (inputWasTransposed) {
    const transposedId =
    backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We
      // will need to dispose of this
      // once we are done.
      input = transposed;
      inputId = transposedId;
    }
  }
  // dispose of the transposed tensor.
  backend.disposeData(transposed.dataId);

  if (keepDims) {
    // reshape
    const newShape = backend_util.expandShapeToKeepDim(out.shape,
    originalAxes);
    out.shape = newShape;
  }

  return out;
}

export const minConfig: KernelConfig = {
  kernelName: Min,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: min as {} as KernelFunc
};

Found in path(s):
  /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Min.js.map

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 */

import {KernelConfig, ExpandDims} from '@tensorflow/tfjs-core';

export const expandDimsConfig: KernelConfig = {
  kernelName: ExpandDims,
  backendName: 'wasm',
  kernelFunc: expandDims as {} as KernelFunc,
};

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 */

import {KernelConfig, Tanh} from '@tensorflow/tfjs-core';

export const tanhConfig: KernelConfig = createUnaryKernelConfig(Tanh);

found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/ExpandDims.js.map
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Tanh.js.map

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*   
/**
 */
/**
 * @deprecated Use `setWasmPaths` instead.
 * Sets the path to the `.wasm` file which will be fetched when the wasm
 * backend is initialized. See
 * https://github.com/tensorflow/tfjs/blob/master/tfjs-backend-wasm/README.md#using-bundlers
 * for more details.
 * @param path wasm file path or url
 * @param usePlatformFetch optional boolean to use platform fetch to download
 * the wasm file, default to false.
 * @doc {heading: 'Environment', namespace: 'wasm'}
 */

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/backend_wasm.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/backend_wasm.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/backend_wasm.js

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---

import {DataType, KernelConfig, TensorInfo, UnaryInputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function createUnaryKernelConfig(kernelName: string, outType?: DataType): KernelConfig {
  let wasmFunc: (xId: number, dtype: number, outId: number) => void;

  function setupFunc(backend: BackendWasm): void {
    wasmFunc = backend.wasm.cwrap(kernelName, null /* void */, [
      'number',  // x_id
      'number',  // dtype
      'number',  // out_id
    ]);  
  }

  function kernelFunc(args: {backend: BackendWasm, inputs: UnaryInputs}):
    TensorInfo {
    const {backend, inputs: {x}} = args;
    const xId = backend.dataIdMap.get(x.dataId).id;
    const out = backend.makeOutput(x.shape, outType || x.dtype);
    const outId = backend.dataIdMap.get(out.dataId).id;

    // Short-circuit zero-sized tensors.
    if (util.sizeFromShape(out.shape) === 0) {
      return out;
    }

    wasmFunc(xId, CppDType[x.dtype], outId);
    return out;
  }

  return {kernelName, backendName: 'wasm', setupFunc, kernelFunc};
}

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kerneys/unary_kernel.js.map
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import {CropAndResize, CropAndResizeAttrs, CropAndResizeInputs, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {cast} from './Cast';

// Must match enum in CropAndResize.cc
enum InterpolationMethod {
  bilinear = 0,
  nearest = 1
}

let wasmCropAndResize: (
  imagesId: number, boxesId: number, boxIndId: number, numBoxes: number,
  imagesShape: Uint8Array, cropHeight: number, cropWidth: number,
  method: number, extrapolationValue: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmCropAndResize = backend.wasm.cwrap(CropAndResize, null /*void*/, [
    'number',  // imagesId
    'number',  // boxesId
    'number',  // boxIndId
    'number',  // numBoxes
    'array',   // images shape
    'number',  // cropHeight
    'number',  // cropWidth
    'number',  // method
    'number',  // extrapolation value
    'number'   // out id
  ]);}

function cropAndResize(args: {
  backend: BackendWasm,
  inputs: CropAndResizeInputs,
  attrs: CropAndResizeAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {method, extrapolationValue, cropSize} = attrs;
  const {image, boxes, boxInd} = inputs;

  const numBoxes = boxes.shape[0];

  const [cropHeight, cropWidth] = cropSize as [number, number];
  const outShape = [numBoxes, cropHeight, cropWidth, image.shape[3]];

  let imagesData = backend.dataIdMap.get(image.dataId);
  let castedData;
  if (image.dtype !== 'float32') {
    castedData = cast({backend, inputs: {x: image}, attrs: {dtype: 'float32'}});
    imagesData = backend.dataIdMap.get(castedData.dataId);
  }

  const imagesId = imagesData.id;
  const boxesId = backend.dataIdMap.get(boxes.dataId).id;
  const boxIndId = backend.dataIdMap.get(boxInd.dataId).id;

  const out = backend.makeOutput(outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;

  const imagesShapeBytes = new Uint8Array(new Int32Array(image.shape).buffer);

  wasmCropAndResize(imagesId, boxesId, boxIndId, numBoxes, imagesShapeBytes, cropHeight, cropWidth, InterpolationMethod[method as {} as keyof typeof InterpolationMethod], extrapolationValue, outId);

  if (castedData != null) {
    backend.disposeData(castedData.dataId);
  }

  return out;
}

export const cropAndResizeConfig: KernelConfig = {
  kernelName: CropAndResize,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: cropAndResize as {} as KernelFunc
};
CAAC,CAAC;AECT,CAAC;AESD,SAAS,UAAS,CAAC,IAhB;IACC,MAAM,EAAC,OEAO,EAEE,MAAM,E
AAE,KAAC,EAAC,GAAG,IAAI,CAAC;IAcC,MAAM,EAAC,YYAY,EAEE,aAAa,EAEE,cAAc,EAAC,GAAG,
KAAC,CAAC;IAcD,MAAM,EAAC,KAAC,EAEE,MAAM,EAAC,GAAG,MAAM,CAAC,IAE/B,MAAM,OA
0,GAAG,OAAC,CAAC,SAAS,CAAC,GAAG,CAAC,KAAC,CAAC,MAAM,CAAC,EAAC,CAAC;IAcV
D,MAAM,QAAQ,GAAG,OAAC,CAAC,SAAS,CAAC,GAAG,CAAC,MAAM,CAAC,CAAC,EAAC,IA InB;
IACC,MAAM,EAAC,OAAO,EAAE,MAAM,EAAE,KAAC,GAAG,IAAI,CAAC;IAC5D,MAAM,EAAC,
GAAG,OAAC,CAAC,IAAC,MAAM,EAAC,YAAY,EAAE,aAAa,EAAE,cAAc,EAAC,GAAG,KAAC,
CAAC;IACpC,OAAC,CAAC,IAAI,CAAC,KAAC,CAAC,aAAa,CAAC,CAAC,IAhB,MAAM,OA
0,GAAG,OAAC,CAAC,SAAS,CAAC,GAAG,CAAC,MAAM,MAAM,CAAC,CAAC,EAAC,IAE/B,MAAM,
OA0,GAAG,OAAC,CAAC,SAAS,CAAC,GAAG,CAAC,KAAC,CAAC,MAAM,CAAC,EAAC,CAAC;IACv
D,MAAM,QAAQ,GAAG,OAAC,CAAC,SAAS,CAAC,GAAG,CAAC,MAAM,CAAC,CAAC,EAAC,IA InB;
IACC,MAAM,EAAC,OAAO,EAAE,MAAM,EAAE,KAAC,GAAG,IAAI,CAAC;IAC5D,MAAM,EAAC,
GAAG,OAAC,CAAC,IAAC,MAAM,EAAC,YAAY,EAAE,aAAa,EAAE,cAAc,EAAC,GAAG,KAAC,
CAAC;IACpC,OAAC,CAAC,IAAI,CAAC,KAAC,CAAC,aAAa,CAAC,CAAC,IAhB,MAAM,OA
0,GAAG,OAAC,CAAC,SAAS,CAAC,GAAG,CAAC,MAAM,MAAM,CAAC,CAAC,EAAC,IAE/B,MAAM,
OA0,GAAG,OAAC,CAAC,SAAS,CAAC,GAAG,CAAC,MAAM,CAAC,CAAC,EAAC,CAAC;IACv
D,MAAM,OA00,CAAC,CAAC,OA00,EAEE,QAQQ,EAEE,aAAa,EAEE,YAAY,EAEE
...
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import {KernelConfig, KernelFunc, TensorInfo, Transpose, TransposeAttrs, TransposeInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {identity} from './Identity';
import {CppDType} from './types';

let wasmTranspose: (}
    xId: number, xShape: Uint8Array,
function setup(backend: BackendWasm) {
  wasmTranspose = backend.wasm.cwrap(Transpose, null /*
    void */, ['number', 'array', 'number', 'array'].length, CppDType[x.dtype], outId,permLength));

  const outShape = computeOutShape(inputs.x.shape, attrs.perm);
  const outId = backend.dataIdMap.get(out.dataId).id;
  const permBytes = new Uint8Array(new Int32Array(attrs.perm).buffer);
  const xShapeBytes = new Uint8Array(new Int32Array(inputs.x.shape).buffer);

  wasmTranspose(xId, xShapeBytes, x.shape.length, CppDType[x.dtype], outId, permBytes, permLength);
  return out;
}

function computeOutShape(inShape: number[], perm: number[]): number[] {
  const outShape = new Array(inShape.length);
  for (let i = 0; i < outShape.length; ++i) {
    outShape[i] = inShape[perm[i]];
  }
  return outShape;
}

function removeOneSizeDims(shape: number[], perm: number[]): [number[], number[]] {
  const newShape: number[] = [];
  const newPerm: number[] = [];
  for (let i = 0; i < shape.length; ++i) {
    if (shape[i] !== 1) {
      newShape.push(shape[i]);
    }
    if (shape[perm[i]] !== 1) {
      newPerm.push(perm[i]);
    }
  }
  for (let i = 0; i < newPerm.length; ++i) {
    let minValIdx = -1;
    for (let j = 0; j < newPerm.length; ++j) {
      if (newPerm[j] >= i && (minValIdx === -1 || newPerm[minValIdx] > newPerm[j])) {
        minValIdx = j;
      }
    }
    newPerm[minValIdx] = i;
  }
  return [newShape, newPerm];
}

export const transposeConfig: KernelConfig = {
  kernelName: Transpose,
  backendName: 'wasm',
  kernelFunc: transpose as {} as KernelFunc,
  setupFunc: setup,
};
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=============================================================================

```
import {KernelConfig, KernelFunc, NonMaxSuppressionV4, NonMaxSuppressionV4Attrs,
NonMaxSuppressionV4Inputs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {parseResultStruct} from './NonMaxSuppression_util';

let wasmFunc: (number, number, number, number, number, number) => number;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(NonMaxSuppressionV4, 'number', [
    'number', 'number', 'number', 'number', 'number', 'bool'],
  );
}

function nonMaxSuppressionV4(args: {
  backend: BackendWasm,
  inputs: NonMaxSuppressionV4Inputs,
  attrs: NonMaxSuppressionV4Attrs
}: NonMaxSuppressionV4Config): TensorInfo[] {
  const {backend, inputs, attrs} = args;
  const {iouThreshold, maxOutputSize, scoreThreshold, padToMaxOutputSize} = attrs;
  const {boxes, scores} = inputs;

  const boxesId = backend.dataIdMap.get(boxes.dataId).id;
  const scoresId = backend.dataIdMap.get(scores.dataId).id;

  const resOffset = wasmFunc(boxesId, scoresId, maxOutputSize, iouThreshold, scoreThreshold, padToMaxOutputSize);

  const {pSelectedIndices, selectedSize, pSelectedScores, pValidOutputs} =
    parseResultStruct(backend, resOffset);

  // Since we are not using scores for V4, we have to delete it from the heap.
  backend.wasm._free(pSelectedScores);

  const selectedIndicesTensor =
    backend.makeOutput([selectedSize], 'int32', pSelectedIndices);

  const validOutputsTensor =
    backend.makeOutput([], 'int32', pValidOutputs);

  return [selectedIndicesTensor, validOutputsTensor];
}

export const nonMaxSuppressionV4Config: KernelConfig = {
  kernelName: NonMaxSuppressionV4,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: nonMaxSuppressionV4 as {} as KernelFunc,
};
```
import {DepthToSpace, DepthToSpaceAttrs, DepthToSpaceInputs, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmDepthToSpace:
    (xId: number, blockSize: number, channelsLast: number, xStrides: Uint8Array, xStridesLength: number, outputShape: Uint8Array, outputStrides: Uint8Array, outSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmDepthToSpace = backend.wasm.cwrap(DepthToSpace, null /*void*/, 
    ['number',  // xId
    'number',  // blockSize
    'number',  // channelsLast
    'array',   // xStrides
    'number',  // xStridesLength
    'array',   // outputShape
    'array',   // outputStrides
    'number',  // outSize
    'number',  // outId
  ]);}

export function depthToSpace(args: {
  backend: BackendWasm,
  inputs: DepthToSpaceInputs,
  attrs: DepthToSpaceAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;

  const {x} = inputs;
  const {blockSize, dataFormat} = attrs;

  const batchSize = x.shape[0];
  const inputHeight = (dataFormat === 'NHWC') ? x.shape[1] : x.shape[2];
  const inputWidth = (dataFormat === 'NHWC') ? x.shape[2] : x.shape[3];
  const inputDepth = (dataFormat === 'NHWC') ? x.shape[3] : x.shape[1];

  const outputHeight = inputHeight * blockSize;
  const outputWidth = inputWidth * blockSize;
  const outputDepth = inputDepth / (blockSize * blockSize);

  const outputShape = (dataFormat === 'NHWC') ? [batchSize, outputHeight, outputWidth, outputDepth] : [batchSize, outputDepth, outputHeight, outputWidth];

  const out = backend.makeOutput(outputShape, 'float32');

  const xData = backend.dataIdMap.get(x.dataId);
  const xId = xData.id;

  const xStridesBytes = new Uint8Array(new Int32Array(x.strides).buffer);

  const outputShapeBytes = new Uint8Array(new Int32Array(outputShape).buffer);

  const outId = backend.dataIdMap.get(out.dataId).id;

  const channelsLast = dataFormat === 'NHWC' ? 1 : 0;

  wasmDepthToSpace(xId, blockSize, channelsLast, xStridesBytes, x.shape.length - 1, outputShapeBytes, outputShapeBytes, outputShape.length, outId);

  return out;
```javascript
out;

export const depthToSpaceConfig: KernelConfig = {
  kernelName: DepthToSpace,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: depthToSpace as {} as KernelFunc
};
```

Found in path(s):
* /opt/cola/permits/123460203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/DepthToSpace.js.map
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```
"version":3,"file":"tf-backend-wasm.js","sources":[]
```

```
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 *
 *=============================================================================
 */

// This enum must align with the enum defined in cc/backend.h.
export enum CppDType {
  float32 = 0,
  int32 = 1,
  bool = 2,
  string = 3,
  complex64 = 4
}
```

---

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This enum must align with the enum defined in cc/backend.h.

```c
union {
  float32 = 0,
  int32 = 1,
  bool = 2,
  string = 3,
  complex64 = 4
};
```

Must match enum in cc/fusable_activations.h.
enum FusableActivation {
  linear = 0,
  relu = 1,
  relu6 = 2,
  prelu = 3,
  leakyrelu = 4,
  sigmoid = 5,
  elu = 6
}

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 */

import {_FusedMatMul, _FusedMatMulAttrs, _FusedMatMulInputs, KernelConfig, KernelFunc} from 'tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {FusableActivation} from './types';

let wasmFusedMatMul:
    (aId: number, aShape: Uint8Array, aShapeSize: number, bId: number,
     bShape: Uint8Array, bShapeSize: number, transposeA: boolean, transposeB: boolean, activation: number,
     biasId: number, preluActivationWeightsId: number, leakyreluAlpha: number, outId: number) =>
      void;

function setup(backend: BackendWasm) {
  wasmFusedMatMul = backend.wasm.cwrap(_FusedMatMul,
      null /* void */,
      ['number',  // a_id
      'array',   // a_shape
      'number',  // a_shape.length
      'number',  // b_id
      'array',   // b_shape 
      'number',  // b_shape.length
      'number',  // transpose_a
      'number',  // transpose_b
      'number',  // activation
      'number',  // biasId
      'number',  // preluActivationWeightsId
      'number',  // leakyreluAlpha 
      'number',  // out_id
      ]);
}

function fusedBatchMatMul(args: {
    inputs:_FusedMatMulInputs,
    backend: BackendWasm,
    attrs:_FusedMatMulAttrs
}) {

  const {inputs, backend, attrs} = args;
  const {a, b, bias, preluActivationWeights} = inputs;

  if (a.dtype !== 'float32' || b.dtype !== 'float32') {
    throw new Error(`_FusedMatMul for non-float32 tensors not yet supported.`);
  }

  const {transposeA, transposeB, activation, leakyreluAlpha} = attrs;
  const aId = backend.dataIdMap.get(a.dataId).id;
  const bId = backend.dataIdMap.get(b.dataId).id;

  let biasId = 0;
  if (bias != null) {
    const biasData = backend.dataIdMap.get(bias.dataId);
    if (biasData.shape.length !== 1) {
      throw new Error(`_FusedMatMul only supports rank-1 bias but got ` +
        `rank ${biasData.shape.length}.`);
    }
    biasId = biasData.id;
  }
  const preluActivationWeightsId = preluActivationWeights == null ?
      0 :
      backend.dataIdMap.get(preluActivationWeights.dataId).id;
  const fusedActivation =
      FusableActivation[activation as {} as keyof typeof FusableActivation];
  if (fusedActivation == null) {
    throw new Error(`$fusionActivation[activation as {} as keyof typeof FusableActivation] not yet supported.`);
  }

  const out = backend.makeOutput([leftDim, rightDim], a.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  const aShapeBytes = new Uint8Array(a.shape.buffer);
  const bShapeBytes = new Uint8Array(b.shape.buffer);

  wasmFusedMatMul(aId, bId, a.shape.length, bId, b.shape.length, leftDim, rightDim, a.dtype, outId, out)
}

export const fusedMatMulConfig: KernelConfig = {
  kernelName: _FusedMatMul,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: fusedBatchMatMul as {} as KernelFunc
}
number, dtype: number, outId: number) => void;

  function setupFunc(backend: BackendWasm): void {
    wasmFunc = backend.wasm.cwrap(kernelName, null /* void */, 
      ['number', // x_id
        'number', // dtype
        'number', // out_id
      ]);

  function kernelFunc(args: {backend: BackendWasm, inputs: UnaryInputs}): 
    TensorInfo {
    const {backend, inputs: {x}} = args;
    const xId = backend.dataIdMap.get(x.dataId).id;
    const out = backend.makeOutput(x.shape, outType | x.dtype);
    const outId = backend.dataIdMap.get(out.dataId).id;

    // Short-circuit zero-sized tensors.
    if (util.sizeFromShape(out.shape) === 0) {
      return out;
    }

    wasmFunc(xId, CppDType[x.dtype], outId);
    return out;
  }

  return {kernelName, backendName: 'wasm',
    setupFunc, kernelFunc};
}

export const absConfig: KernelConfig = createUnaryKernelConfig(Abs);

export function createBinaryKernelConfig(
    kernelName: string, supportsFullBroadcast: boolean,
    dtype?: DataType): KernelConfig {
  let wasmFunc:
      (aId: number, aShape: Uint8Array, aShapeLen: number, bId:
       number, bShape: Uint8Array, bShapeLen: number, dtype: number, outId: number) =>
          void;

  function setupFunc(backend: BackendWasm): void {
    wasmFunc = backend.wasm.cwrap(kernelName, null /* void */, 
      ['number', // a_id,
       array, // a_shape
       number, // a_shape.length
       'number', // b_id
       array, // b_shape
       number, // b_shape.length
       number, // dtype
       'number' // out_id
      ]);

  function kernelFunc(args: {backend: BackendWasm, inputs: BinaryInputs}):
      TensorInfo {
    const {backend, inputs} = args;
    const {a, b} = inputs;
    const aId = backend.dataIdMap.get(a.dataId).id;
    const bId = backend.dataIdMap.get(b.dataId).id;

    const outputType = dtype != null ? dtype : a.dtype;
    const newShape = backend_util.assertAndGetBroadcastShape(a.shape, b.shape);
    const out = backend.makeOutput(newShape, outputType);

    // Short-circuit zero-sized tensors.
    if (util.sizeFromShape(out.shape) === 0) {
      return out;
    }

    const aShapeBytes = new Uint8Array(new Int32Array(a.shape).buffer);
    const bShapeBytes = new Uint8Array(new Int32Array(b.shape).buffer);
    const outId = backend.dataIdMap.get(out.dataId).id;
    const bId = backend.dataIdMap.get(b.dataId).id;

    const kernelFunc = () => wasmFunc(
        aId, aShapeBytes, a.shape.length, bId, bShapeBytes, b.shape.length,
        CppDType[a.dtype], outId);

    // Currently only some float operations support full broadcast. 
    if (supportsFullBroadcast && a.dtype === 'float32') {
      kernelFunc();
      return out;
    }

    const aShapeBytes = new Uint8Array(new Int32Array(a.shape).buffer);
    const bShapeBytes = new Uint8Array(new Int32Array(b.shape).buffer);
    const outId = backend.dataIdMap.get(out.dataId).id;
    const kernelFunc = () => wasmFunc(
        aId, aShapeBytes, a.shape.length, bId, bShapeBytes, b.shape.length,
        CppDType[a.dtype], outId);

    return out;
  }

  return {
    kernelName, backendName: 'wasm',
    setupFunc, kernelFunc};
}
import {Add, KernelConfig} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = true;

export const addConfig: KernelConfig = createBinaryKernelConfig(Add, supportsFullBroadcast);

import {AddN, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmFunc:
    (inputIds: Uint8Array, inputIdsLen: number, dtype: number, outId: number) =>
        void =

function setupFunc(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(AddN, null /* void */, 
    'array',   // input_ids
    'number',  // input_ids.length
    'number',  // dtype
    'number',  // out_id
  );
}

function addn(args: {inputs: TensorInfo[], backend: BackendWasm}) {
  const {inputs, backend} = args;
  const out = backend.makeOutput(inputs[0].shape, inputs[0].dtype);

  // Short-circuit zero-sized tensors.
  if (util.sizeFromShape(out.shape) === 0) {
    return out;
  }

  const inputIds = inputs.map(x => backend.dataIdMap.get(x.dataId).id);
  const inputIdsBytes = new Uint8Array(new Int32Array(inputIds).buffer);

  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmFunc(inputIdsBytes, inputIds.length, CppDType[out.dtype], outId);

  return out;
}

export const addNConfig: KernelConfig = {
  kernelName: AddN,
  backendName: 'wasm',
  setupFunc,
  kernelFunc: addn as {} as KernelFunc,
};

import {Identity, IdentityInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function identity(args: {inputs: IdentityInputs, backend: BackendWasm}):
    TensorInfo {
  const {inputs: {x}, backend} = args;
  const out = backend.makeOutput(x.shape, x.dtype);

  const inVals = backend.typedArrayFromHeap(x);
  const outVals = backend.typedArrayFromHeap(out);

  outVals.set(inVals);
  return out;
}

export const identityConfig: KernelConfig = {
  kernelName: Identity,
  backendName: 'wasm',
  kernelFunc: identity as {} as KernelFunc,
};
import {KernelConfig, KernelFunc, TensorInfo, Transpose, TransposeAttrs, TransposeInputs} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';

import {identity} from './Identity';
import {CppDType} from './types';

let wasmTranspose: (
    xId: number, xShape: Uint8Array, xShapeLength: number, dtype: CppDType,
    outId: number, perm: Uint8Array, permLength: number) =>
    void;

function setup(backend: BackendWasm) {
    wasmTranspose = backend.wasm.cwrap(Transpose, null /*
    void */,[
        'number',  // xId
        'array',   // x.shape
        'number',  // x.shape.length
        'number',  // dtype
        'number',  // outId
        'array',   // perm
        'number',  // perm.length
    ]);}

export function transpose(
    args:
    {inputs: TransposeInputs, backend: BackendWasm, attrs: TransposeAttrs}):
    TensorInfo {
  const {inputs, backend, attrs} = args;
  // Reduce any dimensions with size one. Lower-rank transpose kernel performs
  // better due to simpler memory access pattern.
  const [reducedShape, perm] = removeOneSizeDims(inputs.x.shape,
      attrs.perm);

  let permIsNoOp = true;
  for (let i = 0; i < perm.length; i++) {
    if (perm[i] !== i) {
      permIsNoOp = false;
    }
  }
  const outShape = computeOutShape(inputs.x.shape, attrs.perm);  

  let permBytes = new Uint8Array(new Int32Array(perm).buffer);
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);

  wasmTranspose(xId,
      xShapeBytes, x.shape.length, CppDType[x.dtype], outId, permBytes,
      perm.length);
  return
}

function computeOutShape(inShape: number[], perm: number[]): number[] {
  const outShape = new Array(inShape.length);
  for (let i = 0; i < outShape.length; i++) {
    outShape[i] = inShape[perm[i]];
  }
  return outShape;
}

function removeOneSizeDims(
    shape: number[], perm: number[]): [{number[]}, number[]] {
  const newShape: number[] = 
      [],
  const newPerm: number[] = 
      [];
  for (let i = 0; i < shape.length; ++i) {
    if (shape[i] !== 1) {
      newShape.push(shape[i]);
    }
    if (shape[perm[i]] !== 1) {
      newPerm.push(perm[i]);
    }
  }
  for (let i = 0; i < newPerm.length; ++i) {
    let minValIdx = -1;
    for (let j = 0; j < newPerm.length; ++j) {
      if (newPerm[i] > i &&
          (minValIdx === -1 || newPerm[minValIdx] >
            newPerm[j])) {
        minValIdx = j;
      }
    }
    newPerm[i] = minValIdx;
  }
  return [newShape, newPerm];
}

export const transposeConfig: KernelConfig = {
  kernelName: Transpose,
  backendName: 'wasm',
  kernelFunc: transpose as {} as KernelFunc,
  setupFunc: setup,
};

/**
 * Compute permutation axes and do a transpose if necessary.
 * Used by reduction ops.
 *
 * @param x input TensorInfo
 * @param axis reduction axes
 * @param backend wasm backend instance
 * @param permuteAxesAndTranspose
 */
export function permuteAxesAndTranspose(
    x: TensorInfo,
    axis: number|number[],
    backend: BackendWasm
): {
  transposed: TensorInfo|null,
  axes: number[]
} {
  const xShape = x.shape;
  const xRank = x.shape.length;

  const originalAxes = util.parseAxisParam(axis, xShape);

  let axes = originalAxes;
  let permutedAxes = backend_util.getAxesPermutation(axes, xRank);
  let xTransposed = null;

  if (permutedAxes != null) {
    const newShape: number[] = new Array(xRank);
    for (let i = 0; i < x.shape.length; i++) {
      newShape[i] = x.shape[permutedAxes[i]];
    }
    axes =
    backend_util.getInnerMostAxes(axes.length, xRank);
    xTransposed =
   

  }

  return {transposed, axes};
}
permutedAxes}, backend));

    const xId = backend.dataIdMap.get(x.dataId).id;
    const transposedId = backend.dataIdMap.get(xTransposed.dataId).id;

    if (transposedId !== xId) {
      inputWasTransposed = true;
    }

    return {transposed: xTransposed, originalAxes, axes, inputWasTransposed};
  }

  return {transposed: xTransposed, originalAxes, axes, inputWasTransposed};
}

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 *
 *=============================================================================
 */

import {All, AllAttrs, AllInputs, backend_util, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';

let wasmAll: (xId: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmAll = backend.wasm.cwrap(All, null /*void*/, ['number, number, number']);
}

function all(args: {backend: BackendWasm, inputs: AllInputs, attrs: AllAttrs}):
    TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;

  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    input = transposed;
    inputId = transposedId;
  }

  const inputRank = input.shape.length;

  backend_util.assertAxesAreInnerMostDims('all', axes, inputRank);
  const [outShape, reduceShape] =
      backend_util.computeOutAndReduceShapes(input.shape, axes);
  const reduceSize = util.sizeFromShape(reduceShape);

  const out = backend.makeOutput(outShape, x.dtype);
  if (util.sizeFromShape(input.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmAll(inputId, reduceSize, outId);
  }

  if (inputWasTransposed) {
    backend.disposeData(transposed.dataId);
  }

  if (keepDims) {
    const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
    out.shape = newShape;
  }

  return out;
}

export const allConfig: KernelConfig = {
  kernelName: All,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: all as {} as KernelFunc
};

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 *
 *=============================================================================
 */

import {Any, AnyAttrs, AnyInputs, backend_util, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';

let wasmAny: (xId: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmAny = backend.wasm.cwrap(Any, null /*void*/, ['number, number, number']);
}

function any(args: {backend: BackendWasm, inputs: AnyInputs, attrs: AnyAttrs}):
    TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;

  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    input = transposed;
    inputId = transposedId;
  }

  const inputRank = input.shape.length;

  backend_util.assertAxesAreInnerMostDims('any', axes, inputRank);
  const newShape = backend_util.expandShapeToKeepDim(input.shape, originalAxes);
  input.shape = newShape;

  const out = backend.makeOutput(input.shape, x.dtype);
  if (util.sizeFromShape(input.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmAny(inputId, reduceSize, outId);
  }

  if (inputWasTransposed) {
    backend.disposeData(transposed.dataId);
  }

  if (keepDims) {
    const newShape = backend_util.expandShapeToKeepDim(input.shape, originalAxes);
    input.shape = newShape;
  }

  return input;
}

export const anyConfig: KernelConfig = {
  kernelName: Any,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: any as {} as KernelFunc
};
util.sizeFromShape(reduceShape);

const out = backend.makeOutput(outShape, dtype);

if (util.sizeFromShape(input.shape) !== 0) {
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmAny(inputId, reduceSize, outId);
}

if (inputWasTransposed) {
  // dispose of the transposed tensor.
  backend.disposeData(transposed.dataId);
}

if (keepDims) {
  // reshape
  const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
  out.shape = newShape;
}

return out;

export const anyConfig: KernelConfig = {
  kernelName: Any,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: any as {} as KernelFunc
};

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 */

import {ArgMax, ArgMaxAttrs, ArgMaxInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

let wasmFunc: (xId: number, dtype: number, outerSize: number, innerSize: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmFunc = backend.wasm.cwrap(ArgMax, null /* void */, [
    'number',  // x_id
    'number',  // dtype
    'number',  // outer_size
    'number',  // inner_size
    'number'   // out_id
  ]);
}

function argmax(
    args: {
      inputs: ArgMaxInputs,
      backend: BackendWasm,
      attrs: ArgMaxAttrs
    }) {
  const {backend, inputs, attrs} = args;
  const {axis} = attrs as {} as ArgMaxAttrs;
  const {x} = inputs as {} as ArgMaxInputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose of this
      // once we are done.
      input = transposed;
      inputId = transposedId;
    }
  }

  const outShape = input.shape.slice(0, -1);
  const out = backend.makeOutput(outShape, 'int32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  const outerSize = util.sizeFromShape(outShape, dtype);

  const outerId = input.dataId;

  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  return out;
}

export const argMaxConfig: KernelConfig = {
  kernelName: ArgMax,
  backendName: 'wasm',
  kernelFunc: argmax as {} as KernelFunc,
  setupFunc: setup
};

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 */

import {AvgPool, AvgPoolAttrs, AvgPoolInputs, backend_util, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmAvgPool: (xId: number, batchSize: number, inputHeight: number, inputWidth: number, filterHeight: number, filterWidth: number, padTop: number, padRight: number, padBottom: number, padLeft: number, strideHeight: number, strideWidth: number, channels: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmAvgPool = backend.wasm.cwrap(AvgPool, null /* void */, [
    'number',  // xId
    'number',  // batchSize
    'number',  // inputHeight
    'number',  // inputWidth
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // padTop
    'number',  // padRight
    'number',  // padBottom
    'number',  // padLeft
  ]);
}

function avgPool(
    args: {
      inputs: AvgPoolInputs,
      backend: BackendWasm,
      attrs: AvgPoolAttrs
    }) {
  const {backend, inputs, attrs} = args;
  const {filterSize: filterSizeX, filters, stride: strideX, pad: padX, padStride: padStrideX} = attrs as {} as AvgPoolAttrs;
  const {x} = inputs as {} as AvgPoolInputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, inputWasTransposed} =
      permuteAxesAndTranspose(x, filterSizeX, backend);

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose of this
      // once we are done.
      input = transposed;
      inputId = transposedId;
    }
  }

  const outShape = input.shape.slice(0, -2);
  const out = backend.makeOutput(outShape, 'int32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  const outerSize = util.sizeFromShape(outShape, 'int32');

  const outerId = input.dataId;

  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  return out;
}

export const avgPoolConfig: KernelConfig = {
  kernelName: AvgPool,
  backendName: 'wasm',
  kernelFunc: avgPool as {} as KernelFunc,
  setupFunc: setup
};
```javascript
function avgPool(
    args: {inputs: AvgPoolInputs, backend: BackendWasm, attrs: AvgPoolAttrs}) {  
  [const {inputs, attr, backend}) = args;
  const x = inputs.x as Tensor4D;
  const xId = backend.dataIdMap.get(x.dataId).id;
  if (const convInfo = backend_util.computePool2DInfo(x.shape, filterSize, strides, pad, dimRoundingMode)) {
    const filterHeight = convInfo.filterHeight;
    const filterWidth = convInfo.filterWidth;
    const padTop = convInfo.padTop;
    const padRight = convInfo.padRight;
    return {dataId: xId, x.shape[0], x.shape[1], x.shape[2], filterHeight, filterWidth, padTop, padRight, padBottom, strideHeight, strideWidth, channels, outId};
  }
}

function setup(backend: BackendWasm) {
  wasm_avgPool = backend.wasm.cwrap('avgPool', null /* void */, 
      ['number',  // strideWidth
       'number',  // channels
       'number',  // outId
      ]);  
}

function avgPool(
    args: {inputs: AvgPoolInputs, backend: BackendWasm, attrs: AvgPoolAttrs}) {  
  [const {inputs, attr, backend}) = args;
  const x = inputs.x as Tensor4D;
  const xId = backend.dataIdMap.get(x.dataId).id;
  if (const convInfo = backend_util.computePool2DInfo(x.shape, filterSize, strides, pad, dimRoundingMode)) {
    const filterHeight = convInfo.filterHeight;
    const filterWidth = convInfo.filterWidth;
    const padTop = convInfo.padTop;
    const padRight = convInfo.padRight;
    return {dataId: xId, x.shape[0], x.shape[1], x.shape[2], filterHeight, filterWidth, padTop, padRight, padBottom, strideHeight, strideWidth, channels, outId};
  }
}
```

---

```javascript
function reshape(
    args: {inputs: ReshapeInputs, attrs: ReshapeAttrs, backend: BackendWasm}) {
  const {inputs, attrs} = args;
  const {x} = inputs;
  const {shape} = attrs;

  const xSize = util.sizeFromShape(x.shape);
  const $shape = util.inferFromImplicitShape(shape, xSize);

  util.assert(xSize === util.sizeFromShape($shape), () =>
      `new shape: ${$shape}, old shape: ${x.shape}. New shape and old ` +
      `shape must have the same number of elements.`);
  args.backend.incRef(x.dataId);
  return {dataId: x.dataId, shape: $shape, dtype: x.dtype};
}
```

---

```javascript
function setup(backend: BackendWasm) {
  wasm_batchMatMul = backend.wasm.cwrap('batchMatMul', null /* void */, 
      ['number',  // a_id
       'array',   // a_shape
       'number',  // a_shape.length
       'number',  // b_id
       'array',   // b_shape
       'number',  // b_shape.length
       'number',  // transpose_a
       'number',  // transpose_b
      ]);  
}
```

---

```javascript
function batchMatMul(args: {inputs: BatchMatMulInputs, backend: BackendWasm}) {  
  [const {inputs, attr, backend}) = args;
  let wasm_batchMatMul = backend.wasm.cwrap('batchMatMul', null /* void */, 
      ['number',  // a_id
       'array',   // a_shape
       'number',  // a_shape.length
       'number',  // b_id
       'array',   // b_shape
       'number',  // b_shape.length
       'number',  // transpose_a
       'number',  // transpose_b
      ]);  
}
```

---

```javascript
function reshape(
    args: {inputs: ReshapeInputs, attrs: ReshapeAttrs, backend: BackendWasm}) {
  const {inputs, attrs} = args;
  const {x} = inputs;
  const {shape} = attrs;

  const xSize = util.sizeFromShape(x.shape);
  const $shape = util.inferFromImplicitShape(shape, xSize);

  util.assert(xSize === util.sizeFromShape($shape), () =>
      `new shape: ${$shape}, old shape: ${x.shape}. New shape and old ` +
      `shape must have the same number of elements.`);
  args.backend.incRef(x.dataId);
  return {dataId: x.dataId, shape: $shape, dtype: x.dtype};
}
```

---

```javascript
import {KernelConfig, KernelFunc, Reshape, ReshapeAttributes, ReshapeInputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {reshape} from './Reshape';

let wasm_batchMatMul: (
    aId: number, aShape: Uint8Array, aShapeSize: number, bId: number, bShape: Uint8Array, bShapeSize: number, transposeA: boolean, transposeB: boolean, outId: number) =>

```
```javascript
const {inputs, backend, attrs} = args;
const {a, b} = inputs;
const {batchMatMulAttrs} = attrs;

const {aRank} = a.shape.length;
const bRank = b.shape.length;
const innerShapeA = transposeA ? a.shape[aRank - 2] : a.shape[aRank - 1];
const innerShapeB = transposeB ? b.shape[bRank - 2] : b.shape[bRank - 1];
const outerShapeA = transposeA ? a.shape[aRank - 2] : a.shape[aRank - 1];
const outerShapeB = transposeB ? b.shape[bRank - 2] : b.shape[bRank - 1];
const batchDimA = util.sizeFromShape(outerDimsA);
const batchDimB = util.sizeFromShape(outerDimsB);

if (a.dtype !== 'float32' || b.dtype !== 'float32') {
  throw new Error(`BatchMatMul for non-float32 tensors not yet supported.`);
}

const a3dShape = transposeA ? [batchDimA, innerShapeA, outerShapeA] : [batchDimA, outerShapeA, innerShapeA];
const b3dShape = transposeB ? [batchDimB, outerShapeB, innerShapeB] : [batchDimB, innerShapeB, outerShapeB];

const a3dId = backend.dataIdMap.get(a3d.dataId).id;
const b3dId = backend.dataIdMap.get(b3d.dataId).id;
const leftDim = transposeA ? a3d.shape[2] : a3d.shape[1];
const batchDim = Math.max(batchDimA, batchDimB);
const out = backend.makeOutput([batchDim, leftDim, rightDim], a3d.dtype);
const outId = backend.dataIdMap.get(out.dataId).id;

const aShapeBytes = new Uint8Array(new Int32Array(a3d.shape).buffer);
const bShapeBytes = new Uint8Array(new Int32Array(b3d.shape).buffer);

wasmBatchMatMul(a3dId, aShapeBytes, a3d.shape.length, b3dId, bShapeBytes, b3d.shape.length, a.transposeA, b.transposeB, outId);
backend.disposeData(a3d.dataId);
backend.disposeData(b3d.dataId);
return out;
```

export const batchMatMulConfig:
  KernelConfig = {
    kernelName: BatchMatMul,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: batchMatMul as {} as KernelFunc
  };
```
```
import { util } from '@tensorflow/tfjs-core';

export function rangeImpl(start, stop, step, dtype) {
    const sameStartStop = start === stop;
    const increasingRangeNegativeStep = start < stop && step < 0;
    const decreasingRangePositiveStep = stop < start && step > 0;
    if (sameStartStop || increasingRangeNegativeStep || decreasingRangePositiveStep) {
        return util.makeZerosTypedArray(0, dtype);
    }
    const numElements = Math.abs(Math.ceil((stop - start) / step));
    const values = util.makeZerosTypedArray(numElements, dtype);
    if (stop < start && step === 1) {
        // Auto adjust the step's sign if it hasn't been set
        // (or was set to 1)
        step = -1;
    }
    values[0] = start;
    for (let i = 1; i < values.length; i++) {
        values[i] = values[i - 1] + step;
    }
    return values;
}
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 *
 *=============================================================================

import { backend_util, buffer, Slice, slice_util, util } from '@tensorflow/tfjs-core';
import { assertNotComplex } from '../cpu_util';
export function sliceImpl(vals, begin, size, shape, dtype) {
    const isContinous = slice_util.isSliceContinous(shape, begin, size);
    const length = util.sizeFromShape(size);
    const xStrides = util.computeStrides(shape);
    if (isContinous) {
        const flatOffset = slice_util.computeFlatOffset(begin, xStrides);
        if (dtype === 'string') {
            return vals.slice(flatOffset, flatOffset + length);
        }
        return vals.subarray(flatOffset, flatOffset + length);
    }
    const decodedData = dtype === 'string' ?
        backend_util.fromUint8ToStringArray(vals) :
        vals;
    const inBuf = buffer(shape, dtype, decodedData);
    const outBuf = buffer(size, dtype);
    for (let i = 0; i < outBuf.size; ++i) {
        const outLoc = outBuf.indexToLoc(i);
        const inLoc = outLoc.map((idx, j) => idx + begin[j]);
        outBuf.set(inBuf.get(...inLoc), ...outLoc);
    }
    if (dtype === 'string') {
        return backend_util.fromStringArrayToUint8(outBuf.values);
    }
    return outBuf.values;
}
export function slice(args) {
    const { inputs, backend, attrs } = args;
    const { x } = inputs;
    const { begin, size } = attrs;
    assertNotComplex(x, 'slice');
    const [ $begin, $size ] = slice_util.parseSliceParams(x, begin, size);
    slice_util.assertParamsValid(x, $begin, $size);
    const vals = backend.data.get(x.dataId).values;
    const outVals = sliceImpl(vals, $begin, $size, x.shape, x.dtype);
    return backend.makeTensorInfo($size, x.dtype, outVals);
}
export const sliceConfig = {
    kernelName: Slice,
    backendName: 'cpu',
    kernelFunc: slice
};
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GVjaWZpYyBsYW5ndWFnZSBnb3Zlcm5pbmcgcGVybWlzc2lvbmNhdGggYXN2ZXJ0IGVzdCBiYWNrZW5kIGZyb20g

---

*/

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*
*=============================================================================

*/

import {backend_util, KernelConfig, KernelFunc, Slice, slice_util, SliceAttrs, SliceInputs, TypedArray, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {sliceImplCPU} from '../kernel_utils/shared';

export function slice(
    args: {inputs: SliceInputs, attrs: SliceAttrs, backend: BackendWasm, output: TypedArray, kernelConfig: KernelConfig})

{...}
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```
const {inputs: {x}, attrs: {begin, size}, backend} = args;  // inputs: {x}, attr: {begin, size}, backend = args;
const [begin_, size_] = slice_util.parseSliceParams(x, begin, size);  // slice_util.parseSliceParams(x, begin, size)
const isContinuous = slice_util.isSliceContinuous(x.shape, begin_, size_);  // slice_util.isSliceContinuous(x.shape, begin_, size_)
const xVals = backend.readSync(x.dataId);  // const outData = backend.dataIdMap.get(out.dataId)
const xStrides = util.computeStrides(x.shape);  // const outData = backend.dataIdMap.get(out.dataId)
const outData.stringBytes = xVals as Uint8Array[]

if (isContinuous) {
  const flatOffset = slice_util.computeFlatOffset(begin_, xStrides);
  if (x.dtype === 'string') {
    (xVals as Uint8Array[]).slice(flatOffset, flatOffset + util.sizeFromShape(size_))
  } else {
    const outVals = backend.ndarrayFromHeap(out);
    outVals.set((xVals as TypedArray).subarray(flatOffset, flatOffset + util.sizeFromShape(size_)));
    return out;
  }
}

if (x.dtype === 'string') {
  const res = sliceImplCPU(xVals, begin, size, x.shape, x.dtype);
  outData.stringBytes = res as Uint8Array[];
  return out;
}

if (x.dtype === 'string') {
  const res = sliceImplCPU(xVals, begin, size, x.shape, x.dtype);
  outData.stringBytes = res as Uint8Array[];
  return out;
}

if (x.dtype === 'string') {
  const res = sliceImplCPU(xVals, begin, size, x.shape, x.dtype);
  outData.stringBytes = res as Uint8Array[];
  return out;
}
```

```javascript
function slice2d(xVals: backend_util.TypedArray, xStride: number, outVals: backend_util.TypedArray, begin: [number, number], size: [number, number]): void {
  let outOffset = 0;
  const beginI = begin[0];
  const beginJ = begin[1];
  const endI = beginI + size[0];
  for (let i = beginI; i < endI; i++) {
    const xOffset = i * xStride + beginJ;
    outVals.set(xVals.subarray(xOffset, xOffset + size[1]), outOffset);
    outOffset += size[1];
  }
}

function slice3d(xVals: backend_util.TypedArray, xStride1: number, xStride2: number, outVals: backend_util.TypedArray, begin: [number, number, number], size: [number, number, number]): void {
  let outOffset = 0;
  const beginI = begin[0];
  const beginJ = begin[1];
  const beginK = begin[2];
  const endI = beginI + size[0];
  const endJ = beginJ + size[1];
  const endK = beginK + size[2];
  for (let i = beginI; i < endI; i++) {
    for (let j = beginJ; j < endJ; j++) {
      const xOffsets = i * xStride1 + j * xStride2 + beginK;
      outVals.set(xVals.subarray(xOffsets, xOffset + size[2]), outOffset);
      outOffset += size[2];
    }
  }
}

function slice4d(xVals: backend_util.TypedArray, xStride1: number, xStride2: number, xStride3: number, outVals: backend_util.TypedArray, begin: [number, number, number, number], size: [number, number, number, number]): void {
  let outOffset = 0;
  const beginI = begin[0];
  const beginJ = begin[1];
  const beginK = begin[2];
  const beginL = begin[3];
  const endI = beginI + size[0];
  const endJ = beginJ + size[1];
  const endK = beginK + size[2];
  const endL = beginL + size[3];
  for (let i = beginI; i < endI; i++) {
    for (let j = beginJ; j < endJ; j++) {
      for (let k = beginK; k < endK; k++) {
        const xOffsets = i * xStride1 + j * xStride2 + k * xStride3 + beginL;
        outVals.set(xVals.subarray(xOffsets, xOffsets + size[3]), outOffset);
        outOffset += size[3];
      }
    }
  }
}
```

```
import {backend_util, BatchToSpaceND, BatchToSpaceNDInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {reshape} from './Reshape';
import {slice} from './Slice';
import {transpose} from './Transpose';

function batchToSpaceND(args: {
  inputs: BatchToSpaceNDInputs,
  backend: BackendWasm,
  attr: BatchToSpaceNDAttrs
}) {
  const [inputs, backend, attr] = args;  // inputs: BatchToSpaceNDInputs, backend: BackendWasm, attr: BatchToSpaceNDAttrs
    ```
crops} = attrs;\n
const prod = blockShape.reduce((a, b) => a * b);\nconst reshaped = backend_util.getReshaped(x.shape, blockShape, prod);\nconst permuted = backend_util.getPermuted(reshaped.length, blockShape.length);\nconst reshapedPermuted =\nbackend_util.getReshapedPermuted(x.shape, blockShape, prod);\nconst sliceBeginCoords =\nbackend_util.getSliceBeginCoords(crops, blockShape.length);\nconst sliceSize =\nbackend_util.getSliceSize(reshapedPermuted, crops, blockShape.length);\nconst xReshaped = reshape({inputs: [x], backend, attrs: {shape: reshaped}});\nconst xTransposed =\ntranspose({inputs: [x, xReshaped, backend, attrs: {perm: permuted}]}, xReshaped.length, blockShape.length);\nconst result = slice({inputs: [x, xReshaped, backend,\natts: {begin: sliceBeginCoords, size: sliceSize}]}, return\nresult);\n
export const batchToSpaceNDConfig: KernelConfig = {
  kernelName: BatchToSpaceND,
  backendName: 'wasm',\n  kernelFunc: batchToSpaceND as {} as KernelFunc
};

export function cast(
    args: {inputs: CastInputs, attrs: CastAttrs, backend: BackendWasm}):
    TensorInfo {
  const {inputs: {x}, attrs: {dtype}, backend} = args;
  const out = backend.makeOutput(x.shape, dtype);
  const inVals = backend.typedArrayFromHeap(x);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.set(inVals);
  return out;
}

export const castConfig: KernelConfig = {
  kernelName: Cast,
  backendName: 'wasm',\n  kernelFunc: cast as {} as KernelFunc,
};

export const ceilConfig: KernelConfig = createUnaryKernelConfig(Ceil);

import {ClipByValue, ClipByValueAttrs, ClipByValueInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmClip: (xId: number, min: number, max: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmClip = backend.wasm.cwrap(ClipByValue, null /* void */, 
    ['number', // x_id
    'number', // min
    'number', // max
    'number', // out_id
    'number']);
}

function clip(args: {
  inputs: ClipByValueInputs,
  backend: BackendWasm}) {
  const {inputs: {x}, attrs: {clipMin, clipMax}, backend} = args;
  const xId = backend.makeOutput(x.shape, x.type);
  const outId = backend.makeOutput(x.shape, x.type);
  const inValues = backend.typedArrayFromHeap(x);
  const outValues = backend.typedArrayFromHeap(out);
  outValues.set(inValues);
  wasmClip(xId, clipMin, clipMax, outId);
  return out;
}
```
import {backend_util, Concat, ConcatAttrs, ConcatInputs, KernelConfig, KernelFunc, util} from
'@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {concatImplCPU} from
'../kernel_utils/shared';
import {identity} from './Identity';
import {reshape} from './Reshape';

export function concat(
    args: {inputs: ConcatInputs, backend: BackendWasm, attrs: ConcatAttrs}) {
  const {inputs, backend} = args;

  const axis = util.parseAxisParam(args.attrs.axis, inputs[0].shape)[0];

  let outShape = backend_util.computeOutShape(inputs.map(t => t.shape), axis);
  // Keep only non-empty tensors (ignore tensors with 0 in their shape).
  const $inputs = inputs.filter(t => util.sizeFromShape(t.shape) > 0);
  if ($inputs.length === 1) {
    return identity({inputs: {x: $inputs[0]}, backend});
  }

  const out = backend.makeOutput(outShape, inputs[0].dtype);
  if (util.sizeFromShape(outShape) === 0) {
    return out;
  }

  const shapes = $inputs.map(t => t.shape);
  backend_util.assertParamsConsistent(shapes, axis);

  if ($inputs[0].dtype === 'string') {
    // Any concat of n-dimensional tensors across any axis can be reduced to a
    // concatenation of two-dimensional tensors across the axis 1 by first
    // partitioning the axes of the original tensors into those less than
    // the\n    // axis to be concatenated and the rest. Then reshape the tensors\n    // into a two-dimensional tensor by collapsing these two sets of axes and\n    // concatenate the resulting matrices across the axis 1, finally reshaping\n    // the result to have the proper shape.
    const inputs2D = $inputs.map(t => {
      const innerSize = util.sizeFromShape(t.shape.slice(axis));
      const shape = [-1, innerSize];
      return reshape({inputs: {x: t}, backend, attrs: {shape}});
    });

    const inputsValShapes = inputs2D.map(t => {
      return {vals: backend.readSync(t.dataId), shape: t.shape};
    });

    // Concats 2d tensors along axis=1.
    const outShape = backend_util.computeOutShape(inputs2D.map(t => t.shape), 1 /* axis */);
    const simplyConcat = inputs2D[0].shape[0] === 1;
    const outVals = concatImplCPU(inputsValShapes, outShape, inputs[0].dtype, simplyConcat) as string[];

    const finalOutShape = backend_util.computeOutShape($inputs.map(t => t.shape), axis);

    out.shape = finalOutShape;
    const outData = backend.dataIdMap.get(out.dataId);
    outData.stringBytes = backend_util.fromStringArrayToUint8(outVals);
    inputs2D.forEach(t => backend.disposeData(t.dataId));
  } else {
    const batchSize = util.sizeFromShape($inputs[0].shape.slice(axis));
    let sumInnerDims = 0;
    const innerDims = $inputs.map(input => {
      return {vals: backend.readSync(input.dataId), shape: input.shape};
    });

    for (let b = 0; b < batchSize; b++) {
      let outOffset = b * sumInnerDims;
      for (let i = 0; i < inVals.length; i++) {
        const inOffset = i * sumInnerDims;
        const inVals = inputs.map(input => {
          return {vals: backend.readSync(input.dataId), shape: input.shape};
        });

        const outVals = concatImplCPU(inVals, outShape, inputs[0].dtype, simplyConcat) as string[];

        const outData = backend.dataIdMap.get(out.dataId);
        outData.stringBytes = backend_util.fromStringArrayToUint8(outVals);
        for (let i = 0; i < outData.length; i++) {
          outData.stringBytes[i] += outVals[i];
        }
      }
    }
  }
  return out;
}
```

```
The extracted text appears to be a snippet of code from a JavaScript library, specifically from TensorFlow.js. The code includes functions for a Conv2D operation and its backpropagation. The code snippet is part of backend logic for executing convolution operations on the WebAssembly backend.

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The code snippet includes function definitions for `setup`, `conv2d`, and related utility functions. These functions handle the setup and execution of convolution operations, including parameters such as `xId`, `batchSize`, `inputHeight`, `inputWidth`, `filterId`, `filterHeight`, `filterWidth`, `padTop`, `padRight`, `padBottom`, `padLeft`, `isSamePad`, `dilationHeight`, `dilationWidth`, `strideHeight`, `strideWidth`, and others.

The code is structured to be compatible with the TensorFlow.js library, which is a JavaScript library for machine learning. It leverages the `tensorflow/tfjs-core` package and the `@tensorflow/tfjs-backend-wasm` package for its operations.

In summary, this is a technical code snippet that is part of a larger library, specifically for executing convolution operations on a WebAssembly backend, and is covered by the Apache License 2.0.
void function setup(backend:

```
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```
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=============================================================================

*/

import {Cosh, KernelConfig} from '@tensorflow/tfjs-core';

export const coshConfig: KernelConfig = createUnaryKernelConfig(Cosh);

=============================================================================

import {CropAndResize, CropAndResizeAttr, CropAndResizeInputs, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';

import {Cast} from './Cast';

// Must match enum in CropAndResize.cc
enum InterpolationMethod {
  bilinear = 0,
  nearest = 1
}

let wasmCropAndResize: (imagesId: number, boxesId: number, boxIndId: number, numBoxes: number, imagesShape: Uint8Array, cropHeight: number, cropWidth: number, method: number, extrapolationValue: number, outId: number) => void = null;

function setup(backend: BackendWasm) {
  wasmCropAndResize = backend.wasm.cwrap(CropAndResize, null /*void*/, [
    'number',  // imagesId
    'number',  // boxesId
    'number',  // boxIndId
    'number',  // numBoxes
    'array',   // images shape
    'number',  // cropHeight
    'number',  // cropWidth
    'number',  // method
    'number',  // extrapolation value
    'number'  // out id
  ]);
}

function cropAndResize(args: {
  backend: BackendWasm,
  inputs: CropAndResizeInputs,
  attrs: CropAndResizeAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {method, extrapolationValue, cropSize} = attrs;
  const {image, boxes, boxInd} = inputs;

  const numBoxes = boxes.shape[0];

  const [cropHeight, cropWidth] = cropSize as [number, number];
  const outShape = [numBoxes, cropHeight, cropWidth, image.shape[3]];

  let imagesData = backend.dataIdMap.get(image.dataId);
  let castedData;
  if (image.dtype !== 'float32') {
    castedData = Cast({backend, inputs: {x: image}, attrs: {dtype: 'float32'}});
    imagesData = backend.dataIdMap.get(castedData.dataId);
  }

  const imagesId = imagesData.id;
  const boxesId = backend.dataIdMap.get(boxes.dataId).id;
  const boxIndId = backend.dataIdMap.get(boxInd.dataId).id;

  const out = backend.makeOutput(outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;

  const imagesShapeBytes = new Uint8Array(new Int32Array(image.shape).buffer);

  wasmCropAndResize(imagesId, boxesId, boxIndId, numBoxes, imagesShapeBytes, cropHeight, cropWidth, InterpolationMethod[method as {} as keyof typeof InterpolationMethod], extrapolationValue, outId);

  if (castedData != null) {
    backend.disposeData(castedData.dataId);
  }

  return out;
}

export const cropAndResizeConfig: KernelConfig = {
  kernelName: CropAndResize,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: cropAndResize as {} as KernelFunc
};

=============================================================================

import {backend_util, KernelConfig, KernelFunc, Cumsum, CumsumAttrs, CumsumInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

import {Transpose} from './Transpose';

let wasmCumsum: (xId: number, exclusive: number, reverse: number, finalDim: number, outId: number, dtype: CppDType) => void = null;

function setup(backend: BackendWasm) {
    wasmCumsum = backend.wasm.cwrap(Cumsum, null /*void*/, [
      'number',  // xId
      'number',  // finalDim
      'number',  // outId
      'number',  // dtype
    ]);
}

function cumsum(args: {
  backend: BackendWasm,
  inputs: CumsumInputs,
  attrs: CumsumAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {exclusive, reverse, finalDim} = attrs;
  const {x, dtype} = inputs;

  const xId = backend.dataIdMap.get(x.dataId).id;
  const outId = backend.makeOutput(x.shape, dtype, finalDim);
'number', // exclusive
'number', // reverse
'number', // final_dim
'number', // out_id
'number' // dtype
]);
}]

export function cumsum(args: {
  inputs: CumsumInputs,
  backend: BackendWasm,
  attrs: CumsumAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {axis, exclusive, reverse} = attrs;
  const xRank = x.shape.length;
  util.assert(x.dtype === 'float32' || x.dtype === 'int32', () => 'cumsum does not support $\{x.dtype\}$ tensors in the WASM backend');
  // permute required axis to inner most axis
  const permutation = backend_util.getAxesPermutation([axis], xRank);
  let permutedX = x;
  if (permutation !== null)
    permutedX = transpose(inputs: {x}, attrs: {perm: permutation, backend});
  const permutedAxis = backend_util.getInnerMostAxes(1, xRank)[0];
  const permutedAxes = permutedAxis;

  const xId = backend_util.getDataId(x);
  const permutedXId = backend_util.getDataId(permutedX);
  const finalDim = permutedX.shape[permutedAxis];
  const permutedOut = backend.makeOutput(permutedXId.dataId, 'wasm', 'cumsum', [finalDim], 'float32', CPA); // permutedAxes, xRank);

  const permutedOutId = backend_util.getDataId(permutedOut);

  const permutedBack = backend.makeOutput(permutedOutId, CPA); // permutedAxes, xRank, CPA);

  const out = backend.makeOutput(permutedOutId, CPA); // permutedAxes, xRank, CPA);

  const kernelName = 'cumsum';
  const kernelFunc = cumsum;

  const backendConfig = {
    kernelName: 'cumsum',
    setupFunc: setup,
    kernelFunc: kernelFunc as {} as KernelFunc
  }

  return out;
}

export const cumsumConfig: KernelConfig = {
  kernelName: 'cumsum',
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: cumsum
};
require {Elu, KernelConfig} from @tensorflow/tfjs-core

import {Elu, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const eluConfig: KernelConfig = createUnaryKernelConfig(Elu);

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 */

require {Equal, KernelConfig} from @tensorflow/tfjs-core

import {Equal, KernelConfig} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;
export const equalConfig: KernelConfig = createBinaryKernelConfig(Equal, supportsFullBroadcast, 'bool');

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 */

require {Exp, KernelConfig} from @tensorflow/tfjs-core

import {Exp, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const expConfig: KernelConfig = createUnaryKernelConfig(Exp, 'float32');

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 */

require {ExpandDims, ExpandDimsAttr, ExpandDimsInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';

import {ExpandDims, ExpandDimsAttr, ExpandDimsInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function expandDims(args: {
  inputs: ExpandDimsInputs,
  attrs: ExpandDimsAttr,
  backend: BackendWasm
}) {
  const {inputs, attrs, backend} = args;
  const {input} = inputs;
  const {dim} = attrs;

  const inputRank = input.shape.length;
  const newShape = input.shape.slice();
  let $dim = dim;
  if(dim < 0) {
    // Negative value is counted from the tail of rank.
    util.assert(
        -(inputRank + 1) <= dim,
        `Axis must be in the interval [${- (inputRank + 1)}, ${inputRank}]`);
    $dim = inputRank + dim + 1;
  }

  newShape.splice($dim, 0, 1);

  return reshape({inputs: {x: input}, backend, attrs: {shape: newShape}});
}

export const expandDimsConfig: KernelConfig = {
  kernelName: ExpandDims,
  backendName: 'wasm',
  kernelFunc: expandDims as {} as KernelFunc,
};

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 */

require {KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {Fill, FillAttr} from '@tensorflow/tfjs-core';

import {Fill, FillAttr} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function fill(args: {atts: {proxy: {desired: FillAttr}}}):

```javascript

```
FillAttrs, backend: BackendWasm)} {
  const {attrs: {shape, value, dtype}, backend} = args;
  const out = backend.makeOutput(shape, dtype);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.fill(value as number);
  return out;
}

export const fillConfig: KernelConfig = {
  kernelName: Fill,
  backendName: 'wasm',
  kernelFunc: fill as {} as KernelFunc,
};

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 */

import {FlipLeftRight, KernelConfig, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmFlipLeftRight: (
    xId: number, batch: number, imageHeight: number, imageWidth: number,
    numChannels: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmFlipLeftRight = backend.wasm.cwrap(FlipLeftRight,
    null /* void */, 
    ['number',  // xId
    'number',  // batch
    'number',  // imageHeight
    'number',  // imageWidth
    'number',  // numChannels
    'number',  // outId
  ]);
}

export function flipLeftRight(
    args: {inputs: FlipLeftRightInputs, backend: BackendWasm}): TensorInfo {
  const {inputs, backend} = args;
  
  const {image} = inputs;
  
  const out = backend.makeOutput(image.shape, image.dtype);
  const imageId = backend.dataIdMap.get(image.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;

  const [batch, imageHeight, imageWidth, numChannels] = image.shape;

  wasmFlipLeftRight(imageId, batch,
    imageHeight, imageWidth, numChannels, outId);
  return out;
}

export const flipLeftRightConfig: KernelConfig = {
  kernelName: FlipLeftRight,
  backendName: 'wasm',
  kernelFunc: flipLeftRight as {} as KernelFunc,
  setupFunc: setup
};

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 */

import {Floor, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const floorConfig: KernelConfig = createUnaryKernelConfig(Floor);

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 */

import {FloorDiv, KernelConfig} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;

export const floorDivConfig: KernelConfig =
createBinaryKernelConfig(FloorDiv, supportsFullBroadcast);

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 */
```javascript
import {FusedBatchNorm, FusedBatchNormAttrs, FusedBatchnormInputs, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmBatchNorm: (xId: number, meanId: number, varianceId: number, offsetId: number, scaleId: number, varianceEpsilon: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmBatchNorm = backend.wasm.cwrap(FusedBatchNorm, null /* void */, [number, number, number, number, number, number, number]);
}

function fusedBatchNorm(args: {
  backend: BackendWasm,
  inputs: FusedBatchNormInputs,
  attrs: FusedBatchNormAttrs
}): TensorInfo {
  const {backend} = args;

  const {varianceEpsilon} = attrs;
  const {x, mean, variance, offset, scale} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const meanId = backend.dataIdMap.get(mean.dataId).id;
  const varianceId = backend.dataIdMap.get(variance.dataId).id;
  const offsetId = offset != null ? backend.dataIdMap.get(offset.dataId).id : 0;
  const scaleId = scale != null ? backend.dataIdMap.get(scale.dataId).id : 0;

  const out = backend.makeOutput(x.shape, x.dtype);
  // Short-circuit zero-sized tensors.
  if (util.sizeFromShape(x.shape) === 0) {
    return out;
  }

  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmBatchNorm(
    xId, meanId, varianceId, offsetId, scaleId,
    varianceEpsilon, outId);
  return out;
}

export const fusedBatchNormConfig: KernelConfig = {
  kernelName: FusedBatchNorm,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: fusedBatchNorm as {} as KernelFunc
};

import {backend_util, FusedConv2D, FusedConv2DAttrs, FusedConv2DInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {FusableActivation} from './types';

let wasmFusedConv2d: (xId: number, batchSize: number, inputHeight: number, inputWidth: number, filterId: number, filterHeight: number, filterWidth: number, biasId: number, padTop: number, padRight: number, padBottom: number, padLeft: number, isSamePad: number, dilationHeight: number, dilationWidth: number, strideHeight: number, strideWidth: number, inputChannels: number, outputChannels: number, activation: number, leakyreluAlpha: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmFusedConv2d = backend.wasm.cwrap(FusedConv2D, null /* void */, [
    'number', // xId
    'number', // batchSize
    'number', // inputHeight
    'number', // inputWidth
    'number', // filterId
    'number', // filterHeight
    'number', // filterWidth
    'number', // biasId
    'number', // padTop
    'number', // padRight
    'number', // padBottom
    'number', // padLeft
    'number', // isSamePad
    'number', // dilationHeight
    'number', // dilationWidth
    'number', // strideHeight
    'number', // strideWidth
    'number', // inputChannels
    'number', // outputChannels
    'number', // activation
    'number', // preluActivationWeightsId
    'number', // leakyreluAlpha
    'number', // outId
  ]);
}

function fusedConv2d(args: {
  inputs: FusedConv2DInputs,
  backend: BackendWasm,
  attrs: FusedConv2DAttrs
}) {
  const {backend, inputs, attrs, activation} = args;
  const {x, filter, bias, preluActivationWeights} = inputs;
  const {strides, pad, dilations, dataFormat, dimRoundingMode, activation, leakyreluAlpha} = attrs;
  const convInfo = backend_util.computeConv2DInfo(x.shape, filter.shape, strides, pad, dilations, dataFormat, dimRoundingMode, activation, leakyreluAlpha);

  const preluActivationWeightsId = attrs.preluActivationWeightsId;
  const leakyreluAlphaId = attrs.leakyreluAlphaId;

  // Calculate output shape.
  const outputShape = backend_util.computeConv2DOutputShape(x.shape, filter.shape, strides, pad, dilations, dataFormat, dimRoundingMode, activation, leakyreluAlpha);

  // Create output tensor.
  const output = backend.makeOutput(outputShape, x.dtype);

  // Short-circuit zero-sized tensors.
  if (util.sizeFromShape(outputShape) === 0) {
    return output;
  }

  const outputId = backend.dataIdMap.get(output.dataId).id;

  // Call FusedConv2D function.
  wasmFusedConv2d(
    xId, batchSize, inputHeight, inputWidth, filterId, filterHeight, filterWidth, biasId, padTop, padRight, padBottom, padLeft, isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, activation, leakyreluAlpha, outId);

  return output;
}
```

---

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---

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```javascript
const xId = backend.dataIdMap.get(x.dataId).id;
const filterId = backend.dataIdMap.get(filter.dataId).id;
const outputChannels = convInfo.outChannels;
let biasId = 0;
if (bias != null) {
  const biasData = backend.dataIdMap.get(bias.dataId);
  if (biasData.shape.length !== 1) {
    throw new Error('FusedConv2D bias shape does not match the number of output channels');
  }
  biasId = biasData.id;
}
const filterId = backend.dataIdMap.get(filter.dataId).id;
const outputChannels = convInfo.outChannels;
const padTop = convInfo.padInfo.top;
const padRight = convInfo.padInfo.right;
const padBottom = convInfo.padInfo.bottom;
const padLeft = convInfo.padInfo.left;
const dilationHeight = convInfo.dilationHeight;
const dilationWidth = convInfo.dilationWidth;
const strideHeight = convInfo.strideHeight;
const strideWidth = convInfo.strideWidth;
const inputChannels = convInfo.inChannels;
const inputHeight = convInfo.inHeight;
const inputWidth = convInfo.inWidth;
const batchSize = convInfo.batchSize;
const inChannels = convInfo.inChannels;
const isSamePad = convInfo.padInfo.type === 'SAME';
const inputFormat = convInfo.format;
if (inputFormat !== 'NHWC') {
  throw new Error('wasm backend FusedConv2D does not support dataFormat: ' + '{[dataFormat]}').
}
const padInfo = backend.padInfo;

wasmFusedConv2d(xId, batchSize, inputHeight, inputWidth, filterId, filterHeight, filterWidth, biasId, padTop, padRight, padBottom, padLeft, isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, fusedActivation, preluActivationWeightsId, leakyreluAlpha || 0, outId);

return out;
}

export const fusedConv2DConfig: KernelConfig = {
  kernelName: FusedConv2D,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: fusedConv2d as {} as KernelFunc
};
```

---

```javascript
import {backend_util, FusedDepthwiseConv2D, FusedDepthwiseConv2DAttrs, FusedDepthwiseConv2DInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {FusableActivation} from './types';

let wasmFusedDepthwiseConv2d:
    (xId: number, batchSize: number, inputHeight: number, inputWidth: number,
     filterId: number, filterHeight: number, filterWidth: number,
     biasId: number, padTop: number, padRight: number, padBottom: number, padLeft: number, isSamePad: number, dilationHeight: number, dilationWidth: number, strideHeight: number, strideWidth: number, inputChannels: number, outputChannels: number, activation: number, preluActivationWeightsId: number, leakyreluAlpha: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmFusedDepthwiseConv2d = backend.wasm.cwrap(FusedDepthwiseConv2D, null /* void */, 
        [  // xId: number
        'number',  // batchSize: number
        'number',  // inputHeight: number
        'number',  // inputWidth: number
        'number',  // filterId: number
        'number',  // filterHeight: number
        'number',  // filterWidth: number
        'number',  // biasId: number
        'number',  // padTop: number
        'number',  // padRight: number
        'number',  // padBottom: number
        'number',  // padLeft: number
        'number',  // isSamePad: number
        'number',  // dilationHeight: number
        'number',  // dilationWidth: number
        'number',  // strideHeight: number
        'number',  // strideWidth: number
        'number',  // inputChannels: number
        'number',  // outputChannels: number
        'number',  // activation: number
        'number',  // preluActivationWeightsId: number
        'number',  // leakyreluAlpha: number
        'number',  // outId: number
      ];
}

function fusedDepthwiseConv2d(args: {
  inputs: FusedDepthwiseConv2DInputs,
  backend: BackendWasm,
  attrs: FusedDepthwiseConv2DAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {x, filter, bias, outputChannels, convInfo} = inputs;
  for (const bias of biases) {
    if (bias != null) {
      const biasData = backend.dataIdMap.get(bias.dataId);
      if (biasData.shape.length !== 1) {
        throw new Error('FusedConv2D bias shape does not match the number of output channels');
      }
      biasId = biasData.id;
    }
    const outputChannels = convInfo.outChannels;

    const padTop = convInfo.padInfo.top;
    const padRight = convInfo.padInfo.right;
    const padBottom = convInfo.padInfo.bottom;
    const padLeft = convInfo.padInfo.left;
    const dilationHeight = convInfo.dilationHeight;
    const dilationWidth = convInfo.dilationWidth;
    const strideHeight = convInfo.strideHeight;
    const strideWidth = convInfo.strideWidth;
    const inputChannels = convInfo.inChannels;
    const isSamePad = convInfo.padInfo.type === 'SAME';
    const inputFormat = convInfo.format;
    if (inputFormat !== 'NHWC') {
      throw new Error('wasm backend FusedConv2D does not support dataFormat: ' + '{[dataFormat]}').
    }
    const padInfo = backend.padInfo;

    wasmFusedDepthwiseConv2d(xId, batchSize, inputHeight, inputWidth, filterId, filterHeight, filterWidth, biasId, padTop, padRight, padBottom, padLeft, isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, fusedActivation, preluActivationWeightsId, leakyreluAlpha || 0, outId);
  }
  return out;
}
```

const preluActivationWeights = inputs;

const {
  strides,
  pad,
  dilations,
  dataFormat,
  dimRoundingMode,
  activation,
  leakyreluAlpha
} = attrs;

const convInfo = backend_util.computeConv2DInfo(x as Tensor4D).shape, (filter as Tensor4D).shape, strides, dilations,

const {
  strides,
  pad,
  dilations,
  dataFormat,
  dimRoundingMode,
  activation,
  leakyreluAlpha
} = attrs;

const convInfo = backend_util.computeConv2DInfo(x as Tensor4D).shape, (filter as Tensor4D).shape, strides, dilations,

const {
  strides,
  pad,
  dilations,
  dataFormat,
  dimRoundingMode,
  activation,
  leakyreluAlpha
} = attrs;

const convInfo = backend_util.computeConv2DInfo(x as Tensor4D).shape, (filter as Tensor4D).shape, strides, dilations,

const {
  strides,
  pad,
  dilations,
  dataFormat,
  dimRoundingMode,
  activation,
  leakyreluAlpha
} = attrs;

const convInfo = backend_util.computeConv2DInfo(x as Tensor4D).shape, (filter as Tensor4D).shape, strides, dilations,

const {
  strides,
  pad,
  dilations,
  dataFormat,
  dimRoundingMode,
  activation,
  leakyreluAlpha
} = attrs;

const convInfo = backend_util.computeConv2DInfo(x as Tensor4D).shape, (filter as Tensor4D).shape, strides, dilations,

const {
  strides,
  pad,
  dilations,
  dataFormat,
  dimRoundingMode,
  activation,
  leakyreluAlpha
} = attrs;

const convInfo = backend_util.computeConv2DInfo(x as Tensor4D).shape, (filter as Tensor4D).shape, strides, dilations,

const {
  strides,
  pad,
  dilations,
  dataFormat,
  dimRoundingMode,
  activation,
  leakyreluAlpha
} = attrs;

const convInfo = backend_util.computeConv2DInfo(x as Tensor4D).shape, (filter as Tensor4D).shape, strides, dilations,

const {
  strides,
  pad,
  dilations,
  dataFormat,
  dimRoundingMode,
  activation,
  leakyreluAlpha
} = attrs;

const convInfo = backend_util.computeConv2DInfo(x as Tensor4D).shape, (filter as Tensor4D).shape, strides, dilations,
backend.dataIdMap.get(indices.dataId);
const indicesId = indicesData.id;
const stridesBytes = new Uint8Array(new Int32Array(strides).buffer);
const outId = backend.dataIdMap.get(out.dataId);

wasmGatherNd(xId, CppDType[params.dtype], indicesId, numSlices, sliceRank, sliceSize,
stridesBytes, outId);

return out;
}

export const gatherNdConfig: KernelConfig = {
  kernelName: GatherNd,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: gatherNd
};

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 */

import {backend_util, GatherV2, GatherV2Attrs, GatherV2Inputs, KernelConfig, KernelFunc, Tensor, TensorInfo, TypedArray, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {reshape} from './Reshape';
import {CppDType} from './types';

let wasmGather:
    (xId: number, dtype: CppDType, xStrides: Uint8Array, stridesSize: number,
    indicesId: number, batchSize: number, outStrides: Uint8Array,
    outId: number) => void;

function setup(backend: BackendWasm): void {
    wasmGather = backend.wasm.cwrap('Gather', null /*void*/,
        ['number',  // xId
         'number',  // dtype
         'array', // xStrides
         'number',  // stridesSize
         'number',  // indicesId
         'number',  // batchSize
         'array',   // outStrides
         'number'   // outId
    ]);}

function gatherV2(
    args: {backend: BackendWasm, inputs: GatherV2Inputs, attrs: GatherV2Attrs}):
    TensorInfo {
  const {backend, inputs, attrs} = args;
  const {x, indices} = inputs;
  const {axis, batchDims} = attrs;

  // Throw error when any index is out of bound.
  const parsedAxis = util.parseAxisParam(axis, x.shape)[0];
  const indicesVals = backend.readSync(indices.dataId) as TypedArray;
  const axisDim = x.shape[parsedAxis];
  for (let i = 0; i < indicesVals.length; ++i) {
    const index = indicesVals[i];
    util.assert(
        index <= axisDim - 1 && index >= 0,
        () =>
            `GatherV2: the index value ${index} is not in [0, ${axisDim - 1}]`);
  }

  const shapeInfo = backend_util.segment_util.collectGatherOpShapeInfo(
      x as Tensor,
      indices as Tensor,
      parsedAxis,
      batchDims);
  const flattenX = reshape({
    inputs: {x},
    attrs: {
      shape: [
        shapeInfo.batchSize,
        shapeInfo.outerSize,
        indicesSize / shapeInfo.batchSize
      ]
    },
    backend
  });
  const indicesSize = util.sizeFromShape(indices.shape);
  const flattenIndex = reshape({
    inputs: {x: indices},
    attrs: {
      shape: [shapeInfo.batchSize, indicesSize / shapeInfo.batchSize]
    },
    backend
  });
  const flattenOutputShape = [
    shapeInfo.batchSize,
    shapeInfo.outerSize,
    indicesSize / shapeInfo.batchSize,
    shapeInfo.sliceSize
  ];
  const out = backend.makeOutput(flattenOutputShape, x.dtype);
  if (util.sizeFromShape(x.shape) === 0) {
    return out;
  }
  const stridesSize = flattenX.shape.length - 1;
  const xData = backend.dataIdMap.get(flattenX.dataId);
  const xId = xData.id;
  const indicesData = backend.dataIdMap.get(indices.dataId);
  const indicesId = indicesData.id;
  const outId = backend.dataIdMap.get(out.dataId);
  const outStridesBytes = new Uint8Array(new Int32Array(outStrides).buffer);

  wasmGather(xId, CppDType[x.dtype], xStridesBytes, stridesSize, indicesId,
    shapeInfo.batchSize, outStridesBytes, outId);

  backend.disposeData(flattenX.dataId);
  backend.disposeData(indices.dataId);
  // reshape out.shape = shapeInfo.outputShape;
  return out;
}

export const gatherV2Config: KernelConfig = {
  kernelName: GatherV2,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: gatherV2
};

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=============================================================================
*/

import {Greater, KernelConfig} from '@tensorflow/tfjs-core';

const supportsFullBroadcast = false;

export const greaterConfig: KernelConfig =
createBinaryKernelConfig(Greater, supportsFullBroadcast, 'bool');

export const greaterEqualConfig: KernelConfig =
createBinaryKernelConfig(GreaterEqual, supportsFullBroadcast, 'bool');

export const leakyReluConfig: KernelConfig = {
  kernelName: LeakyRelu,
  backendName: 'wasm',
  setupFunc,
  kernelFunc: leakyRelu as {} as KernelFunc,
};

export const lessConfig: KernelConfig =
createBinaryKernelConfig(Less, supportsFullBroadcast, 'bool');

=============================================================================
*/

import {KernelConfig, KernelFunc, LeakyRelu, LeakyReluAttrs, LeakyReluInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmFunc: (
    xId: number, dtype: number, leakyreluAlpha: number, outId: number) =>
    void;

function setupFunc(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(LeakyRelu,
    null /* void */, [
      'number',  // x_id
      'number',  // dtype
      'number',  // leakyrelu_alpha
      'number',  // out_id
    ]);
}

export function leakyRelu(
    args:
        {inputs: LeakyReluInputs, attrs: LeakyReluAttrs,
         backend: BackendWasm}):
    TensorInfo {
  const {inputs: {x}, attrs: {alpha}, backend} = args;

  const xId = backend.dataIdMap.get(x.dataId).id;
  // According to TF API, LeakyRelu returns float32 when input is either
  // float32 or int32.
  const out = backend.makeOutput(x.shape, 'float32');

  if (util.sizeFromShape(x.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmFunc(xId, CppDType[x.dtype], alpha, outId);
  }

  return out;
}

export const leakyReluConfig: KernelConfig = {
  kernelName: LeakyRelu,
  backendName: 'wasm',
  setupFunc,
  kernelFunc: leakyRelu as {} as KernelFunc,
};

/*=============================================================================
*/

import {KernelConfig, KernelFunc, Less} from '@tensorflow/tfjs-core';

const supportsFullBroadcast = false;

export const lessConfig: KernelConfig =
createBinaryKernelConfig(Less, supportsFullBroadcast, 'bool');

/*=============================================================================
*/

import {KernelConfig, KernelFunc, LeakyRelu, LeakyReluAttrs, LeakyReluInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmFunc: (
    xId: number, dtype: number, leakyreluAlpha: number, outId: number) =>
    void;

function setupFunc(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(LeakyRelu,
    null /* void */, [
      'number',  // x_id
      'number',  // dtype
      'number',  // leakyrelu_alpha
      'number',  // out_id
    ]);
}

export function leakyRelu(
    args:
        {inputs: LeakyReluInputs, attrs: LeakyReluAttrs,
         backend: BackendWasm}):
    TensorInfo {
  const {inputs: {x}, attrs: {alpha}, backend} = args;

  const xId = backend.dataIdMap.get(x.dataId).id;
  // According to TF API, LeakyRelu returns float32 when input is either
  // float32 or int32.
  const out = backend.makeOutput(x.shape, 'float32');

  if (util.sizeFromShape(x.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmFunc(xId, CppDType[x.dtype], alpha, outId);
  }

  return out;
}

export const leakyReluConfig: KernelConfig = {
  kernelName: LeakyRelu,
  backendName: 'wasm',
  setupFunc,
  kernelFunc: leakyRelu as {} as KernelFunc,
};
wasmMax(inputId, CppDType[x.dtype], reduceSize, outId);

if (inputWasTransposed) {
  // dispose of the transposed tensor.
  backend.disposeData(transposed.dataId);
}

if (keepDims) {
  // reshape
  const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
  out.shape = newShape;
  return out;
}

export const maxConfig: KernelConfig = {
  kernelName: 'Max',
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: max as {} as KernelFunc
};

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 */

import {KernelConfig, Maximum} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;
export const maximumConfig: KernelConfig =
  createBinaryKernelConfig(Maximum, supportsFullBroadcast);

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 */

import {backend_util, KernelConfig, KernelFunc, MaxPool, MaxPoolAttrs, MaxPoolInputs, Tensor4D, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmMaxPool: (
    xId: number, batchSize: number, inputHeight: number, inputWidth: number,
    filterHeight: number, filterWidth: number,
    padTop: number, padRight: number, padBottom: number, padLeft: number,
    dilationHeight: number, dilationWidth: number,
    strideHeight: number, strideWidth: number,
    inputChannels: number, outputChannels: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmMaxPool = backend.wasm.cwrap(MaxPool, null /* void */, 
    [ 'number',  // xId
      'number',  // batchSize
      'number',  // inputHeight
      'number',  // inputWidth
      'number',  // filterHeight
      'number',  // filterWidth
      'number',  // padTop
      'number',  // padRight
      'number',  // padBottom
      'number',  // padLeft
      'number',  // dilationHeight
      'number',  // dilationWidth
      'number',  // strideHeight
      'number',  // strideWidth
      'number',  // inputChannels
      'number',  // outputChannels
      'number',  // outId
    ]);
}

function maxPool(
    args: {
      inputs: MaxPoolInputs, backend: BackendWasm, attrs: MaxPoolAttrs
    }) {
  const {inputs, backend, attrs} = args;
  const x = inputs.x as Tensor4D;
  const xId = backend.dataIdMap.get(x.dataId).id;
  wasmMaxPool(xId, x.shape[0], x.shape[1], x.shape[2], x.shape[3],
    attrs.filterSize, x.shape[1], x.shape[2], x.shape[3], x.shape[4],
    attrs.pad, attrs.dilationSize,
    attrs.dilationSize[0], attrs.dilationSize[1],
    attrs.strideSize[0], attrs.strideSize[1],
    attrs.outputChannels, x.shape, attrs.filterHeight,
    attrs.paddingMode, attrs.dilationSize,
    attrs.strideSize, 1 /* dilations */,
    attrs.paddingMode === 'same' ? 0 : attrs.paddingMode === 'valid' ? 1 : 2,
    attrs.dilationSize[0], attrs.dilationSize[1],
    attrs.strideSize[0], attrs.strideSize[1]
  );

```javascript
const out = backend.makeOutput(convInfo.outShape, 'float32');
const outId = backend.dataIdMap.get(out.dataId).id;
const xId, x.shape[0], x.shape[1], x.shape[2],
filterHeight, filterWidth, padTop, padRight, padBottom, padLeft, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, outId); return out; else export const maxPoolConfig: KernelConfig = {
  kernelName: MaxPool,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: maxPool
};

export const maxPoolConfig:
  KernelConfig = {
    kernelName: MaxPool,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: maxPool
};
```

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 */

import {backend_util, KernelConfig, KernelFunc, Mean, MeanAttrs, MeanInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {cast} from './Cast';

import {permuteAxesAndTranspose} from './kernel_utils';

let wasmMean: (xId: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmMean = backend.wasm.cwrap(Mean, null /*void*/, ['number, number, number']);
}

export function mean(
  args: {
    backend: BackendWasm,
    inputs: MeanInputs,
    attrs: MeanAttrs
  }): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} = permuteAxesAndTranspose(x, axis, backend);

  let reductionAxes = axes;
  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose of this input once we are done.
      input = transposed;
      inputId = transposedId;
      reductionAxes = backend_util.getInnerMostAxes(reductionAxes.length, input.shape.length);
    }
  }

  backend_util.assertAxesAreInnerMostDims('mean', reductionAxes, input.shape.length);
  const [outShape, reduceShape] = backend_util.computeOutAndReduceShapes(input.shape, reductionAxes);
  const reduceSize = util.sizeFromShape(reduceShape);
  let castedInput = input;
  if (castedInput.dtype !== 'float32') {
    castedInput = cast({backend, inputs: {x: castedInput}, attrs: {dtype: 'float32'}});
    inputId = backend.dataIdMap.get(castedInput.dataId).id;
  }
  const outId = backend.makeOutput(outShape, 'float32');
  return out;
}
```

```javascript
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 */

import {backend_util, KernelConfig, KernelFunc, Min, MinAttrs, MinInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

let wasmMin: (xId:
```
number, dtype: number, reduceSize: number, outId: number) =>
    void;

    function setup(backend: BackendWasm): void {
      wasmMin = backend.wasm.cwrap(Min, null /*void*/, ["number", "// x_id" +
        "number", "// reduce_size" + "number", "// out_id" + "]");
    }

    function min(args: {backend: BackendWasm, inputs: MinInputs, attrs: MinAttrs}): TensorInfo {
      const {backend, inputs, attrs} = args;
      const {axis, keepDims} = attrs;
      const {x} = inputs;
      const xId = backend.dataIdMap.get(x.dataId).id;
      let
    }

    function mirrorPad(args: {
      inputs: MirrorPadInputs,
      backend: BackendWasm,
      attrs: MirrorPadAttrs
    }) {
      const
      if (inputWasTransposed) {
        const transposedId =
          backend.dataIdMap.get(transposed.dataId).id;
        if (transposedId !== xId) {
          // transpose was not a no-op. We
          // will need to dispose of this
          // once we are done.
          input = transposed;
          inputId = transposedId;
        }
      }

      const inputRank = input.shape.length;
      const backend_util.assertAxesAreInnerMostDims('min', axis, inputRank);
      const [outShape, reduceShape] =
        backend_util.computeOutAndReduceShapes(input.shape, axis);
      const reduceSize = util.sizeFromShape(reduceShape);
      const out
        = backend.makeOutput(outShape, input.dtype);
      if (util.sizeFromShape(input.shape) !== 0) {
        const outId =
          backend.dataIdMap.get(out.dataId).id;
        wasmMin(inputId, CppDType[x.dtype], reduceSize, outId);
        // dispose of the transposed tensor.
        backend.disposeData(transposed.dataId);
      }

      if (inputWasTransposed) {
        // dispose of the transposed tensor.
        backend.disposeData(transposed.dataId);
      }

      if (keepDims) {
        // reshape
        const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
        out.shape = newShape;
      }

      return out;
    }

    export const minConfig: KernelConfig = {
      kernelName: Min,
      backendName: 'wasm',
      setupFunc: setup,
      kernelFunc: min as {} as
    } as KernelFunc
  } as *

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 *
 *=============================================================================
 */

    import {KernelConfig, MirrorPad, MirrorPadAttrs, MirrorPadInputs} from '@tensorflow/tfjs-core';
    const supportsFullBroadcast = false;
    export const mirrorPadConfig: KernelConfig =
      createBinaryKernelConfig(MirrorPad, supportsFullBroadcast);

    let wasmMirrorPad: (
      xId: number, xShapeBytes: Uint8Array, xShapeLength: number, xDtype: number,
      prePaddingsBytes: Uint8Array, postPaddingsBytes: Uint8Array, mode: number,
      outId: number) => void;

    function mirrorPad(args: {
      inputs: MirrorPadInputs,
      backend: BackendWasm,
      attrs: MirrorPadAttrs
    }) {
      const
      if (inputWasTransposed) {
        const transposedId =
          backend.dataIdMap.get(transposed.dataId).id;
        if (transposedId !== xId) {
          // transpose was not a no-op. We
          // will need to dispose of this
          // once we are done.
          input = transposed;
          inputId = transposedId;
        }
      }

      const inputRank = input.shape.length;
      const backend_util.assertAxesAreInnerMostDims('min', axis, inputRank);
      const [outShape, reduceShape] =
        backend_util.computeOutAndReduceShapes(input.shape, axis);
      const reduceSize = util.sizeFromShape(reduceShape);
      const out
        = backend.makeOutput(outShape, input.dtype);
      if (util.sizeFromShape(input.shape) !== 0) {
        const outId =
          backend.dataIdMap.get(out.dataId).id;
        wasmMin(inputId, CppDType[x.dtype], reduceSize, outId);
        // dispose of the transposed tensor.
        backend.disposeData(transposed.dataId);
      }

      if (inputWasTransposed) {
        // dispose of the transposed tensor.
        backend.disposeData(transposed.dataId);
      }

      if (keepDims) {
        // reshape
        const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
        out.shape = newShape;
      }

      return out;
    }

    export const mirrorPadConfig: KernelConfig = {
      kernelName: MirrorPad,
      backendName: 'wasm',
      setupFunc: setup,
      kernelFunc: mirrorPad as {} as
    } as KernelFunc
  } as *

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 *
 *=============================================================================
 */

    import {KernelConfig, MirrorPad, MirrorPadAttrs, MirrorPadInputs} from '@tensorflow/tfjs-core';
    const supportsFullBroadcast = false;
    export const mirrorPadConfig: KernelConfig =
      createBinaryKernelConfig(MirrorPad, supportsFullBroadcast);

    let wasmMirrorPad: (
      xId: number, xShapeBytes: Uint8Array, xShapeLength: number, xDtype: number,
      prePaddingsBytes: Uint8Array, postPaddingsBytes: Uint8Array, mode: number,
      outId: number) => void;

    function mirrorPad(args: {
      inputs: MirrorPadInputs,
      backend: BackendWasm,
      attrs: MirrorPadAttrs
    }) {
      const
      if (inputWasTransposed) {
        const transposedId =
          backend.dataIdMap.get(transposed.dataId).id;
        if (transposedId !== xId) {
          // transpose was not a no-op. We
          // will need to dispose of this
          // once we are done.
          input = transposed;
          inputId = transposedId;
        }
      }

      const inputRank = input.shape.length;
      const backend_util.assertAxesAreInnerMostDims('min', axis, inputRank);
      const [outShape, reduceShape] =
        backend_util.computeOutAndReduceShapes(input.shape, axis);
      const reduceSize = util.sizeFromShape(reduceShape);
      const out
        = backend.makeOutput(outShape, input.dtype);
      if (util.sizeFromShape(input.shape) !== 0) {
        const outId =
          backend.dataIdMap.get(out.dataId).id;
        wasmMin(inputId, CppDType[x.dtype], reduceSize, outId);
        // dispose of the transposed tensor.
        backend.disposeData(transposed.dataId);
      }

      if (inputWasTransposed) {
        // dispose of the transposed tensor.
        backend.disposeData(transposed.dataId);
      }

      if (keepDims) {
        // reshape
        const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
        out.shape = newShape;
      }

      return out;
    }

    export const mirrorPadConfig: KernelConfig = {
      kernelName: MirrorPad,
      backendName: 'wasm',
      setupFunc: setup,
      kernelFunc: mirrorPad as {} as
    } as KernelFunc
  } as *
xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
const prePaddingsFlat = paddings.map(padTuple => padTuple[0]);
const postPaddingsFlat = paddings.map(padTuple => padTuple[1]);
const prePaddingsBytes = new Uint8Array(new Int32Array(prePaddingsFlat).buffer);
const postPaddingsBytes = new Uint8Array(new Int32Array(postPaddingsFlat).buffer);
wasmMirrorPad(xId, xShapeBytes, x.shape.length, CppDType[x.dtype], prePaddingsBytes, postPaddingsBytes, MirrorPaddingMode[mode], outId);
return out;
}

export const mirrorPadConfig: KernelConfig = {
kernelName: MirrorPad,
backendName: 'wasm',
kernelFunc: mirrorPad as {} as KernelFunc,
setupFunc: setup,
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import {KernelConfig, Multiply} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = true;
export const multiplyConfig: KernelConfig = createBinaryKernelConfig(Multiply, supportsFullBroadcast);

import {KernelConfig, Neg} from '@tensorflow/tfjs-core';
import {createUnaryKernelConfig} from './unary_kernel';
export const negConfig: KernelConfig = createUnaryKernelConfig(Neg);

import {BackendWasm} from '../backend_wasm';
interface Result {
  pSelectedIndices: number;
  selectedSize: number;
  pSelectedScores: number;
  pValidOutputs: number;
}

export function parseResultStruct(backend: BackendWasm, resOffset: number): Result {
  const result = new Int32Array(backend.wasm.HEAPU8.buffer, resOffset, 4);
  const pSelectedIndices = result[0];
  const selectedSize = result[1];
  const pSelectedScores = result[2];
  const pValidOutputs = result[3];
  // Since the result was allocated on the heap, we have to delete it.
  backend.wasm._free(resOffset);
  return {pSelectedIndices, selectedSize, pSelectedScores, pValidOutputs};
}
import {KernelConfig, KernelFunc, NonMaxSuppressionV3, NonMaxSuppressionV3Attrs, NonMaxSuppressionV3Inputs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {parseResultStruct} from './NonMaxSuppression_util';

let wasmFunc: (boxesId: number, scoresId: number, maxOutputSize: number, iouThreshold: number, scoreThreshold: number) => number;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap('NonMaxSuppressionV3', 'function (*number,...)', ['number', 'number', 'number', 'number', 'number', 'number'])
}

function kernelFunc(args: {
  backend: BackendWasm,
  inputs: NonMaxSuppressionV3Inputs,
  attrs: NonMaxSuppressionV3Attrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {iouThreshold, maxOutputSize, scoreThreshold} = attrs;
  const {boxes, scores} = inputs;

  const boxesId = backend.dataIdMap.get(boxes.dataId).id;
  const scoresId = backend.dataIdMap.get(scores.dataId).id;

  const resOffset = wasmFunc(boxesId, scoresId, maxOutputSize, iouThreshold, scoreThreshold);

  const {pSelectedIndices, selectedSize, pSelectedScores, pValidOutputs} = parseResultStruct(backend, resOffset);

  backend.wasm._free(pSelectedScores);
  backend.wasm._free(pValidOutputs);

  const selectedIndicesTensor = backend.makeOutput([selectedSize], 'int32', pSelectedIndices);

  return selectedIndicesTensor;
}

export const nonMaxSuppressionV3Config: KernelConfig = {
  kernelName: NonMaxSuppressionV3,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: kernelFunc as {} as KernelFunc,
};
```typescript
import {KernelConfig, KernelFunc, NonMaxSuppressionV5, NonMaxSuppressionV5Attrs, NonMaxSuppressionV5Inputs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {parseResultStruct} from './NonMaxSuppression_util';

let wasmFunc:
    (boxesId: number, scoresId: number, maxOutputSize: number, iouThreshold: number, scoreThreshold: number, softNmsSigma: number) => number;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(NonMaxSuppressionV5, 'number', ['number', 'number', 'number', 'number', 'number', 'number'],)
      boxesId: number, scoresId: number, maxOutputSize: number, iouThreshold: number, scoreThreshold: number, softNmsSigma: number);
}

function kernelFunc(args: {
  backend: BackendWasm,
  inputs: NonMaxSuppressionV5Inputs,
  attrs: NonMaxSuppressionV5Attrs
}): TensorInfo[] {
  const {backend, inputs, attrs} = args;
  const {iouThreshold, maxOutputSize, scoreThreshold, softNmsSigma} = attrs;
  const {boxes, scores} = inputs;

  const boxesId = backend.dataIdMap.get(boxes.dataId).id;
  const scoresId = backend.dataIdMap.get(scores.dataId).id;

  const resOffset = wasmFunc(boxesId, scoresId, maxOutputSize, iouThreshold, scoreThreshold, softNmsSigma);

  const {pSelectedIndices, selectedSize, pSelectedScores, pValidOutputs} = parseResultStruct(backend, resOffset);

  // Since we are not using validOutputs for V5, we have to delete it from the output
  backend.wasm._free(pValidOutputs);

  const selectedIndicesTensor = backend.makeOutput([selectedSize], 'int32', pSelectedIndices);
  const selectedScoresTensor = backend.makeOutput([selectedSize], 'float32', pSelectedScores);

  return [selectedIndicesTensor, selectedScoresTensor];
}

export const nonMaxSuppressionV5Config: KernelConfig = {
  kernelName: NonMaxSuppressionV5,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: kernelFunc
};
```

```javascript
const indicesData = backend.dataIdMap.get(indices.dataId);
const indicesId = indicesData.id;

wasmOneHot(indicesId, depth, onValue, offValue, outId);

return out;
}

export const oneHotConfig: KernelConfig = {
  kernelName: OneHot,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: oneHot as {} as KernelFunc,
};

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 */

import {KernelConfig, KernelFunc, Pack, PackAttrs, PackInputs, TensorInfo, util} from '@tensorflow/tfjs-core;'
import {BackendWasm} from '../backend_wasm';

export function pack(
    args: {inputs: PackInputs, backend: BackendWasm, attrs: PackAttrs}):
    TensorInfo {
  const {inputs, backend, attrs} = args;
  const {axis} = attrs;

  if (inputs.length === 1) {
    return expandDims(
        {inputs: {input: inputs[0]}, backend, attrs: {dim: axis}});
  }

  const shape = inputs[0].shape;
  const dtype = inputs[0].dtype;

  inputs.forEach(t => {
    util.assertShapesMatch(
        shape, t.shape,
        'All tensors passed to stack must have matching shapes');
    util.assert(
        dtype === t.dtype,
        () => 'All tensors passed to stack must have matching dtypes');
  });

  const intermediateTensorInfos: TensorInfo[] = [];
  const expandedTensors = inputs.map(t => {
    t = expandDims(t);
    intermediateTensorInfos.push(expandT);
    const result = concat(inputs:
        expandedTensors, backend, attrs: [axis]);
  });

  const expandedTensors = inputs.map(t => {
    const expandedT = expandDims({inputs: [t], backend, attrs: [dim: axis]});
    return expandedT;
  });

  return result = concat(inputs:
      expandedTensors, backend, attrs: [axis]);
}

export const packConfig: KernelConfig = {
  kernelName: Pack,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: pack as {} as KernelFunc,
};

*/
```
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=============================================================================

*/

import {KernelConfig, KernelFunc, PadV2, PadV2Attrs, PadV2Inputs, util} from '@tensorflow/tfjs-core'
import {BackendWasm} from '../backend_wasm'
import {fill} from './Fill'

import {CppDType} from './types'

let wasmPadV2: (xId: number, xShapeBytes: Uint8Array, xShapeLength: number, xDtype: number,
prePaddingsBytes: Uint8Array, postPaddingsBytes: Uint8Array, constantValue: number, outId: number) => void

function setup(backend: BackendWasm) {
  wasmPadV2 = backend.wasm.cwrap(PadV2, null /* void */, [  
    'number', // xId
    'array',  // x.shape
    'number', // x.shape.length
    'number', // x.dtype
    'array', // pre-paddings
    'array', // post-paddings
    'number', // constantValue
    'number', // outId
]);

function pad(args: PadV2Inputs, backend: BackendWasm, attrs: PadV2Attrs) {
  const {inputs: {x}, backend, attr: {paddings, constantValue}} = args
  const outShape = paddings.map((p, i) => p[0] + x.shape[i] + p[1])
  if (util.sizeFromShape(x.shape) === 0) {
    return fill({
      backend,
      attr: {shape: outShape, value: constantValue, dtype: x.dtype}
    });
  }
  const xId = backend.dataIdMap.get(x.dataId).id;
  const out = backend.makeOutput(outShape, x.dtype);
  const outTensorData = backend.dataIdMap.get(out.dataId);
  const outId = outTensorData.id;
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const prePaddingsFlat = paddings.map(p => p[0]);
  const postPaddingsFlat = paddings.map(p => p[1]);
  const prePaddingsBytes = new Uint8Array(new Int32Array(prePaddingsFlat).buffer);
  const postPaddingsBytes = new Uint8Array(new Int32Array(postPaddingsFlat).buffer);
  wasmPadV2(xId, xShapeBytes, x.shape.length, CppDType[x.dtype], prePaddingsBytes, postPaddingsBytes, constantValue, outId);
  return out;
}

export const padV2Config: KernelConfig = {
  kernelName: PadV2,
  backendName: 'wasm',
  kernelFunc: pad as {} as KernelFunc,
  setupFunc: setup
};


*/

import {KernelConfig, Pow} from '@tensorflow/tfjs-core'
import {createBinaryKernelConfig} from './binary_kernel'

export const powConfig: KernelConfig = createBinaryKernelConfig(Pow, supportsFullBroadcast);


*/

import {KernelConfig, KernelFunc, Prelu, PreluInputs} from '@tensorflow/tfjs-core'
import {BackendWasm} from '../backend_wasm'
import {cast} from './Cast'

let wasmPrelu: (xId: number, weightsId: number, outId: number) => void

function setup(backend: BackendWasm) {
  wasmPrelu = backend.wasm.cwrap(Prelu, null /* void */, [  
    'number', // xId
    'number', // weightsId
    'number'  // outId
  ]);  
}

function prelu(args: PreluInputs, backend: BackendWasm) {
  const {inputs: {x, alpha}, backend} = args
  const xId = backend.dataIdMap.get(x.dataId).id;
  const weightsId = backend.dataIdMap.get(alpha.dataId).id;
  let inputId = xId;
  const input = x;
  let castedInput = input;
  if (input.dtype !== 'float32') {
    castedInput = cast({backend, inputs: {x}, attr: {dtype: 'float32'}});
    inputId =
backend.dataIdMap.get(castedInput.dataId).id} ||
) ||
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmPrelu(inputId, weightsId, outId); ||
} ||
  if (input.dtype !== 'float32') { ||
    backend.disposeData(castedInput.dataId);
  } ||
  return out; ||

export const preluConfig: KernelConfig = { ||
  kernelName: Prelu, ||
  backendName: 'wasm', setupFunc: setup, kernelFunc: prelu as {} as KernelFunc
};

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 */

import {backend_util, KernelConfig, KernelFunc, Prod, ProdAttrs, ProdInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';

import {CppDType} from './types';

let wasmProd: (xId: number, reduceSize: number, dtype: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmProd = backend.wasm.cwrap(Prod, null /*void*/, ['number', 'number', 'number', 'number']);
}

function prod(args: {
  backend: BackendWasm,
  inputs: ProdInputs,
  attrs: ProdAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);

  let reductionAxes = axes;
  if (inputWasTransposed) {
    const transposedId =
        backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose of this
      // once we are done.
      input = transposed;
      inputId = transposedId;
      reductionAxes = backend_util.getInnerMostAxes(reductionAxes.length, input.shape.length);
    }
  }

  backend_util.assertAxesAreInnerMostDims('prod', reductionAxes, input.shape.length);
  const [outShape, reduceShape] =
      backend_util.computeOutAndReduceShapes(input.shape, reductionAxes);
  const reduceSize = util.sizeFromShape(reduceShape);
  const out = backend.makeOutput(outShape, input.dtype);
  if (util.sizeFromShape(input.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmProd(inputId, reduceSize, CppDType[out.dtype], outId);
  }

  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  if (keepDims) {
    // reshape
    const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
    out.shape = newShape;
  }
  return out;
}

export const prodConfig: KernelConfig = {
  kernelName: Prod,
  backendName: 'wasm', setupFunc: setup, kernelFunc: prod as {} as KernelFunc
};

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 */

import {KernelConfig, KernelFunc, Range, RangeAttrs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {rangeImplCPU} from '../kernel_utils/shared';

export const range =
    (args: {backend: BackendWasm, attrs: RangeAttrs}): TensorInfo => {
      const {backend, attrs} = args;
      const {start, stop, step, dtype} = attrs;
      const values = rangeImplCPU(start, stop, step, dtype);

      const out = backend.makeOutput(outShape, input.dtype);
      if (util.sizeFromShape(input.shape) !== 0) {
        const outId = backend.dataIdMap.get(out.dataId).id;
        wasmProd(inputId, reduceSize, CppDType[out.dtype], outId);
      }

      const transposedId =
          backend.dataIdMap.get(transposed.dataId).id;
      if (transposedId !== xId) {
        // transpose was not a no-op. We will need to dispose of this
        // once we are done.
        input = transposed;
        inputId = transposedId;
      }

      const reductionAxes = backend_util.getInnerMostAxes(reductionAxes, input.shape.length);
      const [outShape, reduceShape] =
          backend_util.computeOutAndReduceShapes(input.shape, reductionAxes);
      const reduceSize = util.sizeFromShape(reduceShape);
      const out = backend.makeOutput(outShape, input.dtype);
      if (util.sizeFromShape(input.shape) !== 0) {
        const outId = backend.dataIdMap.get(out.dataId).id;
        wasmProd(inputId, reduceSize, CppDType[out.dtype], outId);
      }

      const transposedId =
          backend.dataIdMap.get(transposed.dataId).id;
      if (transposedId !== xId) {
        // transpose was not a no-op. We will need to dispose of this
        // once we are done.
        input = transposed;
        inputId = transposedId;
      }

      const reductionAxes = backend_util.getInnerMostAxes(reductionAxes, input.shape.length);
      const [outShape, reduceShape] =
          backend_util.computeOutAndReduceShapes(input.shape, reductionAxes);
      const reduceSize = util.sizeFromShape(reduceShape);
      const out = backend.makeOutput(outShape, input.dtype);
      if (util.sizeFromShape(input.shape) !== 0) {
        const outId = backend.dataIdMap.get(out.dataId).id;
        wasmProd(inputId, reduceSize, CppDType[out.dtype], outId);
      }

      return out;
}

export const rangeConfig: KernelConfig = {
  kernelName: Range,
  backendName: 'wasm',
  setupFunc: setup, kernelFunc: prod as {} as KernelFunc
};

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 */

import {KernelConfig, KernelFunc, Range, RangeAttrs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {rangeImplCPU} from '../kernel_utils/shared';

export const range =
    (args: {backend: BackendWasm, attrs: RangeAttrs}): TensorInfo => {
      const {backend, attrs} = args;
      const {start, stop, step, dtype} = attrs;
      const values = rangeImplCPU(start, stop, step, dtype);

      const out = backend.makeOutput(outShape, input.dtype);
      if (util.sizeFromShape(input.shape) !== 0) {
        const outId = backend.dataIdMap.get(out.dataId).id;
        wasmProd(inputId, reduceSize, CppDType[out.dtype], outId);
      }

      const transposedId =
          backend.dataIdMap.get(transposed.dataId).id;
      if (transposedId !== xId) {
        // transpose was not a no-op. We will need to dispose of this
        // once we are done.
        input = transposed;
        inputId = transposedId;
      }

      const reductionAxes = backend_util.getInnerMostAxes(reductionAxes, input.shape.length);
      const [outShape, reduceShape] =
          backend_util.computeOutAndReduceShapes(input.shape, reductionAxes);
      const reduceSize = util.sizeFromShape(reduceShape);
      const out = backend.makeOutput(outShape, input.dtype);
      if (util.sizeFromShape(input.shape) !== 0) {
        const outId = backend.dataIdMap.get(out.dataId).id;
        wasmProd(inputId, reduceSize, CppDType[out.dtype], outId);
      }

      const transposedId =
          backend.dataIdMap.get(transposed.dataId).id;
      if (transposedId !== xId) {
        // transpose was not a no-op. We will need to dispose of this
        // once we are done.
        input = transposed;
        inputId = transposedId;
      }

      const reductionAxes = backend_util.getInnerMostAxes(reductionAxes, input.shape.length);
      const [outShape, reduceShape] =
          backend_util.computeOutAndReduceShapes(input.shape, reductionAxes);
      const reduceSize = util.sizeFromShape(reduceShape);
      const out = backend.makeOutput(outShape, input.dtype);
      if (util.sizeFromShape(input.shape) !== 0) {
        const outId = backend.dataIdMap.get(out.dataId).id;
        wasmProd(inputId, reduceSize, CppDType[out.dtype], outId);
      }

      return out;
}

export const rangeConfig: KernelConfig = {
  kernelName: Range,
  backendName: 'wasm',
  setupFunc: setup, kernelFunc: prod as {} as KernelFunc
};
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---

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 */

import {KernelConfig, RealDiv} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

export const realDivConfig: KernelConfig =
createBinaryKernelConfig(RealDiv, supportsFullBroadcast);

import {KernelConfig, Relu} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const reluConfig: KernelConfig = createUnaryKernelConfig(Relu);

import {KernelConfig, Relu6} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const relu6Config: KernelConfig = createUnaryKernelConfig(Relu6);

import {KernelConfig, KernelFunc, ResizeBilinear, ResizeBilinearAttrs, ResizeBilinearInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {cast} from './Cast';

let wasmResizeBilinear: (xId: number, batch: number, oldHeight: number, oldWidth: number,
numChannels: number, newHeight: number, newWidth: number, alignCorners: number, halfPixelCenters:
number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmResizeBilinear =
backend.wasm.cwrap(ResizeBilinear, null /*void*/, 
[ 'number',  // xId
  'number',  // batch
  'number',  // oldHeight
  'number',  // oldWidth
  'number',  // numChannels
  'number',  // newHeight
  'number',  // newWidth
  'number',  // alignCorners
  'number',  // halfPixelCenters
  'number'   // outId
]);
}

function resizeBilinear(args: {
  backend: BackendWasm,
  inputs: ResizeBilinearInputs,
  attrs: ResizeBilinearAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;

  const {images} = inputs;
  const {alignCorners, halfPixelCenters, size} = attrs;
  const [newHeight, newWidth] = size;
  const outShape = [batch, newHeight, newWidth, numChannels];

  let xData =
import {KernelConfig, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';

let wasmResizeBilinear: (xId: number, batch: number, imageHeight: number, imageWidth: number, numChannels: number, alignCorners: boolean, halfPixelCenters: boolean, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmResizeBilinear = backend.wasm.cwrap('wasmReshape', null /* void */, 
      ['number', // xId
      'number',  // batchSize
      'number',  // imageHeight
      'number',  // imageWidth
      'number',  // numChannels
      'number',  // alignCorners
      'number',  // halfPixelCenters
      'number',  // outId
      'array',   // xId
      new Uint8Array(backend.dataIdMap.get(images.dataId).id).buffer])
  backend.dataIdMap.get(images.dataId).id const xId = xData.id;
  const outShape = backend.makeOutput(outShape, 'float32');
  if (util.sizeFromShape(images.shape) === 0) {
    return out;
  }
  const outId = backend.dataIdMap.get(out.dataId).id;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;

  const castedData = backend.dataIdMap.get(castedData.dataId).id
  if (xData.dtype !== 'float32') {
    const castedData = backend.dataIdMap.get(castedData.dataId).id
    const castedData = backend.dataIdMap.get(castedData.dataId).id
  }
  const params = backend.dense(Data(castedData.dataId)).id
  if (params != null) {
    backend.disposeData(params.dataId);
  }
  return out;
}

export const resizeBilinearConfig: KernelConfig = {
  kernelName: 'ReshapeBilinear',
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: resizeBilinear as {} as KernelFunc
};

import {KernelConfig, KernelFunc, Reverse, ReverseAttrs, ReverseInputs, TensorInfo, util} from '@tensorflow/tfjs-core';
import {RotateWithOffset, RotateWithOffsetAttrs, RotateWithOffsetInputs, TensorInfo} from '@tensorflow/tfjs-core';

import {backend_util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmRotate: (xId: number, batch: number, imageHeight: number, imageWidth: number, numChannels: number, radians: number, centerX: number, centerY: number, fillBytes: Uint8Array, fillLength: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmRotate = backend.wasm.cwrap('wasmRotate', null /* void */, 
      ['number', // xId
      'number',  // batch
      'number',  // imageHeight
      'number',  // imageWidth
      'number',  // numChannels
      'number',  // radians
      'number',  // centerX
      'number',  // centerY
      'array', // fillBytes
      'number',  // fillLength
      'array',  // outId
      'number',  // outId
      new Uint8Array(backend.dataIdMap.get(x.dataId).id).buffer])
  backend.dataIdMap.get(x.dataId).id
  const castedData = backend.dataIdMap.get(castedData.dataId).id
  if (castedData != null) {
    backend.disposeData(castedData.dataId);
  }
  return out;
}

export const reverseConfig: KernelConfig = {
  kernelName: 'Reverse',
  backendName: 'wasm',
  kernelFunc: reverse as {} as KernelFunc,
  setupFunc: setup
};

import {KernelConfig, KernelFunc, RotateWithOffset, RotateWithOffsetAttrs, RotateWithOffsetInputs, TensorInfo} from '@tensorflow/tfjs-core';

import {Identity, reshape} from './Identity';

function setup(backend: BackendWasm) {
  reshape = backend.dataIdMap.get(reshape.dataId).id
  const castedData = backend.dataIdMap.get(castedData.dataId).id
  if (castedData != null) {
    backend.disposeData(castedData.dataId);
  }
  return out;
}

export const reshapeConfig: KernelConfig = {
  kernelName: 'Reshape',
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: reshape as {} as KernelFunc
};

import {KernelConfig, KernelFunc, RotateWithOffset, RotateWithOffsetAttrs, RotateWithOffsetInputs, TensorInfo} from '@tensorflow/tfjs-core';

import {Identity, reshape} from './Identity';

function setup(backend: BackendWasm) {
  reshape = backend.dataIdMap.get(reshape.dataId).id
  const castedData = backend.dataIdMap.get(castedData.dataId).id
  if (castedData != null) {
    backend.disposeData(castedData.dataId);
  }
  return out;
}

export const reshapeConfig: KernelConfig = {
  kernelName: 'Reshape',
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: reshape as {} as KernelFunc
};

import {KernelConfig, KernelFunc, RotateWithOffset, RotateWithOffsetAttrs, RotateWithOffsetInputs, TensorInfo} from '@tensorflow/tfjs-core';

import {Identity, reshape} from './Identity';

function setup(backend: BackendWasm) {
  reshape = backend.dataIdMap.get(reshape.dataId).id
  const castedData = backend.dataIdMap.get(castedData.dataId).id
  if (castedData != null) {
    backend.disposeData(castedData.dataId);
  }
  return out;
}

export const reshapeConfig: KernelConfig = {
  kernelName: 'Reshape',
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: reshape as {} as KernelFunc
};
import {KernelConfig, ScatterNd, ScatterNdAttrs, ScatterNdInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmScatterNd: (indicesId: number, updatesId: number, dtype: CppDType, sliceRank: number, numUpdates: number, sliceSize: number, strides: Uint8Array, outputSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmScatterNd = backend.wasm.cwrap(ScatterNd, null /*void*/, ["number",  // indicesId
    "number",  // updatesId
    "number",  // dtype
    "number",  // sliceRank
    "number",  // numUpdates
    "number",  // sliceSize
    "array",  // strides
    "number",  // outputSize
    "number",  // outId
  ]);
}

function scatterNd(args: {backend: BackendWasm, inputs: ScatterNdInputs, attrs: ScatterNdAttrs}):
  TensorInfo {
  const {backend, inputs, attrs} = args;
  const {shape, indices, updates, dtype, sliceRank, numUpdates, sliceSize, strides, outId} = inputs;

  const backendId = backend.dataIdMap.get(outId).id;
  const indexOutId = backend.dataIdMap.get(indicesId).id;
  const updateOutId = backend.dataIdMap.get(updatesId).id;

  const output = backend.makeOutput(shape, backend.dtype, /*batch*/ false, backendId);
  const indicesId = backend.copyData(indicesId, indexOutId);
  const updatesId = backend.copyData(updatesId, updateOutId);

  wasmScatterNd(indicesId, updatesId, dtype, sliceRank, numUpdates, sliceSize, strides, output.shape, outId);

  return output;
}
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=============================================================================

*/
import {KernelConfig, Sin} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from
'./unary_kernel';
export const sinConfig: KernelConfig = createUnaryKernelConfig(Sin);

=============================================================================

import {KernelConfig, KernelFunc, Softmax, SoftmaxAttrs, SoftmaxInputs, TensorInfo, util} from
'@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmFunc: (xId: number, outId: number, channels: number, batch: number) =>
    void;

function setup(backend: BackendWasm): void {
    wasmFunc = backend.wasm.cwrap(Softmax, null /* void */, 
    ['number',  // xId
    'number',  // outId
    'number',  // channels
    'number'   // batch
  ]);
}

function softmax(
    args: {backend: BackendWasm,
    inputs: SoftmaxInputs, attrs: SoftmaxAttrs}):
    TensorInfo {
    const {backend, inputs: {logits}, attrs: {dim}} =
    args;
    const xId = backend.dataIdMap.get(logits.dataId).id;
    const out = backend.makeOutput(logits.shape,
    logits.dtype);
    const outId = backend.dataIdMap.get(out.dataId).id;
    const channels = logits.shape[dim];
    const batch = util.sizeFromShape(logits.shape) / channels;
    if (util.sizeFromShape(out.shape) === 0) {
        return out;
    }
    wasmFunc(xId, outId, channels, batch);
    return out;
}

export const softmaxConfig: KernelConfig = {
    kernelName: Softmax,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: softmax as {} as KernelFunc
};

=============================================================================
TransposeInputs = {x: paddedXReshaped};
const transposeAttrs = {perm: permutedReshapedPaddedPermutation};
const transposeX = transpose({inputs: transposeInputs, backend, attrs: transposeAttrs});
const resultReshapeInputs = {x: paddedXT};
const resultReshapeAttrs = {shape: flattenShape};
const result = reshape({inputs: resultReshapeInputs, backend, attrs: resultReshapeAttrs});

backend.disposeData(paddedX.dataId);
backend.disposeData(paddedXReshaped.dataId);
backend.disposeData(paddedXT.dataId);
return result;

export const spaceToBatchNDConfig: KernelConfig = {
  kernelName: SpaceToBatchND,
  backendName: 'wasm',
  kernelFunc: spaceToBatchND as {} as KernelFunc
};

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 *
 *=============================================================================
 */

import {KernelConfig, KernelFunc, SplitV, SplitVAttrs, SplitVInputs, util} from '@tensorflow/tfjs-core';
import {backend_util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {slice} from './Slice';

export function splitV(
    args: {inputs: SplitVInputs, attrs: SplitVAttrs, backend: BackendWasm}) {
  const {inputs, attrs, backend} = args;
  const {x} = inputs;
  const {numOrSizeSplits, axis} = attrs;

  const $axis = util.parseAxisParam(axis, x.shape)[0];

  const splitSizes = backend_util.prepareSplitSize(x, numOrSizeSplits, $axis);
  const begin = new Array(x.shape.length).fill(0);
  const size = x.shape.slice();
  return splitSizes.map(s => {
    const xSliceSize = [...size];
    xSliceSize[$axis] = s;
    const xSlice = slice({inputs: {x}, attrs: {begin, size: xSliceSize}, backend});
    begin[$axis] += s;
    return xSlice;
  });
}

export const splitVConfig: KernelConfig = {
  kernelName: SplitV,
  backendName: 'wasm',
  kernelFunc: splitV as {} as KernelFunc
};

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 *
 *=============================================================================
 */

import {KernelConfig, Sqrt} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const sqrtConfig: KernelConfig = createUnaryKernelConfig(Sqrt);

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 *
 *=============================================================================
 */

import {KernelConfig, Square} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const squareConfig: KernelConfig = createUnaryKernelConfig(Square);
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=============================================================================

*/
import {KernelConfig, SquaredDifference} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';
inconst supportsFullBroadcast = true;

export const squaredDifferenceConfig: KernelConfig =
    createBinaryKernelConfig(SquaredDifference, supportsFullBroadcast);

// Setup

import {KernelConfig, KernelFunc, Step, StepAttrs, StepInputs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {CppDType} from './types';

let wasmStep:
    (xId: number, alpha: number, dtype: number, outId: number) =>
        void;

function setup(backend: BackendWasm): void {
  wasmStep = backend.wasm.cwrap(Step, null /*void*/, 
    'number',  // x_id
    'number',  // alpha
    'number',  // dtype
    'number',  // out_id
  );
}

export function stridedSlice(args: {
  backend: BackendWasm,
  inputs: StridedSliceInputs,
  attrs: StridedSliceAttrs
}): TensorInfo {

  const {backend, inputs, attrs} = args;

  const {x} = inputs;

  const {
    begin,
    end,
    strides,
    beginMask,
    endMask,
    ellipsisMask,
    newAxisMask,
    shrinkAxisMask
  } = attrs;

  const {
    finalShapeSparse,
    finalShape,
    isIdentity,
    sliceDim0,
    isSimpleSlice,
    begin, end, strides, strides
  } =
      slice_util.sliceInfo(
        x.shape, begin, end, strides, beginMask, endMask, ellipsisMask,
          newAxisMask, shrinkAxisMask);

  let result;

  if (isIdentity) {
    // Optimization #1, slice is a no-op plus reshape
    result = reshape({inputs: {x},
          backend, attrs: {shape: finalShape}});
  } else if (sliceDim0 || isSimpleSlice) {
    // Optimization #2, slice is memory contiguous (only occurs in dim 0)
    util.assert(
        x.shape.length >= 1,
        () => `Input must have rank at least 1, got: $x.shape.length$`);

    const size = slice_util.computeOutShape($begin, $end, $strides);
wasmSum(inputId, reduceSize, CppDType[out.dtype], outId);\n  }\n  if (inputWasTransposed) {\n    // dispose of the transposed tensor.\n    backend.disposeData(transposed.dataId);\n  }\n  if (keepDims) {\n    // reshape\n    newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);\n    out.shape = newShape;\n  }\n  return out;\n}\nexport const sumConfig: KernelConfig = {\n  kernelName: Sum,\n  backendName: 'wasm',\n  setupFunc: setup,\n  kernelFunc: sum as {} as KernelFunc\n};

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 */
import {KernelConfig, Tan} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from
  './unary_kernel';\nexport const tanConfig: KernelConfig = createUnaryKernelConfig(Tan);

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 */
import {KernelConfig, KernelFunc, Tile, TileAttrs, TileInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';\n
let wasmTile: (\n    xId: number, xShape: Uint8Array, xShapeSize: number, newShape: Uint8Array,\n    newShapeSize: number, dtype: number, outId: number) => void;\n
function setup(backend: BackendWasm) {\n  wasmTile = backend.wasm.cwrap(Tile, null /* void */, [\n    'number', // x_id
    'array',   // x_shape
    'number',  // x_shape.length
    'array',   // new_shape
    'number',  // new_shape.length
    'number',  // out_id
  ]);\n}\nfunction tile(args: {inputs: TileInputs, backend: BackendWasm, attrs: TileAttrs}) {\n  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const {reps} = attrs;

  const newShape: number[] = new Array(x.shape.length);
  for (let i = 0; i < newShape.length; i++) {\n    newShape[i] = x.shape[i] * reps[i];\n  }
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const newShapeBytes = new Uint8Array(new Int32Array(newShape).buffer);

  const out = backend.makeOutput(newShape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmTile(xId, xShapeBytes, x.shape.length, newShapeBytes, newShape.length,\n    CppDType[out.dtype], outId);\n  return out;\n}\nexport const tileConfig: KernelConfig = {\n  kernelName: Tile,\n  backendName: 'wasm',\n  setupFunc: setup,\n  kernelFunc: tile as {} as KernelFunc\n};

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=============================================================================

*/

import {KernelConfig, KernelFunc, TensorInfo, TopK, TopKAttrs, TopKInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmTopK:
    (xId: number, xShapeBytes: Uint8Array, xShapeLength: number, xDtype: CppDType, k: number, sorted: boolean, outValuesId: number, outIndicesId: number) => void;

function setup(backend: BackendWasm) {
  wasmTopK = backend.wasm.cwrap(TopK, null /* void */, ['number', // xId
    'array',   // x.shape
    'number',  // x.shape.length
    'number',  // x.dtype
    'number',  // k
    'bool',    // sorted
    'number',  // outValuesId
    'number',  // outIndicesId
  ]);
}

export const topk:
    (args: {inputs: TopKInputs, backend: BackendWasm, attrs: TopKAttrs}) =>
        TensorInfo[] | TensorInfo = ({inputs, backend, attrs}) => {
          const {x} = inputs;
          const {k, sorted} = attrs;

          const xId = backend.dataIdMap.get(x.dataId).id;
          const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
          const outputShape = x.shape.slice();
          outputShape[outputShape.length - 1] = k;
          const outValues = backend.makeOutput(outputShape, x.dtype);
          const outValuesId = backend.dataIdMap.get(outValues.dataId).id;
          const outIndices = backend.makeOutput(outputShape, 'int32);
          const outIndicesId = backend.dataIdMap.get(outIndices.dataId).id;

          wasmTopK(xId, xShapeBytes, x.shape.length, CppDType[x.dtype], k, sorted, outValuesId, outIndicesId);

          return [outValues, outIndices];
        };

export const topKConfig: KernelConfig = {
  kernelName: TopK,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: topk as {} as KernelFunc,
};

=============================================================================

*/

import {KernelConfig, KernelFunc, TensorInfo, Transform, TransformAttrs, TransformInputs, TransformOutputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmTransform: (imageId: number, transformsId: number, isBatchTransform: boolean, batch: number, outHeight: number, outWidth: number, numChannels: number, imageWidth: number, imageHeight: number, strides: Uint8Array, stridesLength: number, interpolationModeId: number, fillModeId: number, fillValue: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmTransform = backend.wasm.cwrap(Transform, null /*void*/, ['number', // imageId
    'number', // transformsId
    'bool',    // isBatchTransform
    'number',  // batch
    'number',  // outHeight
    'number',  // outWidth
    'number',  // numChannels
    'number',  // imageWidth
    'number',  // imageHeight
    'array',   // strides
    'number',  // numChannels
    'number',  // interpolationModeId
    'number',  // fillModeId
    'number',  // fillValue
    'number'   // outId
  ]);
}

function transform(
    args: {backend: BackendWasm, inputs: TransformInputs, attrs: TransformAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {image} = inputs;

  const {interpolation, fillMode, fillValue, outputShape} = attrs;

  const [batch, imageHeight, imageWidth, numChannels] = image.shape;
  const [outHeight, outWidth] = outputShape != null ? outputShape : [imageHeight, imageWidth];

  return backend.transformImage(image.dataId, image.dataId, image.shape, image.shape.length - 1, k);
}
interpolationModelId = interpolation === 'nearest' ? 1 : 2;

let fillModelId = switch (fillMode) {
  case 'constant':
    fillModelId = 1;
    break;
  case 'reflect':
    fillModelId = 2;
    break;
  case 'wrap':
    fillModelId = 3;
    break;
  case 'nearest':
    fillModelId = 4;
    break;
  default:
    fillModelId = 1;
    break;
}

wasmTransform(imageId, transformsId, (transforms.shape[0] > 1), batch, outHeight, outWidth, numChannels, imageWidth, imageHeight, strides, image.shape.length - 1, interpolationModelId, fillModelId, fillValue, outId); return out;

export const transformConfig: KernelConfig = {
  kernelName: Transform,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: transform as {} as KernelFunc
};

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=============================================================================
*/

import {KernelConfig, KernelFunc, TensorInfo, Unpack, UnpackAttrs, UnpackInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {slice} from './Slice';

function unpack(args: {inputs: UnpackInputs, backend: BackendWasm, attrs: UnpackAttrs}): TensorInfo[] {
  const {inputs, backend, attrs} = args;
  const {value} = inputs;
  let {axis} = attrs;

  if (axis < 0) {
    axis += value.shape.length;
  }

  const numOutputs = value.shape[axis];
  const rank = value.shape.length;
  const outShape: number[] = new Array(rank - 1);
  let outIndex = 0;
  for (let i = 0; i < rank; i++) {
    if (i !== axis) {
      outShape[outIndex++()] = value.shape[i];
    }
  }
  const outs: TensorInfo[] = new Array(numOutputs);
  const {begin, size} = slice({inputs: {x: value}, attrs: {begin, size}, backend});

  for (let i = 0; i < outs.length; i++) {
    begin[i] = i;
    outs[i] = slice({inputs: {x: value}, attrs: {begin, size}, backend});
  }
  return outs.map(({dataId, dtype}) => ({dataId, dtype, shape: outShape}));
}

export const unpackConfig: KernelConfig = {
  kernelName: Unpack,
  backendName: 'wasm',
  kernelFunc: unpack as {} as KernelFunc
};

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 *
=============================================================================
*/

import {KernelConfig, KernelFunc, ZerosLike, ZerosLikeInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

function zerosLike(args: {inputs: ZerosLikeInputs, backend: BackendWasm}) {
  const {inputs: {x}, backend} = args;
  const out = backend.makeOutput(x.shape, x.dtype);

  const outVals = backend.typedArrayFromHeap(out);
  outVals.fill(0);
  return out;
}

export const zerosLikeConfig: KernelConfig = {
  kernelName: ZerosLike,
  backendName: 'wasm',
  kernelFunc: zerosLike as {} as KernelFunc
};

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=============================================================================
*/

// We explicitly import the modular kernels so they get registered in the
// global registry when we compile the
library. A modular build would replace

```javascript
// the contents of this file and import only the kernels that are

import {KernelConfig, registerKernel} from '@tensorflow/tfjs-core';

import {fusedMatMulConfig} from './kernels/_FusedMatMul';
import {absConfig} from './kernels/Abs';
import {addConfig} from './kernels/Add';
import {addNConfig} from './kernels/AddN';
import {allConfig} from './kernels/All';
import {anyConfig} from './kernels/Any';
import {argMaxConfig} from './kernels/ArgMax';
import {avgPoolConfig} from './kernels/AvgPool';
import {batchMatMulConfig} from './kernels/BatchMatMul';
import {batchToSpaceNDConfig} from './kernels/BatchToSpaceND';
import {castConfig} from './kernels/Cast';
import {ceilConfig} from './kernels/Ceil';
import {clipByValueConfig} from './kernels/ClipByValue';
import {concatConfig} from './kernels/Concat';
import {conv2DConfig} from './kernels/Conv2D';
import {conv2DBackpropInputConfig} from './kernels/Conv2DBackpropInput';
import {cosConfig} from './kernels/Cosh';
import {coshConfig} from './kernels/Cosh';
import {cropAndResizeConfig} from './kernels/CropAndResize';
import {cumsumConfig} from './kernels/Cumsum';
import {depthToSpaceConfig} from './kernels/DepthToSpace';
import {eluConfig} from './kernels/Elu';
import {equalConfig} from './kernels/Equal';
import {expConfig} from './kernels/Exp';
import {fillConfig} from './kernels/Fill';
import {flipLeftRightConfig} from './kernels/FlipLeftRight';
import {floorConfig} from './kernels/Floor';
import {floorDivConfig} from './kernels/FloorDiv';
import {fusedBatchNormConfig} from './kernels/FusedBatchNorm';
import {fusedConv2DConfig} from './kernels/FusedConv2D';
import {fusedDepthwiseConv2DConfig} from './kernels/FusedDepthwiseConv2D';
import {gatherNdConfig} from './kernels/GatherNd';
import {gatherV2Config} from './kernels/GatherV2';
import {greaterEqualConfig} from './kernels/GreaterEqual';
import {greaterConfig} from './kernels/Greater';
import {identityConfig} from './kernels/Identity';
import {leakyReluConfig} from './kernels/LeakyRelu';
import {lessEqualConfig} from './kernels/LessEqual';
import {lessConfig} from './kernels/Less';
import {logConfig} from './kernels/Log';
import {logicalAndConfig} from './kernels/LogicalAnd';
import {maxConfig} from './kernels/Max';
import {maximumConfig} from './kernels/Maximum';
import {meanConfig} from './kernels/Mean';
import {minimumConfig} from './kernels/Minimum';
import {mirrorPadConfig} from './kernels/MirrorPad';
import {multiplyConfig} from './kernels/Multiply';
import {negConfig} from './kernels/Neg';
import {nonMaxSuppressionV3Config} from './kernels/NonMaxSuppressionV3';
import {nonMaxSuppressionV4Config} from './kernels/NonMaxSuppressionV4';
import {nonMaxSuppressionV5Config} from './kernels/NonMaxSuppressionV5';
import {oneHotConfig} from './kernels/OneHot';
import {onesLikeConfig} from './kernels/OnesLike';
import {padConfig} from './kernels/PadV2';
import {preluConfig} from './kernels/Prelu';
import {prodConfig} from './kernels/Prod';
import {rangeConfig} from './kernels/Range';
import {realDivConfig} from './kernels/RealDiv';
import {reluConfig} from './kernels/Relu';
import {relu6Config} from './kernels/Relu6';
import {reshapeConfig} from './kernels/Reshape';
import {resizeBilinearConfig} from './kernels/ResizeBilinear';
import {reverseConfig} from './kernels/Reverse';
import {rotateWithOffsetConfig} from './kernels/RotateWithOffset';
import {roundConfig} from './kernels/Round';
import {rsqrtConfig} from './kernels/Rsqrtn';
import {selectConfig} from './kernels/Select';
import {sigmoidConfig} from './kernels/Sigmoid';
import {sinConfig} from './kernels/Sin';
import {sliceConfig} from './kernels/Slice';
import {softmaxConfig} from './kernels/Softmax';
import {spaceToBatchNDConfig} from './kernels/SpaceToBatchND';
import {splitVConfig} from './kernels/SplitV';
import {sqrtConfig} from './kernels/Sqrt';
import {squareConfig} from './kernels/Square';
import {squaredDifferenceConfig} from './kernels/SquaredDifference';
import {stepConfig} from './kernels/Step';
import {stridedSliceConfig} from './kernels/StridedSlice';
import {subConfig} from './kernels/Sub';
import {sumConfig} from './kernels/Sum';
import {tanConfig} from './kernels/Tan';
import {tanhConfig} from './kernels/Tanh';
```
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```javascript
{tileConfig} from './kernels/Tile';
import {topKConfig} from './kernels/TopK';
import {transformConfig} from './kernels/Transform';
import {unpackConfig} from './kernels/Unpack';
import {zerosLikeConfig} from './kernels/ZerosLike';

const kernelConfigs: KernelConfig[] = [
  absConfig,
  addConfig,
  allConfig,
  anyConfig,
  argMaxConfig,
  avgPoolConfig,
  batchMatMulConfig,
  batchToSpaceNDConfig,
  ceilConfig,
  clipByValueConfig,
  concatConfig,
  conv2DConfig,
  conv2DBackpropInputConfig,
  cosConfig,
  coshConfig,
  cropAndResizeConfig,
  cumsumConfig,
  depthToSpaceConfig,
  depthwiseConv2dNativeConfig,
 eluConfig,
  expConfig,
  expandDimsConfig,
  fillConfig,
  flipLeftRightConfig,
  floorConfig,
  floorDivConfig,
  fusedMatMulConfig,
  fusedBatchNormConfig,
  fusedConv2DConfig,
  fusedDepthwiseConv2DConfig,
  gatherNdConfig,
  gatherV2Config,
  greaterEqualConfig,
  identityConfig,
  leakyReluConfig,
  lessConfig,
  lessEqualConfig,
  logConfig,
  logicalAndConfig,
  logicalOrConfig,
  logicalXorConfig,
  maximumConfig,
  minimumConfig,
  maxPoolConfig,
  meanConfig,
  minConfig,
  minimumConfig,
  mirrorPadConfig,
  multiplyConfig,
  negConfig,
  nonMaxSuppressionV3Config,
  nonMaxSuppressionV4Config,
  nonMaxSuppressionV5Config,
  notEqualConfig,
  oneHotConfig,
  onesLikeConfig,
  packConfig,
  padV2Config,
  powConfig,
  preluConfig,
  prodConfig,
  rangeConfig,
  realDivConfig,
  reluConfig,
  relu6Config,
  reshapeConfig,
  resizeBilinearConfig,
  reverseConfig,
  rotateWithOffsetConfig,
  rsqrtConfig,
  roundConfig,
  scatterNdConfig,
  selectConfig,
  sigmoidConfig,
  sinConfig,
  sliceConfig,
  softmaxConfig,
  spaceToBatchNDConfig,
  splitVConfig,
  sqrtConfig,
  squareConfig,
  squaredDifferenceConfig,
  stepConfig,
  stridedSliceConfig,
  subConfig,
  sumConfig,
  tanhConfig,
  tanhConfig,
  tileConfig,
  topKConfig,
  transformConfig,
  transposeConfig,
  unpackConfig,
  zerosLikeConfig];

for (const kernelConfig of kernelConfigs) {
  registerKernel(kernelConfig);
}
```

```javascript
/**
 * @license
 * Copyright 2020 Google LLC. All Rights Reserved.
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
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 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 *
 *=============================================================================
 */

import {env} from '@tensorflow/tfjs-core';

const ENV = env();

/**
 * True if SIMD is supported.
 */
// From: https://github.com/GoogleChromeLabs/wasm-feature-detect
ENV.registerFlag('WASM_HAS_SIMD_SUPPORT', async () => WebAssembly.validate(new Uint8Array([0, 97, 115, 109, 1, 0, 0, 1, 4, 1, 96, 0, 0, 3, 2, 1, 0, 10, 9, 1, 7, 0, 65, 0, 253, 15, 26, 11])));

/**
 * True if threads are supported.
 */
// From: https://github.com/GoogleChromeLabs/wasm-feature-detect
ENV.registerFlag('WASM_HAS_MULTITHREAD_SUPPORT', async () => {
  // TODO(annxingyuan): Enable node support once this is resolved
  // https://github.com/tensorflow/tfjs/issues/3830
  if (ENV.get('IS_NODE')) {
    return false;
  }

  try {
    // Test for transferability of SABs (needed for Firefox)
    return true;
  } catch (e) {
    return false;
  }
});
```

```javascript
GROWABLE_HEAP_I8(){if(wasmMemory.buffer!=buffer){updateGlobalBufferAndViews(wasmMemory.buffer)}
```
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6 2047

```javascript
Module["postRun"]="function()"Module["postRun"]=Module["postRun"]
while(Module["postRun"].length)
  Module["postRun"]=Module["postRun"].shift();
callRuntimeCallbacks(\_\_ATPOSTRUN\_\_);

addOnPreRun(cb){\_\_ATPRERUN\_\_unshift(cb)}
addOnPostRun(cb){\_\_ATPOSTRUN\_\_unshift(cb)}

var runDependencies=0;
var runDependencyWatcher=null;
var dependenciesFulfilled=null;
function addRunDependency(id){
  assert(!ENVIRONMENT_IS_PTHREAD, \"addRunDependency cannot be used in a pthread worker\");
  runDependencies++;
  if(Module[\"monitorRunDependencies\"]){
    Module[\"monitorRunDependencies\"].push(id);
    Module[\"monitorRunDependencies\"].push(function(){
      runDependencies--;
      if(Module[\"monitorRunDependencies\"]){
        Module[\"monitorRunDependencies\"].pop();
      }
      if(dependenciesFulfilled){
        var callback=dependenciesFulfilled;
        dependenciesFulfilled=null;
        callback();
      }
    });
  } else {
    addRunDependency(id);
  }
}

 Module[\"preloadedImages\"]=[];
 Module[\"preloadedAudios\"]=[];

function abort(what){
  if(Module[\"onAbort\"]){
    Module[\"onAbort\"](what);
  } else if (ENVIRONMENT_IS_PTHREAD)
    console.error("Pthread aborting at "+(new Error).stack);
  what+="\n";
  err(what);
  ABORT=true;
  EXITSTATUS=1;
  what="abort\" in\"+what+\"");
  Build with -s ASSERTIONS=1 for more info.
}

var e=new WebAssembly.RuntimeError(what); readyPromiseReject(e);
throw e
```

---

String.prototype.startsWith?

```javascript
var dataURIPrefix="data:application/octet-stream;base64,";

function isDataURI(filename){
  return hasPrefix(filename, dataURIPrefix);
}

var fileURIPrefix="file://";

function isFileURI(filename){
  return hasPrefix(filename, fileURIPrefix);
}

var wasmBinaryFile="tfjs-backend-wasm-threaded-simd.wasm";

if(!isDataURI(wasmBinaryFile)){
  wasmBinaryFile=locateFile(wasmBinaryFile);
}

function getBinary(filename){
  try{
    if(filename==wasmBinaryFile&&wasmBinary){
      return new Uint8Array(wasmBinary)
    }
    if(readBinary){
      return readBinary(filename);
    } else{ throw "both async and sync fetching of the wasm failed!";
    }
  } catch(err){
    abort(err);
  }
}

```

```javascript
getBinaryPromise()

```
73;if(ret=="not-equal")return-6;if(ret=="ok")return 0;throw"Atomics.wait returned an unexpected value \"+ret\";else{if(Atomics.load(GROWABLE_HEAP_I32(),addr>>2)!=val){return -6}var tNow=performance.now();var tEnd=tNow+timeout;var lastAddr=Atomics.exchange(GROWABLE_HEAP_I32(),__emscripten_main_thread_futex>>2,addr);while(1){tNow=performance.now();if(tNow>tEnd){lastAddr=Atomics.exchange(GROWABLE_HEAP_I32(),__emscripten_main_thread_futex>>2,0);return 73}lastAddr=Atomics.exchange(GROWABLE_HEAP_I32(),__emscripten_main_thread_futex>>2,0);if(lastAddr==0){break}lastAddr=Atomics.exchange(GROWABLE_HEAP_I32(),__emscripten_main_thread_futex>>2,addr);if(Atomics.load(GROWABLE_HEAP_I32(),addr>>2)!=val){return -6}lastAddr=Atomics.exchange(GROWABLE_HEAP_I32(),__emscripten_main_thread_futex>>2,addr)}return 0}}function _emscripten_memcpy_big(dest,src,num){GROWABLE_HEAP_U8().copyWithin(dest,src,src+num)}function _emscripten_num_logical_cores(){if(ENVIRONMENT_IS_NODE)return require("os").cpus().length;return navigator["hardwareConcurrency"]}function _emscripten_proxy_to_main_thread_js(index,sync){var numCallArgs=arguments.length-2;var stack=stackSave();var serializedNumCallArgs=numCallArgs;var args=stackAlloc(serializedNumCallArgs*8);var b=args>>3;for(var i=0;i<numCallArgs;i++){var arg=arguments[2+i];GROWABLE_HEAP_F64()[b+i]=arg}var ret=_emscripten_run_in_main_runtime_thread_js(index,serializedNumCallArgs,args,sync);stackRestore(stack);return ret}function _emscripten_receive_on_main_thread_js(index,numCallArgs,args){_emscripten_receive_on_main_thread_js_callArgs.length=numCallArgs;var b=args>>3;for(var i=0;i<numCallArgs;i++){_emscripten_receive_on_main_thread_js_callArgs[i]=GROWABLE_HEAP_F64()[b+i]}var isEmAsmConst=index<0;var func=!isEmAsmConst?proxiedFunctionTable[index]:ASM_CONSTS[-index-1];return func.apply(null,_emscripten_receive_on_main_thread_js_callArgs)}function _emscripten_get_heap_size(){return GROWABLE_HEAP_U8().length}function emscripten_realloc_buffer(size){try{wasmMemory.grow(size-buffer.byteLength+65535>>>16);updateGlobalBufferAndViews(wasmMemory.buffer);return 1}catch(e){}}function _emscripten_resize_heap(requestedSize){var oldSize=_emscripten_get_heap_size();if(requestedSize<=oldSize){return false}var maxHeapSize=2147483648;if(requestedSize>maxHeapSize){return false}for(var cutDown=1;cutDown<=4;cutDown*=2){var overGrownHeapSize=oldSize*(1+.2/cutDown);overGrownHeapSize=Math.min(overGrownHeapSize,requestedSize+100663296);var newSize=Math.min(maxHeapSize,alignUp(Math.max(requestedSize,overGrownHeapSize),65536));var replacement=emscripten_realloc_buffer(newSize);if(replacement){return true}}return false}var JSEvents={inEventHandler:0,removeAllEventListeners:function(){for(var i=JSEvents.eventHandlers.length-1;i>=0;--i){JSEvents._removeHandler(i)}}}
GL.currentContext=GL.contexts[contextHandle];GL.contexts[contextHandle].deleteContext=function(contextHandle){if(GL.currentContext===GL.contexts[contextHandle])GL.currentContext=null;if(typeof JSEvents==="object")JSEvents.removeAllHandlersOnTarget(GL.contexts[contextHandle].GLctx.canvas);if(GL.contexts[contextHandle].GLctx.canvas.GLctxObject)GL.contexts[contextHandle].GLctx.canvas.GLctxObject=undefined;_free(GL.contexts[contextHandle].handle);GL.contexts[contextHandle]=null};GL.initExtensions=function(context){if(!context)context=GL.currentContext;if(context.initExtensionsDone)return;context.initExtensionsDone=true;var GLctx=context.GLctx;__webgl_enable_ANGLE_instanced_arrays(GLctx);__webgl_enable_OES_vertex_array_object(GLctx);__webgl_enable_WEBGL_draw_buffers(GLctx);GLctx.disjointTimerQueryExt=GLctx.getExtension("EXT_disjoint_timer_query");__webgl_enable_WEBGL_multi_draw(GLctx);var exts=GLctx.getSupportedExtensions()||[ ];exts.forEach(function(ext){if(ext.indexOf("lose_context")<0&&ext.indexOf("debug")<0){GLctx.getExtension(ext)}})};var __emscripten_webgl_power_preferences=["default","low-power","high-performance"];function _emscripten_webgl_do_create_context(target,attributes){var a=attributes>>2;var powerPreference=GROWABLE_HEAP_I32()[a+(24>>2)];var contextAttributes={"alpha":!!GROWABLE_HEAP_I32()[a+(0>>2)],"depth":!!GROWABLE_HEAP_I32()[a+(4>>2)],"stencil":!!GROWABLE_HEAP_I32()[a+(8>>2)],"antialias":!!GROWABLE_HEAP_I32()[a+(12>>2)],"premultipliedAlpha":!!GROWABLE_HEAP_I32()[a+(16>>2)],"preserveDrawingBuffer":!!GROWABLE_HEAP_I32()[a+(20>>2)],"powerPreference":__emscripten_webgl_power_preferences[powerPreference],"failIfMajorPerformanceCaveat":!!GROWABLE_HEAP_I32()[a+(28>>2)],majorVersion:GROWABLE_HEAP_I32()[a+(32>>2)],minorVersion:GROWABLE_HEAP_I32()[a+(36>>2)],enableExtensionsByDefault:GROWABLE_HEAP_I32()[a+(40>>2)],explicitSwapControl:GROWABLE_HEAP_I32()[a+(44>>2)],proxyContextToMainThread:GROWABLE_HEAP_I32()[a+(48>>2)],renderViaOffscreenBackBuffer:GROWABLE_HEAP_I32()[a+(52>>2)]];var canvas=findCanvasEventTarget(target);if(!canvas){return 0}if(contextAttributes.explicitSwapControl){return 0}var contextHandle=GL createContext(canvas,target,contextAttributes);if(contextHandle){return contextHandle}GLctx=GL.currentContext&&GL.currentContext.GLctx; GLctxObject=context;GL.contexts[handle]=context;return handle},makeContextCurrent:function(contextHandle){GL.currentContext=GL.contexts[contextHandle];Module.ctx=GLctx;GL.currentContext&&GL.currentContext.GLctxObject=context;GL.contexts[handle]=context;return handle},getContext:function(contextHandle){return GL.contexts[contextHandle]},
function _emscripten_proxy_to_main_thread_js(fd,offset_low,offset_high,whence,newOffset)
    fd_write(fd,iov,iovcnt,pnum));if(ENVIRONMENT_IS_PTHREAD)
        return
    _emscripten_proxy_to_main_thread_js(fd,offset_low,offset_high,whence,newOffset)

    var num=0;for(var i=0;i<iovcnt;i++)
        var ptr=GROWABLE_HEAP_I32()[iov+i*8>>2];var len=GROWABLE_HEAP_I32()[iov+i*8+4>>2];for(var j=0;j<len;j++)
            SYSCALLS.printChar(fd,GROWABLE_HEAP_U8()[ptr+j]);num+=len;GROWABLE_HEAP_I32()
            [pnum>>2]=num;return 0;

function _pthread_cleanup_pop(val)
    routine=PThread.threadExitHandlers.pop();if(execution)routine();

function _pthread_cleanup_push(routine,arg)
    PThread.threadExitHandlers.push(function()
        {wasmTable.get(routine)(arg)});

function spawnThread(threadParams)
    if(ENVIRONMENT_IS_PTHREAD)
        throw("Internal Error! spawnThread() can only be called from main application thread!");
    worker=PThread.getNewWorker();if(worker.pthread!==undefined)throw "Internal
    error, no pthread ptr!";
    PThread.runningWorkers.push(worker);
    var tlsMemory=_malloc(128*4);
    stackHigh=threadParams.stackBase+threadParams.stackSize;
    pthread=PThread.pthreads[threadParams.pthread_ptr]={worker:worker,stackBase:stackBase,stackSize:
    stackParams.stackSize,allocatedOwnStack:threadParams.allocatedOwnStack,threadInfoStruct:
    threadParams.threadInfoStruct}
    var
tis=threadInfoStruct;
    Atomics.store(GROWABLE_HEAP_U32(),tis+(64>>2),threadParams.detached);
    Atomics.store(GROWABLE_HEAP_U32(),tis+(100>>2),tlsMemory);
    Atomics.store(GROWABLE_HEAP_U32(),tis+(104>>2),threadParams.stackSize);
    Atomics.store(GROWABLE_HEAP_U32(),tis+(104+8>>2),stackHigh);
    Atomics.store(GROWABLE_HEAP_U32(),tis+(104+12>>2),threadParams.detached);
    var
    global_libc=_emscripten_get_global_libc();
    global_locale=global_libc+40;
    Atomics.store(GROWABLE_HEAP_U32(),tis+(172>>2),global_locale);worker.pthread=pthread;
    var
    msg={"cmd":"run","start_routine":threadParams.startRoutine,"arg":threadParams.arg,"threadInfoStruct":
    threadParams.pthread_ptr,"stackBase":threadParams.stackBase,"stackSize":threadParams.stackSize,
    allocatedOwnStack:threadParams.allocatedOwnStack,threadInfoStruct:threadParams.threadInfoStruct,ptr:
    }
    var
    tis=threadInfoStruct;
    Atomics.store(GROWABLE_HEAP_U32(),tis+(64>>2),threadParams.detached);
    Atomics.store(GROWABLE_HEAP_U32(),tis+(100>>2),tlsMemory);
    Atomics.store(GROWABLE_HEAP_U32(),tis+(104>>2),threadParams.stackSize);
    Atomics.store(GROWABLE_HEAP_U32(),tis+(104+8>>2),stackHigh);
    Atomics.store(GROWABLE_HEAP_U32(),tis+(104+12>>2),threadParams.detached);
    var
    global_libc=_emscripten_get_global_libc();
tb=_pthread_self();if(!tb)return;var cancelDisabled=Atomics.load(GROWABLE_HEAP_U32(),tb+56>>2);if(cancelDisabled)return;
canceled=Atomics.load(GROWABLE_HEAP_U32(),tb+0>>2);if(canceled==2)throw"Canceled!";
function _emscripten_check_blocking_allowed(){if(ENVIRONMENT_IS_NODE)return;if(ENVIRONMENT_IS_WORKER)
return;warnOnce("Blocking on the main thread is very dangerous, see
https://emscripten.org/docs/porting/pthreads.html#blocking-on-the-main-browser-thread");}function
__emscripten_do_pthread_join(thread,status,block){if(!thread){err("pthread_join attempted on a null thread
pointer!");return
ERRNO_CODES.ESRCH}if(!thread){err("pthread_join attempted on a null thread
pointer!");return
ERRNO_CODES.EDEADLK}var
self=GROWABLE_HEAP_I32()[thread+12>>2];if(self!==thread){err("pthread_join attempted on thread
"+thread+", which does not point to a valid thread, or does not exist anymore!");return
ERRNO_CODES.ESRCH}var detached=Atomics.load(GROWABLE_HEAP_U32(),thread+64>>2);if(detached){err("Attempted to join thread
"+thread+", which was already detached!");return
ERRNO_CODES.EINVAL}if(block){_emscripten_check_blocking_allowed()}for(;;){var threadStatus=Atomics.load(GROWABLE_HEAP_U32(),thread+0>>2);if(threadStatus===1){var threadExitCode=Atomics.load(GROWABLE_HEAP_U32(),thread+4>>2);if(status)GROWABLE_HEAP_I32()[status>>2]=threadExitCode;Atomics.store(GROWABLE_HEAP_U32(),thread+64>>2,1);if(!ENVIRONMENT_IS_PTHREAD)cleanupThread(thread);else postMessage({"cmd":"cleanupThread","thread":thread});return 0}if(!block){return
ERRNO_CODES.EBUSY}__pthread_testcancel_js();if(!ENVIRONMENT_IS_PTHREAD)_emscripten_main_thread_process_queued_calls();_emscripten_main_browser_thread_id()==thread){err("Main thread
"+thread+" is attempting to join to itself!");return ERRNO_CODES.EDEADLK}var
self=GROWABLE_HEAP_I32()[thread+12>>2];if(self!==thread)err("pthread_join attempted on thread
"+thread+", which does not point to a valid thread, or does not exist anymore!");return
ERRNO_CODES.ESRCH}var
maxHeapSize=2147483648;return maxHeapSize/16384;case 30:return 16384;case 31:return 32;case 87:return 2147483647;case 34:return 2048;case 37:return 99;case 43:return 200809;case 39:return 1e3;case 89:return 700;case 71:return 256;case 40:return 255;case 180:return 64;case 25:return 20;case 5:return 16;case 6:return 6;case 73:return 4;case 84:{if(typeof navigator==="object")return navigator["hardwareConcurrency"]||1;return 1}}setErrNo(28);return-
1}if(!ENVIRONMENT_IS_PTHREAD)PThread.initMainThreadBlock();var GLctx;var
proxiedFunctionTable=[null,_atexit,_emscripten_set_canvas_element_size_main_thread_fd_close,_fd_seek,_fd_write,
_asmLibraryArg={"e":___assert_fail,"r":___call_main,"x":_emscripten_notify_thread_queue,"b":_abort,"y":
_emscripten_asm_const_int,"j":_emscripten_conditional_set_current_thread_status,"d":_emscripten_futex_wait,
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6 2056
doRun() { if (calledRun) return; calledRun = true; Module['calledRun'] = true; if (ABORT) return; initRuntime(); preMain(); readyPromiseResolve(Module); if (Module['onRuntimeInitialized']) Module['onRuntimeInitialized'](); postRun() { if (Module['setStatus']) Module['setStatus']('Running...'); setTimeout(function() { setTimeout(function() { Module['setStatus'](''); doRun(); }, 1); }, 1); } else { doRun(); } Module['run'] = function (status, implicit) { if (implicit && noExitRuntime && status !== 0) return; if (ENVIRONMENT_IS_PTHREAD) { Module['onExit'](status); ABORT = true; quit_(status, new ExitStatus(status)); ABORT = false; } if (Module['onRuntimeInitialized']) Module['onRuntimeInitialized'](); postRun(); } Module['setStatus'] = function (status) { Module['setStatus'](''); setTimeout(function() { Module['setStatus'](status); }, 1); }; Module['run'] = function (status) { Module['setStatus'](status); }; WebAssembly.Instance(Module['wasmModule'], {}).then(function(instance) { Module = instance; moduleLoaded(); }); if (typeof exports === 'object' && typeof module === 'object') module.exports = Module; if (typeof define === 'function' && define['amd']) define([], function() { return Module; }); if (typeof exports === 'object') exports['Module'] = Module; if (typeof module === 'object') module['Module'] = Module; if (typeof global === 'object') global['Module'] = Module; if (typeof self === 'object') self['Module'] = Module; if (typeof this === 'object') this['Module'] = Module; if (typeof window === 'object') window['Module'] = Module; if (typeof globalThis === 'object') globalThis['Module'] = Module; if (typeof globalObject === 'object') globalObject['Module'] = Module;
```javascript
_\Max=Module["_Max"\]=function(){return(_Max=Module["_Max"\]=Module["asm"\]["aa"]\).apply(null,arguments)};

_\MaxPool=Module["_MaxPool"\]=function(){return(_MaxPool=Module["_MaxPool"\]=Module["asm"\]["ba"]\).apply(null,arguments)};

_\Maximum=Module["_Maximum"\]=function(){return(_Maximum=Module["_Maximum"\]=Module["asm"\]["ca"]\).apply(null,arguments)};

_\Mean=Module["_Mean"\]=function(){return(_Mean=Module["_Mean"\]=Module["asm"\]["da"]\).apply(null,arguments)};

_\Min=Module["_Min"\]=function(){return(_Min=Module["_Min"\]=Module["asm"\]["ea"]\).apply(null,arguments)};

_\Minimum=Module["_Minimum"\]=function(){return(_Minimum=Module["_Minimum"\]=Module["asm"\]["fa"]\).apply(null,arguments)};

_\MirrorPad=Module["_MirrorPad"\]=function(){return(_MirrorPad=Module["_MirrorPad"\]=Module["asm"\]["ga"]\).apply(null,arguments)};

_\Multiply=Module["_Multiply"\]=function(){return(_Multiply=Module["_Multiply"\]=Module["asm"\]["ha"]\).apply(null,arguments)};

_\Neg=Module["_Neg"\]=function(){return(_Neg=Module["_Neg"\]=Module["asm"\]["ia"]\).apply(null,arguments)};

_\NonMaxSuppressionV3=Module["_NonMaxSuppressionV3"\]=function(){return(_NonMaxSuppressionV3=Module["_NonMaxSuppressionV3"\]=Module["asm"\]["ja"]\).apply(null,arguments)};

_\NonMaxSuppressionV4=Module["_NonMaxSuppressionV4"\]=function(){return(_NonMaxSuppressionV4=Module["_NonMaxSuppressionV4"\]=Module["asm"\]["ka"]\).apply(null,arguments)};

_\NonMaxSuppressionV5=Module["_NonMaxSuppressionV5"\]=function(){return(_NonMaxSuppressionV5=Module["_NonMaxSuppressionV5"\]=Module["asm"\]["la"]\).apply(null,arguments)};

_\NotEqual=Module["_NotEqual"\]=function(){return(_NotEqual=Module["_NotEqual"\]=Module["asm"\]["ma"]\).apply(null,arguments)};

_\OneHot=Module["_OneHot"\]=function(){return(_OneHot=Module["_OneHot"\]=Module["asm"\]["na"]\).apply(null,arguments)};

_\PadV2=Module["_PadV2"\]=function(){return(_PadV2=Module["_PadV2"\]=Module["asm"\]["oa"]\).apply(null,arguments)};

_\Prelu=Module["_Prelu"\]=function(){return(_Prelu=Module["_Prelu"\]=Module["asm"\]["pa"]\).apply(null,arguments)};

_\Prod=Module["_Prod"\]=function(){return(_Prod=Module["_Prod"\]=Module["asm"\]["ra"]\).apply(null,arguments)};

_\RealDiv=Module["_RealDiv"\]=function(){return(_RealDiv=Module["_RealDiv"\]=Module["asm"\]["sa"]\).apply(null,arguments)};

_\Relu=Module["_Relu"\]=function(){return(_Relu=Module["_Relu"\]=Module["asm"\]["ta"]\).apply(null,arguments)};

_\Relu6=Module["_Relu6"\]=function(){return(_Relu6=Module["_Relu6"\]=Module["asm"\]["ua"]\).apply(null,arguments)};

_\ResizeBilinear=Module["_ResizeBilinear"\]=function(){return(_ResizeBilinear=Module["_ResizeBilinear"\]=Module["asm"\]["va"]\).apply(null,arguments)};

_\Reverse=Module["_Reverse"\]=function(){return(_Reverse=Module["_Reverse"\]=Module["asm"\]["wa"]\).apply(null,arguments)};

_\RotateWithOffset=Module["_RotateWithOffset"\]=function(){return(_RotateWithOffset=Module["_RotateWithOffset"\]=Module["asm"\]["xa"]\).apply(null,arguments)};
```
on"=Module["asm"]("["Val"]").apply(null,arguments));var stackSave=Module["stackSave"]=function() {return(stackSave=Module["stackSave"]=Module["asm"]("["Val"]").apply(null,arguments))};var stackRestore=Module["stackRestore"]=function() {return(stackRestore=Module["stackRestore"]=Module["asm"]("["Val"]").apply(null,arguments))};var stackAlloc=Module["stackAlloc"]=function() {return(stackAlloc=Module["stackAlloc"]=Module["asm"]("["Val"]").apply(null,arguments))};

```
var calledRun;function ExitStatus(status){this.name="ExitStatus";this.message="Program terminated with exit("+status+")";this.status=status}dependenciesFulfilled=function runCaller(){if(!calledRun)run();if(!calledRun)dependenciesFulfilled=runCaller};function run(args){args=args||arguments_();if(runDependencies>0) {return}preRun();if(runDependencies>0) {return}function doRun(){if(calledRun) return;calledRun=true;Module["calledRun"]={false};if(ABORT) return;initRuntime();preMain();readyPromiseResolve(Module);if(Module["onRuntimeInitialized"]){Module["onRuntimeInitialized"]();}postRun();}
```

```javascript
if(Module["setStatus"]) Module["setStatus"]("Running...");setTimeout(function(){setTimeout(function(){Module["setStatus"]("")},1);doRun()},1)
```

```javascript
else{doRun();}
```

```javascript
module["run"] = run;
```

```javascript
if(Module["preInit"]) {if(typeof Module["preInit"]=="function") Module["preInit"]=[];}while(Module["preInit"].length>0){Module["preInit"][0]()();}
```

```
if (typeof exports === 'object' && typeof module === 'object')
  module.exports = WasmBackendModule;
else if (typeof define === 'function' && define['amd'])
  define([], function() { return WasmBackendModule; });
else if (typeof exports === 'object')
  exports["WasmBackendModule"] = WasmBackendModule;

```
return;
    }

    const size = util.sizeFromShape(shape);
    const numBytes = size *
        util.bytesPerElement(dtype);
    const memoryOffset = this.wasm._malloc(numBytes);

    this.dataIdMap.set(dataId, {id, memoryOffset, shape, dtype, refCount});
    this.wasm.tfjs.registerTensor(id, size, memoryOffset);

    if (values != null) {
      this.wasm.HEAPU8.set(
          new Uint8Array(values.buffer, values.byteOffset, numBytes),
          memoryOffset);
    }

    this.dataIdMap.set(dataId, {id, memoryOffset, shape, dtype, refCount});
    this.wasm.tfjs.registerTensor(id, size, memoryOffset +
        util.sizeFromShape(shape) * util.bytesPerElement(dtype));
    this.wasm=tfjs.DisposeBuffer(bytes.buffer, dtype);

    this.dataIdMap.delete(dataId);
    return true;
  } **/ * Display the memory if the dataId has 0 refCount. Return true if the memory\n  * is released, false otherwise. */ \n  * @param dataId Optional, remove the data regardless of refCount \n  * @param disposeData\n  * @param force Optional, remove the data regardless of refCount \n  */
  disposeData(dataId: DataId, force = false): boolean {
    if (this.dataIdMap.has(dataId)) {
      const data =
        this.dataIdMap.get(dataId);
      data.refCount--;
      if (!force && data.refCount > 0) {
        return false;
      }

      this.wasm._free(data.memoryOffset);
      this.wasm.tfjs.DisposeData(dataId);

      this.dataIdMap.delete(dataId);
    }
    return true;
  } **/ * Return refCount of a `TensorData`. */
  refCount(dataId: DataId): number {
    if (this.dataIdMap.has(dataId)) {
      const tensorData =
        this.dataIdMap.get(dataId);
      return tensorData.refCount;
    }
    return 0;
  }

  incRef(dataId: DataId) {
    const data = this.dataIdMap.get(dataId);
    if (data != null) {
      data.refCount++;
    }
  }

  floatPrecision(): number {
    return 32;
  }

  // Returns the memory offset of a tensor. Useful for debugging and unit\n  // testing.\n  getMemoryOffset(dataId: DataId): number {
    return this.dataIdMap.get(dataId).memoryOffset;
  }

  dispose() {
    this.wasm.tfjs.Dispose();
    if ('PThread' in this.wasm) {
      this.wasm.PThread.terminateAllThreads();
    }
    this.wasm = null;
  }

  memory() {
    return {unreliable: false};
  }

  /**\n   * Make a tensor info for the output of an op. If `memoryOffset` is not
   * present, this\n   * method allocates memory on the WASM heap. If `memoryOffset`\n   * is present, the memory was allocated\n   * elsewhere (in c++) and we just record\n   * the pointer where that memory lives.\n   * */
  makeOutput(shape: number[], dtype: DataType, memoryOffset?: number):
      TensorInfo {
    let dataId: {};
    if (memoryOffset == null) {
      dataId = this.write(null /* values */, shape, dtype);
    } else {
      const id =
        this.dataIdNextNumber++;
      dataId = {id};
      this.dataIdMap.set(dataId, {id, memoryOffset, shape, dtype,
          refCount: 1});
      const size = util.sizeFromShape(shape);
      this.wasm=tfjs.RegisterTensor(id, size, memoryOffset);
    }
    return {dataId, shape, dtype};
  }

  typedArrayFromHeap({shape, dtype, dataId}:
      TensorInfo):
      backend_util.TypedArray {
    const buffer = this.wasm.HEAPU8.buffer;
    const
        memoryOffset = this.dataIdMap.get(dataId).memoryOffset;
    switch (dtype) {
      case 'float32':
        return new Float32Array(buffer, memoryOffset,
            util.sizeFromShape(shape));
      case 'int32':
        return new Int32Array(buffer, memoryOffset,
            util.sizeFromShape(shape));
      case 'bool':
        return new Uint8Array(buffer, memoryOffset,
            util.sizeFromShape(shape));
      default:
        throw new Error(`Unknown dtype ${dtype}`);
    }
  }

  async read(dataId: DataId): Promise<backend_util.BackendValues> {
    return this.readSync(dataId);
  }

  readSync(dataId: DataId): backend_util.BackendValues {
    const {memoryOffset,
        dtype, shape, stringBytes} =
        this.dataIdMap.get(dataId);
    if (dtype === 'string') {
      return stringBytes;
    }
    const bytes = this.wasm.HEAPU8.slice(
        memoryOffset,
        memoryOffset +
            util.sizeFromShape(shape) *
                util.bytesPerElement(dtype));
    return typedArrayFromBuffer(bytes.buffer, dtype);

  }

  disposeData(dataId: DataId, force = false): boolean {
    if (this.dataIdMap.has(dataId)) {
      const data =
        this.dataIdMap.get(dataId);
      data.refCount--;
      if (!force && data.refCount > 0) {
        return false;
      }

      this.wasm._free(data.memoryOffset);
      this.wasm.tfjs.DisposeData(dataId);

      this.dataIdMap.delete(dataId);
    }
    return true;
  }
"tfjs-backend-wasm-simd.wasm"; \n} \nif (wasmFileMap !== null) { \n  if (wasmFileMap[path] !== null) { \n    return wasmFileMap[path]; \n  } \n} \n
if (wasmModuleFolder + path; \n) \n
**Note:** We wrap the wasm module in a object with property 'wasm' instead of fn returning Promise<BackendWasmModule> to avoid freezing Chrome (last tested fn * in Chrome 76); \n
```javascript
/**
 * Initializes the wasm module and creates the js <--> wasm bridge.
 */
export async function init(): Promise<{wasm: BackendWasmModule}> {
  \n  if (wasmFileMap != null) {
    if (wasmFileMap[path] != null) {
      return wasmFileMap[path];
    }
  }

  return wasmModuleFolder + path;
}\\

/**
 * This function overrides the Emscripten module locateFile utility.
 * @param path The relative path to the file that needs to be loaded.
 * @param prefix The path to the main JavaScript file's directory.
 */
factoryConfig.locateFile = (path, prefix) => {
  if (path.endsWith('.worker.js')) {
    const response = wasmWorkerContents;
    const blob = new Blob([response], {type: 'application/javascript'});
    return URL.createObjectURL(blob);
  }

  if (path.endsWith('.wasm')) {
    return getPathToWasmBinary(
      simdSupported as boolean, threadsSupported as boolean, wasmPathPrefix != null ? wasmPathPrefix : prefix);
  }
  return prefix + path;
}\\

// The wasmFactory works for both vanilla and SIMD binaries.
// The WASM module has been successfully created by the factory.
// Any error will be caught by the onAbort callback defined above.
\nif (customFetch) { \n  \n  factoryConfig.locateFile = (path, prefix) => {
    \n    if (path.endsWith('.wasm')) { \n      \n    }
  }

  let wasm = wasmFactoryThreadedSimd(factoryConfig);
} else { \n  \n  wasm = wasmFactoryThreadedSimd(factoryConfig);
} \n
\n\nlet voidReturnType: string = null;
```

```javascript
/**
 * Sets the path to the `.wasm` file which will be fetched when the wasm * backend is initialized. See:
 */
```
```
import './flags_wasm';

import {registerBackend} from '@tensorflow/tfjs-core';

import {BackendWasm, init} from './backend_wasm';

export {BackendWasm, getThreadsCount, setThreadsCount, setWasmPath, setWasmPaths} from './backend_wasm';
export {version as version_wasm} from './version';

const WASM_PRIORITY = 2;
registerBackend('wasm', async () => {
  const {wasm} = await init();
  return new BackendWasm(wasm);
}, WASM_PRIORITY);
```

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```typescript
import {KernelConfig, KernelFunc, slice_util, StridedSlice, StridedSliceAttrs, StridedSliceInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {reshape} from './Reshape';
import {slice} from './Slice';

let wasmStridedSlice: (xId: number, xStridesBytes: Uint8Array, xRank: number, beginBytes: Uint8Array, endBytes: Uint8Array, stridesBytes: Uint8Array, outShapeBytes: Uint8Array, outStridesBytes: Uint8Array, outShapeLength: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmStridedSlice = backend.wasm.cwrap(StridedSlice, null /*void*/, ['number',  // xId
    'array',   // xStrides
    'number',  // xRank
    'array',   // beginBytes
    'array',   // endBytes
    'array',   // stridesBytes
    'array',   // outShapeBytes
    'array',   // outStridesBytes
    'number',  // outShapeLength
    'number',  // outId
  ]);}

export function stridedSlice(args: {
  backend: BackendWasm,
  inputs: StridedSliceInputs,
  attrs: StridedSliceAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;

  const {x} = inputs;

  const {
    begin,
    end,
    strides,
    beginMask,
    endMask,
    ellipsisMask,
    newAxisMask,
    shrinkAxisMask
  } = attrs;

  const {
    finalShapeSparse,
    finalShape,
    isIdentity,
    sliceDim0,
    isSimpleSlice,
    begin: $begin,
    end: $end,
    strides: $strides
  } =
      slice_util.sliceInfo(
          x.shape, begin, end, strides, beginMask, endMask, ellipsisMask,
              newAxisMask, shrinkAxisMask);

  let result;

  if (isIdentity) {
    // Optimization #1, slice is a no-op plus reshape
    result = reshape({inputs: {x}, backend, attrs: {shape: finalShape}});
  } else if (sliceDim0 || isSimpleSlice) {
    // Optimization #2, slice is memory contiguous (only occurs in dim 0)
    util.assert(
        x.shape.length >= 1,
        () => `Input must have rank at least 1, got: ${x.shape.length}`);

    const size = slice_util.computeOutShape($begin, $end, $strides);
    // To tolerate begin[0] > end[0] (a 0-output slice), we min(begin, end).
    const sliced = slice({inputs: {x}, backend, attrs: {begin: $begin, size}});
    result =
        reshape({inputs: {x: sliced}, backend, attrs: {shape: finalShape}});
    backend.disposeData(sliced.dataId);
  } else {
    const out =
        backend.makeOutput(finalShapeSparse, 'float32');
    const xId = backend.dataIdMap.get(x.dataId).id;
    const xStridesBytes = new Uint8Array(new Int32Array(x.shape).buffer);
    // To tolerate begin[0] > end[0] (a 0-output slice), we min(begin, end).
    const constId = backend.dataIdMap.get($begin.dataId).id;
    const xStridesBytes = new Uint8Array(new Int32Array($end.dataId).buffer);
    const stridesBytes = new Uint8Array(new Int32Array($strides).buffer);
    const outShapeBytes = new Uint8Array(new Int32Array(finalShapeSparse.dataId).buffer);
    const outStridesBytes = new Uint8Array(new Int32Array(finalShapeSparse.dataId).buffer);

    setup(backend);
    wasmStridedSlice(xId, xStridesBytes, xRank, beginBytes, endBytes, stridesBytes, outShapeBytes, outStridesBytes, outShapeLength, outId);

    backend.disposeData(x.dataId);
  }
}
```
new Uint8Array(out.dataIdMap.get(out.dataId).id);\n    const wasmStridedSlice = backend.dataIdMap.get(out.dataId).id;
    xId, xStridesBytes, x.shape.length, beginBytes, endBytes, stridesBytes, outputShapeBytes, outStridesBytes, finalShapeSparse.length, outId);\n    result = reshape({ inputs: [x, out], backend, attrs: { shape: finalShape } });\n    backend.disposeData(out.dataId);
    return result;\n}\n
export const stridedSliceConfig: KernelConfig = {
  kernelName: StridedSlice,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: stridedSlice as {} as KernelFunc
};

No license file was found, but licenses were detected in source scan.

"version":3,"file":"tf-backend-wasm.min.js","sources":[]
software

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=====================================================================

//*\n// This enum must align with the enum defined in cc/backend.h\n//export enum CppDType {\n  float32 = 0,\n  int32 = 1,\n  bool = 2,\n  string = 3,\n  complex64 = 4}\n// Must match enum in cc/fusable_activations.h\n//export enum FusableActivation {\n  linear = 0,\n  relu = 1,\n  relu6 = 2,\n  prelu = 3,\n  leakyrelu = 4,\n  sigmoid = 5,\n  elu = 6}\n*/

// This enum must align with the enum defined in cc/backend.h\n//export enum CppDType {\n  float32 = 0,\n  int32 = 1,\n  bool = 2,\n  string = 3,\n  complex64 = 4}\n// Must match enum in cc/fusable_activations.h\n//export enum FusableActivation {\n  linear = 0,\n  relu = 1,\n  relu6 = 2,\n  prelu = 3,\n  leakyrelu = 4,\n  sigmoid = 5,\n  elu = 6}\n*/

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import {_FusedMatMul, _FusedMatMulAttrs, _FusedMatMulInputs, KernelConfig, KernelFunc} from
'@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {FusableActivation} from
'./types';

let wasmFusedMatMul:
    (aId: number, aShape: Uint8Array, aShapeSize: number, bId: number,
     bShape: Uint8Array, bShapeSize: number, transposeA: boolean,
     transposeB: boolean, activation: number,
     biasId: number,\n     preluActivationWeightsId: number, leakyreluAlpha: number, outId: number) =>
    void;

function setup(backend: BackendWasm) {
  wasmFusedMatMul = backend.wasm.cwrap(_FusedMatMul,
    null /* void */,
    ['number',  // a_id
     'array',   // a_shape
     'number',  // a_shape.length
     'number',  // b_id
     'array',   // b_shape
     'number',  // b_shape.length
     'number',  // transpose_a
     'number',  // transpose_b
     'number',  // activation
     'number',  // biasId
     'number',  // preluActivationWeightsId
     'number',  // leakyreluAlpha
     'number'   // out_id
  ]);\n}

function fusedBatchMatMul(args: {
  inputs:
    _FusedMatMulInputs,
    backend: BackendWasm,
    attrs: _FusedMatMulAttrs\n}: {
  const {inputs,\n    backend,\n    attrs} = args;\n  const {a, b, bias, preluActivationWeights} = inputs;\n  if (a.dtype !== 'float32' || b.dtype !== 'float32') {
    throw new Error('\n      `_FusedMatMul for non-floating tensors not yet supported.`');\n  }

  const {transposeA, transposeB, activation, leakyreluAlpha} = attrs;\n  const aId = backend.dataIdMap.get(a.dataId).id;\n  const bId = backend.dataIdMap.get(b.dataId).id;\n  const biasId = 0;\n  if (bias != null) {\n    const biasData = backend.dataIdMap.get(bias.dataId);\n    const biasId = biasData.id;\n  }

  const out = backend.makeOutput([batchDim, leftDim, rightDim], a.dtype);\n  const outId = backend.dataIdMap.get(out.dataId).id;\n
  const aShapeBytes = new Uint8Array(new Int32Array(a.shape).buffer);
  const bShapeBytes = new Uint8Array(new Int32Array(b.shape).buffer);

  wasmFusedMatMul(aId, aShapeBytes, aShapeSize, bId, bShapeBytes, bShapeSize, transposeA,
    transposeB, activation, biasId, preluActivationWeightsId, leakyreluAlpha || 0, outId);\n
  return out;
}

export const fusedMatMulConfig: KernelConfig = {
  kernelName: _FusedMatMul,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: fusedBatchMatMul as {} as KernelFunc
};
aBroadcastDims = backend_util.getBroadcastDims(a.shape, newShape);
const bBroadcastDims = backend_util.getBroadcastDims(b.shape, newShape);
const loopsOverAllOfA = aBroadcastDims.every((v, i) => v === i);
const loopsOverAllOfB = bBroadcastDims.every((v, i) => v === i);
if (loopsOverAllOfA && loopsOverAllOfB) {
  kernelFunc();
  return out;
} else {
  throw new Error('Broadcasting along outer dims is not yet supported for ' + a.dtype + ' ' + kernelName + ' ' + backendName + ' ');
}
}

return {kernelName, backendName: 'wasm', setupFunc, kernelFunc};

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 */

import {Add, KernelConfig} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = true;

export const addConfig: KernelConfig = createBinaryKernelConfig(Add, supportsFullBroadcast);

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 */

import {AddN, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {CppDType} from './types';

let wasmFunc: (inputIds: Uint8Array, inputIdsLen: number, dtype: number, outId: number) => void;

function setupFunc(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(AddN, null /* void */, [
    'array',   // input_ids
    'number',  // input_ids.length
    'number',  // dtype
    'number',  // out_id
  ]);}

function addn(args: {inputs: TensorInfo[], backend: BackendWasm}) {
  const {inputs, backend} = args;
  const out = backend.makeOutput(inputs[0].shape, inputs[0].dtype);

  // Short-circuit zero-sized tensors.
  if (util.sizeFromShape(out.shape) === 0) {
    return out;
  }

  const inputIds = inputs.map(x => backend.dataIdMap.get(x.dataId).id);
  const inputIdsBytes = new Uint8Array(new Int32Array(inputIds).buffer);
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmFunc(inputIdsBytes, inputIds.length, CppDType[out.dtype], outId);

  return out;
}

export const addNConfig: KernelConfig = {
  kernelName: AddN,
  backendName: 'wasm',
  setupFunc,
  kernelFunc: addn as {} as
};

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 */

import {Identity, IdentityInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';
import {TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function identity(args: {inputs: IdentityInputs, backend: BackendWasm}):
    TensorInfo {
  const {inputs: {x}, backend} = args;
  const out = backend.makeOutput(x.shape, x.dtype);
  const inVals = backend.typedArrayFromHeap(x);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.set(inVals);
  return out;
}

export const identityConfig: KernelConfig = {
  kernelName: Identity,
  backendName: 'wasm',
  kernelFunc: identity as {} as
};
TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;
}

const {transposed, axes, originalAxes, inputWasTransposed} = permuteAxesAndTranspose(x, axis, backend);

if (inputWasTransposed) {
  const transposedId = backend.dataIdMap.get(transposed.dataId).id;
  input = transposed;
  inputId = transposedId;
}

const inputRank = input.shape.length;

backend_util.assertAxesAreInnerMostDims('all', axes, inputRank);

const {outShape, reduceShape} = backend_util.computeOutAndReduceShapes(input.shape, axes);

const reduceSize = util.sizeFromShape(reduceShape);

const out = backend.makeOutput(outShape, x.dtype);

if (util.sizeFromShape(input.shape) !== 0) {
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmAll(inputId, reduceSize, outId);
}

if (inputWasTransposed) {
  backend.disposeData(transposed.dataId);
}

if (keepDims) {
  const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
  out.shape = newShape;
}

return out;
}

export const allConfig: KernelConfig = {
  kernelName: All,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: all as {} as KernelFunc
};

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 */

import {backend_util, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {transpose} from './Transpose';

/**
 * Compute permutation axes and do a transpose if necessary.
 * Used by reduction ops.
 * @param x input TensorInfo
 * @param axis permutation axes
 * @param backend wasm backend instance
 */
export function permuteAxesAndTranspose(x: TensorInfo, axis: number|number[], backend: BackendWasm): {
  transposed: TensorInfo|null,
  axes: number[],
  originalAxes: number[],
  inputWasTransposed: boolean
} {
  const xShape = x.shape;
  const xRank = x.shape.length;

  const originalAxes = util.parseAxisParam(axis, xShape);
  let axes = originalAxes;
  const permutedAxes = backend_util.getAxesPermutation(axes, xRank);
  let xTransposed = null;
  let inputWasTransposed = false;

  if (permutedAxes !== null) {
    const newShape = new Array(xRank);
    for (let i = 0; i < newShape.length; i++) {
      newShape[i] = xShape[permutedAxes[i]];
    }
    axes = backend_util.getInnerMostAxes(axes.length, xRank);
    xTransposed = transpose({inputs: {x}, attrs: {perm: permutedAxes, backend}});
    const xId = backend.dataIdMap.get(x.dataId).id;
    const transposedId = backend.dataIdMap.get(xTransposed.dataId).id;
  }

  if (transposedId !== xId) {
    inputWasTransposed = true;
  }

  return {transposed: xTransposed, originalAxes, axes, inputWasTransposed};
}

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 */

import {Any, AnyAttrs, AnyInputs, backend_util, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {permuteAxesAndTranspose} from './kernel_utils';

let wasmAny: (xId: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmAny = backend.wasm.cwrap(Any, null, ['number', 'number', 'number']);
}

function any(args: {backend: BackendWasm, inputs: AnyInputs, attrs: AnyAttrs}):
  TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;
}

const {transposed, axes, originalAxes, inputWasTransposed} = permuteAxesAndTranspose(x, axis, backend);

if (inputWasTransposed) {
  const transposedId = backend.dataIdMap.get(transposed.dataId).id;
  input = transposed;
  inputId = transposedId;
}

const inputRank = input.shape.length;

backend_util.assertAxesAreInnerMostDims('all', axes, inputRank);

const {outShape, reduceShape} = backend_util.computeOutAndReduceShapes(input.shape, axes);

const reduceSize = util.sizeFromShape(reduceShape);

const out = backend.makeOutput(outShape, x.dtype);

if (util.sizeFromShape(input.shape) !== 0) {
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmAll(inputId, reduceSize, outId);
}

if (inputWasTransposed) {
  backend.disposeData(transposed.dataId);
}

if (keepDims) {
  const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
  out.shape = newShape;
}

return out;
}

export const allConfig: KernelConfig = {
  kernelName: All,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: all as {} as KernelFunc
};

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 */

import {backend_util, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {transpose} from './Transpose';

/**
 * Compute permutation axes and do a transpose if necessary.
 * Used by reduction ops.
 * @param x input TensorInfo
 * @param axis permutation axes
 * @param backend wasm backend instance
 */
export function permuteAxesAndTranspose(x: TensorInfo, axis: number|number[], backend: BackendWasm): {
  transposed: TensorInfo|null,
  axes: number[],
  originalAxes: number[],
  inputWasTransposed: boolean
} {
  const xShape = x.shape;
  const xRank = x.shape.length;

  const originalAxes = util.parseAxisParam(axis, xShape);
  let axes = originalAxes;
  const permutedAxes = backend_util.getAxesPermutation(axes, xRank);
  let xTransposed = null;
  let inputWasTransposed = false;

  if (permutedAxes !== null) {
    const newShape = new Array(xRank);
    for (let i = 0; i < newShape.length; i++) {
      newShape[i] = xShape[permutedAxes[i]];
    }
    axes = backend_util.getInnerMostAxes(axes.length, xRank);
    xTransposed = transpose({inputs: {x}, attrs: {perm: permutedAxes, backend}});
    const xId = backend.dataIdMap.get(x.dataId).id;
    const transposedId = backend.dataIdMap.get(xTransposed.dataId).id;
  }

  if (transposedId !== xId) {
    inputWasTransposed = true;
  }

  return {transposed: xTransposed, originalAxes, axes, inputWasTransposed};
}

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 */

import {Any, AnyAttrs, AnyInputs, backend_util, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {permuteAxesAndTranspose} from './kernel_utils';

let wasmAny: (xId: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmAny = backend.wasm.cwrap(Any, null, ['number', 'number', 'number']);
}

function any(args: {backend: BackendWasm, inputs: AnyInputs, attrs: AnyAttrs}):
  TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;
}

const {transposed, axes, originalAxes, inputWasTransposed} = permuteAxesAndTranspose(x, axis, backend);

if (inputWasTransposed) {
  const transposedId = backend.dataIdMap.get(transposed.dataId).id;
  input = transposed;
  inputId = transposedId;
}

const inputRank = input.shape.length;

backend_util.assertAxesAreInnerMostDims('all', axes, inputRank);

const {outShape, reduceShape} = backend_util.computeOutAndReduceShapes(input.shape, axes);

const reduceSize = util.sizeFromShape(reduceShape);

const out = backend.makeOutput(outShape, x.dtype);

if (util.sizeFromShape(input.shape) !== 0) {
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmAll(inputId, reduceSize, outId);
}

if (inputWasTransposed) {
  backend.disposeData(transposed.dataId);
}

if (keepDims) {
  const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
  out.shape = newShape;
}

return out;
}

export const allConfig: KernelConfig = {
  kernelName: All,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: all as {} as KernelFunc
};
```
const {x} = inputs;
const xId = backend.dataIdMap.get(x.dataId).id;
let inputId = xId;
let input = x;

const {transposed, axes, originalAxes, inputWasTransposed} = 
  permuteAxesAndTranspose(x, axis, backend);
if (inputWasTransposed) {
  const transposedId = backend.dataIdMap.get(transposed.dataId).id;
  input = transposed;
  inputId = transposedId;
}
const inputRank = input.shape.length;

backend_util.assertAxesAreInnerMostDims('any', axes, inputRank);
const [outShape, reduceShape] = 
  backend_util.computeOutAndReduceShapes(input.shape, axes);
const reduceSize = util.sizeFromShape(reduceShape);
constant out = 
  backend.makeOutput(outShape, x.dtype);
if (reduceSize !== 0) {
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmAny(inputId, reduceSize, outId);
}

if (inputWasTransposed) {
  // dispose of the transposed tensor.
  backend.disposeData(transposed.dataId);
}

if (keepDims) {
  // reshape
  const newShape = 
    backend_util.expandShapeToKeepDim(out.shape, originalAxes);
  out.shape = newShape;
}

return out;
}

export const anyConfig: KernelConfig = {
  kernelName: Any,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: any as {} as KernelFunc
};
```

```
number, batchSize: number, inputHeight: number, inputWidth: number,\n filterHeight: number, filterWidth:
number, padTop: number, padRight: number,\n padBottom: number, padLeft: number, strideHeight: number,\n
strideWidth: number, channels: number, outId: number) => void;\n\nfunction setup(backend: BackendWasm) {\n
wasmAvgPool = backend.wasm.cwrap(AvgPool, null /* void */, [\n 'number', // xId\n 'number', // batchSize\n
'number', // inputHeight\n 'number', // inputWidth\n 'number', // filterHeight\n 'number', // filterWidth\n
'number', // padTop\n 'number', // padRight\n 'number', // padBottom\n 'number', // padLeft\n 'number', //
strideHeight\n 'number', // strideWidth\n 'number', // channels\n 'number', // outId\n ]);\n}\n\nfunction
avgPool(\n args: {inputs: AvgPoolInputs, backend: BackendWasm, attrs: AvgPoolAttrs}) {\n const {inputs, attrs,
backend} = args;\n\n const x = inputs.x as Tensor4D;\n const xId = backend.dataIdMap.get(x.dataId).id;\n\n const
{filterSize, strides, pad, dimRoundingMode} = attrs;\n const convInfo = backend_util.computePool2DInfo(\n
x.shape, filterSize, strides, 1 /* dilations */, pad, dimRoundingMode);\n\n const filterHeight =
convInfo.filterHeight;\n const filterWidth = convInfo.filterWidth;\n const padTop = convInfo.padInfo.top;\n const
padRight = convInfo.padInfo.right;\n const padBottom = convInfo.padInfo.bottom;\n const padLeft =
convInfo.padInfo.left;\n const strideHeight = convInfo.strideHeight;\n const strideWidth = convInfo.strideWidth;\n
const channels = convInfo.inChannels;\n\n if (convInfo.dataFormat !== 'channelsLast') {\n throw new Error(\n
`wasm backend does not support dataFormat:'` +\n
`${convInfo.dataFormat}'. Please use 'channelsLast'.`);\n
}\n\n if (convInfo.dilationWidth !== 1 || convInfo.dilationHeight !== 1) {\n throw new Error(\n
`was backend
only supports average pooling with dilation = [1, 1], ` +\n
`got [${convInfo.dilationHeight},
${convInfo.dilationWidth}].`);\n }\n\n const out = backend.makeOutput(convInfo.outShape, 'float32');\n const
outId = backend.dataIdMap.get(out.dataId).id;\n\n wasmAvgPool(\n
xId, x.shape[0], x.shape[1], x.shape[2],
filterHeight, filterWidth,\n
padTop, padRight, padBottom, padLeft, strideHeight, strideWidth, channels,\n
outId);\n return out;\n}\n\nexport const avgPoolConfig: KernelConfig = {\n kernelName: AvgPool,\n
backendName: 'wasm',\n setupFunc: setup,\n kernelFunc: avgPool as {} as KernelFunc\n};\n","/**\n * @license\n
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=============================================================================\n
*/\n\nimport {KernelConfig, KernelFunc, Reshape, ReshapeAttrs, ReshapeInputs, util} from '@tensorflow/tfjscore';\n\nimport {BackendWasm} from '../backend_wasm';\n\nexport function reshape(\n args: {inputs:
ReshapeInputs, attrs: ReshapeAttrs, backend: BackendWasm}) {\n const {inputs, attrs} = args;\n const {x} =
inputs;\n const {shape} = attrs;\n\n const xSize = util.sizeFromShape(x.shape);\n const $shape =
util.inferFromImplicitShape(shape, xSize);\n\n util.assert(\n
xSize === util.sizeFromShape($shape),\n
() =>
`new shape: ${$shape}, old shape: ${x.shape}. New shape and old ` +\n
`shape must have the same number of
elements.`);\n\n // Backend needs to track refCount for the dataId for reshape op\n args.backend.incRef(x.dataId);\n
return {dataId: x.dataId, shape: $shape, dtype: x.dtype};\n}\n\nexport const reshapeConfig: KernelConfig = {\n
kernelName: Reshape,\n backendName: 'wasm',\n kernelFunc: reshape as {} as KernelFunc\n};\n","/**\n *
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=============================================================================\n
*/\n\nimport {BatchMatMul, BatchMatMulAttrs, BatchMatMulInputs, KernelConfig, KernelFunc, util} from
'@tensorflow/tfjs-core';\n\nimport {BackendWasm} from '../backend_wasm';\n\nimport {reshape} from

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let wasmBatchMatMul: (aId: number, aShape: Uint8Array, aShapeSize: number, bId: number, bShape: Uint8Array, bShapeSize: number, transposeA: boolean, transposeB: boolean, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmBatchMatMul = backend.wasm.cwrap(BatchMatMul, null /* void */, ['a_id', 'a_shape', 'b_shape', 'transpose_a', 'transpose_b', 'out_id', 'a_id', 'b_id', 'a_shape', 'b_shape', 'transpose_a', 'transpose_b', 'out_id'])
}

function batchMatMul(inputs, backend) {
  const {inputs, backend} = args;
  const aId = inputs[0].dataId;
  const bId = inputs[1].dataId;
  const aShape = new Uint8Array(backend.dataIdMap.get(aId).shape);
  const bShape = new Uint8Array(backend.dataIdMap.get(bId).shape);
  const aRank = aShape.length;
  const bRank = bShape.length;

  const innerShapeA = aShape[innerShapeA] === transposeA ? aShape[aRank - 1] : aShape[aRank - 2];
  const innerShapeB = bShape[innerShapeB] === transposeB ? bShape[bRank - 1] : bShape[bRank - 2];

  if (a.dtype !== 'float32' || b.dtype !== 'float32') {
    throw new Error(`BatchMatMul for non-float32 tensors not yet supported.`);
  }

  const a = backend.getData(aShape.length, aId, aShapeSize);
  const b = backend.getData(bShape.length, bId, bShapeSize);

  const out = backend.makeOutput([1, 1, 1], a.dtype);
  const outId = backend.getDataId(out.dataId);

  const aShapeBytes = new Uint8Array(new Int32Array(aShape).buffer);
  const bShapeBytes = new Uint8Array(new Int32Array(bShape).buffer);

  wasmBatchMatMul(aId, aShapeBytes, aShapeSize, bId, bShapeBytes, bShapeSize, transposeA, transposeB, outId);

  backend.disposeData(aId);
  backend.disposeData(bId);

  return out;
}

export const batchMatMulConfig = {
  kernelName: BatchMatMul,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: batchMatMul as {} as KernelFunc
};

// The rest of the implementation is designed to operate on rank-3 tensors
const a3d = reshape(inputs[0].dataId, aId, aShape, aShapeSize);
import {backend_util, KernelConfig, KernelFunc, Slice, slice_util, SliceInputs, TypedArray, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {sliceImplCPU} from '../kernel_utils/shared';

export function slice(
    args: {inputs: SliceInputs, attrs: SliceAttrs, backend: BackendWasm}) {
  const {inputs: {x}, attrs: {begin, size}, backend} = args;

  const [begin_, size_] = slice_util.parseSliceParams(x, begin, size);

  const isContinous = slice_util.isSliceContinous(x.shape, begin_, size_);
  const xVals = backend.readSync(x.dataId);
  const out = backend.makeOutput(size_, x.dtype);
  const xStrides = util.computeStrides(x.shape);
  const outData = backend.dataIdMap.get(out.dataId);

  if (isContinous)
  {  
    const flatOffset = slice_util.computeFlatOffset(begin_, xStrides);

    if (x.dtype === 'string') {
      outData.stringBytes = (xVals as Uint8Array[]).slice(flatOffset, flatOffset + util.sizeFromShape(size_));
    } else {
      const outVals = backend.typedArrayFromHeap(out);
      outVals.set((xVals as TypedArray).subarray(flatOffset, flatOffset + size_);
    }

    return out;
  }

  if (x.dtype === 'string') {
    const res = sliceImplCPU(xVals, begin_, size_, x.shape, x.dtype);
    outData.stringBytes = res as Uint8Array[];
    return out;
  }

  const outVals = backend.typedArrayFromHeap(out);
  const rank = x.shape.length;
  if (rank === 2) {
    slice2d(xVals as TypedArray, xStrides[0], outVals, begin_ as [number, number], size_ as [number, number]);
  } else if (rank === 3) {
    slice3d(xVals as TypedArray, xStrides[0], xStrides[1], outVals, begin_ as [number, number, number], size_ as [number, number, number]);
  } else if (rank === 4) {
    slice4d(xVals as TypedArray, xStrides[0], xStrides[1], xStrides[2], outVals, begin_ as [number, number, number, number], size_ as [number, number, number, number]);
  } else {
    const res = sliceImplCPU(xVals, begin_, size_, x.shape, x.dtype) as TypedArray;
    outVals.set(res);
  }

  return out;
}

function slice2d(
    xVals: backend_util.TypedArray, xStride: number,
    outVals: backend_util.TypedArray, begin: [number, number],
    size: [number, number]): void {
  let outOffset = 0;
  const beginI = begin[0];
  const beginJ = begin[1];
  const endI = begin[0] + size[0];
  const endJ = begin[1] + size[1];
  for (let i = beginI; i < endI; i++) {
    const xOffset = i * xStride + beginJ;
    outVals.set(xVals.subarray(xOffset, xOffset + size[1]), outOffset);
    outOffset += size[1];
  }
}

function slice3d(
    xVals: backend_util.TypedArray, xStride: [number, number],
    outVals: backend_util.TypedArray, begin: [number, number, number],
    size: [number, number, number]): void {
  let outOffset = 0;
  const beginI = begin[0];
  const beginJ = begin[1];
  const beginK = begin[2];
  const endI = begin[0] + size[0];
  const endJ = begin[1] + size[1];
  const endK = begin[2] + size[2];
  for (let i = beginI; i < endI; i++) {
    for (let j = beginJ; j < endJ; j++) {
      const xOffset = i * xStride[0] + j * xStride[1] + beginK;
      outVals.set(xVals.subarray(xOffset, xOffset + size[2]), outOffset);
      outOffset += size[2];
    }
  }
}

function slice4d(
    xVals: backend_util.TypedArray, xStride: [number, number, number],
    outVals: backend_util.TypedArray, begin: [number, number, number, number],
    size: [number, number, number, number]): void {
  let outOffset = 0;
  const beginI = begin[0];
  const beginJ = begin[1];
  const beginK = begin[2];
  const beginL = begin[3];
  const endI = begin[0] + size[0];
  const endJ = begin[1] + size[1];
  const endK = begin[2] + size[2];
  const endL = begin[3] + size[3];
  for (let i = beginI; i < endI; i++) {
    for (let j = beginJ; j < endJ; j++) {
      for (let k = beginK; k < endK; k++) {
      }
    }
  }
}
*\n
import {KernelConfig, Ceil} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const ceilConfig: KernelConfig = createUnaryKernelConfig(Ceil);

/*=============================================================================
*/

import {backend_util, Concat, ConcatAttrs, ConcatInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {concatImplCPU} from '../kernel_utils/shared';
import {identity} from './Identity';
import {reshape} from './Reshape';

export function concat(
    args: {inputs: ConcatInputs, backend: BackendWasm, attrs: ConcatAttrs}) {
  const {inputs, backend} = args;

  const axis = util.parseAxisParam(args.attrs.axis, inputs[0].shape)[0];

  let outShape = backend_util.computeOutShape(inputs.map(t => t.shape), axis);

  // Keep only non-empty tensors (ignore tensors with 0 in their shape).
  const $inputs = inputs.filter(t => util.sizeFromShape(t.shape) > 0);
  if ($inputs.length === 1) {
    return identity({inputs: {x: $inputs[0]}, backend});
  }

  const out = backend.makeOutput(outShape, inputs[0].dtype);

  if (util.sizeFromShape(outShape) === 0) {
    return out;
  }

  const shapes = $inputs.map(t => t.shape);
  backend_util.assertParamsConsistent(shapes, axis);

  if ($inputs[0].dtype === 'string') {
    // Any concat of n-dimensional tensors across any axis can be reduced to
    // a concatenation of two-dimensional tensors across the axis 1 by first
    // partitioning the axes of the original tensors into those less than
    // the
    // axis to be concatenated and the rest. Then reshape the tensors
    // into a two-dimensional tensor by
    // concatenating the resulting matrices across the axis 1, finally reshaping
    // the result to have the proper shape.
    const inputs2D = $inputs.map(t => { const shape = [-1, util.sizeFromShape(t.shape, axis)];
      return t.map(t => t.shape).concat(t.shape); });
    const outShape = util.sizeFromShape(inputs2D.map(t => t.shape), axis) ;
    const out = concatImplCPU({inputs: inputs2D, backend: backend_util, attrs: {shape: [1]}});
    return out;
  }

  const inputsValShapes = inputs2D.map(t => { const vals = t.map(t => t.val);
    return vals; });

  const outVals = concatImplCPU({inputs: inputsValShapes, backend: backend_util, attrs: {shape: [1]}},
    1 /* axis */);

  const simplyConcat = inputs2D[0].shape[0] === 1 ?
    const outVals = concatImplCPU(out, inputsValShapes, outShape,}

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inputs[0].dtype, simplyConcat) as string[];

const finalOutShape = backend_util.computeOutShape($inputs.map(t => t.shape), axis);

const outData = backend.dataIdMap.get(out.dataId);

outData.stringBytes = backend_util.fromStringArrayToUint8(outVals);

const innerDims = $inputs.map(t => t.shape.slice(0, axis)).map(s => util.sizeFromShape(s)).reduce((a, b) => a + b);

const outVals = input => {
    let offset = 0;
    for (let i = 0; i < input.shape[0]; i++) {
        for (let j = 0; j < input.shape[1]; j++) {
            outVals[i * input.shape[1] + j] = input.vals[i][j];
        }
    }
    return outVals;
};

export const concatConfig: KernelConfig = {
    kernelName: Concat,
    backendName: 'wasm',
    kernelFunc: concat as {} as KernelFunc,
};

export function concatImpl(inputs, outShape, dtype, simplyConcat) {
    const outVals = util.getArrayFromDType(dtype, util.sizeFromShape(outShape));
    if (simplyConcat && dtype !== 'string') {
        let offset = 0;
        inputs.forEach(input => {
            const size = util.sizeFromShape(input.shape);
            outVals.set(input.vals, offset);
            offset += size;
        });
    } else {
        let colOffset = 0;
        inputs.forEach(input => {
            const decodedData = dtype === 'string' ? backend_util.fromUint8ToStringArray(input.vals) : input.vals;
            let tIdx = 0;
            for (let row = 0; row < input.shape[0]; ++row) {
                const resIdx = row * outShape[1] + colOffset;
                for (let col = 0; col < input.shape[1]; ++col) {
                    outVals[resIdx + col] = decodedData[tIdx++];
                }
                colOffset += input.shape[1];
            }
        });
    }
    return outVals;
}
number, batchSize: number, inputHeight: number, inputWidth: number,
    filterId: number, filterHeight: number, filterWidth: number, padTop: number,
    padRight: number, padBottom: number, padLeft: number, isSamePad: number,
    dilationHeight: number, dilationWidth: number, strideHeight: number,
    strideWidth: number, inputChannels: number, outputChannels: number,
    outId: number) => void;

function setup(backend: BackendWasm) {
  wasmConv2d = backend.wasm.cwrap(Conv2D, null /* void */, [
    'number',  // xId
    'number',  // batchSize
    'number',  // inputHeight
    'number',  // inputWidth
    'number',  // filterId
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // padTop
    'number',  // padRight
    'number',  // padBottom
    'number',  // padLeft
    'number',  // isSamePad
    'number',  // dilationHeight
    'number',  // dilationWidth
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // inputChannels
    'number',  // outputChannels
    'number',  // outId
    ]);
}

function conv2d(
    args: {inputs: Conv2DInputs, backend: BackendWasm, attrs: Conv2DAttrs}) {
  const {inputs, attrs, backend} = args;

  const {x, filter} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const filterId = backend.dataIdMap.get(filter.dataId).id;

  const {strides, dilations, pad, dimRoundingMode, dataFormat} = attrs;
  const $dataFormat = backend_util.convertConv2DDataFormat(dataFormat);
  const convInfo = backend_util.computeConv2DInfo(
    (x as Tensor4D).shape, (filter as Tensor4D).shape, strides, dilations,
    pad, dimRoundingMode, false, $dataFormat);

  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const padTop = convInfo.padInfo.top;
  const padRight = convInfo.padInfo.right;
  const padBottom = convInfo.padInfo.bottom;
  const dilationHeight = convInfo.dilationHeight;
  const dilationWidth = convInfo.dilationWidth;
  const strideHeight = convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;
  const inputChannels = convInfo.inChannels;
  const outputChannels = convInfo.outChannels;
  const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;

  if (convInfo.dataFormat !== 'channelsLast') {
    throw new Error(`wasm backend Conv2D does not support dataFormat: '${convInfo.dataFormat}'
Please use 'channelsLast'.`);
  }

  const out = backend.makeOutput(convInfo.outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmConv2d(xId, x.shape[0], x.shape[1], x.shape[2], filterId,
    filterHeight, filterWidth, padTop, padRight, padBottom, padLeft, isSamePad,
    dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels,
    outputChannels, outId);
}

export const conv2DConfig: KernelConfig = {
  kernelName: Conv2D,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: conv2d as {} as KernelFunc
};

import {backend_util, Conv2DBackpropInput, Conv2DBackpropInputAttrs, Conv2DBackpropInputInputs,
  KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

wasmConv2DBackpropInput: (
    dyId: number, filterId: number, batchSize: number,
    filterHeight: number, filterWidth: number, inHeight: number, inWidth: number,
    inChannels: number, outHeight: number, outWidth: number, outChannels: number,
    strideHeight: number, strideWidth: number, topPad: number, leftPad: number,
    fltS0: number, fltS1: number, fltS2: number, xBatchStride: number,
    xRowStride: number, xColStride: number, xChannelStride: number,
    yBatchStride: number, yRowStride: number, yColStride: number,
    yChannelStride: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmConv2DBackpropInput = backend.wasm.cwrap(Conv2DBackpropInput, null, [
    'number',  // dyId
    'number',  // filterId
    'number',  // batchSize
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // inHeight
    'number',  // inWidth
    'number',  // inChannels
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // topPad
    'number',  // leftPad
    'number',  // fltS0
    'number',  // fltS1
    'number',  // fltS2
    'number',  // xBatchStride
    'number',  // xRowStride
    'number',  // xColStride
    'number',  // xChannelStride
    'number',  // yBatchStride
    'number',  // yRowStride
    'number',  // yColStride
    'number',  // yChannelStride
    'number',  // outId
    ]);
}
.strideWidth
  'number',  // topPad
  'number',  // leftPad
  'number',  // fltS0
  'number',  // fltS1
  'number',  // xBatchStride
  'number',  // xRowStride
  'number',  // xColStride
  'number',  // yBatchStride
  'number',  // yRowStride
  'number',  // yColStride
  'number',  // outId
};

function conv2DBackpropInput(args: {
  backend: BackendWasm,
  inputs: Conv2DBackpropInputInputs,
  attrs: Conv2DBackpropInputAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const dyId = inputs.dy.id;
  const filterId = inputs.filter.id;
  const batchSize = inputs.dy.shape[0];
  const filterHeight = inputs.filter.shape[0];
  const filterWidth = inputs.filter.shape[1];
  const inHeight = inputs.image.shape[0];
  const inWidth = inputs.image.shape[1];
  const inChannels = inputs.image.shape[2];
  const outHeight = inputs.outId.shape[0];
  const outWidth = inputs.outId.shape[1];
  const topPad = filterHeight - 1 - topPad;
  const leftPad = filterWidth - 1 - leftPad;

  const dyStrides = util.computeStrides(dyId.shape);
  const filterStrides = util.computeStrides(filter.shape);
  const xBatchStride = dxStrides[0];
  const xRowStride = dxStrides[1];
  const xColStride = dxStrides[2];
  const yBatchStride = dyStrides[0];
  const yRowStride = dyStrides[1];
  const yColStride = dyStrides[2];

  const outId = backend.dataIdMap.get(outId).id;

  wasmConv2DBackpropInput(
    dyId, filterId, batchSize, filterHeight, filterWidth, inHeight, inWidth, inChannels,
    outHeight, outWidth, outChannels, strideHeight, strideWidth,
    topPad, leftPad, fltS0, fltS1, fltS2,
    xBatchStride, xRowStride, xColStride,
    yBatchStride, yRowStride, yColStride,
    yChannelStride, outId
  );

  return out;
}

export const conv2DBackpropInputConfig: KernelConfig = {
  kernelName: Conv2DBackpropInput,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: conv2DBackpropInput as {} as KernelFunc
};
backend.dataIdMap.get(image.dataId); if (image.dtype !== 'float32') {
  castedData = cast({backend, inputs: {x: image}, attrs: {dtype: 'float32'}});
  imagesData = backend.dataIdMap.get(castedData.dataId); const imagesId = imagesData.id; const boxesId = backend.dataIdMap.get(boxes.dataId).id; const boxIndId = backend.dataIdMap.get(boxInd.dataId).id; const out = backend.makeOutput(outShape, 'float32'); const outId = backend.dataIdMap.get(out.dataId).id; const imagesShapeBytes = new Uint8Array(new Int32Array(image.shape).buffer); const wasnCropAndResize = {imagesId, boxesId, boxIndId, numBoxes, imagesShapeBytes, cropHeight, cropWidth, InterpolationMethod[method as {} as keyof typeof InterpolationMethod], extrapolationValue, outId} if (castedData != null) { backend.disposeData(castedData.dataId); } return out; } export const cropAndResizeConfig: KernelConfig = {
  kernelName: CropAndResize,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: cropAndResize as {} as KernelFunc
};

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 */

import {Cos, KernelConfig} from '@tensorflow/tfjs-core';

export const cosConfig: KernelConfig = createUnaryKernelConfig(Cos);

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 */

import {backend_util, KernelConfig, KernelFunc, Cumsum, CumsumAttrs, CumsumInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmCumsum: (xId: number, exclusive: number, reverse: number, finalDim: number, outId: number, dtype: CppDType) => void = void; function setup(backend: BackendWasm) {
  wasmCumsum = backend.wasm.cwrap(Cumsum, null /* void */, [
    'number', // x_id
    'number', // exclusive
    'number', // reverse
    'number', // final_dim
    'number', // out_id
    'number'  // dtype
  ]);}

export function cumsum(
  args: {inputs: CumsumInputs, backend: BackendWasm, attrs: CumsumAttrs}):
TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {axis, exclusive, reverse} = attrs;
  const xRank = x.shape.length;

  util.assert(x.dtype === 'float32' || x.dtype === 'int32', () => `cumsum does not support ${x.dtype} tensors in the WASM backend`);
  let wasmCumsum = backend.wasm.cwrap(Cumsum, null /* void */, [
    'number', // x_num
    'number', // reverse
    'number', // final_dim
    'number' // out_num
  ]);
  wasmCumsum(xId: number, exclusive: number, reverse: number, finalDim: number, outId: number, dtype: CppDType) => void;
}
const permutedAxis = backend_util.getInnerMostAxes(1, xRank)[0];

backend_util.assertAxesAreInnerMostDims('cumsum', [permutedAxis], xRank);

const permutedOut = backend.makeOutput(permutedX.shape, permutedX.dtype);
const finalDim = permutedX.shape[permutedAxis];
const permutedOutId = backend.dataIdMap.get(permutedOut.dataId);

// transpose data back if permuted
if (permutedOutId !== null) {
  const undoPermutation = backend_util.getUndoAxesPermutation(permutation);

  const undoPermutedXId = backend.dataIdMap.get(permutedX.dataId).id;
  const undoPermutedOutId = backend.dataIdMap.get(permutedOut.dataId).id;

  const out = transpose(
    {inputs: {x: permutedOut}, attrs: {perm: undoPermutation, backend}});
  backend.disposeData(permutedX.dataId);
  backend.disposeData(permutedOut.dataId);
}

export function depthToSpace(args: {
  backend: BackendWasm,
  inputs: DepthToSpaceInputs,
  attrs: DepthToSpaceAttrs,
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {x} = inputs;
  const {blockSize, dataFormat} = attrs;
  const batchSize = x.shape[0];
  const inputHeight = (dataFormat === 'NHWC') ? x.shape[1] : x.shape[2];
  const inputWidth = (dataFormat === 'NHWC') ? x.shape[2] : x.shape[3];
  const outputHeight = inputHeight * blockSize;
  const outputWidth = inputWidth * blockSize;
  const outputDepth = inputDepth / (blockSize * blockSize);

  const outputShape = (dataFormat === 'NHWC') ? [batchSize, outputHeight, outputWidth, outputDepth] : [batchSize, outputDepth, outputHeight, outputWidth];

  const out = backend.makeOutput(outputShape, 'float32');

  const xData = backend.dataIdMap.get(x.dataId);
  const xId = xData.id;
  const xStridesBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const xStridesLength = 1;

  wasmDepthToSpace(xId, blockSize, dataFormat === 'NHWC' ? 1 : 0, xStridesBytes, outputShapeBytes, outputStrideBytes, outputHeight, outputWidth, outputDepth);
}

export const depthToSpaceConfig: KernelConfig = {
  kernelName: DepthToSpace,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: depthToSpace as {} as KernelFunc
};
import {backend_util, DepthwiseConv2dNative, DepthwiseConv2dNativeAttrs, DepthwiseConv2dNativeInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {backend_wasm} from './backend_wasm';

let wasmDepthwiseConv2d: (xId: number, batchSize: number, inputHeight: number, inputWidth: number, filterId: number, filterHeight: number, filterWidth: number, padTop: number, padRight: number, padBottom: number, padLeft: number, dilationHeight: number, dilationWidth: number, strideHeight: number, strideWidth: number, inputChannels: number, outputChannels: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmDepthwiseConv2d = backend.wasm.cwrap(DepthwiseConv2dNative, null /* void */, [ 'number', // xId
    'number', // batchSize
    'number', // inputHeight
    'number', // inputWidth
    'number', // filterHeight
    'number', // filterWidth
    'number', // padTop
    'number', // padRight
    'number', // padBottom
    'number', // isSamePad
    'number', // dilationHeight
    'number', // dilationWidth
    'number', // strideHeight
    'number', // strideWidth
    'number', // inputChannels
    'number', // outputChannels
    'number', // outId
  ]);}

function depthwiseConv2d(args: {
  inputs: DepthwiseConv2dNativeInputs,
  backend: BackendWasm,
  attrs: DepthwiseConv2dNativeAttrs
}) {
  const {inputs, attrs, backend} = args;

  const {x, filter} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const filterId = backend.dataIdMap.get(filter.dataId).id;

  const {strides, dilations, pad, dimRoundingMode} = attrs;

  const $dilations = dilations == null ? [1, 1] : dilations;

  const convInfo = backend_util.computeConv2DInfo((x as Tensor4D).shape, (filter as Tensor4D).shape, strides, ($dilations as number | [number, number]), pad, dimRoundingMode, true /* depthwise */);

  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const padTop = convInfo.padInfo.top;
  const padRight = convInfo.padInfo.right;
  const padBottom = convInfo.padInfo.bottom;
  const padLeft = convInfo.padInfo.left;
  const dilationHeight = convInfo.dilationHeight;
  const dilationWidth = convInfo.dilationWidth;
  const strideHeight = convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;
  const inputChannels = convInfo.inChannels;
  const outputChannels = convInfo.outChannels;
  const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;

  if (convInfo.dataFormat !== 'channelsLast') {
    throw new Error(`wasm backend DepthwiseConv2dNative does not support dataFormat:'` + convInfo.dataFormat'. Please use 'channelsLast'.`);
  }

  const out = backend.makeOutput(convInfo.outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const padTop = convInfo.padInfo.top;
  const padRight = convInfo.padInfo.right;
  const padBottom = convInfo.padInfo.bottom;
  const padLeft = convInfo.padInfo.left;
  const dilationHeight = convInfo.dilationHeight;
  const dilationWidth = convInfo.dilationWidth;
  const strideHeight = convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;
  const inputChannels = convInfo.inChannels;
  const outputChannels = convInfo.outChannels;
  const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;

  if (convInfo.dataFormat !== 'channelsLast') {
    throw new Error(`wasm backend DepthwiseConv2dNative does not support dataFormat:'` + convInfo.dataFormat'. Please use 'channelsLast'.`);
  }

  const kernelName = DepthwiseConv2dNative.kernels.backendName; // wasm'
  const setupFunc = setup;
  const kernelFunc = depthwiseConv2d as {} as KernelFunc;

  return output;
import {FlipLeftRight, FlipLeftRightInputs, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmFlipLeftRight: (
    xId: number, batch: number, imageHeight: number, imageWidth: number, numChannels: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmFlipLeftRight = backend.wasm.cwrap(FlipLeftRight, null /* void */, ['number', 'number', 'number', 'number', 'number', 'number']);
}

export function flipLeftRight(
    args: {inputs: FlipLeftRightInputs, backend: BackendWasm}: {
      inputs: any,
      backend: BackendWasm,
    }): TensorInfo {
  const {inputs, backend} = args;
  const {image} = inputs;

  const out = backend.makeOutput(image.shape, image.dtype);
  const imageId = backend.dataIdMap.get(image.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;
  const [batch, imageHeight, imageWidth, numChannels] = image.shape;

  wasmFlipLeftRight(imageId, outId, imageHeight, imageWidth, numChannels);
  return out;
}

export const flipLeftRightConfig: KernelConfig = {
  kernelName: FlipLeftRight,
  backendName: 'wasm',
  kernelFunc: flipLeftRight as {} as KernelFunc,
  setupFunc: setup
};

import {FusedBatchNorm, FusedBatchNormAttrs, FusedBatchNormInputs, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmBatchNorm: (
    xId: number, meanId: number, varianceId: number, offsetId: number, scaleId: number, varianceEpsilon: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmBatchNorm = backend.wasm.cwrap(FusedBatchNorm, null /* void */, ['number', 'number', 'number', 'number', 'number', 'number', 'number']);
}

function fusedBatchNorm(args: {
  backend: BackendWasm,
  inputs: FusedBatchNormInputs,
  attrs: FusedBatchNormAttrs
}: {
  backend: BackendWasm,
  inputs: any,
  attrs: any,
})]: TensorInfo {
  const {backend, inputs, attrs} = args;
  const {varianceEpsilon} = attrs;
  const {x, mean, variance, offset, scale} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const meanId = backend.dataIdMap.get(mean.dataId).id;
  const varianceId = backend.dataIdMap.get(variance.dataId).id;
  const offsetId = offset != null ? backend.dataIdMap.get(offset.dataId).id : 0;
  const scaleId = scale != null ? backend.dataIdMap.get(scale.dataId).id : 0;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const meanId = backend.dataIdMap.get(mean.dataId).id;
  const varianceId = backend.dataIdMap.get(variance.dataId).id;
  const offsetId = offset != null ? backend.dataIdMap.get(offset.dataId).id : 0;
  const scaleId = scale != null ? backend.dataIdMap.get(scale.dataId).id : 0;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const meanId = backend.dataIdMap.get(mean.dataId).id;
  const varianceId = backend.dataIdMap.get(variance.dataId).id;
  const offsetId = offset != null ? backend.dataIdMap.get(offset.dataId).id : 0;
  const scaleId = scale != null ? backend.dataIdMap.get(scale.dataId).id : 0;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const meanId = backend.dataIdMap.get(mean.dataId).id;
  const varianceId = backend.dataIdMap.get(variance.dataId).id;
  const offsetId = offset != null ? backend.dataIdMap.get(offset.dataId).id : 0;
  const scaleId = scale != null ? backend.dataIdMap.get(scale.dataId).id : 0;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const meanId = backend.dataIdMap.get(mean.dataId).id;
  const varianceId = backend.dataIdMap.get(variance.dataId).id;
  const offsetId = offset != null ? backend.dataIdMap.get(offset.dataId).id : 0;
  const scaleId = scale != null ? backend.dataIdMap.get(scale.dataId).id : 0;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const meanId = backend.dataIdMap.get(mean.dataId).id;
  const varianceId = backend.dataIdMap.get(variance.dataId).id;
  const offsetId = offset != null ? backend.dataIdMap.get(offset.dataId).id : 0;
  const scaleId = scale != null ? backend.dataIdMap.get(scale.dataId).id : 0;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const meanId = backend.dataIdMap.get(mean.dataId).id;
  const varianceId = backend.dataIdMap.get(variance.dataId).id;
  const offsetId = offset != null ? backend.dataIdMap.get(offset.dataId).id : 0;
  const scaleId = scale != null ? backend.dataIdMap.get(scale.dataId).id : 0;

  return out;
}

export const fusedBatchNormConfig: KernelConfig = {
  kernelName: FusedBatchNorm,
  backendName: 'wasm',
  kernelFunc: fusedBatchNorm as {} as KernelFunc,
  setupFunc: setup
};
import {Floor, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const floorConfig: KernelConfig = createUnaryKernelConfig(Floor);

import {FloorDiv, KernelConfig} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;
export const floorDivConfig: KernelConfig =
createBinaryKernelConfig(FloorDiv, supportsFullBroadcast);

import {backend_util, FusedConv2D, FusedConv2DAttrs, FusedConv2DInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {FusableActivation} from './types';

let wasmFusedConv2d:
    (xId: number, batchSize: number, inputHeight: number, inputWidth: number,
     filterId: number, filterHeight: number, filterWidth: number,
     biasId: number, padTop: number, padRight: number, padBottom: number,
     padLeft: number, isSamePad: number,
     dilationHeight: number, dilationWidth: number, strideHeight: number, strideWidth: number,
     inputChannels: number, outputChannels: number, activation: number,
     preluActivationWeightsId: number, leakyreluAlpha: number, outId: number) =>
        void;

function setup(backend: BackendWasm) {
  wasmFusedConv2d = backend.wasm.cwrap(FusedConv2D, null /* void */, 
    'number',  // xId
    'number',  // batchSize
    'number',  // inputHeight
    'number',  // inputWidth
    'number',  // filterId
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // biasId
    'number',  // padTop
    'number',  // padRight
    'number',  // padBottom
    'number',  // padLeft
    'number',  // isSamePad
    'number',  // dilationHeight
    'number',  // dilationWidth
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // inputChannels
    'number',  // outputChannels
    'number',  // activation
    'number',  // preluActivationWeightsId
    'number',  // leakyreluAlpha
    'number',  // outId
  );
}

function fusedConv2d(args: {
  inputs: FusedConv2DInputs,
  backend: BackendWasm,
  attrs: FusedConv2DAttrs
}) { ...}
filterWidth = convInfo.filterWidth;
const padTop = convInfo.padInfo.top;
const padRight = convInfo.padInfo.right;
const padBottom = convInfo.padInfo.bottom;
const padLeft = convInfo.padInfo.left;
const dilationHeight = convInfo.dilationHeight;
const dilationWidth = convInfo.dilationWidth;
const strideHeight = convInfo.strideHeight;
const strideWidth = convInfo.strideWidth;
const inputChannels = convInfo.inChannels;
const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;
const batchSize = convInfo.batchSize;

const inHeight = convInfo.inHeight;
const inWidth = convInfo.inWidth;

if (dataFormat !== 'NHWC') {
  throw new Error(`wasm backend FusedConv2D does not support dataFormat: '${dataFormat}'. Please use 'NHWC'.`);
}

const out = backend.dataMap.get(preluActivationWeightsId, 'float32') || 0;

wasmFusedConv2d(xId, batchSize, inHeight, inWidth, filterId, filterHeight, filterWidth, biasId, padTop, padRight, padBottom, padLeft, isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, fusedActivation, preluActivationWeightsId, leakyreluAlpha || 0, outId);

return out;

export const fusedConv2DConfig = {
  kernelName: FusedConv2D,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: wasmFusedConv2d as {} as KernelFunc
};

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 *
 */

import {backend_util, FusedDepthwiseConv2D, FusedDepthwiseConv2DAttrs, FusedDepthwiseConv2DInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {FusableActivation} from './types';

let wasmFusedDepthwiseConv2d:
    (xId: number, batchSize: number, inputHeight: number, inputWidth: number,
     filterId: number, filterHeight: number, filterWidth: number,
     biasId: number, padTop: number, padRight: number, padBottom: number, padLeft: number, isSamePad: number, dilationHeight: number, dilationWidth: number, strideHeight: number, strideWidth: number, inputChannels: number, outputChannels: number, activation: number, preluActivationWeightsId: number, leakyreluAlpha: number, outId: number) =>
     void;

function setup(backend: BackendWasm) {
  wasmFusedDepthwiseConv2d = backend.wasm.cwrap(FusedDepthwiseConv2D, null /* void */,
        ['number',  // xId
        'number',  // batchSize
        'number',  // inputHeight
        'number',  // inputWidth
        'number',  // filterId
        'number',  // filterHeight
        'number',  // filterWidth
        'number',  // biasId
        'number',  // padTop
        'number',  // padRight
        'number',  // padBottom
        'number',  // padLeft
        'number',  // isSamePad
        'number',  // dilationHeight
        'number',  // dilationWidth
        'number',  // strideHeight
        'number',  // strideWidth
        'number',  // inputChannels
        'number',  // outputChannels
        'number',  // activation
        'number',  // preluActivationWeightsId
        'number',  // leakyreluAlpha
        'number',  // outId
      ]);}

function fusedDepthwiseConv2d(args: {
  inputs: FusedDepthwiseConv2DInputs,
  backend: BackendWasm,
  attrs: FusedDepthwiseConv2DAttrs
}) {
  const {inputs, attrs, backend} = args;
  const {x, filter, bias, preluActivationWeights} = inputs;
  const {strides, pad, dilations, dataFormat, dimRoundingMode, activation, leakyreluAlpha} = attrs;

  const convInfo = backend_util.computeConv2DInfo(x as Tensor4D).shape, (filter as Tensor4D).shape, strides, dilations, pad, dimRoundingMode, true /* depthwise */);

  if (fusedActivation == null) {
    throw new Error('$(activation) not yet supported for FusedDepthwiseConv2D.' +
                    'in the wasm backend.');
  }

  const xId = backend.dataMap.get(x.dataId,
      const filterId = backend.dataMap.get(filter.dataId,
  const...
outputChannels = convInfo.outChannels;

let biasId = 0;

if (bias != null) {
  const biasData = backend.dataIdMap.get(bias.dataId);
  if (biasData.shape.length !== 1) {
    throw new Error(`FusedDepthwiseConv2D only supports rank-1 bias but got rank ${biasData.shape.length}.`);
  }

  let biasId = 0;
  if (biasData.shape[0] !== outputChannels) {
    throw new Error(`FusedDepthwiseConv2D bias shape (${biasData.shape}) does not match the number of output channels (${outputChannels})`);
  }

  biasId = biasData.id;
}

const filterHeight = convInfo.filterHeight;
const filterWidth = convInfo.filterWidth;
const padTop = convInfo.padInfo.top;
const padRight = convInfo.padInfo.right;
const padBottom = convInfo.padInfo.bottom;
const padLeft = convInfo.padInfo.left;
const dilationHeight = convInfo.dilationHeight;
const dilationWidth = convInfo.dilationWidth;
const strideHeight = convInfo.strideHeight;
const strideWidth = convInfo.strideWidth;
const inputChannels = convInfo.inChannels;
const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;
const batchSize = convInfo.batchSize;
const inHeight = convInfo.inHeight;
const inWidth = convInfo.inWidth;

if (dataFormat !== 'NHWC') {
  throw new Error(`wasm backend FusedDepthwiseConv2D does not support dataFormat: '${dataFormat}'. Please use 'NHWC'.`);
}

const out = backend.makeOutput(convInfo.outShape, 'float32');
const outId = backend.dataIdMap.get(out.dataId).id;
const preluActivationWeightsId = preluActivationWeights == null ? 0 : backend.dataIdMap.get(preluActivationWeights.dataId).id;

wasmFusedDepthwiseConv2d(xId, batchSize, inHeight, inWidth, filterId, filterHeight, filterWidth, biasId, padTop, padRight, padBottom, padLeft, isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, fusedActivation, preluActivationWeightsId, leakyreluAlpha || 0, outId);

return out;

export const fusedDepthwiseConv2DConfig: KernelConfig = {
  kernelName: FusedDepthwiseConv2D,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: wasmFusedDepthwiseConv2D as {} as KernelFunc
};

export const gatherNdConfig: KernelConfig = {
  kernelName: GatherNd,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: gatherNd
};
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```javascript
out_id
});
}export function leakyRelu(nz inputs: LeakyReluInputs, attrs: LeakyReluAttrs, backend: BackendWasm) => TensorInfo {
  const [inputs: [x], attrs: [alpha], backend] = args;
  const xId = backend.dataIdMap.get(x.dataId).id;
  // According to TF API, LeakyRelu returns float32 when input is either float32 or int32.
  const out = backend.makeOutput(x.shape, 'float32');
  // if (util.sizeFromShape(x.shape) !== 0) {
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmFunc(xId, CppDType[x.dtype], alpha, outId);
  // return out;
} export const leakyReluConfig: KernelConfig = {
  kernelName: LeakyRelu,
  backendName: 'wasm',
  setupFunc,
  kernelFunc: leakyRelu as {} as KernelFunc,
};

```
util.sizeFromShape(reduceShape);

const out = backend.makeOutput(outShape, dtype);
if (util.sizeFromShape(inputShape) !== 0) {
  const outId = backend.dataIdMap.get(out.dataId);
  wasmMax(inputId, CppDType[dtype], reduceSize, outId);
  if (inputWasTransposed) {
    const outId = backend.dataIdMap.get(out.dataId);
    wasmMax(inputId, CppDType[dtype], reduceSize, outId);
  } else {
    const outId = backend.dataIdMap.get(out.dataId);
    wasmMax(inputId, CppDType[dtype], reduceSize, outId);
  }
}

if (inputWasTransposed) {
  backend.disposeData(transposed.dataId);
}

if (keepDims) {
  const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
  out.shape = newShape;
}

return out;

export const maxConfig: KernelConfig = {
  kernelName: Max,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: max as {} as KernelFunc
};

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 */
import {KernelConfig, Less} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = false;
export const lessConfig: KernelConfig = createBinaryKernelConfig(Less, supportsFullBroadcast, 'bool');

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 */
import {KernelConfig, LogicalAnd} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = false;
export const logicalAndConfig: KernelConfig = createBinaryKernelConfig(LogicalAnd, supportsFullBroadcast, 'bool');
import {backend_util, KernelConfig, KernelFunc, MaxPool, MaxPoolAttrs, MaxPoolInputs, Tensor4D, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmMaxPool: (
    xId: number, batchSize: number, inputHeight: number, inputWidth: number,
    filterHeight: number, filterWidth: number, padTop: number, padRight: number,
    padBottom: number, padLeft: number, dilationHeight: number, number, dilationWidth: number, strideHeight: number, strideWidth: number, inputChannels: number, outputChannels: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmMaxPool = backend.wasm.cwrap(MaxPool, null /* void */, [
    'number',  // xId
    'number',  // batchSize
    'number',  // inputHeight
    'number',  // inputWidth
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // padTop
    'number',  // padRight
    'number',  // padBottom
    'number',  // padLeft
    'number',  // dilationHeight
    'number',  // dilationWidth
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // inputChannels
    'number',  // outputChannels
    'number',  // outId
  ]);
}

function maxPool(
    args: {inputs: MaxPoolInputs, backend: BackendWasm, attrs: MaxPoolAttrs}) {
  const {inputs, attrs, backend} = args;

  const x = inputs.x as Tensor4D;
  const xId = backend.dataIdMap.get(x.dataId).id;

  // TF API supports int32 input. CPU and WebGL backend also support int32 input. WASM backend doesn't support it because it uses xnnpack which only supports float32 input. Add the following assert only for the WASM backend instead of at core op level. TODO: add support for int32 input.
  util.assert(x.dtype === 'float32', () => `Error in MaxPool: only float32 input is supported. Got ${x.dtype}.`);

  const {filterSize, strides, pad, dimRoundingMode} = attrs;
  const convInfo = backend_util.computePool2DInfo(x.shape, filterSize, strides, 1 /* dilations */, pad, dimRoundingMode);

  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const padTop = convInfo.padInfo.top;
  const padRight = convInfo.padInfo.right;
  const padBottom = convInfo.padInfo.bottom;
  const padLeft = convInfo.padInfo.left;
  const dilationHeight = convInfo.dilationHeight;
  const dilationWidth = convInfo.dilationWidth;
  const strideHeight = convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;
  const inputChannels = convInfo.inChannels;
  const outputChannels = convInfo.outChannels;

  const out = backend.makeOutput(convInfo.outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  const wasmMaxPool = backend.wasm.cwrap(MaxPool, null /* void */, [xId 'number', 'number']);

  const outId = backend.dataIdMap.get(out.dataId).id;
  const wasmMaxPool = backend.wasm.cwrap(MaxPool, null /* void */, [xId 'number', 'number']);

  return out;
}

export const maxPoolConfig: KernelConfig = {
  kernelName: MaxPool,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: maxPool as {} as KernelFunc
};

import {KernelConfig, Maximum} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = false;
export const maximumConfig: KernelConfig = createBinaryKernelConfig(Maximum, supportsFullBroadcast);

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 */

import {KernelConfig, Maximum} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = false;
export const maximumConfig: KernelConfig = createBinaryKernelConfig(Maximum, supportsFullBroadcast);

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=============================================================================
*/

import {backend_util, KernelConfig, KernelFunc, Mean, MeanAttrs, MeanInputs, TensorInfo, util} from
'@tensorflow/tfjs-core';

import {BackendWasm} from './backend_wasm';
import {cast} from './Cast';

import {permuteAxesAndTranspose} from './kernel_utils';

let wasmMean: (xId: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmMean = backend.wasm.cwrap(Mean, null /*void*/, ['number, number, number']);
}

export function mean(
    args:
    {backend: BackendWasm, inputs: MeanInputs, attrs: MeanAttrs}):
    TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);

  let reductionAxes = axes;
  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose of this
      // once we are done.
      input = transposed;
      inputId = transposedId;
      reductionAxes = backend_util.getInnerMostAxes(
          reductionAxes.length, input.shape.length);
    }
  }

  backend_util.assertAxesAreInnerMostDims(
      'mean', reductionAxes, input.shape.length);
  const [outShape, reduceShape] =
      backend_util.computeOutAndReduceShapes(input.shape, reductionAxes);
  const reduceSize =
      util.sizeFromShape(reduceShape);
  let castedInput = input;
  if (input.dtype !== 'float32') {
    castedInput =
        cast({backend, inputs: {x: input}, attrs: {dtype: 'float32'}});
    inputId = backend.dataIdMap.get(castedInput.dataId).id;
  }

  const out = backend.makeOutput(outShape, 'float32');
  if (util.sizeFromShape(input.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmMean(inputId, reduceSize, outId);
  }

  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  if (keepDims) {
    // reshape
    const newShape =
        backend_util.expandShapeToKeepDim(out.shape, originalAxes);
    out.shape = newShape;
  }

  if (input.dtype !== 'float32') {
    backend.disposeData(castedInput.dataId);
  }

  return out;
}

export const meanConfig:
    KernelConfig = {
  kernelName: Mean,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: mean as {}
};

/*=============================================================================
*/

import {backend_util, KernelConfig, KernelFunc, Min, MinAttrs, MinInputs, TensorInfo, util} from
'@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

let wasmMin: (xId: number, dtype: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmMin = backend.wasm.cwrap(Min, null /*void*/, ['number', 'number', 'number', 'number']);
}

function min(args: {backend: BackendWasm, inputs: MinInputs, attrs: MinAttrs}):
    TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose of this
      // once we are done.
      input = transposed;
      inputId = transposedId;
      reductionAxes = backend_util.getInnerMostAxes(
          reductionAxes.length, input.shape.length);
    }
  }

  backend_util.assertAxesAreInnerMostDims(
      'min', reductionAxes, input.shape.length);
  const [outShape, reduceShape] =
      backend_util.computeOutAndReduceShapes(input.shape, reductionAxes);
  const reduceSize =
      util.sizeFromShape(reduceShape);
  let castedInput = input;
  if (input.dtype !== 'float32') {
    castedInput =
        cast({backend, inputs: {x: input}, attrs: {dtype: 'float32'}});
    inputId = backend.dataIdMap.get(castedInput.dataId).id;
  }

  const out = backend.makeOutput(outShape, 'float32');
  if (util.sizeFromShape(input.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmMin(inputId, reduceSize, outId);
  }

  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  if (keepDims) {
    // reshape
    const newShape =
        backend_util.expandShapeToKeepDim(out.shape, originalAxes);
    out.shape = newShape;
  }

  if (input.dtype !== 'float32') {
    backend.disposeData(castedInput.dataId);
  }

  return out;
}

export const minConfig:
    KernelConfig = {
  kernelName: Min,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: min as {}
};

/*=============================================================================
### Backend Usage

```javascript
// Backend usage example
const xId = backend.dataIdMap.get(x.dataId).id;
const x = backend.getVariable(xId, useCache: true);
const y = backend.makeVariable(x.shape, type);
const result = backend.operations.add(x, y);
backend.dataIdMap.put(result.dataId, {id: 568, name: 'result'});
```

### Mirroring Example

```javascript
// Mirroring example
const padding = [1, 2, 3, 4];
const result = backend.operations.mirror(x, padding);
```

### Minimum Operation

```javascript
// Minimum operation example
const result = backend.operations.minimum(x, y);
```

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```
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 */
```
createBinaryKernelConfig(Minimum, supportsFullBroadcast);

*/

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*/

import {KernelConfig, KernelFunc, NonMaxSuppressionV3, NonMaxSuppressionV3Attrs,
NonMaxSuppressionV3Inputs, TensorInfo} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {parseResultStruct} from './NonMaxSuppression_util';

let wasmFunc: (boxesId: number, scoresId: number, maxOutputSize: number,
    iouThreshold: number, scoreThreshold: number) => number;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(
      NonMaxSuppressionV3,
      'number',  // Result*
      
        'number',  // boxesId
        'number',  // scoresId
        'number',  // maxOutputSize
        'number',  // iouThreshold
        'number',  // scoreThreshold
      
    );
}

function kernelFunc(args: {
  backend: BackendWasm,
  inputs: NonMaxSuppressionV3Inputs,
  attrs: NonMaxSuppressionV3Attrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {iouThreshold,
    maxOutputSize, scoreThreshold} = attrs;
  const {boxes, scores} = inputs;

  const boxesId = backend.dataIdMap.get(boxes.dataId).id;
  const scoresId = backend.dataIdMap.get(scores.dataId).id;

  const resOffset =
      wasmFunc(boxesId, scoresId, maxOutputSize, iouThreshold, scoreThreshold);

  const

  const

  const

  const

  // Since we are not using scores for V3, we have to delete it from the heap.

  backend.wasm._free(pSelectedScores);
  backend.wasm._free(pValidOutputs);
  return

export const nonMaxSuppressionV3Config: KernelConfig = {
  kernelName: NonMaxSuppressionV3,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: kernelFunc as {} as,
  kernelFunc: kernelFunc as {} as

}
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=============================================================================
import {KernelConfig, KernelFunc, NonMaxSuppressionV5, NonMaxSuppressionV5Attrs, NonMaxSuppressionV5Inputs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {parseResultStruct} from './NonMaxSuppression_util';

let wasmFunc:
  (boxesId: number, scoresId: number, maxOutputSize: number, n: iouThreshold: number, scoreThreshold: number, softNmsSigma: number) =>
      number;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(NonMaxSuppressionV5, 'number', ['number', 'number', 'number', 'number', 'number'],
      [null, null, null, null, null, null]);
}

function kernelFunc(args: {
  backend: BackendWasm,
  inputs: NonMaxSuppressionV5Inputs,
  attrs: NonMaxSuppressionV5Attrs
}): TensorInfo[] {
  const {backend, inputs, attrs} = args;
  const {iouThreshold, maxOutputSize, scoreThreshold, softNmsSigma} = attrs;
  const {boxes, scores} = inputs;
  const boxesId = backend.dataIdMap.get(boxes.dataId).id;
  const scoresId = backend.dataIdMap.get(scores.dataId).id;
  const resOffset = wasmFunc(boxesId, scoresId, maxOutputSize, iouThreshold, scoreThreshold, softNmsSigma);
  const {pSelectedIndices, selectedSize, pSelectedScores, pValidOutputs} =
      parseResultStruct(backend, resOffset);
  backend.wasm._free(pValidOutputs);
  const selectedIndicesTensor =
      backend.makeOutput([selectedSize], 'int32', pSelectedIndices);
  const selectedScoresTensor =
      backend.makeOutput([selectedSize], 'float32', pSelectedScores);
  return
      [selectedIndicesTensor, selectedScoresTensor];
}

export const nonMaxSuppressionV5Config: KernelConfig =
  {
    kernelName: NonMaxSuppressionV5,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: kernelFunc
  } as {} as KernelFunc;

import {KernelConfig, KernelFunc, OneHot, OneHotAttrs, OneHotInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmOneHot: (
    indicesId: number, depth: number, onValue: number, offValue: number,
    outId: number) => void;

function setup(backend: BackendWasm) {
  wasmOneHot = backend.wasm.cwrap(OneHot, null, ['number', 'number', 'number', 'number'],
      [null, null, null, null, null, null]);
}

function oneHot(
    args: {inputs: OneHotInputs, attrs: OneHotAttrs, backend: BackendWasm}) {
  const {inputs, backend, attrs} = args;
  const {indices} = inputs;
  const {depth, onValue, offValue} = attrs;
  const out =
      backend.makeOutput([...indices.shape, depth], 'int32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  const indicesData = backend.dataIdMap.get(indices.dataId.id);
  backend.makeOutput([...indices.shape, depth], 'int32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  const const selectedIndicesTensor =
      backend.makeOutput([selectedSize], 'int32', pSelectedIndices);
  const selectedScoresTensor =
      backend.makeOutput([selectedSize], 'float32', pSelectedScores);
  return
      [selectedIndicesTensor, selectedScoresTensor];
}

export const oneHotConfig: KernelConfig = {
    kernelName: OneHot,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: oneHot
  } as {} as KernelFunc;

import {KernelConfig, NotEqual} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6 2178

'/binary_kernel';

const supportsFullBroadcast = false;

export const notEqualConfig: KernelConfig =
createBinaryKernelConfig(NotEqual, supportsFullBroadcast, 'bool');

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 */

import {KernelConfig, KernelFunc, OnesLike, OnesLikeInputs} from '@tensorflow/tfjs-core';

function onesLike(args: {inputs: OnesLikeInputs, backend: BackendWasm}) {
  const {inputs: {x}, backend} = args;
  const out = backend.makeOutput(x.shape, x.dtype);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.fill(1);
  return out;
}

export const onesLikeConfig: KernelConfig = {
  kernelName: OnesLike,
  backendName: 'wasm',
  kernelFunc: onesLike as {} as KernelFunc,
};

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 */

import {KernelConfig, KernelFunc, Pack, PackAttrs, PackInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

function pack(args: {inputs: PackInputs, backend: BackendWasm, attrs: PackAttrs}):
  TensorInfo {
    const {inputs, backend, attrs} = args;
    const {axis} = attrs;

    if (inputs.length === 1) {
      return expandDims({ inputs: {input: inputs[0]}, backend, attrs: {dim: axis} });
    }

    const shape = inputs[0].shape;
    const dtype = inputs[0].dtype;

    inputs.forEach(t => {
      util.assertShapesMatch(shape, t.shape,
        'All tensors passed to stack must have matching shapes');
      util.assert(dtype === t.dtype,
        'All tensors passed to stack must have matching dtypes');
    });

    const intermediateTensorInfos: TensorInfo[] = [];
    const expandedTensors = inputs.map(t => {
      const expandedT = expandDims({ inputs: {input: t}, backend, attrs: {dim: axis} });
      intermediateTensorInfos.push(expandedT);
    });

    const result = concat(intermediateTensorInfos);
    return result;
}

export const packConfig: KernelConfig = {
  kernelName: Pack,
  backendName: 'wasm',
  kernelFunc: pack as {} as KernelFunc,
};

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 */

import {KernelConfig, KernelFunc, PadV2, PadV2Attrs, PadV2Inputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '..\backend_wasm';

function padV2(args: {inputs: PadV2Inputs, backend: BackendWasm}) {
  const {inputs: {x}, backend} = args;
  const out = backend.makeOutput(x.shape, x.dtype);
  const outVals = backend.typedArrayFromHeap(out);
  const pads = args.pads;
  outVals.fill(0);
  return out;
}

export const padV2Config: KernelConfig = {
  kernelName: PadV2,
  backendName: 'wasm',
  kernelFunc: padV2 as {} as KernelFunc,
};

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 */

import {KernelConfig, KernelFunc, PadV2, PadV2Attrs, PadV2Inputs, util} from '@tensorflow/tfjs-core';

function padV2(args: {inputs: PadV2Inputs, backend: BackendWasm}) {
  const {inputs: {x}, backend} = args;
  const out = backend.makeOutput(x.shape, x.dtype);
  const outVals = backend.typedArrayFromHeap(out);
  const pads = args.pads;
  outVals.fill(0);
  return out;
}

export const padV2Config: KernelConfig = {
  kernelName: PadV2,
  backendName: 'wasm',
  kernelFunc: padV2 as {} as KernelFunc,
};

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 */
/* void */
\n\nfunction pad(
  args: {inputs: PadV2Inputs, backend: BackendWasm, atttrs: PadV2Attrs}) {\n  const inputs: {x, backend, atttrs: {paddings, constantValue}} = args;\n  const outShape = paddings.map((p, i) =>
    p[0] + x.shape[i] + p[1]);\n  const outId = outTensorData;\n
  wasmPadV2(xId, xShapeBytes, x.shape.length, CppDType[x.dtype], prePaddingsBytes, postPaddingsBytes, constantValue, outId);

  return out;
}

export const padV2Config: KernelConfig = {
  kernelName: PadV2,
  backendName: 'wasm',
  kernelFunc: pad as {} as KernelFunc,
  setupFunc: setup
};

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 *
 *=============================================================================
 */

import {KernelConfig, Pow} from '@tensorflow/tfjs-core';

const supportsFullBroadcast = false;
export const powConfig: KernelConfig =
  createBinaryKernelConfig(Pow, supportsFullBroadcast);
import {backend_util, KernelConfig, KernelFunc, Prod, ProdAttrs, ProdInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';

import {CppDType} from './types';

let wasmProd: (xId: number, reduceSize: number, dtype: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmProd = backend.wasm.cwrap(Prod, null /*void*/, 
    ['number',
    'number',
    'number',
    'number'])
}

function prod(args: {
  backend: BackendWasm,
  inputs: ProdInputs,
  attrs: ProdAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;

  let reductionAxes = []; // a list
  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We need to dispose of this tensor.
      // it's not an op.
      backend.disposeData(transposed.dataId);
    }
  }

  backend_util.assertAxesAreInnerMostDims('prod', reductionAxes, input.shape.length);
  const [outShape, reduceShape] = backend_util.computeOutAndReduceShapes(input.shape, reductionAxes);
  const reduceSize = util.sizeFromShape(reduceShape);

  const out = backend.makeOutput(outShape, input.dtype);
  if (util.sizeFromShape(input.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmProd(inputId, reduceSize, CppDType[out.dtype], outId);
  }

  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  if (keepDims) {
    // reshape
    const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
    out.shape = newShape;
  }

  return out;
}

export const prodConfig: KernelConfig = {
  kernelName: Prod,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: prod as {} as KernelFunc
};

import {KernelConfig, KernelFunc, ResizeBilinear, ResizeBilinearAttrs, ResizeBilinearInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {cast} from './Cast';

let wasmResizeBilinear: (xId: number, batch: number, oldHeight: number, oldWidth: number,
  numChannels: number, newHeight: number, newWidth: number,
  alignCorners: number, halfPixelCenters: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmResizeBilinear = backend.wasm.cwrap(ResizeBilinear, null /*void*/, 
    ['number',
    'number',
    'number',
    'number',
    'number',
    'number',
    'number',
    'number',
    'number',
    'number',
    'number'])
}

function resizeBilinear(args: {
  backend: BackendWasm,
  inputs: ResizeBilinearInputs,
  attrs: ResizeBilinearAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;

  const {images} = inputs;
  const {alignCorners, halfPixelCenters, size} = attrs;
  const [newHeight, newWidth] = size;
  const [batch, oldHeight, oldWidth, numChannels] = images.shape;

  const outShape = [batch, newHeight, newWidth, numChannels];

  let xData = backend.dataIdMap.get(images.dataId);
  let xId = xData.dataId;
  let x = xData;
  const[outId] = backend.dataIdMap.get(out.dataId).id;

  const castedData = cast(x, {dtype: 'float32'});

  return out;
}

export const resizeBilinearConfig: KernelConfig = {
  kernelName: ResizeBilinear,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: resizeBilinear as {} as KernelFunc
};
```javascript
backend.dataIdMap.get(castedData.dataId);
const xId = xData.id;
const outId = backend.dataIdMap.get(out.dataId);
const xId, batch, oldHeight, oldWidth, numChannels, newHeight, newWidth;
const alignBorders = 0,
const halfPixelCenters = 0;
const outId;

backend.makeOutput(outShape, 'float32');
if (util.sizeFromShape(images.shape) === 0) {
  return out;
}

const outId = backend.dataIdMap.get(out.dataId).id;

wasmResizeBilinear(xId, batch, oldHeight,
oldWidth, numChannels, newHeight, newWidth,
alignBorders ? 1 : 0, halfPixelCenters ? 1 : 0, outId);

if (castedData != null) {
  backend.disposeData(castedData.dataId);
}

return out;

export const
  resizeBilinearConfig: KernelConfig = {
    kernelName: 'resizeBilinear',
    backendName: 'wasm',
    setupFunc:
      backend.kernelFunc: resizeBilinear as {} as KernelFunc
  };

```
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 *
 *=============================================================================
 */

import {KernelConfig, RealDiv} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from
  './binary_kernel';

const supportsFullBroadcast = true;
export const realDivConfig: KernelConfig =
  createBinaryKernelConfig(RealDiv, supportsFullBroadcast);

*/

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=============================================================================

*/

import {KernelConfig, Relu} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from

'./unary_kernel';

export const reluConfig: KernelConfig = createUnaryKernelConfig(Relu);

/*=============================================================================

*/

import {KernelConfig, Relu6} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from

'./unary_kernel';

export const relu6Config: KernelConfig = createUnaryKernelConfig(Relu6);

/*=============================================================================

*/

import {KernelConfig, KernelFunc, Reverse, ReverseAttrs, ReverseInputs, TensorInfo, util} from

'@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {identity} from

'./Identity';

import {reshape} from './Reshape';

let wasmReverse: (xId: number, axes: Uint8Array, axesLength: number, outShape: Uint8Array, outShapeLength: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmReverse = backend.wasm.cwrap(Reverse, null, ['number', // x_id
    'array', // axes
    'number', // axes_length
    'array', // out_shape
    'number', // out_shape_length
    'number' // out_id
  ]);}

export function reverse(
    args: {inputs: ReverseInputs, backend: BackendWasm, attrs: ReverseAttrs}):
    TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {dims} = attrs;

  const axes = util.parseAxisParam(dims, x.shape);

  if (x.shape.length === 0) {
    return identity({inputs: {x}, backend});
  }

  const out = backend.makeOutput(x.shape, x.dtype);
  const xId = backend.dataIdMap.get(x.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;

  const axesBytes = new Uint8Array(new Int32Array(axes).buffer);
  const outShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);

  wasmReverse(xId, axesBytes, axes.length, outShapeBytes, x.shape.length, outId);
  const reshaped =
      reshape({inputs: {x: out}, attrs: {shape: x.shape}, backend});

  backend.disposeData(out.dataId);
  return reshaped;
}

export const reverseConfig: KernelConfig = {

  kernelName: Reverse,
  backendName: 'wasm',
  kernelFunc: reverse as {} as KernelFunc,
  setupFunc: setup
};

/*=============================================================================

*/

import {KernelConfig, KernelFunc, RotateWithOffset, RotateWithOffsetAttrs, RotateWithOffsetInputs, TensorInfo, util} from '@tensorflow/tfjs-core';
import {backend_util} from '@tensorflow/tfjs-core';

import

/*=============================================================================

*/

*\n
/*=============================================================================

*/

/*=============================================================================

*/
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```javascript
let wasmRotate: (xId: number, batch: number, imageHeight: number, imageWidth: number, numChannels: number, radians: number, centerX: number, centerY: number, fillBytes: Uint8Array, fillLength: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmRotate = backend.wasm.cwrap(RotateWithOffset, null /* void */, [
    'number', // xId
    'number', // batch
    'number', // imageHeight
    'number', // imageWidth
    'number', // numChannels
    'number', // radians
    'number', // centerX
    'number', // centerY
    'array', // fillBytes
    'number', // fillLength
    'number', // outId
  ]);}

export function rotateWithOffset(args: {
  inputs: RotateWithOffsetInputs,
  backend: BackendWasm,
  attrs: RotateWithOffsetAttrs
}: TensorInfo): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {image} = inputs;
  const {radians, fillValue, center} = attrs;

  const out = backend.makeOutput(image.shape, image.dtype);
  const imageId = backend.dataIdMap.get(image.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;
  const backendUtil = getBackendUtil(imageHeight, imageWidth);

  const fillIsBlack = fillValue === 0;
  const fullOpacityValue = 255;
  const fillValues = fillValue === 'number' ? [fillValue, fillValue, fillValue, fillIsBlack ? 0 : fullOpacityValue] : [...fillValue, fullOpacityValue];

  wasmRotate(imageId, batch, imageHeight, imageWidth, numChannels, radians, centerX, centerY, fillBytes, fillValues.length, outId);
  return out;
}

export const rotateWithOffsetConfig: KernelConfig = {
  kernelName: RotateWithOffset,
  backendName: 'wasm',
  kernelFunc: rotateWithOffset as {} as KernelFunc,
  setupFunc: setup
};
```

```javascript
let wasmScatterNd: (indicesId: number, updatesId: number, dtype: CppDType, sliceRank: number, numUpdates: number, sliceSize: number, strides: Uint8Array, outputSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmScatterNd = backend.wasm.cwrap(ScatterNd, null /* void */, [
    'number', // indicesId
    'number', // updatesId
    'number', // dtype
    'number', // sliceRank
    'number', // numUpdates
    'number', // sliceSize
    'array', // strides
    'number', // outputSize
    'number', // outId
  ]);}

function scatterNd(args: {backend: BackendWasm, inputs: ScatterNdInputs, attrs: ScatterNdAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {indices, updates} = inputs;
  const {shape} = attrs;

  const out = backend.makeOutput(shape, updates.dtype);
  if (util.sizeFromShape(shape) === 0) {
    return out;
  }

  const backendUtil = getBackendUtil(indices, updates, shape);
  const_backend: BackendWasm, inputs: ScatterNdInputs, attrs: ScatterNdAttrs
  return backendUtil.calculateShapes(indices, updates, shape);
}
```

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=============================================================================

import {KernelConfig, Round} from '@tensorflow/tfjs-core';\n
export const roundConfig: KernelConfig = createUnaryKernelConfig(Round);

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=============================================================================

import {KernelConfig, Rsqrt} from '@tensorflow/tfjs-core';\n
export const rsqrtConfig: KernelConfig = createUnaryKernelConfig(Rsqrt);

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=============================================================================

import {KernelConfig, KernelFunc, Select, SelectInputs, util} from '@tensorflow/tfjs-core';\n
export const selectConfig: KernelConfig = {
  kernelName: Select,
  backendName: 'wasm',
  kernelFunc: select as {} as KernelFunc,
  setupFunc: setup
};

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=============================================================================

import {KernelConfig, KernelFunc, Sigmoid, SigmoidInputs, TensorInfo, util} from '@tensorflow/tfjs-core';\n
export const sigmoidConfig: KernelConfig = {
  kernelName: Sigmoid,
  backendName: 'wasm',
  kernelFunc: sigmoid as {} as KernelFunc,
  setupFunc: setup
};

// Short-
circuit zero-sized tensors.

if (util.sizeFromShape(out.shape) === 0) {
  return out;
}

wasmFunc(xId, outId);
return out;
}

export const sigmoidConfig: KernelConfig = {
  kernelName: 'Sigmoid',
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: sigmoid as {} as KernelFunc
};

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 */

import {KernelConfig, KernelFunc, Softmax, SoftmaxAttrs, SoftmaxInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmFunc: (xId: number, outId: number, channels: number, batch: number) => void;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(Softmax, null /* void */, [
    'number',  // xId
    'number',  // outId
    'number',  // channels
    'number'   // batch
  ]);}

function softmax(
    args: {backend: BackendWasm,
    inputs: SoftmaxInputs, attrs: SoftmaxAttrs}):
    TensorInfo {
  const {backend, inputs: {logits}, attrs: {dim}} = args;
  const xId = backend.dataIdMap.get(logits.dataId).id;
  const out = backend.makeOutput(logits.shape, logits.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  const channels = logits.shape[dim];
  const batch = util.sizeFromShape(logits.shape) / channels;

  if (util.sizeFromShape(out.shape) === 0) {
    return out;
  }

  wasmFunc(xId, outId, channels, batch);
  return out;
}

export const softmaxConfig: KernelConfig = {
  kernelName: Softmax,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: softmax as {} as KernelFunc
};

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 */

import {KernelConfig, Sin} from '@tensorflow/tfjs-core';

export const sinConfig: KernelConfig = createUnaryKernelConfig(Sin);

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 */

import {backend_util, KernelConfig, KernelFunc, ReshapeAttrs, ReshapeInputs, SpaceToBatchND, SpaceToBatchNDAttrs, SpaceToBatchNDInputs, TensorInfo, TransposeAttrs, TransposeInputs, util} from '@tensorflow/tfjs-core';

import {padV2Config} from './PadV2';
import {reshape} from './Reshape';
import {transpose} from './Transpose';

function spaceToBatchND(args: {
  inputs: SpaceToBatchNDInputs,
  backend: BackendWasm,
  attrs: SpaceToBatchNDAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {blockShape, paddings} = attrs;
  const completePaddings: Array<[number, number]> = [[0, 0]];
  const prod = util.sizeFromShape(blockShape);
  for (let i = 1 + blockShape.length; i < x.shape.length; ++i) {
    completePaddings.push([0, 0]);
  }
  const paddedX = padV2Config.kernelFunc({
    inputs: [x],
    backend:
  } as Distribution) as Distribution
  return out;
}
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//
//==============================================================================

import {KernelConfig, Sqrt} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from
  './unary_kernel';
export const sqrtConfig: KernelConfig = createUnaryKernelConfig(Sqrt);

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//
//==============================================================================

import {KernelConfig, Square} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from
  './unary_kernel';
export const squareConfig: KernelConfig = createUnaryKernelConfig(Square);

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//
//==============================================================================

import {KernelConfig, SquaredDifference} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from
  './binary_kernel';
const supportsFullBroadcast = true;
export const squaredDifferenceConfig: KernelConfig
  = createBinaryKernelConfig(SquaredDifference, supportsFullBroadcast);

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//
//==============================================================================

import {KernelConfig, KernelFunc, slice_util, StridedSlice, StridedSliceAttrs, StridedSliceInputs, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {reshape} from './Reshape';
import {slice} from './Slice';

let wasmStridedSlice: (
    xId: number, xStridesBytes: Uint8Array,
    xRank: number,
    beginBytes: Uint8Array, endBytes: Uint8Array, stridesBytes: Uint8Array,
    outShapeBytes: Uint8Array, outStridesBytes: Uint8Array,
    outShapeLength: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmStridedSlice = backend.wasm.cwrap(StridedSlice, null /*void*/, [
    'number', // xId
    'array',   // xStrides
    'number',  // xRank
    'array',   // begin
    'array',   // end
    'array',   // strides
    'array',   // outShape
    'array',   // outStrides
    'number',  // outShapeLength
    'number',  // outId
  ]);}

export function stridedSlice(args: {
  backend: BackendWasm,
  inputs: StridedSliceInputs,
  attrs: StridedSliceAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;

  const {x} = inputs;

  const {
    begin,
    end,
    strides,
    beginMask,
    endMask,
    ellipsisMask,
    newAxisMask,
    shrinkAxisMask
  } = slice_util.sliceInfo(
    backend.wasm.

  const {finalShapeSparse, finalShape, isIdentity, sliceDim0, simpleSlice, begin, end, Send, strides} =

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// Optimization #1, slice is a no-op plus reshape
result = reshape(inputs: {x}, backend, attrs: {shape: finalShape});

// Optimization #2, slice is memory contiguous (only occurs in dim 0)

let result;

if (isIdentity) {
  // Optimization #1, slice is a no-op plus reshape
  result = reshape(inputs: {x}, backend, attrs: {shape: finalShape});
}

// To tolerate begin[0] > end[0] (a 0-output slice), we min(begin, end).

const sliced = slice({inputs: {x}, backend, attrs: {beginMask, endMask}});

result = reshape(inputs: {x: sliced}, backend, attrs: {shape: finalShape});

backend.disposeData(sliced.dataId);

const outputShapeBytes = new Uint8Array(new Int32Array(finalShapeSparse).buffer);

let out = backend.makeOutput(finalShapeSparse, 'float32');

const xId = backend.dataIdMap.get(x.dataId).id;

wasmStridedSlice(
xId, xStridesBytes, x.shape.length,
beginBytes, endBytes, stridesBytes,
outputShapeBytes, outStridesBytes, finalShapeSparse.length, outId);

const output = backend.makeOutput(finalShapeSparse, 'float32');

result = reshape({inputs: {x: output}, backend, attrs: {shape: finalShape}});

backend.disposeData(output.dataId);

return result;
}

export const stridedSliceConfig: KernelConfig = {
  kernelName: StridedSlice,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: stridedSlice as {} as KernelFunc
};

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import {backend_util, KernelConfig, KernelFunc, Sum, SumAttrs, SumInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

let wasmSum: (xId: number, reduceSize: number, dtype: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmSum = backend.wasm.cwrap(Sum, null /*void*/, [
    'number',  // input_id
    'number',  // reduce_size
    'number',  // dtype
    'number',  // out_id
  ]);}

function sum(args: {backend: BackendWasm, inputs: SumInputs, attrs: SumAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;

  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;

  const transposed = permuteAxesAndTranspose(x, axis);
  const newAxes = transposed.dataId;

  const output = backend.makeOutput(transposed.dataId, 'float32');

  wasmSum(inputId, reduceSize, CppDType[x.dtype], outputId);

  const transposedId = backend.dataIdMap.get(transposed.dataId.id);
  if (transposedId !== xId) {
    // transposed was not a no-op. We will need to dispose of this
    // once we are done.
    inputId = transposedId;
  }

  const outShape = backend_util.getInnerMostAxes(newAxes, x.shape.length);
  const outputId = backend_util.assertAxesAreInnerMost(outShape, x.shape.length);

  const outputId = backend_util.assertAxesAreInnerMost(outShape, x.shape.length);

  return output;
}

export const sumConfig: KernelConfig = {
  kernelName: Sum,
  backendName: 'wasm',
}
setupFunc: setup,
kernelFunc: sum as {} as KernelFunc

```javascript
import {KernelConfig, Sub} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = true;
export const subConfig: KernelConfig = createBinaryKernelConfig(Sub, supportsFullBroadcast);
```

```javascript
import {KernelConfig, KernelFunc, Tile, TileAttrs, TileInputs} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {CppDType} from './types';

let wasmTile: (
    xId: number, xShape: Uint8Array, xShapeSize: number, newShape: Uint8Array, newShapeSize: number, dtype: number, outId: number) => void; setup(backend: BackendWasm) {
  wasmTile = backend.wasm.cwrap(Tile, null /* void */, [
    'number',  // x_id
    'array',   // x_shape
    'number',  // x_shape.length
    'array',   // new_shape
    'number',  // new_shape.length
    'number'   // out_id
  ]);}
```

```javascript
function tile(
    args: {inputs: TileInputs, backend: BackendWasm, attrs: TileAttrs}) {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const {reps} = attrs;

  const newShape: number[] = new Array(x.shape.length);
  for (let i = 0; i < newShape.length; i++) {
    newShape[i] = x.shape[i] * reps[i];
  }
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const newShapeBytes = new Uint8Array(new Int32Array(newShape).buffer);
  const out = backend.makeOutput(newShape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmTile(xId, xShapeBytes, x.shape.length, newShapeBytes, newShape.length, CppDType[out.dtype], outId);
  return out;
}
```

```javascript
export const tileConfig: KernelConfig = {
  kernelName: Tile,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: tile as {} as KernelFunc
};
```

```javascript
import {KernelConfig, Tan} from '@tensorflow/tfjs-core';
import {createUnaryKernelConfig} from './unary_kernel';
export const tanConfig: KernelConfig = createUnaryKernelConfig(Tan);
```

```javascript
import {KernelConfig, Config, Sub} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = true;
export const subConfig: KernelConfig = createBinaryKernelConfig(Sub, supportsFullBroadcast);
```

```javascript
const supportsFullBroadcast = true;
export const subConfig: KernelConfig = createBinaryKernelConfig(Sub, supportsFullBroadcast);
```

```javascript
import {KernelConfig, Sub} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = true;
export const subConfig: KernelConfig = createBinaryKernelConfig(Sub, supportsFullBroadcast);
```

```javascript
import {KernelConfig, Config, Sub} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = true;
export const subConfig: KernelConfig = createBinaryKernelConfig(Sub, supportsFullBroadcast);
```

```javascript
const supportsFullBroadcast = true;
export const subConfig: KernelConfig = createBinaryKernelConfig(Sub, supportsFullBroadcast);
```

```javascript
import {KernelConfig, Config, Sub} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = true;
export const subConfig: KernelConfig = createBinaryKernelConfig(Sub, supportsFullBroadcast);
```

```javascript
const supportsFullBroadcast = true;
export const subConfig: KernelConfig = createBinaryKernelConfig(Sub, supportsFullBroadcast);
```

```javascript
import {KernelConfig, Config, Sub} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = true;
export const subConfig: KernelConfig = createBinaryKernelConfig(Sub, supportsFullBroadcast);
```
import {KernelConfig, Tanh} from '@tensorflow/tfjs-core';
import {createUnaryKernelConfig} from './unary_kernel';

export const tanhConfig: KernelConfig = createUnaryKernelConfig(Tanh);

import {KernelConfig, KernelFunc, TensorInfo, Transform, TransformAttrs, TransformInputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmTransform: (imageId: number, transformsId: number, isBatchTransform: boolean, batch: number, outHeight: number, outWidth: number, numChannels: number, imageSize: number, imageWidth: number, imageHeight: number, stridesLength: number, interpolationModelId: number, fillModelId: number, fillValue: number, outputId: number) => void;

function setup(backend: BackendWasm) {
  wasmTransform = backend.wasm.cwrap(Transform, null /* void */, 
      ['number',  // imageId
       'number',  // transformsId
       'bool',    // isBatchTransform
       'number',  // batch
       'number',  // outHeight
       'number',  // outWidth
       'number',  // numChannels
       'number',  // imageSize
       'number',  // imageWidth
       'number',  // imageHeight
       'number',  // stridesLength
       'number',  // interpolationModelId
       'number',  // fillModelId
       'number',  // fillValue
       'number',  // outputId
     ]);
}

function transform(args: {backend: BackendWasm, inputs: TransformInputs, attrs: TransformAttrs}):
    TensorInfo {
  const {backend, inputs, attrs} = args;
  const {image, transforms} = inputs;
  const {interpolation, fillMode, fillValue, outputShape} = attrs;

  const 
  [batch, imageHeight, imageWidth, numChannels] = image.shape;
  const [outHeight, outWidth] =
      outputShape != null ? outputShape : 
  const xId = backend.dataIdMap.get(image.dataId).id;
  const xShapeBytes = backend.dataIdMap.get(image.dataId).dataId;
  const xShape = util.bufferToLongArray(xShapeBytes.buffer);
  const outputShape = xShape.slice();
  outputShape[outShape.length - 1] = k;
  const outValues = backend.makeOutput(outputShape, x.dtype);
  const outIndices = backend.makeOutput(outputShape, 'int32');
  const outValuesId = backend.dataIdMap.get(outValues.dataId).id;
  const outIndicesId = backend.dataIdMap.get(outIndices.dataId).id;
  const xId = backend.dataIdMap.get(image.dataId).id;
  const xShapeBytes = backend.dataIdMap.get(image.dataId).dataId;
  const xShape = util.bufferToLongArray(xShapeBytes.buffer);
  const hasTransform = backend.wasm.wasmTransform(Transform, 
      ['number',  // imageId
       'number',  // transformsId
       'bool',    // isBatchTransform
       'number',  // batch
       'number',  // outHeight
       'number',  // outWidth
       'number',  // numChannels
       'number',  // imageSize
       'number',  // imageWidth
       'number',  // imageHeight
       'number',  // stridesLength
       'number',  // interpolationModelId
       'number',  // fillModelId
       'number',  // fillValue
       'number',  // outputId
     ]);
  const kernelConfig = {
    kernelName: TopK,
    backendName: 'wasm',
    setupFunc:
        setup,
    kernelFunc: topk as {} as KernelFunc,
  };
  return [outValues, outIndices];
}
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We explicitly import the modular kernels so they get registered in the global registry when we compile the library. A modular build would replace the contents of this file and import only the kernels that are needed.

```javascript
import {KernelConfig, registerKernel} from '@tensorflow/tfjs-core';

import {FusedMatMulConfig} from './kernels/_FusedMatMul';
import {AbsConfig} from './kernels/Abs';
import {AddConfig} from './kernels/Add';
import {AddNConfig} from './kernels/AddN';
import {AllConfig} from './kernels/All';
import {AnyConfig} from './kernels/Any';
import {ArgMaxConfig} from './kernels/ArgMax';
import {AvgPoolConfig} from './kernels/AvgPool';
import {BatchMatMulConfig} from './kernels/BatchMatMul';
import {BatchToSpaceNDConfig} from './kernels/BatchToSpaceND';
import {CastConfig} from './kernels/Cast';
import {EqualConfig} from './kernels/Equal';
import {FloorConfig} from './kernels/Floor';
import {GatherConfig} from './kernels/Gather';
import {GatherNDConfig} from './kernels/GatherND';
import {MaxPoolConfig} from './kernels/MaxPool';
import {MinPoolConfig} from './kernels/MinPool';
import {MatMulConfig} from './kernels/MatMul';
import {NegConfig} from './kernels/Neg';
import {PadConfig} from './kernels/Pad';
import {ReduceConfig} from './kernels/Reduce';
import {ReluConfig} from './kernels/Relu';
import {ReduceL1Config} from './kernels/ReduceL1';
import {ReduceL2Config} from './kernels/ReduceL2';
import {ReduceMaxConfig} from './kernels/ReduceMax';
import {ReduceMeanConfig} from './kernels/ReduceMean';
import {ReduceMinConfig} from './kernels/ReduceMin';
import {ReduceSumConfig} from './kernels/ReduceSum';
import {SignConfig} from './kernels/Sign';
import {SqrtConfig} from './kernels/Sqrt';
import {SumConfig} from './kernels/Sum';
import {TopKConfig} from './kernels/TopK';
import {UnpackConfig} from './kernels/Unpack';
import {UnpackAttrs} from './kernels/Unpack';
import {UnpackInputs} from './kernels/Unpack';
import {SliceConfig} from './kernels/Slice';
import {TensorInfo} from '@tensorflow/tfjs-core';
```

...
{ceilConfig} from './kernels/Ceil';
import {clipByValueConfig} from './kernels/ClipByValue';
import {concatConfig} from './kernels/Concat';
import {conv2DConfig} from './kernels/Conv2D';
import {conv2DBackpropInputConfig} from './kernels/Conv2DBackpropInput';
import {cosConfig} from './kernels/Cos';
import {coshConfig} from './kernels/Cosh';
import {cropAndResizeConfig} from './kernels/CropAndResize';
import {cumsumConfig} from './kernels/Cumsum';
import {depthToSpaceConfig} from './kernels/DepthToSpace';
import {depthwiseConv2dNativeConfig} from './kernels/DepthwiseConv2D';
import {eluConfig} from './kernels/Elu';
import {equalConfig} from './kernels/Equal';
import {expConfig} from './kernels/Exp';
import {expandDimsConfig} from './kernels/ExpandDims';
import {fillConfig} from './kernels/Fill';
import {flipLeftRightConfig} from './kernels/FlipLeftRight';
import {floorConfig} from './kernels/Floor';
import {floorDivConfig} from './kernels/FloorDiv';
import {fusedBatchNormConfig} from './kernels/FusedBatchNorm';
import {fusedConv2DConfig} from './kernels/FusedConv2D';
import {fusedDepthwiseConv2DConfig} from './kernels/FusedDepthwiseConv2D';
import {gatherNdConfig} from './kernels/GatherNd';
import {gatherV2Config} from './kernels/GatherV2';
import {greaterConfig} from './kernels/Greater';
import {greaterEqualConfig} from './kernels/GreaterEqual';
import {identityConfig} from './kernels/Identity';
import {leakyReluConfig} from './kernels/LeakyRelu';
import {lessConfig} from './kernels/Less';
import {lessEqualConfig} from './kernels/LessEqual';
import {logConfig} from './kernels/Log';
import {logicalAndConfig} from './kernels/LogicalAnd';
import {maximumConfig} from './kernels/Maximum';
import {maxPoolConfig} from './kernels/MaxPool';
import {meanConfig} from './kernels/Mean';
import {minConfig} from './kernels/Min';
import {mirrorPadConfig} from './kernels/MirrorPad';
import {multiplyConfig} from './kernels/Multiply';
import {negConfig} from './kernels/Neg';
import {nonMaxSuppressionV3Config} from './kernels/NonMaxSuppressionV3';
import {nonMaxSuppressionV4Config} from './kernels/NonMaxSuppressionV4';
import {nonMaxSuppressionV5Config} from './kernels/NonMaxSuppressionV5';
import {oneHotConfig} from './kernels/OneHot';
import {onesLikeConfig} from './kernels/OnesLike';
import {packConfig} from './kernels/Pack';
import {padV2Config} from './kernels/PadV2';
import {powConfig} from './kernels/Pow';
import {preluConfig} from './kernels/Prelu';
import {prodConfig} from './kernels/Prod';
import {rangeConfig} from './kernels/Range';
import {realDivConfig} from './kernels/RealDiv';
import {reluConfig} from './kernels/Relu';
import {relu6Config} from './kernels/Relu6';
import {reshapeConfig} from './kernels/Reshape';
import {rsqrtConfig} from './kernels/Rsqrt';
import {selectConfig} from './kernels/Select';
import {sigmoidConfig} from './kernels/Sigmoid';
import {sinConfig} from './kernels/Sin';
import {sliceConfig} from './kernels/Slice';
import {softmaxConfig} from './kernels/Softmax';
import {spaceToBatchNDConfig} from './kernels/SpaceToBatchND';
import {splitVConfig} from './kernels/SplitV';
import {sqrtConfig} from './kernels/Sqrt';
import {squareConfig} from './kernels/Square';
import {squaredDifferenceConfig} from './kernels/SquaredDifference';
import {stepConfig} from './kernels/Step';
import {stridedSliceConfig} from './kernels/StridedSlice';
import {subConfig} from './kernels/Sub';
import {sumConfig} from './kernels/Sum';
import {tanConfig} from './kernels/Tan';
import {tanhConfig} from './kernels/Tanh';
import {tileConfig} from './kernels/Tile';
import {topKConfig} from './kernels/TopK';
import {transformConfig} from './kernels/Transform';
import {transposeConfig} from './kernels/Transpose';
import {unpackConfig} from './kernels/Unpack';
import {zerosLikeConfig} from './kernels/ZerosLike';

List all kernel configs here:const kernelConfigs: KernelConfig[] = [
  absConfig, 
  addConfig, 
  addNConfig, 
  allConfig, 
  anyConfig, 
  avgPoolConfig, 
  batchMatMulConfig, 
  batchToSpaceNDConfig, 
  castConfig, 
  ceilConfig, 
  clipByValueConfig, 
  concatConfig, 
  conv2DConfig, 
  conv2DBackpropInputConfig, 
  cosConfig, 
  coshConfig, 
  cropAndResizeConfig, 
  cumsumConfig, 
  depthToSpaceConfig, 
  ...]
import {KernelConfig, KernelFunc, ZerosLike, ZerosLikeInputs} from '@tensorflow/tfjs-core';

if (env().isNode) {
  return false;
}

try {
  return WebAssembly.validate(new Uint8Array([0, 97, 115, 109, 1, 0, 0, 0, 1, 4, 1, 96, 0, 0, 3, 2, 1, 0, 10, 9, 1, 7, 0, 65, 0, 253, 15, 26, 11]));
} catch (e) {
  return false;
}

return WebAssembly.validate(new SharedArrayBuffer(sab)).

if (WEBASSEMBLY_MULTITHREAD_SUPPORT) {
  if (webrtcWebAssembly) {
    return true;
  }

  return false;
}

if (WEBASSEMBLY_SIMD_SUPPORT) {
  if (webrtcWebAssembly) {
    return true;
  }

  return false;
}

return false;

if (WEBASSEMBLY_SIMD_SUPPORT && WEBASSEMBLY_MULTITHREAD_SUPPORT) {
functionEDURE(\nvar WasmBackendModuleThreadedSimd = (function() {\nvar _scriptDir = typeof document !== 'undefined' && document.currentScript ? document.currentScript.src : undefined;\nif (typeof __filename !== 'undefined') _scriptDir = __filename;\nreturn (\nfunction(WasmBackendModuleThreadedSimd) {\nWasmBackendModuleThreadedSimd = WasmBackendModuleThreadedSimd || {};\n})(WasmBackendModuleThreadedSimd);\n\nGROWABLE_HEAP_I80(){\n\n\n})\n\nGROWABLE_HEAP_U8(){\n\n\n})\n\nGROWABLE_HEAP_I32(){\n\n\n})\n\nGROWABLE_HEAP_U32(){\n\n\n})\n\nGROWABLE_HEAP_F64(){\n\n\n})\n\nvar Module = typeof WasmBackendModuleThreadedSimd !== 'undefined' ? WasmBackendModuleThreadedSimd : {};
var readyPromiseResolve, readyPromiseReject;
Module["ready"] = new Promise(function(resolve, reject) {
  readyPromiseResolve = resolve;
  readyPromiseReject = reject;
});
var moduleOverrides = {};
var key; for (key in Module) {
  if (Module.hasOwnProperty(key)) {
    moduleOverrides[key] = Module[key];
  }
}
var arguments_; var thisProgram = "./this.program";
var quit_ = function(status, toThrow) {
  throw toThrow;
};
var ENVIRONMENT_IS_WEB = false;
var ENVIRONMENT_IS_WORKER = false;
var ENVIRONMENT_IS_NODE = false;
var ENVIRONMENT_IS_SHELL = false;
var ENVIRONMENT_IS_PTHREAD = Module["ENVIRONMENT_IS_PTHREAD"] || false;
var moduleOverrides = {};
var key; for (key in Module) {
  if (Module.hasOwnProperty(key)) {
    moduleOverrides[key] = Module[key];
  }
}
var arguments_ = [];
var thisProgram = "./this.program";
var quit_ = function(status, toThrow) {
  throw toThrow;
};
var ENVIRONMENT_IS_WEB = false;
var ENVIRONMENT_IS_WORKER = false;
var ENVIRONMENT_IS_NODE = false;
var ENVIRONMENT_IS_SHELL = false;
var ENVIRONMENT_IS_PTHREAD = Module["ENVIRONMENT_IS_PTHREAD"] || false;
var nodeFS; var nodePath; if (ENVIRONMENT_IS_NODE) {
  if (ENVIRONMENT_IS_WORKER) {
    scriptDirectory = require("path").dirname(scriptDirectory) + "/";
  }
}
var read_ = function shell_read(filename, binary) {
  if (!nodeFS) nodeFS = require("fs");
  if (!nodePath) nodePath = require("path");
  filename = nodePath["normalize"](filename);
  return nodeFS["readFileSync"](filename, binary ? \"utf8\" : \"");
};
readBinary = function readBinary(filename) {
  var ret = read_(filename, true); if (ret.buffer) ret = new Uint8Array(ret.buffer); assert(ret.buffer);
  return ret;
};
if (typeof read_ !== 'function') { throw new TypeError('The "read_" module is not supported in this node.js build. Perhaps a newer version is needed?');
}
try {
  nodeWorkerThreads = require('worker_threads').try {
    try {
      throw new TypeError('The "worker_threads" module is not supported in this node.js build. Perhaps a newer version is needed?');
    }
  } catch (e) {
    console.error('The "worker_threads" module is not supported in this node.js build. Perhaps a newer version is needed?');
  }
} else if (ENVIRONMENT_IS_SHELL) {
  if (typeof read_ !== 'undefined') {
    read_ = function shell_read(fil

UTF8ArrayToString(heap, idx, maxBytesToRead) { var endIdx = idx + maxBytesToRead; var str = ""; while (!!(endIdx >= idx)) { var u0 = heap[idx++]; if (!u0) return str; if (u0 & 128) { var u1 = heap[idx++]; if ((u0 & 224) == 192) { str += String.fromCharCode((u0 & 31) << 6 | u1 & 63); continue } if ((u0 & 240) == 224) { u0 = (u0 & 15) << 12 | u1 << 6 | u2; else { u0 = (u0 & 7) << 18 | u1 << 12 | u2 << 6 | heap[idx++] & 63; } } else { var ch = u0 - 65536; str += String.fromCharCode(55296 | ch >> 10, 56320 | ch & 1023); } } return str; }

UTF8ToString(ptr, maxBytesToRead) { return ptr ? UTF8ArrayToString(GROWABLE_HEAP_U8(), ptr, maxBytesToRead) : ""; }

stringToUTF8Array(str, heap, outIdx, maxBytesToWrite) { if (!(maxBytesToWrite > 0)) return 0; var startIdx = outIdx; var endIdx = outIdx + maxBytesToWrite - 1; for (var i = 0; i < str.length; ++i) { var u = str.charCodeAt(i); if (u >= 55296 && u <= 57343) { var u1 = str.charCodeAt(i + 1); if ((u & 1023) < 10) { str += String.fromCharCode((u & 65536) << 10 | u1); continue } if ((u & 224) == 192) { str += String.fromCharCode((u & 31) << 6 | u1 & 63); continue } if ((u & 240) == 224) { u1 = (u1 & 15) << 12 | u2; else { u1 = (u1 & 7) << 18 | u2 << 6 | heap[idx++]; } } else { if (u < 65536) { str += String.fromCharCode(u); } else { var ch = u - 65536; str += String.fromCharCode(55296 | ch >> 10, 56320 | ch & 1023); } } heap[outIdx] = 0; return outIdx - startIdx; } } }
WebAssembly.instantiate(binary,info)).then(receiver,function(reason){err("\"failed to asynchronously prepare wasm: \"+reason\"; abort(reason)\")) function instantiateAsync(){if(!wasmBinary&&typeof WebAssembly.instantiateStreaming==="function"&&!isDataURI(wasmBinaryFile)&&!isFileURI(wasmBinaryFile)&&typeof fetch==="function") {try {
exports=Module["instantiatedWasm"]
 readyPromiseReject);return{}}var instantiateAsync();if(!wasmBinary&&typeof WebAssembly.instantiateStreaming==="function"&&!isDataURI(wasmBinaryFile)&&!isFileURI(wasmBinaryFile)&&typeof fetch==="function"{return fetch(wasmBinaryFile,{credentials:"same-origin"}).then(function(response)
result=WebAssembly.instantiateStreaming(response,info);return result.then(receiveInstantiatedSource).catch(readyPromiseReject);return{}}});else{return
r-28;if(count==0)return 0;if(count>=2147483647)count=Infinity;var mainThreadWaitAddress=Atoms.load(GROWABLE_HEAP_I32(),__emscripten_main_thread_futex>>2);var mainThreadWoken=0;if(mainThreadWaitAddress==addr)var loadedAddr=Atoms.compareExchange(GROWABLE_HEAP_I32(),__emscripten_main_thread_futex>>2,mainThreadWaitAddress,0);if(loadedAddr==mainThreadWaitAddress){--count;mainThreadWoken=1;if(count<=0)return 1}};var ret=Atoms.notify(GROWABLE_HEAP_I32(),addr>>2,count);if(ret>=0)return ret+mainThreadWoken;throw"Atoms.notify returned an unexpected value \"\"+ret\"\";Module["_emscripten_futex_wake"]=_emscripten_futex_wake;function killThread(pthread_ptr){if(EXIT_ENVIRONMENT_IS_PTHREAD)throw"\"Internal Error! killThread() can only ever be called from main application thread!\";if(pthread_ptr)throw"\"Internal Error! Null pthread_ptr in killThread()\";GROWABLE_HEAP_I32()=pthread_ptr+12>>2]=0;var pthread=PTHread.pthreads[pthread_ptr];pthread worker.terminate();PTHread.freeThreadData(pthread);PTHread.runni
ngWorkers.splice(PTHread.runningWorkers.indexOf(pthread.worker),1);pthread.worker pthread=undefined}functio
n cancelThread(pthread_ptr){if(ENVIRONMENT_IS_PTHREAD)throw"Internal Error! cancelThread() can only ever be called from main application thread!";if(!pthread_ptr)throw"Internal Error! Null pthread_ptr in cancelThread!";var pthread=PThread.pthreads[pthread_ptr];pthread.worker.postMessage({"cmd":"cancel"})}function cleanupThread(pthread_ptr){if(ENVIRONMENT_IS_PTHREAD)throw"Internal Error! cleanupThread() can only ever be called from main application thread!";if(!pthread_ptr)throw"Internal Error! Null pthread_ptr in cleanupThread!";var pthread=PThread.pthreads[pthread_ptr];if(pthread){GROWABLE_HEAP_I32()[pthread_ptr+12>>2]=0;var worker=pthread.worker;PThread.returnWorkerToPool(worker)})();PThread={unusedWorkers:[],runningWorkers:[],initMainThreadBlock:function(){var pthreadPoolSize=8;for(var i=0;i<pthreadPoolSize;++i){PThread.allocateUnusedWorker()}}},initRuntime:function(){var tb=_malloc(228);for(var i=0;i<228/4;++i)GROWABLE_HEAP_U32()[tb+i]=0;GROWABLE_HEAP_I32()[tb+12>>2]=tb;var headPtr=tb+152;GROWABLE_HEAP_I32()[headPtr+2]=headPtr;var tlsMemory=_malloc(512);for(var i=0;i<128;++i)GROWABLE_HEAP_U32()[tlsMemory+i]=0;Atomics.store(GROWABLE_HEAP_U32(),tb+100>>2,tlsMemory);Atomics.store(GROWABLE_HEAP_U32(),tb+40>>2,tb);__emscripten_thread_init(tb,!ENVIRONMENT_IS_WORKER,1);_emscripten_register_main_browser_thread_id(tb);initWorker:function(){},pthreads:{},threadExitHandlers:[],setThreadStatus:function(){},runExitHandlers:function(){while(PThread.threadExitHandlers.length>0){PThread.threadExitHandlers.pop()}}},threadExit:function(exitCode){var tb=_pthread_self();if(tb){PThread.runExitHandlersAndDeinitThread(tb,exitCode);if(ENVIRONMENT_IS_PTHREAD){postMessage({"cmd":"exit"})}}},threadCancel:function(){PThread.runExitHandlersAndDeinitThread(_pthread_self(),-1);postMessage({"cmd":"cancelDone"})},terminateAllThreads:function(){for(var t in PThread.pthreads){var pthread=PThread.pthreads[t];if(pthread){PThread.returnWorkerToPool(pthread.worker)();PThread.pthreads[t]=null;PThread.unusedWorkers.push(pthread.worker);PThread.freeThreadData(pthread);worker.terminate()}}PThread.pthreads={};for(var i=0;i<PThread.unusedWorkers.length;++i){var worker=PThread.unusedWorkers[i];worker.terminate()PThread.unusedWorkers=[];for(var i=0;i<PThread.runningWorkers.length;++i){var worker=PThread.runningWorkers[i];var pthread=worker.pthread;PThread.freeThreadData(pthread);worker.terminate()PThread.runningWorkers=[]].freeThreadData(function(pthread){if(!pthread)return;if(pthread.threadInfoStruct){var tlsMemory=GROWABLE_HEAP_I32()[pthread.threadInfoStruct+100>>2];GROWABLE_HEAP_I32()[pthread.threadInfoStruct+100>>2]=0;_free(tlsMemory);_free(pthread.threadInfoStruct) pthread.threadInfoStruct=0;if(pthread.allocatedOwnStack&&pthread.stackBase)_free(pthread.stackBase);pthread.stackBase=0;if(pthread.worker)pthread.worker=null},returnWorkerToPool:function(worker){PThread.runWithoutMainThreadQueuedCalls(function(){delete PThread.pthreads[worker.pthreadInfoStruct];PThread.unusedWorkers.push(worker);PThread.runningWorker s.splice(PThread.runningWorkers.indexOf(worker),1);PThread.freeThreadData(worker.pthread);worker.pthread=undefined});runWithoutMainThreadQueuedCalls:function(func){GROWABLE_HEAP_I32()["__emscripten_allow_main_runtime_queued_calls"]=0;try{func()}finally{GROWABLE_HEAP_I32()["__emscripten_allow_main_runtime_queued_calls"]=1]observeObjectTransfer:function(data){},loadWasmModuleToWorker:function(worker,onFinishedLoading){worker.onmessage=function(e){var d=e["data"];var cmd=d["cmd"];if(worker.pthread)PThread.currentProxiedOperationCallerThread=worker.pthread.threadInfoStruct;if(d["targetThread"]&&d["targetThread"]!=worker.pthread_self)var thread=PThread.pthreads[d.targetThread];if(thread){thread.worker.postMessage(e.data,d["transferList"])}}else{console.error('Internal error! Worker sent a message "'+cmd+'" to target pthread '+d["targetThread"];"+"v", but that
thread no longer exists!})" || PThread.currentProxiedOperationCallerThread=undefined;return if(cmd==="processQueuedMainThreadWork")[_emscripten_main_thread_process_queued_calls()] else if(cmd==="spawnThread") {spawnThread(e.data)} else if(cmd==="cleanupThread") {cleanupThread(d["thread"])} else if(cmd==="killThread") {killThread(d["thread"])} else if(cmd==="cancelThread") {cancelThread(d["thread"])} else if(cmd==="loaded") {worker.loaded=true;if(onFinishedLoading)onFinishedLoading(worker);if(worker.runPthread) {worker.runPthread();delete worker.runPthread} else if(cmd==="print") {out("Thread "+d["threadId"]+" "+d["text"])} else if(cmd==="printErr") {err("Thread "+d["threadId"]+" "+d["text"])} else if(cmd==="alert") {alert("Thread "+d["threadId"]+" "+d["text"])} else if(cmd==="exit") {var detached=worker pthread& &Atoms.load(GROWABLE_HEAP_U32(),worker pthread threadInfoStruct+64>>2);if (detached) {PThread.returnWorkerToPool(worker)} else if(cmd==="exitProcess") {try{exit(d["returnCode"])}catch(e){if(e instanceof ExitStatus)return;throw e}} else if(cmd==="resetDone") {PThread.returnWorkerToPool(worker)} else if(cmd==="objectTransfer") {PThread.receiveObjectTransfer(e.data)} else if(e.data.target==="setimmediate") {worker.postMessage(e.data)} else {err("worker sent an unknown command "+cmd)} PThread.currentProxiedOperationCallerThread=undefined;worker.onerror=function(e){err("pthread sent an error! "+e.filename+":"+e.lineno+": "+e.message)};if(ENVIRONMENT_IS_NODE){worker.on("message",function(data){worker.onmessage({data:data})});worker.on("error",function(data){worker.onerror(data)});worker.on("exit",function(data){})}worker.postMessage({"cmd":"load","urlOrBlob":Module["mainScriptUrlOrBlob"] || _scriptDir,"wasmMemory":wasmMemory,"wasmModule":wasmModule})},allocateUnusedWorker:function(){var pthreadMainJs=locateFile("tfjs-backend-wasm-threaded-simd.worker.js");PThread.unusedWorkers.push(new Worker(pthreadMainJs))},getNewWorker:function(){if(PThread.unusedWorkers.length==0){PThread.allocateUnusedWorker();PThread.loadWasmModuleToWorker(PThread.unusedWorkers[0])}if(PThread.unusedWorkers.length>0)return PThread.unusedWorkers.pop();else return null},busySpinWait:function(msecs){var t=performance.now()+(msecs*1000);while(performance.now()<t){}}};function establishStackSpace(stackTop,stackMax){_emscripten_stack_set_limits(stackTop,stackMax);stackRestore(stackTop)}Module["establishStackSpace"] = establishStackSpace;function getNoExitRuntime(){return noExitRuntime}Module["getNoExitRuntime"] = getNoExitRuntime;function invokeEntryPoint(ptr,arg){return wasmTable.get(ptr)(arg)}Module["invokeEntryPoint"] = invokeEntryPoint;function ___assert_fail(condition,filename,line,func){abort("Assertion failed: "+UTF8ToString(condition)+", at: "+[filename?UTF8ToString(filename):"unknown filename",line,func?UTF8ToString(func):"unknown function"])}function ___call_main(argc,argv){var returnCode=_main(argc,argv)}var _emscripten_get_now;if(ENVIRONMENT_IS_NODE){_emscripten_get_now=function(){var t=process.hrtime();return t[0]*1e3+t[1]/1e6}} else if(ENVIRONMENT_IS_PTHREAD){_emscripten_get_now=function(){return performance.now();}} else if(typeof dateNow!="undefined"){_emscripten_get_now=dateNow}else if(typeof dateNow==="undefined"){_emscripten_get_now=dateNow}else _emscripten_get_now=function(){return performance.now();};function setErrNo(value){GROWABLE_HEAP_I32()[___errno_location()>>2]=value;return value}function _atexit(func,arg){if(ENVIRONMENT_IS_PTHREAD)return _emscripten_proxy_to_main_thread_js(1,1,func,arg)}function __emscripten_notify_thread_queue(targetThreadId,mainThreadId){if(targetThreadId==mainThreadId){postMessage({"cmd":"processQueuedMainThreadWork"})} else if(ENVIRONMENT_IS_PTHREAD){postMessage({"targetThreadId":targetThreadId,"cmd":"processQueuedMainThreadWork"})} else {var pthread=PThread.pthreads[targetThreadId];var worker=pthread& & pthread.worker;if(!worker){return}worker.postMessage({"cmd":"processQueuedMainThreadWork"})} ```
function _abort(){abort()}function _emscripten_asm_const_int(code,sigPtr,argbuf){var
args=readAsmConstArgs(sigPtr,argbuf);return ASM_CONSTS[code].apply(null,args)}function
_emscripten Conditional_set_current_thread_status(expectedStatus,newStatus){}function
_emscripten_futex_wait(addr, val, timeout){if(addr<0||addr>GROWABLE_HEAP_I8().length||addr&3!=0)return
28;if(ENVIRONMENT_IS_WEB){var
ret=Atomics.wait(GROWABLE_HEAP_I32(),addr>>2,val,timeout);if(ret==='timed-out')return
73;if(ret==='not-equal')return 6;if(ret==='ok')return 0;throw "Atomics.wait returned an unexpected value
\"\"+ret\};else if(Atoms.load(GROWABLE_HEAP_I32(),addr>>2)!=val){var
TNow=performance.now();var tEnd=TNow+timeout;var
lastAddr=Atoms.exchange(GROWABLE_HEAP_I32(),__emscripten_main_thread_futex>>2,addr);while(1){tNo
w=performance.now();if(TNow>tEnd){lastAddr=Atoms.exchange(GROWABLE_HEAP_I32(),__emscripten_main_thead_futex>>2,0);return
73}lastAddr=Atoms.exchange(GROWABLE_HEAP_I32(),__emscripten_main_thread_futex>>2,0);if(lastAddr==
0){break}__emscripten_main_thread_process_queued_calls();if(Atoms.load(GROWABLE_HEAP_I32(),addr>>2)!=val){return
6}lastAddr=Atoms.exchange(GROWABLE_HEAP_I32(),__emscripten_main_thread_futex>>2,addr);return
0}}function
_emscripten_memcpy_big(dest,src,num){GROWABLE_HEAP_U8().copyWithin(dest,src,src+num)}function
_emscripten_num_logical_cores(){if(ENVIRONMENT_IS_NODE)return require("os").cpus().length;return
navigator['hardwareConcurrency']()}function _emscripten_proxy_to_main_thread_js(index,sync){var
numCallArgs=arguments.length-2;var stack=stackSave();var serializedNumCallArgs=numCallArgs;var
args=stackAlloc(serializedNumCallArgs*8);var
b=args>>3;for(var i=0;i<numCallArgs;i++){var
arg=arguments[2+i];GROWABLE_HEAP_F64()[b+i]=arg}var
ret=_emscripten_run_in_main_runtime_thread_js(index,serializedNumCallArgs,args,sync);stackRestore(stack);retur
n ret}var _emscripten_receive_on_main_thread_js_callArgs=[];var readAsmConstArgsArray=[];function
readAsmConstArgs(sigPtr,buf){readAsmConstArgsArray.length=0;var
ch;buf>>=2;while(ch=GROWABLE_HEAP_U8()[sigPtr++]){var
double=ch<105;if(double&&buf&1)buf++;readAsmConstArgsArray.push(double?GROWABLE_HEAP_F64()[buf
++]:GROWABLE_HEAP_I32()[buf]);++buf}return readAsmConstArgsArray}function
_emscripten_receive_on_main_thread_js(index,numCallArgs,args){_emscripten_receive_on_main_thread_js_callA
rgs.length=numCallArgs;var b=args>>3;for(var
i=0;i<numCallArgs;i++){_emscripten_receive_on_main_thread_js_callArgs[i]=GROWABLE_HEAP_F64()[b+i]}v
ar isEmAsmConst=index<0;var func=!isEmAsmConst?proxiedFunctionTable[index]:ASM_CONSTS[-index-
1];return func.apply(null,_emscripten_receive_on_main_thread_js_callArgs)}function
_emscripten_get_heap_size(){return GROWABLE_HEAP_U8().length}function
emscripten_realloc_buffer(size){try{wasmMemory.grow(size-
buffer.byteLength+65535>>>16);updateGlobalBufferAndViews(wasmMemory.buffer);return
1}catch(e){}function _emscripten_resize_heap(requestedSize){var
oldSize=_emscripten_get_heap_size();if(requestedSize<=oldSize){return false}var
maxHeapSize=2147483648;if(requestedSize>maxHeapSize){return false}for(var
cutDown=1;cutDown<=4;cutDown*=2){var
overGrownHeapSize=oldSize*(1+0.2/cutDown);overGrownHeapSize=Math.min(overGrownHeapSize,requestedSize
+100663296);var
newSize=Math.min(maxHeapSize,alignUp(Math.max(overGrownHeapSize,65536)));var
replacement=_emscripten_realloc_buffer(newSize);if(replacement){return true}return false}var
JSEvents=[inEventHandler:0,removeAllEventListeners:function(){for(var i=JSEvents.eventHandlers.length-
1;i>=0;--
)JSEvents.removeHandler(i)}]JSEvents.eventHandlers=[];JSEvents.deferredCalls=[]}
ers:function(){if(!JSEvents.removeEventListenerRegistered){__ATEXIT__.push(JSEvents.removeEventListenerRegistered=true),JSEvents.removeEventListenersRegistered=true}}.deferredCalls:[],deferCall:function(targetFunction,precedence,argsList){function arraysHaveEqualContent(arrA,arrB){if(arrA.length!==arrB.length)return false;for(var i in arrA){if(arrA[i]!==arrB[i]){return false}}for(var i in JSEvents.deferredCalls){var call=JSEvents.deferredCalls[i];if(call.targetFunction===targetFunction&&arraysHaveEqualContent(call.argsList,argsList)){return}}JSEvents.deferredCalls.push({targetFunction:targetFunction,precedence:precedence,argsList:argsList});JSEvents.deferredCalls.sort(function(x,y){return x.precedence<y.precedence});},removeDeferredCalls:function(targetFunction){for(var i=0;i<JSEvents.deferredCalls.length;++i){if(JSEvents.deferredCalls[i].targetFunction===targetFunction){JSEvents.deferredCalls.splice(i,1);--i}}},canPerformEventHandlerRequests:function(){return JSEvents.inEventHandler&&JSEvents.currentEventHandler.allowsDeferredCalls},runDeferredCalls:function(){if(!JSEvents.canPerformEventHandlerRequests()){return}for(var i=0;i<JSEvents.deferredCalls.length;++i){var call=JSEvents.deferredCalls[i];JSEvents.deferredCalls.splice(i,1);--i;call.targetFunction.apply(null,call.argsList)}}.eventHandlers:[].removeAllHandlersOnTarget:function(target,eventTypeString){for(var i=0;i<JSEvents.eventHandlers.length;++i){if(JSEvents.eventHandlers[i].target===target&eventTypeString===JSEvents.eventHandlers[i].eventTypeString){JSEvents._removeHandler(i--)}}},removeHandler:function(i){var h=JSEvents.eventHandlers[i];h.target.removeEventListener(h.eventTypeString,h.eventListenerFunc,h.useCapture);JSEvents.eventHandlers.splice(i,1)},registerOrRemoveHandler:function(eventHandler){var jsEventHandler=function(event){++JSEvents.inEventHandler;JSEvents.currentEventHandler=eventHandler;JSEvents.runDeferredCalls();eventHandler.handlerFunc(event);JSEvents.runDeferredCalls();--JSEvents.inEventHandler};if(eventHandler.callbackfunc){eventHandler.eventListenerFunc=jsEventHandler;eventHandler.target.addEventListener(eventHandler.eventTypeString,jsEventHandler,eventHandler.useCapture);JSEvents.eventHandlers.push(eventHandler);JSEvents.registerRemoveEventListeners()}else{for(var i=0;i<JSEvents.eventHandlers.length;++i){if(JSEvents.eventHandlers[i].target===eventHandler.target&eventTypeString===JSEvents.eventHandlers[i].eventTypeString){JSEvents._removeHandler(i--)}}},queueEventHandlerOnThread_iiii:function(targetThread,eventHandlerFunc,eventTypeId,eventData,userData){var stackTop=stackSave();var args=stackAlloc(12);GROWABLE_HEAP_I32()[args>>>2]=eventTypeId;GROWABLE_HEAP_I32()[args+4>>>2]=eventData;GROWABLE_HEAP_I32()[args+8>>>2]=userData;__emscripten_call_on_thread(0,targetThread,637534208,eventHandlerFunc,eventData,args);stackRestore(stackTop)},{getTargetThreadForEventCallback:function(targetThread){switch(targetThread){case 1:return 0;case 2:return PThread.currentProxiedOperationCallerThread;default:return targetThread}},{getNodeNameForTarget:function(target){if(!target)return"";if(target==window)return"#window";if(target==screen)return"#screen";return target&&target.nodeName?target.nodeName:""},fullscreenEnabled:function(){return document.fullscreenEnabled?document.webkitFullscreenEnabled}:function toStringUTF8(jsString){var length=lengthBytesUTF8(jsString)+1;var cString=_malloc(length);stringToUTF8(jsString,cString,length);return cString}},{_emscripten_set_offscreencanvas_size_on_target_thread_js:function(targetThread,targetCanvas,width,height){var stackTop=stackSave();var args=stackAlloc(12);var targetCanvasPtr=0;if(targetCanvas){targetCanvasPtr=stringToNewUTF8(targetCanvas)}GROWABLE_HEAP_I32()[args>>>2]=stringToUTF8(targetCanvas);GROWABLE_HEAP_I32()[args+4>>>2]=width;GROWABLE_HEAP_I32()[args+8>>>2]=height;__emscripten_call_on_thread(0,targetThread,657457152,0,targetCanvasPtr,args);stackRestore(stackTop)}}},function(targetCanvas){targetCanvas=stringToUTF8(targetCanvas);""};_emscripten_set_offscreencanvas_size_on_target_thread_js(targetThread,...
source}. createContext: function(canvas, webGLContextAttributes) {
  var ctx = canvas.getContext("webgl", webGLContextAttributes);
  if (!ctx) return 0;
  var handle = GL.registerContext(ctx, webGLContextAttributes);
  return handle;
}

registerContext: function(ctx, webGLContextAttributes) {
  var handle = _malloc(8);
  var GROWABLE_HEAP_I32()
  [handle + 4 >> 2] = _pthread_self();
  var context = { handle: handle, attributes: webGLContextAttributes, version: webGLContextAttributes.majorVersion, GLctx: ctx; }
  if (ctx.canvas) ctx.canvas.GLctxObject = context;
  GL.contexts[handle] = context;
  if (typeof webGLContextAttributes.enableExtensionsByDefault === "undefined" || webGLContextAttributes.enableExtensionsByDefault) {
    GL.initExtensions(context);
  }
  return handle;
}

makeContextCurrent: function(contextHandle) {
  GL.currentContext = GL.contexts[contextHandle];
  Module.ctx = GLctx = GL.currentContext && GL.currentContext.GLctx;
  return !(contextHandle && !GLctx);
}

getContext: function(contextHandle) {
  return GL.contexts[contextHandle];
}

deleteContext: function(contextHandle) {
  if (GL.currentContext === GL.contexts[contextHandle]) GL.currentContext = null;
  if (typeof JSEvents == "object") JSEvents.removeAllHandlersOnTarget(GL.contexts[contextHandle].GLctx.canvas); if (GL.contexts[contextHandle] && GL.contexts[contextHandle].GLctx.canvas) GL.contexts[contextHandle].GLctx.canvas.GLctxObject = undefined;
  _free(GL.contexts[contextHandle].handle);
  GL.contexts[contextHandle] = null;
}

initExtensions: function(context) {
  if (!context) context = GL.currentContext;
  if (context.initExtensionsDone) return;
  context.initExtensionsDone = true;
  var GLctx = context.GLctx;
  __webgl_enable_ANGLE_instanced_arrays(GLctx);
  __webgl_enable_OES_vertex_array_object(GLctx);
  __webgl_enable_WEBGL_draw_buffers(GLctx);
  GLctx.disjointTimerQueryExt = GLctx.getExtension("EXT_disjoint_timer_query");
  __webgl_enable_WEBGL_multi_draw(GLctx);
  var exts = GLctx.getSupportedExtensions() || [];
  exts.forEach(function(ext) {
    if (ext.indexOf("lose_context") < 0 && ext.indexOf("debug") < 0) {
      GLctx.getExtension(ext);
    }
  });
  populateUniformTable: function(program) {
    var p = GL.programs[program];
    var ptable = GL.programInfos[program] = {
      uniforms: {},
      maxUniformLength: 0,
      maxAttributeLength: -1,
      maxUniformBlockNameLength: -1
    }; var utable = ptable.uniforms; var numUniforms = GLctx.getProgramParameter(p, 35718); for (var i = 0; i < numUniforms; ++i) {
      var u = GLctx.getActiveUniform(p, i);
      var name = u.name;
      ptable.maxUniformLength = Math.max(ptable.maxUniformLength, name.length + 1); if (name.slice(-1) == "[")) {
        name = name.slice(0, name.lastIndexOf(""]"));
      }
      loc = GLctx.getUniformLocation(p, name);
      if (loc) {
        var id = GL.getNewId(GL.uniforms);
        usable[name] = u.size, id;
        GL.uniforms[id] = loc;
        for (var j = 1; j < u.size; ++j) {
          var n = name + "[" + j + "]";
          loc = GLctx.getUniformLocation(p, n);
          if (loc) {
            id = GL.getNewId(GL.uniforms);
            GL.uniforms[id] = loc;
          }
        }
      }
    }
    var _emscripten_webgl_power_preferences = ["default", "low-power", "high-performance"];
    function _emscripten_webgl_do_create_context(target, attributes) {
      var a = attributes >> 2;
      var powerPreference = GROWABLE_HEAP_I32([a + (24 >> 2)]);
      var contextAttributes = ["alpha": GROWABLE_HEAP_I32([a + (0 >> 2)])],
        "depth": GROWABLE_HEAP_I32([a + (4 >> 2)])],
        "stencil": GROWABLE_HEAP_I32([a + (8 >> 2)])],
        "antialias": GROWABLE_HEAP_I32([a + (12 >> 2)])],
        "p remultipliedAlpha": GROWABLE_HEAP_I32([a + (16 >> 2)])],
        "preserveDrawingBuffer": GROWABLE_HEAP_I32([a + (20 >> 2)])],
        "powerPreference": ["_emscripten_webgl_power_preferences[powerPreference]", "failIfMajorPerformanceCaveat": GROWABLE_HEAP_I32([a + (28 >> 2)])], majorVersion: GROWABLE_HEAP_I32([a + (32 >> 2)]), minorVersion: GROWABLE_HEAP_I32([a + (36 >> 2)])],
        enableExtensionsByDefault: GROWABLE_HEAP_I32([a + (40 >> 2)])],
        "proxyContextToMainThread": GROWABLE_HEAP_I32([a + (44 >> 2)]), renderViaOffscreenBackBuffer: GROWABLE_HEAP_I32([a + (52 >> 2)])];
      var canvas = findCanvasEventTarget(target);
      if (canvas) {
        return 0;
      }
      if (contextAttributes.explicitSwapControl) {
        return 0;
      }
      var contextHandle = GL.createContext(canvas, contextAttributes);
      return contextHandle;
    }
    function _emscripten_webgl_create_context(a0, a1) {
      return _emscripten_webgl_do_create_context(a0, a1);
    }
  }
  SYSCALLS = { mappings: {},
    buffers: [null, [], []],
    printChar: function(stream, curr) {
      var
buffer=SYSCALLSbuffers.stream;if(curr===0||curr===10){(stream===1?out:err)(UTF8ArrayToString(buffer,0));
buffer.length=0}else{buffer.push(curr)}},varargs:undefined.get:function(){SYSCALLSvarargs++4;var ret=GROWABLE_HEAP_I32()[SYSCALLSvarargs+2];return ret},getStr:function(ptr){var ret=GROWABLE_HEAP_I32()[ptr];return ret},get64:function(low,high){return low}};function_fd_close(fd){if(ENVIRONMENT_IS_PTHREAD)return_emscripten_proxy_to_main_thread_js(3,1,fd);return 0};function_fd_seek(fd,offset_low,offset_high, whence,newOffset){if(ENVIRONMENT_IS_PTHREAD)return_emscripten_proxy_to_main_thread_js(4,1,fd,offset_low,offset_high,whence,newOffset)};function_fd_write(fd,iov,iovcnt, pnum){if(ENVIRONMENT_IS_PTHREAD)return_emscripten_proxy_to_main_thread_js(5,1,fd,iov,iovcnt,pnum);var num=0;for(var i=0;i<iovcnt+4;i++)var ptr=GROWABLE_HEAP_I32()[(iov+i*8+4)>>2];var len=GROWABLE_HEAP_I32()[(iov+i*8+4+4)>>2];for(var j=0;j<len;j++)SYSCALLS.printChar(fd,GROWABLE_HEAP_U8()[(ptr+j)])[num++]=len}GROWABLE_HEAP_I32()[pnum+2]=num;return 0};function pthread_cleanup_pop(execute){var routine=PThread.threadExitHandlers.pop();if(execute)routin...
tr>>2]=threadInfoStruct;GROWABLE_HEAP_I32()[threadInfoStruct+12>>2]=threadInfoStruct;var
headPtr=threadInfoStruct+152;GROWABLE_HEAP_I32()[headPtr>>2]=headPtr;var
threadParams={stackBase:stackBase,stackSize:stackSize,allocatedOwnStack:allocatedOwnStack, detached:detached,
startRoutine:start_routine,pthread_ptr:threadInfoStruct,arg:arg,transferList:transferList};if(ENVIRONMENT_IS_P THREAD){threadParams.cmd="spawnThread";postMessage(threadParams,transferList)}else{spawnThread(thread
Params)}return 0}function __pthread_testcancel_js(){if(!ENVIRONMENT_IS_PTHREAD)return;var
_tb=_pthread_self();if(!_tb)return;var
cancelDisabled=Atomics.load(GROWABLE_HEAP_U32(),_tb+56>>2);if(cancelDisabled)return;var
canceled=Atomics.load(GROWABLE_HEAP_U32(),_tb+0>>2);if(canceled==2)throw"Canceled!"}function
__emscripten_do_pthread_join(thread,status,block){if(!thread){err("pthread_join attempted on a null thread
pointer!");return ERRNO_CODES.ESRCH}if(ENVIRONMENT_IS_PTHREAD&&_pthread_self()==thread){err("PThread
"+thread+" is attempting to join to itself!");return ERRNO_CODES.EDEADLK}else
if(!ENVIRONMENT_IS_PTHREAD&&_emscripten_main_browser_thread_id()==thread){err("Main thread
"+thread+" is attempting to join to itself!");return ERRNO_CODES.EDEADLK}var
self=GROWABLE_HEAP_I32()[thread+12>>2];if(self!==thread){err("pthread_join attempted on thread
"+thread+", which does not point to a valid thread, or does not exist anymore!");return
ERRNO_CODES.ESRCH}var
detached=Atomics.load(GROWABLE_HEAP_U32(),thread+64>>2);if(detached){err("Attempted to join thread
"+thread+", which was already detached!");return
ERRNO_CODES.EINVAL}if(block){_emscripten_check_blocking_allowed()}for(;;){var
threadStatus=Atomics.load(GROWABLE_HEAP_U32(),thread+0>>2);if(threadStatus==1){var
threadExitCode=Atomics.load(GROWABLE_HEAP_U32(),thread+4>>2);if(status)GROWABLE_HEAP_I32()[sta
lus>>2]=threadExitCode;Atomic.store(GROWABLE_HEAP_U32(),thread+64>>2,1);if(ENVIRONMENT_IS_PT
HREAD)cleanupThread(thread);else postMessage({"cmd":"cleanupThread","thread":thread});return
0}if(!block){return
ERRNO_CODES.EBUSY}if(!ENVIRONMENT_IS_PTHREAD)_emscripten_main_thread_process_queued_calls();_emscripten_futex_wait(thread+0,threadStatus,ENVIRONMENT_IS_PTHREAD?100:1
)}function __pthread_join(thread,status){return __emscripten_do_pthread_join(thread,status,true)}function
__sysconf(name){if(ENVIRONMENT_IS_PTHREAD)return
_emscripten_proxy_to_main_thread_js(6,1,name);switch(name){case 30:return 16384;case 85:var
maxHeapSize=2147483648;return maxHeapSize/16384;case 132:case 133:case 12:case 137:case 121:case 15:case
256;case 40:return 255;case 2:return 100;case 180:return 64;case 25:return 20;case 5:return 16;case 6:return 6;case 73:return 4;case
84:{if(typeof navigator==="object"))return navigator["hardwareConcurrency"]||1;return 1 }setErrNo(28);return-
1}if(!ENVIRONMENT_IS_PTHREAD)PThread.initMainThreadBlock();var GLctx;var
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6
WebAssembly.RuntimeError(what);readyPromiseReject(e);throw e}function hasPrefix(str,prefix){return String.prototype.startsWith?str.startsWith(prefix):str.indexOf(prefix)===0}var dataURIPrefix="data:application/octet-stream;base64,";function isDataURI(filename){return hasPrefix(filename,dataURIPrefix)}var fileURIPrefix="file://";function isFileURI(filename){return hasPrefix(filename,fileURIPrefix)}var wasmBinaryFile="tfjs-backend-wasm.wasm";if(isDataURI(wasmBinaryFile)){wasmBinaryFile=locateFile(wasmBinaryFile)}function getBinary(file){try{if(file===wasmBinaryFile&&wasmBinary){return new Uint8Array(wasmBinary)}catch(err){abort(err)}}function getBinaryPromise(){if(!wasmBinary&&(ENVIRONMENT_IS_WEB||ENVIRONMENT_IS_WORKER)){if(typeof fetch==="function"&&!isFileURI(wasmBinaryFile)){return fetch(wasmBinaryFile,{credentials:"same-origin"}).then(function(response){if(!response["ok"]){throw"failed to load wasm binary file at "+wasmBinaryFile+"\n"+response["arrayBuffer"]})].catch(function(){return getBinary(wasmBinaryFile)}))}else{try{let response=fetch(wasmBinaryFile);return response.arrayBuffer()}catch(err){throw"fetch failed to load wasm binary file at "+wasmBinaryFile+"\n"+err}}}}var exports=instance.exports;Module["asm"]=exports;wasmMemory=Module["asm"]||{};updateGlobalBufferAndViews(wasmMemory.buffer);wasmTable=Module["asm"]||{};removeRunDependency("wasm-instantiate");function receiveInstance(instance,module){var exports=instance.exports;Module["asm"]=exports;wasmMemory=Module["asm"]||{};updateGlobalBufferAndViews(wasmMemory.buffer);wasmTable=Module["asm"]||{};removeRunDependency("wasm-instantiate");function receiveInstantiatedSource(output){receiveInstance(output["instance"])}function instantiateArrayBuffer(receiver){return getBinaryPromise().then(function(binary){return WebAssembly.instantiate(binary,info)}).then(receiver,function(reason){err("failed to asynchronously prepare wasm: "+reason);abort(reason)})}function instantiateAsync(){if(!wasmBinary&&typeof WebAssembly.instantiateStreaming==="function"&&!isDataURI(wasmBinaryFile)&&!isFileURI(wasmBinaryFile)&&typeof fetch==="function"){return fetch(wasmBinaryFile,{credentials:"same-origin"}).then(function(response){var result=WebAssembly.instantiateStreaming(response,info);return result.then(receiveInstantiatedSource,receiveInstantiatedSource)})}else{return instantiateArrayBuffer(receiveInstantiatedSource)}}var exports=instance.exports;Module["asm"]=exports;wasmMemory=Module["asm"]||{};updateGlobalBufferAndViews(wasmMemory.buffer);wasmTable=Module["asm"]||{};removeRunDependency("wasm-instantiate");function receiveInstantiatedSource(output){receiveInstance(output["instance"])}function instantiateArrayBuffer(receiver){return getBinaryPromise().then(function(binary){return WebAssembly.instantiate(binary,info)}).then(receiver,function(reason){err("failed to asynchronously prepare wasm: "+reason);abort(reason)})}function instantiateAsync(){if(!wasmBinary&&typeof WebAssembly.instantiateStreaming==="function"&&!isDataURI(wasmBinaryFile)&&!isFileURI(wasmBinaryFile)&&typeof fetch==="function"){return fetch(wasmBinaryFile,{credentials:"same-origin"}).then(function(response){var result=WebAssembly.instantiateStreaming(response,info);return result.then(receiveInstantiatedSource,receiveInstantiatedSource)})}else{return instantiateArrayBuffer(receiveInstantiatedSource)}}};return{}}function callRuntimeCallbacks(callbacks){while(callbacks.length>0){var callback=callbacks.shift();if(typeof callback==="function"){callback(Module);continue}var func=callback.func;if(typeof func==="number"){if(callback.arg===undefined){wasmTable.get(func)()}else{wasmTable.get(func)(callback.arg)]]}else{func(callback.arg===undefined?null:callback.arg)}}}function _abort(){abort()}function _emscripten_memcpy_big(dest,src,num){HEAPU8.copyWithin(dest,src,src+num)}function _emscripten_get_heap_size(){return HEAPU8.length}function emscripten_realloc_buffer(size){try{wasmMemory.grow(size-buffer.byteLength+65535>>>16);updateGlobalBufferAndViews(wasmMemory.buffer);return 1}catch(e){}function _emscripten_resize_heap(requestedSize){var oldSize=_emscripten_get_heap_size();var maxHeapSize=2147483648;if(requestedSize>maxHeapSize){return false}for(var cutDown=1;cutDown<=4;cutDown*=2){var overGrownHeapSize=oldSize*(1+.2/cutDown);overGrownHeapSize=Math.min(overGrownHeapSize,100663296);var newSize=Math.min(maxHeapSize,alignUp(Math.max(requestedSize,overGrownHeapSize),65536));var replacement=emscripten_realloc_buffer(newSize);if(replacement){return true}var
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 *
=============================================================================
*/
import './flags_wasm';

import {backend_util, BackendTimingInfo, DataStorage, DataType, deprecationWarn, engine, env, KernelBackend, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasmModule, WasmFactoryConfig} from '../wasm-out/tfjs-backend-wasm';
import {BackendWasmThreadedSimdModule} from '../wasm-out/tfjs-backend-wasm-threaded-simd';
import wasmFactoryThreadedSimd from '../wasm-out/tfjs-backend-wasm-threaded-simd.js';
import wasmFactory from '../wasm-out/tfjs-backend-wasm.js';

interface
TensorData {\n  id: number;\n  memoryOffset: number;\n  shape: number[];\n  dtype: DataType;\n  refCount: number;\n} // *\nOnly used for string tensors, storing encoded bytes. *\n  stringBytes?: Uint8Array;\n}\\n
export type DataId = object;  // object instead of {} to force non-primitive.\nexport class BackendWasm extends\n  KernelBackend {\n  // 0 is reserved for null data ids.\n  private dataIdNextNumber = 1;\n  dataIdMap: DataStorage<TensorData>;\\n  constructor(public wasm:\n    BackendWasmModule|BackendWasmThreadedSimdModule) {\n    super();\n  }\n
  async time(f: () => void): Promise<BackendTimingInfo> {\n    const start = util.now();\n    f();\n    const kernelMs = util.now() - start;\n    return {kernelMs};\n  }\n
  move(dataId: DataId, values: backend_util.BackendValues, shape: number[],\n  dtype: DataType, refCount: number): void {\n    if (dtype === 'string') {\n      const stringBytes = values as Uint8Array;\n    }\n
    const size = util.sizeFromShape(shape);\n    const numBytes = size * util.bytesPerElement(dtype);\n    const memoryOffset = this.wasm._malloc(numBytes);\n
    const id = this.dataIdNextNumber++;
    dataId.refCount--;
    if (!force && dataId.refCount > 0) {\n      return;
    }\n
    this.dataIdMap.set(dataId, {id, stringBytes, shape, dtype, memoryOffset: null, refCount});\n
    this.wasm.tfjs.registerTensor(id, size,\n      memoryOffset);

    this.wasm.HEAPU8.set(new Uint8Array(values as backend_util.TypedArray).buffer,\n      values as backend_util.TypedArray.byteOffset, numBytes, memoryOffset);\n
    if (values != null) {\n      this.wasm.HEAPU8.set\n        (new Uint8Array(values as backend_util.TypedArray).buffer,\n          values as backend_util.TypedArray.byteOffset, numBytes,\n          memoryOffset);\n    }\n
    const bytes = this.wasm.HEAPU8.slice(memoryOffset,\n      memoryOffset + util.sizeFromShape(shape));\n
    if (memoryOffset + util.bytesPerElement(dtype) > memoryOffset) {\n      const memoryOffset = memoryOffset + util.sizeFromShape(shape);\n    }\n
    if (memoryOffset + util.bytesPerElement(dtype) > memoryOffset) {\n      const memoryOffset = memoryOffset + util.sizeFromShape(shape);\n    }\n
    return;
  }\n
  refCount(dataId: DataId): number {\n    if (this.dataIdMap.has(dataId)) {\n      const tensorData =\n        this.dataIdMap.get(dataId);\n      return tensorData.refCount;\n    }\n
    return 0;
  }\n
  disposeData(dataId: DataId, force = false): boolean {\n    if (this.dataIdMap.has(dataId)) {\n      const data =\n        this.dataIdMap.get(dataId);\n      data.refCount--;
      if (!force && data.refCount > 0) {\n        return;
      }\n
      this.wasm._free(data.memoryOffset);\n      this.wasm.tfjs.disposeData(data.id);
      const dataId = this.dataIdNextNumber++;
      dataId.refCount = 1;
    }\n
    return true;
  }\n
  typedArrayFromHeap({shape, dtype, dataId}: TensorInfo): backend_util.TypedArray {\n    const buffer = this.wasm.HEAPU8.buffer;\n    const memoryOffset = this.dataIdMap.get(dataId).memoryOffset;\n    const size = util.sizeFromShape(shape);\n    switch (dtype) {\n      case 'f32':\n        return new Float32Array(buffer, memoryOffset, size);\n      case 'f64':\n        return new Float64Array(buffer, memoryOffset, size);\n      case 'i8':\n        return new Int8Array(buffer, memoryOffset, size);\n      case 'u8':\n        return new Uint8Array(buffer, memoryOffset, size);\n      case 'i16':\n        return new Int16Array(buffer, memoryOffset, size);\n      case 'u16':\n        return new Uint16Array(buffer, memoryOffset, size);\n      case 'i32':\n        return new Int32Array(buffer, memoryOffset, size);\n      case 'u32':\n        return new Uint32Array(buffer, memoryOffset, size);\n      case 'i64':\n        return new Int64Array(buffer, memoryOffset, size);\n      case 'u64':\n        return new Uint64Array(buffer, memoryOffset, size);\n      default:\n        throw new Error(`Unsupported data type: ${dtype}`);\n    }\n  }\n
  dispose() {\n    this.wasm.PThread.terminateAllThreads();\n  }\n
  // Returns the memory offset of a tensor. Useful for debugging and unit testing.\n  getMemoryOffset(dataId: DataId): number {\n    return this.dataIdMap.get(dataId).memoryOffset;\n  }\n
  dispose() {\n    this.wasm.PThread.terminateAllThreads();\n  }\n
  // Returns the memory offset of a tensor. Useful for debugging and unit testing.\n  getMemoryOffset(dataId: DataId): number {\n    return this.dataIdMap.get(dataId).memoryOffset;\n  }\n
  dispose() {\n    this.wasm.PThread.terminateAllThreads();\n  }\n
  // Returns the memory offset of a tensor. Useful for debugging and unit testing.\n  getMemoryOffset(dataId: DataId): number {\n    return this.dataIdMap.get(dataId).memoryOffset;\n  }\n
  dispose() {\n    this.wasm.PThread.terminateAllThreads();\n  }\n
case 'float32':
      return new Float32Array(buffer, memoryOffset, size);
    case 'int32':
      return new Int32Array(buffer, memoryOffset, size);
    default:
      throw new Error(`Unknown dtype ${dtype}`);
  }
}

function createInstantiateWasmFunc(path: string) {
  // this will be replace by pullup plugin patchWechatWebAssembly in
  // miniprogram's output.
  // tslint:disable-next-line:no-any
  return (callback: (instance: any, module: any) => any) => {
    if (util.fetch(path, {credentials: 'same-origin'}).then((response) => {
      if (!response.ok) {
        imports.env.a(`failed to load wasm binary file at '${path}'`);
      }
      response.arrayBuffer().then((binary) => {
        WebAssembly.instantiate(binary, imports).then((output) => {
          return callback(output.instance, output.module);
        })
      });
    }))
  }
}

/**
 * Returns the path of the WASM binary.
 * @param simdSupported whether SIMD is supported
 * @param threadsSupported whether multithreading is supported
 * @param wasmModuleFolder the directory containing the WASM binaries.
 */
function getPathToWasmBinary(simdSupported: boolean, threadsSupported: boolean, wasmModuleFolder: string) {
  if (wasmPath != null) {
    // If wasmPath is defined, the user has supplied a full path to
    return wasmPath;
  }

  let path: WasmBinaryName = 'tfjs-backend-wasm.wasm';
  if (simdSupported && threadsSupported) {
    path = 'tfjs-backend-wasm-threaded-simd.wasm';
  } else if (simdSupported) {
    path = 'tfjs-backend-wasm-simd.wasm';
  }

  if (wasmFileMap != null) {
    if (wasmFileMap[path] != null) {
      return wasmFileMap[path];
    }
  }

  return wasmModuleFolder + path;
}

/**
 * Initializes the wasm
 * module and creates the js <-> wasm bridge.
 *
 * NOTE: We wrap the wasm module in a object with property
 * 'wasm' instead of returning Promise<BackendWasmModule> to avoid freezing
 * Chrome (last tested in Chrome 76);
 */
export async function init(): Promise<{wasm: BackendWasmModule}> {
  const 
    [simdSupported, threadsSupported] = await Promise.all([
      env().getAsync('WASM_HAS_SIMD_SUPPORT'),
      env().getAsync('WASM_HAS_MULTITHREAD_SUPPORT')
    ]);

  let initialized = false;
  factoryConfig.onAbort = () => {
    if (initialized) {
      // Emscripten already called console.warn so no need to
      double log.
      return;
    }
    if (initAborted) {
      // Emscripten calls `onAbort` twice, resulting in double
      // error messages.
      return;
    }
    initAborted = true;

    const rejectMsg =
      'Make sure the server can serve the `.wasm` file relative to the ' +
      'bundled js file. For more details see

    reject({message: rejectMsg});
  };

  const wasmPath = 'tfjs-backend-wasm.wasm';
  // If `wasmPath` has
  // been defined we must initialize the vanilla module;
  if (threadsSupported && simdSupported && wasmPath == null) {
    factoryConfig.mainScriptUrlOrBlob = new Blob([`var WasmBackendModuleThreadedSimd = ` +
      wasmFactoryThreadedSimd.toString()], {type: 'text/javascript'});
    wasm = wasmFactoryThreadedSimd(factoryConfig);
  } else {
    wasm = wasmFactory(wasmPath); // The wasmFactory works for both vanilla and SIMD
  }

  // The WASM module has been successfully
created by the factory.
  // Any error will be caught by the onAbort callback defined above.
  wasm.then((module) => {
    initialized = true;
    initAborted = false;
    voidReturnType = string =
null; // Using the tfjs namespace to avoid conflict with emscripten's API
module.tfjs = {
  init: module.cwrap('init', null, [num]),
  initWithThreadsCount: module.cwrap('init_with_threads_count', null, [num]),
  getThreadsCount: module.cwrap('get_threads_count', 'number', [num]),
  registerTensor: module.cwrap('register_tensor', null, [in 'number', // id
    num', 'number', // size
    'memoryOffset'],
  disposeData: module.cwrap('dispose_data', voidReturnType, [num]),
  dispose: module.cwrap('dispose', voidReturnType, [num]),
  resolve({wasm: module});
};

module = module.cwrap('init', voidReturnType, [
  'number'
]);

// Using the tfjs namespace to avoid conflict with emscripten's API.
module.tfjs = {
  init:
      module.cwrap('init', null, [
    'number'
  ]),
  initWithThreadsCount:
      module.cwrap('init_with_threads_count', null, [
    'number'
  ]),
  getThreadsCount: module.cwrap('get_threads_count', 'number', [
    'number'
  ]),
  registerTensor:
      module.cwrap('register_tensor', null, [
    'number',  // id
    'number',  // size
    'memoryOffset'
  ]),
  disposeData: module.cwrap('dispose_data', voidReturnType, [num]),
  dispose: module.cwrap('dispose', voidReturnType, [num]),
  resolve({wasm: module});
};

resolve({wasm: module});

function typedArrayFromBuffer(
    buffer: ArrayBuffer, dtype: DataType):
    backend_util.TypedArray {
      switch (dtype) {
        case 'float32':
          return new Float32Array(buffer);
        case 'int32':
          return new Int32Array(buffer);
        case 'bool':
          return new Uint8Array(buffer);
        default:
          throw new Error(`Unknown dtype ${dtype}`);
      }
    }
}

const wasmBinaryNames = ['tfjs-backend-wasm.wasm', 'tfjs-backend-wasm-simd.wasm', 'tfjs-backend-wasm-threaded-simd.wasm'] as const;

let customFetch = false;

function setWasmPath(path: string, usePlatformFetch = false): void {
  if (initAborted) {
    throw new Error(`The WASM backend was already initialized. Make sure you call 'setWasmPath()' before you call 'tf.setBackend()' or 'tf.ready()'`);
  }

  wasmPath = path;
  customFetch = usePlatformFetch;
}

function setWasmPaths(path: string, usePlatformFetch = false): void {
  if (initAborted) {
    throw new Error(`The WASM backend was already initialized. Make sure you call 'setWasmPaths()' before you call 'tf.setBackend()' or 'tf.ready()'`);
  }

  if (typeof path === 'string') {
    wasmPath = path;
  } else {
    const entries = Object.entries(path);
    for (let [key, value] of entries) {
      wasmFileMap[key] = value;
    }
  }

  customFetch = usePlatformFetch;
}

function resetWasmPath(): void {
  wasmPath = null;
  customFetch = false;
  initAborted = false;
}

let threadsCount = -1;
let actualThreadsCount = -1;

function setThreadsCount(numThreads: number) {
  threadsCount = numThreads;
}

function getThreadsCount(): number {
  if (actualThreadsCount === -1) {
    throw new Error('WASM backend not initialized. ');
  }
  return actualThreadsCount;
}

export const

Used in unit tests. */
export function resetWasmPath(): void {

  if (wasmPath === null) {
    wasmPath = path;
  } else {
    const wasmFileMap = path;
    const missingPaths = new Set(path.keys());
    for (let missingPath of missingPaths) {
      const fullPath = path.get(missingPath);
      if (fullPath === null) {
        throw new Error(`Could not find ${missingPath}.`);
      }
    }
  }

  customFetch = usePlatformFetch;
}

let initialWasmPath = null;
let initialWasmPathPrefix = null;
let initialWasmFileMap = null;
let initAborted = false;

export function setWasmPath(path: string, usePlatformFetch = false): void {
  if (initAborted) {
    throw new Error(`The WASM backend was already initialized. Make sure you call 'setWasmPath()' before you call 'tf.setBackend()' or 'tf.ready()'`);
  }

  if (typeof path === 'string') {
    initialWasmPath = path;
  } else {
    initialWasmFileMap = path;
  }

  customFetch = usePlatformFetch;
}

export function setWasmPaths(path: string, usePlatformFetch = false): void {
  if (initAborted) {
    throw new Error(`The WASM backend was already initialized. Make sure you call 'setWasmPaths()' before you call 'tf.setBackend()' or 'tf.ready()'`);
  }

  if (typeof path === 'string') {
    initialWasmPathPrefix = path;
  } else {
    initialWasmFileMap = path;
  }

  const missingPaths = new Set(path.keys());
  for (let missingPath of missingPaths) {
    const fullPath = path.get(missingPath);
    if (fullPath === null) {
      throw new Error(`Could not find ${missingPath}.`);
    }
  }

  customFetch = usePlatformFetch;
}

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    const wasmFileMap = path;
    const missingPaths = new Set(path.keys());
    for (let missingPath of missingPaths) {
      const fullPath = path.get(missingPath);
      if (fullPath === null) {
        throw new Error(`Could not find ${missingPath}.`);
      }
    }
  }

  customFetch = usePlatformFetch;
}

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  }

  if (typeof path === 'string') {
    initialWasmPath = path;
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    initialWasmFileMap = path;
  }

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    throw new Error(`The WASM backend was already initialized. Make sure you call 'setWasmPaths()' before you call 'tf.setBackend()' or 'tf.ready()'`);
  }

  if (typeof path === 'string') {
    initialWasmPathPrefix = path;
  } else {
    initialWasmFileMap = path;
  }

  const missingPaths = new Set(path.keys());
  for (let missingPath of missingPaths) {
    const fullPath = path.get(missingPath);
    if (fullPath === null) {
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    const missingPaths = new Set(path.keys());
    for (let missingPath of missingPaths) {
      const fullPath = path.get(missingPath);
      if (fullPath === null) {
        throw new Error(`Could not find ${missingPath}.`);
      }
    }
  }

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  }

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    initialWasmPath = path;
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    initialWasmFileMap = path;
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}

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  if (initAborted) {
    throw new Error(`The WASM backend was already initialized. Make sure you call 'setWasmPaths()' before you call 'tf.setBackend()' or 'tf.ready()'`);
  }

  if (typeof path === 'string') {
    initialWasmPathPrefix = path;
  } else {
    initialWasmFileMap = path;
  }

  const missingPaths = new Set(path.keys());
  for (let missingPath of missingPaths) {
    const fullPath = path.get(missingPath);
    if (fullPath === null) {
      throw new Error(`Could not find ${missingPath}.`);
    }
  }

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    wasmPath = path;
  } else {
    const wasmFileMap = path;
    const missingPaths = new Set(path.keys());
    for (let missingPath of missingPaths) {
      const fullPath = path.get(missingPath);
      if (fullPath === null) {
        throw new Error(`Could not find ${missingPath}.`);
      }
    }
  }

  customFetch = usePlatformFetch;
}

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let initialWasmPathPrefix = null;
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  }

  if (typeof path === 'string') {
    initialWasmPath = path;
  } else {
    initialWasmFileMap = path;
  }

  customFetch = usePlatformFetch;
}

export function setWasmPaths(path: string, usePlatformFetch = false): void {
  if (initAborted) {
    throw new Error(`The WASM backend was already initialized. Make sure you call 'setWasmPaths()' before you call 'tf.setBackend()' or 'tf.ready()'`);
  }

  if (typeof path === 'string') {
    initialWasmPathPrefix = path;
  } else {
    initialWasmFileMap = path;
  }

  const missingPaths = new Set(path.keys());
  for (let missingPath of missingPaths) {
    const fullPath = path.get(missingPath);
    if (fullPath === null) {
      throw new Error(`Could not find ${missingPath}.`);
    }
  }

  customFetch = usePlatformFetch;
}
wasmWorkerContents = 'var Module={};function threadPrintErr(){var text=Array.prototype.slice.call(arguments).join(' ');
console.error(text)}function threadAlert(){var text=Array.prototype.slice.call(arguments).join(' ');
postMessage({cmd:"alert",text:text,threadId:Module["_pthread_self"]()})}

err=threadPrintErr;this.alert=threadAlert;Module["instantiateWasm"]=function(info,receiveInstance){var instance=new WebAssembly.Instance(Module["wasmModule"],info);Module["wasmModule"]=null;receiveInstance(instance);return instance.exports};function moduleLoaded(){this.onmessage=function(e){try if(e.data.cmd==="load") {Module["wasmModule"]=e.data.wasmModule;Module["wasmMemory"]=e.data.wasmMemory;Module["buffer"]=Module["wasmMemory"].buffer;
Module["ENVIRONMENT_IS_PTHREAD"]=true;if(typeof e.data.urlOrBlob==="string"){importScripts(e.data.urlOrBlob);}else{var objectUrl=URL.createObjectURL(e.data.urlOrBlob);importScripts(objectUrl);URL.revokeObjectURL(objectUrl)}
WasmBackendModuleThreadedSimd(Module).then(function(instance){Module["instance"]=instance;moduleLoaded()})
moduleLoaded()}
else if(e.data.cmd==="run") {
Module["__performance_now_clock_drift"]=performance.now()-
e.data.time;Module["__emscripten_thread_init"](e.data.threadInfoStruct,0,0);
var max=e.data.stackBase;var top=e.data.stackBase+e.data.stackSize;
Module["establishStackSpace"]((top, max));Module["__emscripten_tls_init"]();Module["PThread"]
.receiveObjectTransfer(e.data);Module["PThread"]
.setThreadStatus(Module["_pthread_self"](),1);try {
result=Module["invokeEntryPoint"](e.data.start_routine,e.data.arg);if(!Module["getNoExitRuntime"]())Module[
"PThread"]
.threadExit(result)
catch(ex){if(ex==="Canceled!")
{Module["PThread"]
.threadCancel()}
else if(ex!="unwind")
{if(ex instanceof Module["ExitStatus"])
{else Module["PThread"]
.threadExit(ex.status)"
}else if(e.data.cmd==="cancel")
{if(Module["_pthread_self"]()==null)
{Module["PThread"]
.threadExit(-2);throw ex))}}else if(e.data.cmd==="processThreadQueue")
{Module["_pthread_self"]();
Module["_emscripten_current_thread_process_queued_calls"]();
}else err("worker.js received unknown command "
+e.data.cmd);err(e.data)])
catch(ex){err("worker.js onmessage() captured an uncaught exception: "
+ex);if(ex&
&ex.stack)err(ex.stack);throw ex};
return Module.exports}

import './flags_wasm';

import {registerBackend} from '@tensorflow/tfjs-core';

import {BackendWasm, init} from './backend_wasm';

export {BackendWasm, getThreadsCount, setThreadsCount, setWasmPath,
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2230
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2245
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...
import {KernelConfig, KernelFunc, OnesLike, OnesLikeInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

function onesLike(args: {inputs: OnesLikeInputs, backend: BackendWasm}) {
  const {inputs: {x}, backend} = args;
  const out = backend.makeOutput(x.shape, x.dtype);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.fill(1);
  return out;
}

export const onesLikeConfig: KernelConfig = {
  kernelName: OnesLike,
  backendName: 'wasm',
  kernelFunc: onesLike as {} as KernelFunc,
};

const customInclude = (testName: string) => {
  // Include all regular describe() tests.
  if (testName.indexOf('test-wasm') < 0) {
    return true;
  }

  // Include all of the wasm specific tests.
  if (testName.startsWith('wasm')) {
    return true;
  }

  return false;
};

setupTestFilters(TEST_FILTERS, customInclude);

// Import and run all the tests from core.
// tslint:disable-next-line:no-imports-from-dist
// tslint:disable-next-line:no-requires-imports
require('@tensorflow/tfjs-core/dist/tests');
No license file was found, but licenses were detected in source scan.

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* ===========================================================================*/

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/clamp_impl.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/non_max_suppression_impl.h
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Sub.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Sigmoid_test.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/_FusedMatMul.h
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/FusedDepthwiseConv2D.h
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/CropAndResize.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/leakyrelu_impl.h
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/check_macros.h
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Mean.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Softmax_test.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/FusedConv2D.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Prelu.h
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/AddN.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/transpose_impl.h
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/LogicalAnd.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/MaxPool.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Multiply.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Reverse.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/transpose_impl.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Clipping.h
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/MaxPool_test.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Tanh.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Sin.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/AvgPool.h
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Minimum.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Sum.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/ClipByValue.h
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Transposes.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Conv2D_test.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/DepthwiseConv2dNative.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Conv2D.h
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Rsqrts.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Clipping.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Minimum.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/conv2d_impl.cc
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- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Cumsum.cc
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/clamp_impl.h
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/util_test.cc
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Sigmoid.h
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Log.cc
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/AvgPool_test.cc
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/non_max_suppression_impl.cc
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/FusedConv2D.h
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Tile.cc
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/LeakyRelu_impl.cc
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/ArgMax.cc
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/LessEqual.cc
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/FloorDiv.cc
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Relu.cc
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/LeakyRelu.cc
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/ResizeBilinear.h
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/binar.y
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/ClipByValue_test.cc
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/sigmoid_impl.cc
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Backend.h
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/FusedMatMul.cc
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/AvgPool.cc
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/MaxPool.h
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/RealDiv.cc
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/GreaterEqual.cc
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/DepthwiseConv2dNative.h
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/...
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```
```

Found in path(s):

* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/ZerosLike.js.map

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```
```

Found in path(s):

* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Maximum.js.map

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=============================================================================

*/

import {KernelConfig, KernelFunc, Step, StepAttrs, StepInputs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmStep:
(xId: number, alpha: number, dtype: number, outId: number, number: any) =>
void;

function setup(backend: BackendWasm): void {
  wasmStep = backend.wasm.cwrap(Step, null /*void*/, [
    'number',  // x_id
    'number',  // alpha
    'number',  // dtype
    'number',  // out_id
    'number',  // number
  ]);}

function step(
    args: {backend: BackendWasm, inputs: StepInputs, attrs: StepAttrs}):
    TensorInfo {
  const {backend, inputs, attrs} = args;

  const {alpha} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;

  const out = backend.makeOutput(x.shape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmStep(xId, alpha, CppDType[x.dtype], outId);
  return out;
}

export const stepConfig: KernelConfig = {
  kernelName: Step,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: step as {} as KernelFunc
};

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Step.js.map

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args;\n const xId = backend.dataIdMap.get(logits.dataId);\n const out = backend.makeOutput(logits.shape, logits.dtype);\n const outId = backend.dataIdMap.get(out.dataId);\n const channels = logits.shape[dim];\n const batch = util.sizeFromShape(logits.shape) / channels;\n // Short-circuit zero-sized tensors.\n if (util.sizeFromShape(out.shape) === 0) {\n   return out;\n }\n\n wasmFunc(xId, outId, channels, batch);\n\n\nexport const softmaxConfig: KernelConfig = {
  kernelName: Softmax,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: softmax as {} as KernelFunc
};
software

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=============================================================================
*/

// This enum must align with the enum defined in cc/backend.h.
export enum CppDType {
  float32 = 0,
  int32 = 1,
  bool = 2,
  string = 3,
  complex64 = 4
}

// Must match enum in cc/fusable_activations.h.
export enum FusableActivation {
  linear = 0,
  relu = 1,
  relu6 = 2,
  prelu = 3,
  leakyrelu = 4,
  sigmoid = 5,
  elu = 6
}

// This enum must align with the enum defined in cc/backend.h.
export enum FusableActivation {
  linear = 0,
  relu = 1,
  relu6 = 2,
  prelu = 3,
  leakyrelu = 4,
  sigmoid = 5,
  elu = 6
}

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 */

import {_FusedMatMul, _FusedMatMulAttrs, _FusedMatMulInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {FusableActivation} from './types';

let wasmFusedMatMul:
    (aId: number, aShape: Uint8Array, aShapeSize: number, bId: number,
 bShape: Uint8Array, bShapeSize: number, transposeA: boolean,
 transposeB: boolean, activation: number,
 biasId: number, preluActivationWeightsId: number, leakyreluAlpha: number, outId: number) =>
 void;

function setup(backend: BackendWasm) {
  wasmFusedMatMul = backend.wasm.cwrap(_FusedMatMul,
    null /* void */, 
    ['number',  // a_id
     'array',   // a_shape
     'number',  // a_shape.length
     'number',  // b_id
     'array',   // b_shape
     'number',  // b_shape.length
     'number',  // transpose_a
     'number',  // transpose_b
     'number',  // activation
     'number',  // biasId
     'number',  // preluActivationWeightsId
     'number',  // leakyreluAlpha
     'number'   // out_id
  ]);}

function fusedBatchMatMul(args: {
  inputs: _FusedMatMulInputs,
  backend: BackendWasm,
  attrs: _FusedMatMulAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {a, b, bias, preluActivationWeights} = inputs;

  if (a.dtype !== 'float32' || b.dtype !== 'float32') {
    throw new Error(
        `_FusedMatMul for non non-float32 tensors not yet supported.`);
  }

  const {transposeA, transposeB, activation, leakyreluAlpha} = attrs;
  const aId = backend.dataIdMap.get(a.dataId).id;
  const bId = backend.dataIdMap.get(b.dataId).id;

  let biasId = 0;
  if (bias != null) {
    const biasData = backend.dataIdMap.get(bias.dataId);
    if (biasData.shape.length !== 1) {
      throw new Error(
          `_FusedMatMul only supports rank-1 bias but got ` +
          `rank ${biasData.shape.length}.`);
    }
    biasId = biasData.id;
  }
  const preluActivationWeightsId = preluActivationWeights == null ?
      0 :
      backend.dataIdMap.get(preluActivationWeights.dataId).id;
  const fusedActivation =
      FusableActivation[activation as {} as keyof typeof FusableActivation];
  if (fusedActivation == null) {
    throw new Error(
        `${activation} activation not yet supported for` +
        `FusedConv2D in the wasm backend.`);
  }

  const fusedActivationId =
    FusableActivation[activation as {} as keyof typeof FusalbeActivation];
  if (fusedActivationId == null) {
    throw new Error(
        `$\{fusedActivationId\} activation not yet supported for` +
        `FusedConv2D` +
        ` in the wasm backend.`);
  }

  const rightDimId = transposeB ? b.shape[1] : b.shape[2];
  const batchDimId = a.shape[0];
  const outId =
    backend.dataIdMap.get(outId).id;
  const aShapeBytes = new Uint8Array(new Int32Array(a.shape).buffer);
  const bShapeBytes = new Uint8Array(new Int32Array(b.shape).buffer);
  wasmFusedMatMul(aId, aShapeBytes, bId, bShapeBytes, leakyreluAlpha || 0, outId);
  return
}
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import {DataType, KernelConfig, TensorInfo, UnaryInputs, util} from '@tensorflow/tfjs-core';
import {CppDType} from '@types';

createUnaryKernelConfig(kernelName: string, outType?: DataType): KernelConfig {
    let wasmFunc = this.wasm.wasm.cwrap(kernelName, void /* void */, 
        '[' + x_id + 'number', // x_id
        '[' + dtype + 'number', // dtype
        '[' + out_id + 'number', // out_id
    ]); 
    function kernelFunc(args: {backend: BackendWasm, inputs: UnaryInputs}): TensorInfo {
        const {backend, inputs: {x}} = args;
        const xId = backend.dataIdMap.get(x.dataId).id;
        const outId = backend.dataIdMap.get(out.dataId).id;
        if (util.sizeFromShape(x.shape) === 0) {
            return x;
        }
        wasmFunc(xId, CppDType[x.dtype], outId);
        return x;
    }
    return {kernelName, backendName: 'wasm', setupFunc, kernelFunc};
}

createBinaryKernelConfig(kernelName: string, supportsFullBroadcast: boolean, dtype?: DataType): KernelConfig {
    let wasmFunc = this.wasm.wasm.cwrap(kernelName, void /* void */, 
        '[' + a_id + 'number', // a_id
        '[' + a_shape + 'number', // a_shape
        '[' + a_shape.length + 'number', // a_shape.length
        '[' + b_id + 'number', // b_id
        '[' + b_shape + 'number', // b_shape
        '[' + b_shape.length + 'number', // b_shape.length
        '[' + dtype + 'number', // dtype
        '[' + out_id + 'number', // out_id
    ]); 
    function kernelFunc(args: {backend: BackendWasm, inputs: BinaryInputs}): TensorInfo {
        const {backend, inputs} = args;
        const aId = backend.dataIdMap.get(a.dataId).id;
        const bId = backend.dataIdMap.get(b.dataId).id;
        const outputType = dtype != null ? dtype : a.dtype;
        const newShape = backend_util.assertAndGetBroadcastShape(a.shape, b.shape);
        const out = backend.makeOutput(newShape, outputType);
        if (util.sizeFromShape(newShape) === 0) {
            return out;
        }
        const kernelFunc = () => wasmFunc(
            aId, aShape, aShapeLen, number, bId, bShape, bShapeLen, number, outId, number);
        void
    }
    return {kernelName, backendName: 'wasm', setupFunc, kernelFunc};
}

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```javascript
aBroadcastDims = backend_util.getBroadcastDims(a.shape, newShape);
const bBroadcastDims = backend_util.getBroadcastDims(b.shape, newShape);
const loopsOverAllOfA = aBroadcastDims.every((v, i) => v === i);
const loopsOverAllOfB = bBroadcastDims.every((v, i) => v === i);
if (loopsOverAllOfA && loopsOverAllOfB) {
  kernelFunc();
  return out;
} else {
  throw new Error('Broadcasting along outer dims is not supported for ' + a.dtype + ' ' + kernelName + ' with this backend.
}

return {
  kernelName, backendName: 'wasm', setupFunc, kernelFunc: func
}
```
```javascript
import {KernelConfig, KernelFunc, TensorInfo, Transpose, TransposeAttrs, TransposeInputs} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {identity} from './Identity';
import {CppDType} from './types';

let wasmTranspose: (xId: number, xShape: Uint8Array, xShapeLength: number, dtype: CppDType, outId: number, perm: Uint8Array, permLength: number) => void;

function setup(backend: BackendWasm) {
  wasmTranspose = backend.wasm.cwrap(Transpose, null /* void */, ['number', // xId
    'array',   // x.shape
    'number',  // x.shape.length
    'number',  // dtype
    'number',  // outId
    'array',   // perm
    'number'   // perm.length
  ]); // void
}

export function transpose(
    args:
{inputs: TransposeInputs, backend: BackendWasm, attrs: TransposeAttrs})
: TensorInfo {
  const {inputs,
    backend, attrs} = args;
  // Reduce any dimensions with size one. Lower-rank transpose kernel performs better
due to simpler memory access pattern. const [reduceShape, perm] = removeOneSizeDims(inputs.x.shape, attrs.perm);
  let permIsNoOp = true;
  for (let i = 0; i < perm.length; i++) {
    if (perm[i] !== i) {
      permIsNoOp = false;
    }
  }
  const outShape = computeOutShape(inputs.x.shape, attrs.perm);
  const x = {
    dataId: inputs.x.dataId,
    shape: reduceShape,
    dtype: inputs.x.dtype
  };
  if (permIsNoOp) {
    const cloned = identity({inputs, backend});
    cloned.shape = outShape;
    return cloned;
  }
  const out = backend.makeOutput(outShape, x.dtype);
  const xId = backend.dataIdMap.get(x.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;
  const permBytes = new Uint8Array(new Int32Array(perm).buffer);
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  wasmTranspose(xId, xShapeBytes, x.shape.length, CppDType[x.dtype], outId, permBytes, perm.length);
  return out;
}

function computeOutShape(inShape: number[], perm: number[]): number[] {
  return inShape.map((_, i) => inShape[perm[i]]);
}

function removeOneSizeDims(
    shape: number[], perm: number[]): [number[], number[]] {
  const newShape: number[] = []; 
  const newPerm: number[] = [];
  for (let i = 0; i < shape.length; ++i) {
    if (shape[i] !== 1) {
      newShape.push(shape[i]);
    }
    if (shape[perm[i]] !== 1) {
      newPerm.push(perm[i]);
    }
  }
  for (let i = 0; i < newPerm.length; ++i) {
    if (newPerm[i] === i) {
      return [newShape, newPerm];
    }
  }
  return [newShape, newPerm];
}

export const transposeConfig: KernelConfig = {
  kernelName: Transpose,
  backendName: 'wasm',
  kernelFunc: transpose as {} as KernelFunc,
  setupFunc: setup,
};
```

```javascript
import {All, AllAttrs, AllInputs, backend_util, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';
import {backend_util, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {permuteAxesAndTranspose} from './kernel_utils';

let wasmAll: (xId: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmAll = backend.wasm.cwrap(All, null /*void*/, ['number, number, number']);
}

function all(args: {backend: BackendWasm, inputs: AllInputs, attrs: AllAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} = permuteAxesAndTranspose(x, axis, backend);

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    input = transposed;
    inputId = transposedId;
  }

  const inputRank = input.shape.length;
  backend_util.assertAxesAreInnerMostDims('all', axes, inputRank);
  const [outShape, reduceShape] = backend_util.computeOutAndReduceShapes(input.shape, axes);
  const reduceSize = util.sizeFromShape(reduceShape);
  let out = backend.makeOutput(outShape, x.dtype);
  if (util.sizeFromShape(input.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmAll(inputId, reduceSize, outId);
  }
  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }
  if (keepDims) {
    // reshape
    const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
    out.shape = newShape;
  }
  return out;
}

export const allConfig: KernelConfig = {
  kernelName: All,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: all as {} as KernelFunc
};
```

```javascript
import {Any, AnyAttrs, AnyInputs, backend_util, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';
import {backend_util, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {permuteAxesAndTranspose} from './kernel_utils';

let wasmAny: (xId: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmAny = backend.wasm.cwrap(Any, null /*void*/, ['number, number, number']);
}

function any(args: {backend: BackendWasm, inputs: AnyInputs, attrs: AnyAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
```
const {x} = inputs;

const xId = backend.dataIdMap.get(x.dataId).id;

let inputId = xId;

let input = x;

const {transposed, axes, originalAxes, inputWasTransposed} =
permuteAxesAndTranspose(x, axis, backend);

if (inputWasTransposed) {
  const transposedId = backend.dataIdMap.get(transposed.dataId).id;

  input = transposed;

  inputId = transposedId;
}

const inputRank = input.shape.length;

backend_util.assertAxesAreInnerMostDims('any', axes, inputRank);

const [outShape, reduceShape] =
backend_util.computeOutAndReduceShapes(input.shape, axes);

const reduceSize = util.sizeFromShape(reduceShape);

out = backend.makeOutput(outShape, x.dtype);

if (util.sizeFromShape(input.shape) !== 0) {
  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmAny(inputId, reduceSize, outId);
}

if (inputWasTransposed) {
  // dispose of the transposed tensor.
  backend.disposeData(transposed.dataId);
}

if (keepDims) {
  // reshape
  const newShape =
  backend_util.expandShapeToKeepDim(out.shape, originalAxes);

  out.shape = newShape;

  return out;
}

export const anyConfig: KernelConfig = {
  kernelName: Any,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: any as {} as KernelFunc
};

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 *
=============================================================================

import {ArgMax, ArgMaxAttrs, ArgMaxInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

let wasmFunc: (
    xId: number, dtype: number, outerSize: number, innerSize: number,
    outId: number) => void;

function setup(backend: BackendWasm) {
  wasmFunc = backend.wasm.cwrap(ArgMax, null /* void */, 
[ 'number',  // x_id
'number',  // dtype
'number',  // outer_size
'number',  // inner_size
'number'   // out_id
  ]);
}

function argmax(
    args: {inputs: ArgMaxInputs, backend: BackendWasm, attrs: ArgMaxAttrs}) {
  const {backend, inputs, attrs} = args;

  const {axis} = attrs as {} as ArgMaxAttrs;

  const {x} = inputs as {} as ArgMaxInputs;

  const xId = backend.dataIdMap.get(x.dataId).id;

  let inputId = xId;

  let input = x;

  const {transposed, axes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;

    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose of this
      // once we are done.
      input = transposed;

      inputId = transposedId;
    }
  }

  const outShape = input.shape.slice(0, -1);

  const out = backend.makeOutput(outShape, 'int32');

  const outId = backend.dataIdMap.get(out.dataId).id;

  const outerSize = util.sizeFromShape(out.shape);

  const innerSize = input.shape[axes[0]];

  wasmFunc(inputId, 
    CppDType[input.dtype], outerSize, innerSize, outId);

  if (inputWasTransposed) {
    // dispose of the transposed tensor
    backend.disposeData(transposed.dataId);

    input = transposed;

    inputId = transposedId;

    const outShape = input.shape.slice(0, -1);

    const out = backend.makeOutput(outShape, 'int32');

    const outId = backend.dataIdMap.get(out.dataId).id;

    const outerSize = util.sizeFromShape(out.shape);

    const innerSize = input.shape[axes[0]];

    wasmFunc(inputId, 
    CppDType[input.dtype], outerSize, innerSize, outId);

    if (inputWasTransposed) {
      // dispose of the transposed tensor
      backend.disposeData(transposed.dataId);
    }

    input = transposed;

    inputId = transposedId;
  }

  if (transposedId !== xId) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  return out;
}

export const argMaxConfig: KernelConfig = {
  kernelName: ArgMax,
  backendName: 'wasm',
  kernelFunc: argmax as {} as KernelFunc,
  setupFunc: setup,
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 *
=============================================================================

import {AvgPool, AvgPoolAttrs, AvgPoolInputs, backend_util, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmAvgPool: (
    xId:
number, batchSize: number, inputHeight: number, inputWidth: number
    filterHeight: number, filterWidth: number, padTop: number, padRight: number, padBottom: number, padLeft: number, strideHeight: number, strideWidth: number, channels: number, outId: number)

function setup(backend: BackendWasm) {
    wasmAvgPool = backend.wasm.cwrap(AvgPool, null /* void */, [
        'number',  // xId
        'number',  // batchSize
        'number',  // inputHeight
        'number',  // inputWidth
        'number',  // filterHeight
        'number',  // filterWidth
        'number',  // padTop
        'number',  // padRight
        'number',  // padBottom
        'number',  // padLeft
        'number',  // strideHeight
        'number',  // strideWidth
        'number',  // channels
        'number'   // outId
    ]);\n}

function avgPool(
    args: {inputs: AvgPoolInputs, backend: BackendWasm, attrs: AvgPoolAttrs}) {
    const {inputs, attrs, backend} = args;
    const x = inputs.x as Tensor4D;
    const xId = backend.dataIdMap.get(x.dataId).id;

    const filterSize = attrs.filterSize;
    const strides = attrs.stides;
    const dilations = attrs.dilations;
    const pad = attrs.pad;
    const dimRoundingMode = attrs.dimRoundingMode;
    const filterHeight = convInfo.filterHeight;
    const filterWidth = convInfo.filterWidth;
    const padTop = convInfo.padTop;
    const padRight = convInfo.padRight;
    const padBottom = convInfo.padBottom;
    const padLeft = convInfo.padLeft;
    const strideHeight = convInfo.strideHeight;
    const strideWidth = convInfo.strideWidth;
    const channels = convInfo.inChannels;

    if (convInfo.dataFormat !== 'channelsLast') {
        throw new Error(`wasm backend does not support dataFormat: '${convInfo.dataFormat}'. Please use 'channelsLast'.`);
    }

    if (convInfo.dilationWidth !== 1 || convInfo.dilationHeight !== 1) {
        throw new Error(`wasm backend only supports average pooling with dilation = [1, 1], got [${convInfo.dilationHeight}, ${convInfo.dilationWidth}].`);
    }

    const out = backend.makeOutput(convInfo.outShape, 'float32');
    const outId = backend.dataIdMap.get(out.dataId).id;

    wasmAvgPool(xId, x.shape[0], x.shape[1], x.shape[2],
        filterHeight, filterWidth, padTop, padRight, padBottom, padLeft, strideHeight, strideWidth, channels,
        outId);
    return out;
}

export const avgPoolConfig: KernelConfig = {
    kernelName: AvgPool,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: avgPool as {} as KernelFunc
};

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*/

import {KernelConfig, KernelFunc, Reshape, ReshapeAttrs, ReshapeInputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function reshape(
    args: {inputs: ReshapeInputs, attrs: ReshapeAttrs, backend: BackendWasm}) {
    const {inputs, attrs} = args;
    const {x} = inputs;

    const xSize = util.sizeFromShape(x.shape);
    const $shape = util.inferFromImplicitShape(attrs.shape, xSize);

    util.assert(
        xSize === util.sizeFromShape($shape),
        () =>
            `new shape: ${$shape}, old shape: ${x.shape}. New shape and old shape must have the same number of elements.`);

    // Backend needs to track refCount for the dataId for reshape op
    args.backend.incRef(x.dataId);
    return {dataId: x.dataId, shape: $shape, dtype: x.dtype}
}

export const reshapeConfig: KernelConfig = {
    kernelName: Reshape,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: reshape as {} as KernelFunc
};

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*/

import {BatchMatMul, BatchMatMulAttrs, BatchMatMulInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function batchMatMul(
    args: {inputs: BatchMatMulInputs, backend: BackendWasm, attrs: BatchMatMulAttrs}) {
    const {inputs, backend, attrs} = args;
    const [x, y] = inputs;
    const {numOutput']

// Import the TensorFlow.js core library
import {Tensor} from '@tensorflow/tfjs-core';

// Create two input tensors
const x = tf.tensor2d([1, 2, 3, 4], [2, 2]);
const y = tf.tensor2d([5, 6, 7, 8], [2, 2]);

// Perform batch matrix multiplication
const z = tf.batchMatMul(x, y);

console.log(z.dataSync()); // Output: [[19, 22], [43, 50]]
let wasmBatchMatMul: (
    aId: number, aShape: Uint8Array, aShapeSize: number, bId: number,
    bShape: Uint8Array, bShapeSize: number, transposeA: boolean, transposeB: boolean, outId: number) =>
    void;

function setup(backend: BackendWasm) {
    wasmBatchMatMul = backend.wasm.cwrap(BatchMatMul, null /* void */ ,
        ['number', // a_id
         'array', // a_shape
         'number', // a_shape.length
         'number', // b_id
         'array', // b_shape
         'number', // b_shape.length
         'number', // transpose_a
         'number', // transpose_b
         'number'] // out_id
        );
}

function batchMatMul(args: {
    inputs: BatchMatMulInputs,
    backend: BackendWasm
}) {
    const {inputs, backend} = args;
    const a = inputs.a;
    const b = inputs.b;
    const {transposeA, transposeB} = inputs.attrs;
    util.assert(a.dtype === 'float32' && b.dtype === 'float32', () => `Error in matMul: the input batch dimensions must either be the same or at least one input batch dimension must be 1. Got input batch dimensions of (${a.shape}) and (${b.shape}).`);
    const a3dShape = transposeA ? [a.shape[0], a.shape[1], a.shape[2]] : [a.shape[0], a.shape[2], a.shape[1]];
    const b3dShape = transposeB ? [b.shape[0], b.shape[1], b.shape[2]] : [b.shape[0], b.shape[2], b.shape[1]];
    const a3dId = backend.dataIdMap.get(a3d.dataId).id;
    const b3dId = backend.dataIdMap.get(b3d.dataId).id;
    const outShapeOuterDims = a3d.shape.slice(0, -2).concat([a3d.shape[2], b3d.shape[2]]);
    const outShape = outShapeOuterDims.concat([a3d.shape[0], b3d.shape[0]]);
    const out = backend.makeOutput(outShape, 'float32');
    const outId = backend.dataIdMap.get(out.dataId).id;
    const aShapeBytes = new Uint8Array(new Int32Array(a3d.shape).buffer);
    const bShapeBytes = new Uint8Array(new Int32Array(b3d.shape).buffer);
    wasmBatchMatMul(a3dId, aShapeBytes, a3d.shape.length, b3dId, bShapeBytes, b3d.shape.length, transposeA, transposeB, outId);
    backend.disposeData(a3dId);
    backend.disposeData(b3dId);
    return out;
}

export const batchMatMulConfig: KernelConfig = {
    kernelName: BatchMatMul,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: batchMatMul as {} as KernelFunc
};

*/

export function sliceImpl(vals, begin, size, shape, dtype) {
    const isContinous = slice_util.isSliceContinous(shape, begin, size, dtype);
    const length = util.sizeFromShape(shape);
    const xStrides = util.computeStrides(shape);
    if (isContinous) {
        const flatOffset = slice_util.computeFlatOffset(begin,
xStrides);
  return vals.slice(flatOffset, flatOffset + length);
}

backend_util.fromStringArrayToUint8(outBuf.values);
return outBuf.values;
}
export function slice(args) {
    const { inputs, backend, attrs } = args;
    const { x } = inputs;
    const { begin, size } = attrs;
    assertNotComplex(x, 'slice');
    const [$begin, $size] = slice_util.parseSliceParams(x, begin, size);
    slice_util.assertParamsValid(x, $begin, $size);
    const vals = backend.data.get(x.dataId).values;
    const outVals = sliceImpl(vals, $begin, $size, x.shape, x.dtype);
    return backend.makeTensorInfo($size, x.dtype, outVals);
}
export const sliceConfig = {
    kernelName: Slice,
    backendName: 'cpu',
    kernelFunc: slice
};
//
import {backend_util, KernelConfig, KernelFunc, Slice, slice_util, SliceInputs, TypedArray, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {sliceImplCPU} from '../kernel_utils/shared';

export function slice(
    args: {inputs: SliceInputs, attrs: SliceAttrs, backend: BackendWasm}) {
  const {inputs: {x}, attrs: {begin, size}, backend} = args;

  const [begin_, size_] = slice_util.parseSliceParams(x, begin, size);

  const isContinous = slice_util.isSliceContinous(x.shape, begin_, size_);
  const xVals = backend.readSync(x.dataId);
  const out = backend.makeOutput(size_, x.dtype);
  const xStrides = util.computeStrides(x.shape);
  const outData = backend.dataIdMap.get(out.dataId);

  if (isContinous) {
    const flatOffset = slice_util.computeFlatOffset(begin_, xStrides);

    if (x.dtype === 'string') {
      outData.stringBytes = (xVals as Uint8Array[]) .slice(flatOffset, flatOffset + util.sizeFromShape(size_));
    } else {
      const outVals = backend.typedArrayFromHeap(out);
      outVals.set((xVals as TypedArray) .subarray(flatOffset, flatOffset + util.sizeFromShape(size_)));
    }

    return out;
  }

  if (x.dtype === 'string') {
    const res = sliceImplCPU(xVals, begin_, size_, x.shape, x.dtype);
    outData.stringBytes = res as Uint8Array[];
    return out;
  }

  const outVals = backend.typedArrayFromHeap(out);
  const rank = x.shape.length;
  if (rank === 2) {
    slice2d(xVals as TypedArray, xStrides[0], outVals, begin_ as [number, number], size_ as [number, number]);
  } else if (rank === 3) {
    slice3d(xVals as TypedArray, xStrides[0], xStrides[1], outVals, begin_ as [number, number, number], size_ as [number, number, number]);
  } else if (rank === 4) {
    slice4d(xVals as TypedArray, xStrides[0], xStrides[1], xStrides[2], outVals, begin_ as [number, number, number, number], size_ as [number, number, number, number]);
  }

  return out;
}

function slice2d(
    xVals: backend_util.TypedArray, xStride: number,
    outVals: backend_util.TypedArray, begin: [number, number],
    size: [number, number]): void {
  let outOffset = 0;
  const beginI = begin[0];
  const beginJ = begin[1];
  const endI = beginI + size[0];
  const endJ = beginJ + size[1];

  for (let i = beginI; i < endI; i++) {
    const xOffset = i * xStride[0] + beginJ;
    outVals.set(xVals.subarray(xOffset, xOffset + size[1]), outOffset);
    outOffset += size[1];
  }
}

function slice3d(
    xVals: backend_util.TypedArray, xStrides: [number, number],
    outVals: backend_util.TypedArray, begin: [number, number, number],
    size: [number, number, number]): void {
  let outOffset = 0;
  const beginI = begin[0];
  const beginJ = begin[1];
  const beginK = begin[2];
  const endI = beginI + size[0];
  const endJ = beginJ + size[1];
  const endK = beginK + size[2];

  for (let i = beginI; i < endI; i++) {
    for (let j = beginJ; j < endJ; j++) {
      const xOffset = i * xStride[0] + j * xStride[1] + beginK;
      outVals.set(xVals.subarray(xOffset, xOffset + size[2]), outOffset);
      outOffset += size[2];
    }
  }
}

function slice4d(
    xVals: backend_util.TypedArray, xStrides: [number, number, number],
    outVals: backend_util.TypedArray, begin: [number, number, number, number],
    size: [number, number, number, number]): void {
  let outOffset = 0;
  const beginI = begin[0];
  const beginJ = begin[1];
  const beginK = begin[2];
  const beginL = begin[3];
  const endI = beginI + size[0];
  const endJ = beginJ + size[1];
  const endK = beginK + size[2];
  const endL = beginL + size[3];

  for (let i = beginI; i < endI; i++) {
    for (let j = beginJ; j < endJ; j++) {
      for (let k = beginK; k < endK; k++) {
        const xOffset = i * xStride[0] + j * xStride[1] + k * xStride[2] + l * xStride[3];
      }
    }
  }
}
```javascript
beginL;\n  outVals.set(xVals.subarray(xOffset, xOffset + size[3]), outOffset);\n  outOffset += size[3];\n\n  import {backend_util, BatchToSpaceND, BatchToSpaceNDAttrs, BatchToSpaceNDInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';\n  \n  backend.disposeData();\n  \n  castConfig = {\n    kernelName: 'Slice',\n    backendName: 'wasm',\n    kernelFunc: slice as {} as KernelFunc;\n  };

  return result;\n\n  const castConfig = {\n    kernelName: 'Slice',\n    backendName: 'wasm',\n    kernelFunc: slice as {} as KernelFunc;\n  };

  return result;\n\n  const castConfig = {\n    kernelName: 'Slice',\n    backendName: 'wasm',\n    kernelFunc: slice as {} as KernelFunc;\n  };

  return result;\n\n  const castConfig = {\n    kernelName: 'Slice',\n    backendName: 'wasm',\n    kernelFunc: slice as {} as KernelFunc;\n  };

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  return result;\n\n  const castConfig = {\n    kernelName: 'Slice',\n    backendName: 'wasm',\n    kernelFunc: slice as {} as KernelFunc;\n  };

  return result;\n\n  const castConfig = {\n    kernelName: 'Slice',\n    backendName: 'wasm',\n    kernelFunc: slice as {} as KernelFunc;\n  };

  return result;\n\n  const castConfig = {\n    kernelName: 'Slice',\n    backendName: 'wasm',\n    kernelFunc: slice as {} as KernelFunc;\n  };

  return result;\n\n  const castConfig = {\n    kernelName: 'Slice',\n    backendName: 'wasm',\n    kernelFunc: slice as {} as KernelFunc;\n  };

  return result;\n\n  const castConfig = {\n    kernelName: 'Slice',\n    backendName: 'wasm',\n    kernelFunc: slice as {} as KernelFunc;\n  };

  return result;\n```

---

Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6  2286
```javascript
import {KernelConfig, Ceil} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const ceilConfig: KernelConfig = createUnaryKernelConfig(Ceil);

import {ClipByValue, ClipByValueAttrs, ClipByValueInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmClip: (xId: number, min: number, max: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmClip = backend.wasm.cwrap(ClipByValue, null /* void */, [
    'number',  // x_id
    'number',  // min
    'number',  // max
    'number'   // out_id
  ]);
}

function clip(args: {
  inputs: ClipByValueInputs,
  backend: BackendWasm,
  attrs: ClipByValueAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {clipValueMin, clipValueMax} = attrs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const out = backend.makeOutput(x.shape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmClip(xId, clipValueMin, clipValueMax, outId);
  return out;
}

export const clipByValueConfig: KernelConfig = {
  kernelName: ClipByValue,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: clip as {} as KernelFunc
};

import {backend_util, Concat, ConcatAttrs, ConcatInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {concatImplCPU} from '../kernel_utils/shared';
import {identity} from './Identity';
import {reshape} from './Reshape';

export function concat(
    args: {inputs: ConcatInputs, backend: BackendWasm, attrs: ConcatAttrs}) {
  const {inputs, backend} = args;

  const axis = util.parseAxisParam(args.attrs.axis, inputs[0].shape)[0];

  let outShape = backend_util.computeOutShape(inputs.map(t => t.shape), axis);

  // Keep only non-empty tensors (ignore tensors with 0 in their shape).
  const $inputs = inputs.filter(t => util.sizeFromShape(t.shape) > 0);
  if ($inputs.length === 1) {
    return identity({inputs: {x: $inputs[0]}, backend});
  }

  const out = backend.makeOutput(outShape, inputs[0].dtype);

  if (util.sizeFromShape(outShape) === 0) {
    return out;
  }

  const shapes = $inputs.map(t => t.shape);
  backend_util.assertParamsConsistent(shapes, axis);

  if ($inputs[0].dtype === 'string') {
    // Any concat of n-dimensional tensors across any axis can be reduced to
    // a concatenation of two-dimensional tensors across the axis 1 by first
    // partitioning the axes of the original tensors into those less than
    // the axis to be concatenated and the rest. Then reshape the tensors
    // into a two-dimensional tensor by collapsing these two sets of axes
    // and concatenating the resulting matrices across the axis 1, finally
    // the result to have the proper shape.
    const inputs2D = $inputs.map(t => {
      const innerSize = util.sizeFromShape(t.shape.slice(axis));
      const shape = [-1, innerSize];
      return reshape({inputs: [t], backend, attrs: {shape}});
    });
    const inputsValShapes = inputs2D.map(t => {
      const vals: backend.readSync(t.dataId, shape: t.shape); return vals;
    });
    const simplyConcat = inputs2D.map(t => t.shape, 1 /* axis */);
    const outShape = 
    backend_util.computeOutShape(inputs2D.map(t => t.shape), 1 /* axis */);
    const out = Concat(inputsValShapes, outShape, simplyConcat);
    return out;
  }
```
inputs[0].dtype as string[]);

  const finalOutShape = backend_util.computeOutShape($inputs.map(t => t.shape), axis);

  out.shape = finalOutShape;

  const outData = backend.dataIdMap.get(out.dataId);

  outData.stringBytes = backend_util.fromStringArrayToUint8(outVals);

  inputs2D.forEach(t => backend.disposeData(t.dataId));

  return out;

  const batchDim = util.sizeFromShape($inputs[0].shape.slice(0, axis));

  let sumInnerDims = 0;

  const innerDims = $inputs.map(input => {
    const innerDim = util.sizeFromShape(input.shape.slice(axis));
    sumInnerDims += innerDim;
    return innerDim;
  });

  const inVals = $inputs.map(input => backend.typedArrayFromHeap(input));

  const outVals = backend.typedArrayFromHeap(out);

  for (let b = 0; b < batchDim; b++) {
    let outOffset = b * sumInnerDims;
    for (let i = 0; i < inVals.length; i++) {
      const innerDim = innerDims[i];
      const inOffset = b * innerDim;
      const vals = inVals[i].subarray(inOffset, inOffset + innerDim);
      outVals.set(vals, outOffset);
      outOffset += innerDim;
    }
  }

  return out;
}

export const concatConfig: KernelConfig = {
  kernelName: Concat,
  backendName: 'wasm',
  kernelFunc: concat as {} as KernelFunc,
};

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 */

import { backend_util, util } from '@tensorflow/tfjs-core';

export function concatImpl(inputs, outShape, dtype, simplyConcat) {
  const outVals = util.getArrayFromDType(dtype, util.sizeFromShape(outShape));

  if (simplyConcat && dtype !== 'string') {
    // Use built-in TypedArray.set() method for speed.
    let offset = 0;
    inputs.forEach(input => {
      const size = util.sizeFromShape(input.shape);
      outVals.set(input.vals, offset);
      offset += size;
    });
  }
  else {
    let colOffset = 0;
    inputs.forEach(input => {
      const decodedData = dtype === 'string' ? backend_util.fromUint8ToStringArray(input.vals) : input.vals;
      let tIdx = 0;
      for (let row = 0; row < input.shape[0]; ++row) {
        const resIdx = row * outShape[1] + colOffset;
        for (let col = 0; col < input.shape[1]; ++col) {
          outVals[resIdx + col] = decodedData[tIdx++];
        }
        colOffset += input.shape[1];
      }
    });
  }

  return outVals;
}
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```
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 *
=============================================================================
*/

import {backend_util, Conv2D, Conv2DAttrs, Conv2DInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmConv2d: (xId:
```
number, batchSize: number, inputHeight: number, inputWidth: number,  
filterHeight: number,  
filterWidth: number, padTop: number, padRight: number, padBottom: number, padLeft: number, isSamePad: number,  
dilationHeight: number, dilationWidth: number, strideHeight: number,  
strideWidth: number,  
inputChannels: number, outputChannels: number,  
outId: number) => void;

function setup(backend:
  BackendWasm) {
  wasmConv2d = backend.wasm.cwrap(Conv2D, null /* void */, [  
    'number',  // xId
    'number',  // batchSize
    'number',  // inputHeight
    'number',  // inputWidth
    'number',  // filterId
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // padTop
    'number',  // padRight
    'number',  // padBottom
    'number',  // padLeft
    'number',  // isSamePad
    'number',  // dilationHeight
    'number',  // dilationWidth
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // inputChannels
    'number',  // outputChannels
    'number',  // outId
  ]);
}

function conv2d(
    args: {inputs: Conv2DInputs, backend:
      BackendWasm, attrs: Conv2DAttrs}) {
  const {inputs, attrs, backend} = args;
  const {x, filter} = inputs;

  const xId = backend.dataIdMap.get(x.dataId).id;
  const filterId = backend.dataIdMap.get(filter.dataId).id;

  const {strides, dilations, pad, dimRoundingMode, dataFormat} = attrs;
  const $dataFormat = backend_util.convertConv2DDataFormat(dataFormat);
  const convInfo = backend_util.computeConv2DInfo(
    (x as Tensor4D).shape, (filter as Tensor4D).shape, strides, dilations, 
    pad, dimRoundingMode, false, 
    $dataFormat);
  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const padTop = convInfo.padInfo.top;
  const padRight = convInfo.padInfo.right;
  const padBottom = convInfo.padInfo.bottom;
  const padLeft = convInfo.padInfo.left;
  const dilationHeight = convInfo.dilationHeight;
  const dilationWidth = convInfo.dilationWidth;
  const strideHeight = convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;
  const inputChannels = convInfo.inChannels;
  const outputChannels = convInfo.outChannels;
  const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;
  if (convInfo.dataFormat !== 'channelsLast') {
    throw new Error`
      wasm backend Conv2D does not support dataFormat: ` + $dataFormat + `. Please use 'channelsLast'.`;
  }

  const out = backend.makeOutput(convInfo.outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmConv2d(xId, x.shape[0], x.shape[1], x.shape[2], filterId, 
    filterHeight, padTop, padRight, padBottom, padLeft, isSamePad, 
    dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, 
    outputChannels, outId);
  return out;
}

export const conv2DConfig: KernelConfig = {
  kernelName: Conv2D,  
  backendName: 'wasm',  
  setupFunc: setup, 
  kernelFunc: conv2d as {} as KernelFunc
};
strideWidth
    'number',  // topPad
    'number',  // leftPad
    'number',  // fltS0
    'number',  // fltS1
    'number',  // fltS2
    'number',  // xBatchStride
    'number',  // xRowStride
    'number',  // xColStride
    'number',  // yBatchStride
    'number',  // yRowStride
    'number',  // yColStride
    'number',  // outId
  ];
}

function conv2DBackpropInput(args: {
  backend:
  BackendWasm,
  inputs: Conv2DBackpropInputInputs,
  attrs: Conv2DBackpropInputAttrs
}): TensorInfo {

  const {backend, inputs, attrs} = args;
  const {dy, filter} = inputs;
  const {strides, pad, dataFormat,
    dimRoundingMode, inputShape} = attrs;

  const dilations = 1;

  const $dataFormat = backend_util.convertConv2DDataFormat(dataFormat);
  const convInfo = backend_util.computeConv2DInfo(inputShape, filter.shape as [number, number, number, number], strides,
    dilations, pad, dimRoundingMode, false /* depthwise */!, $dataFormat);
  const {batchSize, filterHeight, filterWidth, inChannels, inHeight, inWidth, outChannels, outHeight, outWidth, strideHeight, strideWidth} = convInfo;
  const topPad = filterHeight - 1 - convInfo.padInfo.top;
  const leftPad = filterWidth - 1 - convInfo.padInfo.left;

  const isChannelsLast = convInfo.dataFormat === 'channelsLast';
  const dxStrides = util.computeStrides(convInfo.inShape);
  const dyStrides = util.computeStrides(dy.shape);
  const [fltS0, fltS1, fltS2] = util.computeStrides(filter.shape);
  const xBatchStride = dxStrides[0];
  const xRowStride = isChannelsLast ? dxStrides[1] : dxStrides[2];
  const xColStride = isChannelsLast ? dxStrides[2] : 1;
  const xChannelStride = isChannelsLast ? 1 : dxStrides[1];
  const dyBatchStride = dyStrides[0];
  const yRowStride = isChannelsLast ? dyStrides[1] : dyStrides[2];
  const yColStride = isChannelsLast ? dyStrides[2] : 1;
  const yChannelStride = isChannelsLast ? 1 : dyStrides[1];

  const outId = backend.dataIdMap.get(out.dataId).id;
  const dyId = backend.dataIdMap.get(dy.dataId).id;
  const filterId = backend.dataIdMap.get(filter.dataId).id;

  wasmConv2DBackpropInput(
    dyId, filterId, batchSize, filterHeight, filterWidth, inHeight, inWidth, 
    inChannels, outHeight, outWidth, outChannels, strideHeight, strideWidth, 
    topPad, leftPad, fltS0, fltS1, fltS2, xBatchStride, xRowStride, 
    xColStride, xChannelStride, yBatchStride, yRowStride, yColStride, 
    yChannelStride, outId)
  return out;
}

export const conv2DBackpropInputConfig: KernelConfig = {
  kernelName: Conv2DBackpropInput,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: conv2DBackpropInput as {} as KernelFunc
};

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 */

import {Cos, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const cosConfig: KernelConfig = createUnaryKernelConfig(Cos);

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 */

import {Cosh, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const coshConfig: KernelConfig = createUnaryKernelConfig(Cosh);
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import {CropAndResize, CropAndResizeAttrs, CropAndResizeInputs, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {cast} from './Cast';

// Must match enum in CropAndResize.cc
enum InterpolationMethod {
  bilinear = 0,
  nearest = 1
}

let wasmCropAndResize: (imagesId: number, boxesId: number, boxIndId: number, numBoxes: number, imagesShape: Uint8Array, cropHeight: number, cropWidth: number, method: number, extrapolationValue: number, outId: number) => void = void;

function setup(backend: BackendWasm): void {
  wasmCropAndResize = backend.wasm.cwrap(CropAndResize, null /* void */, ['number', 'number', 'number', 'number', 'array', 'number', 'number', 'number', 'number', 'number']);
}

function cropAndResize(args: {
  backend: BackendWasm,
  inputs: CropAndResizeInputs,
  attrs: CropAndResizeAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {method, extrapolationValue, cropSize} = attrs;
  const {image, boxes, boxInd} = inputs;

  const numBoxes = boxes.shape[0];
  const [cropHeight, cropWidth] = cropSize as [number, number];
  const outShape = [numBoxes, cropHeight, cropWidth, image.shape[3]];

  let imagesData = backend.dataIdMap.get(image.dataId);
  let castedData;
  if (image.dtype !== 'float32') {
    castedData = cast({backend, inputs: {x: image}, attrs: {dtype: 'float32'}});
    imagesData = backend.dataIdMap.get(castedData.dataId);
  }

  const imagesId = imagesData.id;
  const boxesId = backend.dataIdMap.get(boxes.dataId).id;
  const boxIndId = backend.dataIdMap.get(boxInd.dataId).id;

  const out = backend.makeOutput(outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;

  const imagesShapeBytes = new Uint8Array(new Int32Array(image.shape).buffer);

  wasmCropAndResize(imagesId, boxesId, boxIndId, numBoxes, imagesShapeBytes, cropHeight, cropWidth, InterpolationMethod[method as {} as keyof typeof InterpolationMethod], extrapolationValue, outId);

  if (castedData != null) {
    backend.disposeData(castedData.dataId);
  }

  return out;
}

export const cropAndResizeConfig: KernelConfig = {
  kernelName: CropAndResize,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: cropAndResize as {} as KernelFunc
};
const permutedAxis = backend_util.getInnerMostAxes(1, xRank)[0];

backend_util.assertAxesAreInnerMostDims('cumsum', [permutedAxis], xRank);

const permutedOut = backend.makeOutput(permutedX.shape, permutedX.dtype);

const finalDim = permutedX.shape[permutedAxis];

const permutedOutId = backend.dataIdMap.get(permutedOut.dataId);

wasmCumsum(permutedOutId, exclusive ? 1 : 0, reverse ? 1 : 0,
finalDim,
permutedOutId, CppDType[x.dtype]);

// transpose data back if permuted

let out = permutedOut;

if (permutation !== null) {
    const undoPermutation = backend_util.getUndoAxesPermutation(permutation);

    out = transpose(
        {inputs: {x: permutedOut}, attrs: {perm: undoPermutation}, backend});

    backend.disposeData(permutedOut.dataId);
}

return out;

export const cumsumConfig: KernelConfig =
{
    kernelName: Cumsum,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: cumsum as {} as KernelFunc
};

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 */

import {DepthToSpace, DepthToSpaceAttrs, DepthToSpaceInputs, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmDepthToSpace:
(
    xId: number, blockSize: number, channelsLast: number, xStrides: Uint8Array,
    xStridesLength: number,
    outputShape: Uint8Array, outputStrides: Uint8Array,
    outSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
    wasmDepthToSpace = backend.wasm.cwrap(DepthToSpace, null /*void*/, 
        ['number',  // xId
         'number',  // blockSize
         'number',  // channelsLast
         'array',   // xStrides
         'number',  // xStridesLength
         'array',   // outputShape
         'array',   // outputStrides
         'number',  // outSize
         'number',  // outId
    ]);
}

export function depthToSpace(args: {
    backend: BackendWasm,
    inputs: DepthToSpaceInputs,
    attrs: DepthToSpaceAttrs
}): TensorInfo {
    const {backend, inputs, attrs} = args;

    const {x} = inputs;
    const {blockSize, dataFormat} = attrs;

    const batchSize = x.shape[0];
    const inputHeight = (dataFormat === 'NHWC') ? x.shape[1] : x.shape[2];
    const inputWidth = (dataFormat === 'NHWC') ? x.shape[2] : x.shape[3];
    const outputHeight = inputHeight * blockSize;
    const outputWidth = inputWidth * blockSize;
    const outputDepth = inputDepth / blockSize;
    const outputShape = (dataFormat === 'NHWC') ? [batchSize, outputHeight, outputWidth, outputDepth] : [batchSize, outputHeight, outputWidth, outputDepth];

    const out = backend.makeOutput(outputShape, 'float32');

    const xData = backend.dataIdMap.get(x.dataId);
    const xId = xData.id;

    const xStridesBytes = new Uint8Array(new Int32Array(x.shape).buffer);
    const xStridesBytes = new Uint8Array(new Int32Array(x.shape).buffer);
    const outId = backend.dataIdMap.get(outId.dataId);
    const channelsLast = dataFormat === 'NHWC' ? 1 : 0;
    wasmDepthToSpace(xId, blockSize, channelsLast, xStridesBytes, x.shape.length - 1, outputShapeBytes, outId);

    return out;
}

export const depthToSpaceConfig: KernelConfig =
{
    kernelName: DepthToSpace,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: depthToSpace as {} as KernelFunc
};

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=============================================================================

import {backend_util, DepthwiseConv2dNative, DepthwiseConv2dNativeAttrs,
DepthwiseConv2dNativeInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {backend_wasm} from '../backend_wasm';

let wasmDepthwiseConv2d: (
    xId: number, batchSize: number,
    inputHeight: number, inputWidth: number,
    filterId: number, filterHeight: number, filterWidth: number, padTop:
    number, padRight: number, padBottom: number, padLeft: number, isSamePad: number,
    dilationHeight: number, dilationWidth: number, strideHeight: number,
    strideWidth: number, inputChannels: number, outputChannels: number,
    outId: number) => void;

function setup(backend: BackendWasm) {
  wasmDepthwiseConv2d = backend.wasm.cwrap(DepthwiseConv2dNative, null /* void */, [
    'number',  // xId
    'number',  // batchSize
    'number',  // inputHeight
    'number',  // inputWidth
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // padTop
    'number',  // padRight
    'number',  // padBottom
    'number',  // padLeft
    'number',  // isSamePad
    'number',  // dilationHeight
    'number',  // dilationWidth
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // inputChannels
    'number',  // outputChannels
    'number',  // outId
  ]);
}

function depthwiseConv2d(args: {
  inputs: DepthwiseConv2dNativeInputs,
  backend: BackendWasm,
  attrs: DepthwiseConv2dNativeAttrs
}) {
  const {inputs, attrs, backend} = args;

  const {x, filter} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const filterId = backend.dataIdMap.get(filter.dataId).id;

  const {strides, dilations, pad, dimRoundingMode} = attrs;

  const $dilations = dilations == null ? [1, 1] : dilations;

  const convInfo = backend_util.computeConv2DInfo(
    (x as Tensor4D).shape, (filter as Tensor4D).shape,
    strides, $dilations as number | [number, number], pad, dimRoundingMode, true /* depthwise */);

  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const padTop = convInfo.padInfo.top;
  const padRight = convInfo.padInfo.right;
  const padBottom = convInfo.padInfo.bottom;
  const padLeft = convInfo.padInfo.left;
  const dilationHeight = convInfo.dilationHeight;
  const dilationWidth = convInfo.dilationWidth;
  const strideHeight = convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;
  const inputChannels = convInfo.inChannels;
  const outputChannels = convInfo.outChannels;
  const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;

  if (convInfo.dataFormat !== 'channelsLast') {
    throw new Error('wasm backend DepthwiseConv2dNative does not support dataFormat: ' + `$({convInfo.dataFormat}). Please use 'channelsLast': ${convInfo.dataFormat}.`);
  }

  const out = backend.makeOutput(convInfo.outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  const outId = backend.wasm.invoke('depthwiseConv2d', [xId, x.shape[0], x.shape[1], x.shape[2], filterId, filterHeight], padTop, padRight, padBottom, padLeft, isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, outId);

  return out;
}

export const depthwiseConv2dNativeConfig: KernelConfig = {
  kernelName: DepthwiseConv2dNative,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: depthwiseConv2d as {}
};

function elu(args: {
  inputs: UnaryKernelInputs,
  backend: BackendWasm,
  attrs: UnaryKernelAttrs
}) {
  const {inputs, backend, attrs} = args;

  const xId = backend.dataIdMap.get(inputs.dataId).id;
  const x = inputs;

  const outId = backend.dataIdMap.get(backend.makeOutput(inputs.shape, 'float32').dataId).id;
  const outId = backend.wasm.invoke('elu', [xId, x.dataId], outId);

  return backend.dataIdMap.get(outId).id;
}

export const eluConfig: KernelConfig = createUnaryKernelConfig(Elu);

=============================================================================

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 */

// Additional imports

*@

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'number', 'number', 'number', 'number', 'number');

function fusedBatchNorm(args: {
  backend: BackendWasm,
  inputs: FusedBatchNormInputs,
  attrs: FusedBatchNormAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {varianceEpsilon} = attrs;
  const {x, mean, variance, offset, scale} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const meanId = backend.dataIdMap.get(mean.dataId).id;
  const varianceId = backend.dataIdMap.get(variance.dataId).id;
  const offsetId = offset != null ? backend.dataIdMap.get(offset.dataId).id : 0;
  const scaleId = scale != null ? backend.dataIdMap.get(scale.dataId).id : 0;

  const outId = backend.dataIdMap.get(out.dataId).id;

  const out = backend.makeOutput(x.shape, x.dtype);
  if (util.sizeFromShape(x.shape) === 0) {
    return out;
  }

  const xId = backend.dataIdMap.get(x.dataId).id;
  const meanId = backend.dataIdMap.get(mean.dataId).id;
  const varianceId = backend.dataIdMap.get(variance.dataId).id;
  const offsetId = offset != null ? backend.dataIdMap.get(offset.dataId).id : 0;
  const scaleId = scale != null ? backend.dataIdMap.get(scale.dataId).id : 0;

  const outId = backend.dataIdMap.get(out.dataId).id;

  const out = backend.makeOutput(x.shape, x.dtype);
  if (util.sizeFromShape(x.shape) === 0) {
    return out;
  }

  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmBatchNorm(xId, meanId, varianceId, offsetId, scaleId, varianceEpsilon, outId);
  return out;
}

export const fusedBatchNormConfig: KernelConfig = {
  kernelName: FusedBatchNorm,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: fusedBatchNorm as {} as KernelFunc
};

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 */

import {backend_util, FusedConv2D, FusedConv2DAttrs, FusedConv2DInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {FusableActivation} from './types';

let wasmFusedConv2d:
    (xId: number, batchSize: number, inputHeight: number, inputWidth: number, filterId: number, filterHeight: number, filterWidth: number, biasId: number, padTop: number, padRight: number, padBottom: number, padLeft: number, isSamePad: number, dilationHeight: number, dilationWidth: number, strideHeight: number, strideWidth: number, inputChannels: number, outputChannels: number, activation: number, leakyreluAlpha: number, preluActivationWeightsId: number, outId: number) =>
        void;

function setup(backend: BackendWasm) {
  wasmFusedConv2d = backend.wasm.cwrap(FusedConv2D, null /* void */, [
    'number',  // xId
    'number',  // batchSize
    'number',  // inputHeight
    'number',  // inputWidth
    'number',  // filterId
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // biasId
    'number',  // padTop
    'number',  // padRight
    'number',  // padBottom
    'number',  // padLeft
    'number',  // isSamePad
    'number',  // dilationHeight
    'number',  // dilationWidth
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // inputChannels
    'number',  // outputChannels
    'number',  // activation
    'number',  // leakyreluAlpha
    'number',  // preluActivationWeightsId
    'number',  // outId
  ]);
}

function fusedConv2d(args: {
  inputs: FusedConv2DInputs,
  backend: BackendWasm,
  attrs: FusedConv2DAttrs
}){
  const {inputs, backend, attrs} = args;
  const {x, filter, bias, preluActivationWeights} = inputs;
  const {strides, pad, dilations, dataFormat, dimRoundingMode, activation, leakyreluAlpha } = attrs;
  const convInfo = backend_util.computeConv2DInfo((x as Tensor4D).shape, (filter as Tensor4D).shape, (filter as Tensor4D).shape, (bias as number), pad, dimRoundingMode);
  const fusedActivation = FusableActivation[activation as {} as keyof typeof FusableActivation];
  if (fusedActivation == null) {
    throw new Error(`${activation} activation not yet supported for FusedConv2D`);
  }

  const xId = backend.dataIdMap.get(x.dataId).id;
  const filterId = backend.dataIdMap.get(filter.dataId).id;
  const outputChannels = convInfo.outChannels;
  let biasId = 0;
  if (bias != null) {
    const biasData = backend.dataIdMap.get(bias.dataId);
    if (biasData.shape.length !== 1) {
      throw new Error('FusedConv2D only supports rank-1 bias but got '+bias.rank);
    } else {
      if (biasData.shape[0] != 0) {
        if (biasData.shape[0] !== outputChannels) {
          throw new Error('FusedConv2D bias shape (${biasData.shape}) does not match the number of output channels (${outputChannels})');
        }
        biasId = biasData.id;
      }
    }
  }

  const filterHeight = convInfo.filterHeight;
  const
filterWidth = convInfo.filterWidth;
const padTop = convInfo.padInfo.top;
const padRight =
convInfo.padInfo.right;
const padBottom = convInfo.padInfo.bottom;
const padLeft = convInfo.padInfo.left;
const dilationHeight = convInfo.dilationHeight;
const dilationWidth = convInfo.dilationWidth;
const strideHeight = convInfo.strideHeight;
const strideWidth = convInfo.strideWidth;
const inputChannels =
convInfo.inChannels;
const isSamePad = convInfo.padInfo.type === 'SAME';
const batchSize = convInfo.batchSize;
const inHeight = convInfo.inHeight;
const inWidth = convInfo.inWidth;

if (dataFormat !== 'NHWC') { throw new Error(`wasm backend FusedConv2D does not support dataFormat: '${dataFormat}'. Please use 'NHWC'.`); }

const out = backend.makeOutput(convInfo.outShape, 'float32');
const outId = backend.dataIdMap.get(out.dataId);
const preluActivationWeightsId = preluActivationWeights == null ? 0 :
backend.dataIdMap.get(preluActivationWeights.dataId);

wasmFusedConv2d(xId, batchSize, inHeight, inWidth, filterId, filterHeight,
filterWidth, biasId, padTop, padRight, padBottom, padLeft, isSamePad,
dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels,
outputChannels, fusedActivation, preluActivationWeightsId, leakyreluAlpha || 0,
outId); return out;

export const fusedConv2DConfig:
KernelConfig = {
  kernelName: FusedConv2D,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc:
fusedConv2d as {} as KernelFunc
};

function setup(backend: BackendWasm) {
  wasmFusedDepthwiseConv2d =
  backend.wasm.cwrap(FusedDepthwiseConv2D, null /* void */, 
  ['number',  // xId
   'number',  // batchSize
   'number',  // filterId
   'number',  // filterHeight
   'number',  // filterWidth
   'number',  // biasId
   'number',  // padTop
   'number',  // padRight
   'number',  // padBottom
   'number',  // padLeft
   'number',  // dilationHeight
   'number',  // dilationWidth
   'number',  // strideHeight
   'number',  // strideWidth
   'number',  // inputChannels
   'number',  // outputChannels
   'number',  // activation
   'number',  // leakyreluAlpha
   'number',  // outId
  ]);}

function fusedDepthwiseConv2d(args: {
  inputs: FusedDepthwiseConv2DInputs,
  backend: BackendWasm,
  attrs: FusedDepthwiseConv2DAttrs
}) {
  const {inputs, attrs, backend} = args;
  const {x, filter, bias, preluActivationWeights} = inputs;
  const {strides, pad, dilations, dataFormat, dimRoundingMode, activation,
   leakyreluAlpha} = attrs;
  const convInfo =
  backend_util.computeConv2DInfo(x as Tensor4D).shape,
  (filter as Tensor4D).shape, strides, dilations,
  pad, dimRoundingMode, true /* depthwise */);}

  const fusionActivation = x =>
  fusedActivation[activation as {} as keyof typeof fusedActivation];

  if (fusedActivation == null) { throw new Error(`$({activation}
activation not yet supported for FusedDepthwiseConv2D`); }

  const xId = backend.dataIdMap.get(x.dataId);
  const filterId = backend.dataIdMap.get(filter.dataId);
outputChannels = convInfo.outChannels;

let biasId = 0;

if (bias != null) {
  const biasData = backend.dataIdMap.get(bias.dataId);

  if (biasData.shape.length !== 1) {
  throw new Error('FusedDepthwiseConv2D only supports rank-1 bias but got ' + rank ${biasData.shape.length}).
  }

  if (biasData.shape[0] !== outputChannels) {
  throw new Error('FusedDepthwiseConv2D bias shape ' + ${biasData.shape} does not match the number of output channels ' + ${outputChannels}).
  }

  biasId = biasData.id;
}

const filterHeight = convInfo.filterHeight;
const filterWidth = convInfo.filterWidth;

const batchSize = convInfo.batchSize;

if (dataFormat !== 'NHWC') {
  throw new Error('wasm backend FusedDepthwiseConv2D does not support dataFormat: ' + ${dataFormat}). Please use 'NHWC'.
}

const xId = backend.dataIdMap.get(out.dataId).id;

const preluActivationWeightsId = preluActivationWeights == null ? 0 : backend.dataIdMap.get(preluActivationWeights.dataId).id;

wasmFusedDepthwiseConv2d(xId, batchSize, inHeight, inWidth, filterId, filterHeight, filterWidth, biasId, padTop, padRight, padBottom, isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, fusedActivation, preluActivationWeightsId, leakyreluAlpha || 0, outId);

return out;

export const fusedDepthwiseConv2DConfig: KernelConfig = {
  kernelName: FusedDepthwiseConv2D,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: fusedDepthwiseConv2d
};

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 */

export const gatherNdConfig: KernelConfig = {
  kernelName: GatherNd,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: gatherNd
};

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 */
import {backend_util, GatherV2, GatherV2Attrs, GatherV2Inputs, KernelConfig, Tensor, TensorInfo, TypedArray, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {reshape} from './Reshape';
import {CppDType} from './types';

let wasmGather:
    (xId: number, dtype: CppDType, xStrides: Uint8Array, stridesSize: number, indicesId: number, batchSize: number, outStrides: Uint8Array, outId: number) => void;

function setup(backend: BackendWasm): void {
    wasmGather = backend.wasm.cwrap('Gather', null /*void*/, [
        'number',  // xId
        'number',  // dtype
        'array',   // xStrides
        'number',  // stridesSize
        'number',  // indicesId
        'number',  // batchSize
        'array',   // outStrides
        'number'   // outId
    ]);}

function gatherV2(
    args: {backend: BackendWasm, inputs: GatherV2Inputs, attrs: GatherV2Attrs}):
    TensorInfo {
    const {backend, inputs, attrs} = args;
    const {x, indices} = inputs;
    const {axis, batchDims} = attrs;

    // Throw error when any index is out of bound.
    const parsedAxis = util.parseAxisParam(axis, x.shape)[0];
    const indicesVals = backend.readSync(indices.dataId) as TypedArray;
    const axisDim = x.shape[parsedAxis];
    for (let i = 0; i < indicesVals.length; ++i) {
        const index = indicesVals[i];
        util.assert(
            index <= axisDim - 1 && index >= 0,
            () =>
                `GatherV2: the index value ${index} is not in [0, ${axisDim - 1}]`);
    }

    const shapeInfo = backend_util.segment_util.collectGatherOpShapeInfo(x as Tensor, indices as Tensor, parsedAxis, batchDims);
    const flattenX = reshape({
        inputs: {x},
        attrs: {
            shape: [shapeInfo.batchSize, shapeInfo.outerSize, shapeInfo.dimSize, shapeInfo.sliceSize]
        },
        backend
    });
    const flattenIndex = reshape({
        inputs: {x: indices},
        attrs:
            {shape: [shapeInfo.batchSize, indicesSize / shapeInfo.batchSize]},
        backend
    });
    const flattenOutputShape = [shapeInfo.batchSize, shapeInfo.outSize, indicesSize / shapeInfo.batchSize, shapeInfo.sliceSize];
    const out = backend.makeOutput(flattenOutputShape, x.dtype);
    if (util.sizeFromShape(x.shape) === 0) {
        return out;
    }
    const stridesSize = flattenX.shape.length - 1;
    const xData = backend.dataIdMap.get(flattenX.dataId);
    const xId = xData.id;
    const indicesData = backend.dataIdMap.get(flattenIndex.dataId);
    const indicesId = indicesData.id;
    const outId = backend.dataIdMap.get(out.dataId).id;
    const xStridesBytes = new Uint8Array(new Int32Array(util.computeStrides(flattenX.shape)).buffer);
    const outStridesBytes = new Uint8Array(new Int32Array(util.computeStrides(flattenOutputShape)).buffer);
    const wasmGather = backend.wasm.cwrap('Gather', null /*void*/, [xId, 'number', 'array', 'number', 'number', 'array', 'number', 'number', 'array', 'number', 'number']);
    wasmGather(xId, CppDType[x.dtype], xStridesBytes, stridesSize, indicesId, batchSize, outStridesBytes, outId);
    backend.disposeData(flattenX.dataId);
    backend.disposeData(flattenIndex.dataId);
    // reshape
    return out;
}

export const gatherV2Config: KernelConfig = {
    kernelName: GatherV2,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: gatherV2 as [] as KernelFunc

};
import {GreaterEqual, KernelConfig} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;
export const greaterEqualConfig: KernelConfig =
createBinaryKernelConfig(GreaterEqual, supportsFullBroadcast, 'bool');

import {Less, KernelConfig} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = false;
export const lessConfig: KernelConfig =
createBinaryKernelConfig(Less, supportsFullBroadcast, 'bool');

import {LessEqual, KernelConfig} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = false;
export const lessEqualConfig: KernelConfig =
createBinaryKernelConfig(LessEqual, supportsFullBroadcast, 'bool');
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=============================================================================

import {KernelConfig, Log} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const logConfig: KernelConfig = createUnaryKernelConfig(Log);

/*=============================================================================

import {KernelConfig, LogicalAnd} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

export const logicalAndConfig: KernelConfig =
createBinaryKernelConfig(LogicalAnd);

/*=============================================================================

import {backend_util, KernelConfig, KernelFunc, Max, MaxAttrs, MaxInputs, TensorInfo, util} from
'@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';

export const maxConfig: KernelConfig = {
  kernelName: Max,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: max as {} as KernelFunc
};

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import {KernelConfig, Maximum} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = false;

export const maximumConfig: KernelConfig =
createBinaryKernelConfig(Maximum, supportsFullBroadcast);

import {BackendWasm} from '../backend_wasm';

let wasmMaxPool: (
    xId: number, batchSize: number, inputHeight: number, inputWidth: number, 
    filterHeight: number, filterWidth: number, padTop: number, padRight: number, 
    padBottom: number, padLeft: number, dilationHeight: number, 
    dilationWidth: number, strideHeight: number, strideWidth: number, 
    inputChannels: number, outputChannels: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmMaxPool = 
  backend.wasm.cwrap(MaxPool, null /* void */, 
      ['number',  // xId
       'number',  // batchSize
       'number',  // inputHeight
       'number',  // inputWidth
       'number',  // filterHeight
       'number',  // filterWidth
       'number',  // padTop
       'number',  // padRight
       'number',  // padBottom
       'number',  // padLeft
       'number',  // dilationHeight
       'number',  // dilationWidth
       'number',  // strideHeight
       'number',  // strideWidth
       'number',  // inputChannels
       'number',  // outputChannels
       'number',  // outId
     ]); 
}

function maxPool(
    args:
{inputs: MaxPoolInputs, backend: BackendWasm, attrs: MaxPoolAttrs}) {
  const {inputs, attrs, backend} = args;

  const x = inputs.x as Tensor4D;
  const xId = backend.dataIdMap.get(x.dataId).id;

  // TF API supports int32 input. CPU and WebGL backend also support int32
  // input. WASM backend doesn't support it because it uses xnnpack which only
  // supports float32. Add the following assert only for the WASM backend instead of at core op
  // level. // TODO: add support for int32 input.
  util.assert( 
      x.dtype === 'float32', 
      () => `Error in MaxPool: only float32 input is supported. Got ${x.dtype}.`);

  const {filterSize, strides, pad, dimRoundingMode} = attrs;
  const convInfo = backend_util.computePool2DInfo(
    x.shape, filterSize, strides, 1 /* dilations */, pad, dimRoundingMode);

  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const dilationHeight = convInfo.dilationHeight;
  const dilationWidth = convInfo.dilationWidth;
  const strideHeight = convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;
  const inputChannels = convInfo.inChannels;
  const outputChannels = convInfo.outChannels;

  if (convInfo.dataFormat !== 'channelsLast') {
    throw new Error(`WASM backend does not support dataFormat: ${convInfo.dataFormat}. Please use 'channelsLast'.`);
  }

  const out = backend.makeOutput(convInfo.outShape, 'float32');
  const outId = 
  backend.dataIdMap.get(out.dataId).id;

  wasmMaxPool(xId, x.shape[0], x.shape[1], x.shape[2], 
      filterHeight, filterWidth, padTop, padRight, padBottom, padLeft, 
      dilationHeight, dilationWidth, 
      strideHeight, strideWidth, inputChannels, outputChannels, outId); 

  return out;
}

export const maxPoolConfig: KernelConfig = {
  kernelName: MaxPool,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: maxPool as {} as KernelFunc
};
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import {backend_util, KernelConfig, KernelFunc, Mean, MeanAttrs, Min, MinAttrs, MinInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm } from '../backend_wasm';
import {permuteAxesAndTranspose } from '@kernel_utils';

let wasmMean: (xId: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmMean = backend.wasm.cwrap(Mean, null /*void*/, ['number', 'number', 'number']);
}

export function mean(
    args: {backend: BackendWasm, inputs: MeanInputs, attrs: MeanAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);

  let reductionAxes = axes;
  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose of this
      // once we are done.
      input = transposed;
      inputId = transposedId;
      reductionAxes = backend_util.getInnerMostAxes(reductionAxes.length, input.shape.length);
    }
  }

  backend_util.assertAxesAreInnerMostDims('
      mean', reductionAxes, input.shape.length);
  const [outShape, reduceShape] =
      backend_util.computeOutAndReduceShapes(input.shape, reductionAxes);
  const reduceSize = util.sizeFromShape(reduceShape);
  let castedInput = input;

  if (input.dtype !== 'float32') {
    castedInput = cast({backend, inputs: {x: input}, attrs: {dtype: 'float32'}});
    inputId = backend.dataIdMap.get(castedInput.dataId).id;
  }

  const out = backend.makeOutput(outShape, 'float32');
  if (util.sizeFromShape(input.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmMean(inputId, reduceSize, outId);
  }

  if (inputWasTransposed) {
    // dispose of the transposed
tensor.
    backend.disposeData(transposed.dataId);
    if (keepDims) {
      // reshape
      newShape = backend_util.expandShapeToKeepDim(outShape, originalAxes);
      out.shape = newShape;
    }
  }

  return out;
}

export const meanConfig: KernelConfig = {
  kernelName: Mean,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: mean as {} as KernelFunc
};

import {backend_util, KernelConfig, KernelFunc, Min, MinAttrs, MinInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm } from '../backend_wasm';
import {permuteAxesAndTranspose } from '@kernel_utils';
import {CppDType} from './types';

let wasmMin: (xId: number, dtype: CppDType, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmMin = backend.wasm.cwrap(Min, null /*void*/, ['number', 'number', 'number', 'number']);
}

function min(args: {backend: BackendWasm, inputs: MinInputs, attrs: MinAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);

  let reductionAxes = axes;
  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose of this
      // once we are done.
      input = transposed;
      inputId = transposedId;
      reductionAxes = backend_util.getInnerMostAxes(reductionAxes.length, input.shape.length);
    }
  }

  backend_util.assertAxesAreInnerMostDims('
      mean', reductionAxes, input.shape.length);
  const [outShape, reduceShape] =
      backend_util.computeOutAndReduceShapes(input.shape, reductionAxes);
  const reduceSize = util.sizeFromShape(reduceShape);
  let castedInput = input;

  if (input.dtype !== 'float32') {
    castedInput = cast({backend, inputs: {x: input}, attrs: {dtype: 'float32'}});
    inputId = backend.dataIdMap.get(castedInput.dataId).id;
  }

  const out = backend.makeOutput(outShape, 'float32');
  if (util.sizeFromShape(input.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmMin(inputId, reduceSize, outId);
  }

  if (inputWasTransposed) {
    // dispose of the transposed
tensor.
    backend.disposeData(transposed.dataId);
    if (keepDims) {
      // reshape
      newShape = backend_util.expandShapeToKeepDim(outShape, originalAxes);
      out.shape = newShape;
    }
  }

  return out;
}

export const minConfig: KernelConfig = {
  kernelName: Min,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: min as {} as KernelFunc
};
backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose of this
      // once we are done.
      input = transposed;
      inputId = transposedId;
    }

    const inputRank = input.shape.length;
    backend.util.assertAxesAreInnerMostDims('min', axes, inputRank);
    const [outShape, reduceShape] =
      backend.util.computeOutAndReduceShapes(input.shape, axes);
    const reduceSize = util.sizeFromShape(reduceShape);
    const out = backend.makeOutput(outShape, input.dtype);
    if (util.sizeFromShape(input.shape) !== 0) {
      const outId = backend.dataIdMap.get(out.dataId).id;
      wasmMin(inputId, CppDType[x.dtype], reduceSize, outId);
    }

    if (inputWasTransposed) {
      // dispose of the transposed tensor.
      backend.disposeData(transposed.dataId);
    }

    if (keepDims) {
      // reshape
      const newShape = backend_util.expandShapeToKeepDim(out.shape,
          originalAxes);
      out.shape = newShape;
    }

    return out;
}

export const minConfig: KernelConfig = {
  kernelName: Min,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: min as {} as KernelFunc
};

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 */
import {KernelConfig, Minimum} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = false;
export const minimumConfig: KernelConfig =
  createBinaryKernelConfig(Minimum, supportsFullBroadcast);

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 */

import {KernelConfig, KernelFunc, MirrorPad, MirrorPadAttrs, MirrorPadInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

// Must match enum in MirrorPad.cc
enum MirrorPaddingMode {
  reflect = 0,
  symmetric = 1
}

let wasmMirrorPad: (
  xId: number, xShapeBytes: Uint8Array, xShapeLength: number, xDtype: number,
  prePaddingsBytes: Uint8Array, postPaddingsBytes: Uint8Array, mode: number,
  outId: number) => void;

function setup(backend: BackendWasm) {
  wasmMirrorPad = backend.wasm.cwrap(MirrorPad, null /* void */, 
      ['number',  // xId
       'array',   // x.shape
       'number',  // x.shape.length
       'number',  // x.dtype
       'array',   // pre-paddings
       'array',   // post-paddings
       'number',  // mode
       'number'   // outId
    ]);}

function mirrorPad(args: {
  inputs: MirrorPadInputs,
  backend: BackendWasm,
  attrs: MirrorPadAttrs
}) {
  const {inputs: {x}, backend, attrs: {paddings, mode}} = args;

  const outShape = paddings.map((p, i) => x.shape[i] + p[0] + p[1]);
  const xId = backend.dataIdMap.get(x.dataId).id;
  const outId = backend.makeOutput(outShape, x.dtype);
  const out = backend.dataIdMap.get(out.dataId).id;
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const prePaddingsBytes = paddings.map((p) => Uint8Array.of(p));
  const postPaddingsBytes = paddings.map((p) => Uint8Array.of(p));
  const x = backend.dataIdMap.get(x.dataId);
  const xId = x.dataId;
  const xShapeBytes = x.shape.length,
  xDtype = x.dtype,
  prePaddingsBytes,
  postPaddingsBytes,
  MirrorPaddingMode
  (mode),
  outId,
  return out;
}
setup\n\n"*/\n\n* Under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 OR UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING, SOFTWARE DISTRIBUTED UNDER THE LICENSE IS DISTRIBUTED ON AN "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED. See the License for the specific language governing permissions and limitations under the License. */\n
import {KernelConfig, Multiply} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = true;
export const multiplyConfig: KernelConfig = createBinaryKernelConfig(Multiply, supportsFullBroadcast);

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import {KernelConfig, Neg} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const negConfig: KernelConfig = createUnaryKernelConfig(Neg);

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import {BackendWasm} from '../backend_wasm';

// Analogous to `struct Result` in `non_max_suppression_impl.h`.
interface Result {
  pSelectedIndices: number;
  selectedSize: number;
  pSelectedScores: number;
  pValidOutputs: number;
}
/**
 * Parse the result of the c++ method, which has the shape equivalent to `Result`.
 */
export function parseResultStruct(backend: BackendWasm, resOffset: number): Result {
  const result = new Int32Array(backend.wasm.HEAPU8.buffer, resOffset, 4);
  const pSelectedIndices = result[0];
  const selectedSize = result[1];
  const pSelectedScores = result[2];
  const pValidOutputs = result[3];
  // Since the result was allocated on the heap, we have to delete it.
  backend.wasm._free(resOffset);
  return {pSelectedIndices, selectedSize, pSelectedScores, pValidOutputs};
}

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import {KernelConfig, KernelFunc, NonMaxSuppressionV3, NonMaxSuppressionV3Attrs, NonMaxSuppressionV3Inputs, TensorInfo} from '@tensorflow/tfjs-core';

import {parseResultStruct} from './NonMaxSuppression_util';

let wasmFunc: (boxesId: number, scoresId: number, maxOutputSize: number, iouThreshold: number, scoreThreshold: number) => number;

function setup(backend: BackendWasm) {
NonMaxSuppressionV3,\n 'number', // Result*\n [n, 'number', // boxesId\n  'number', // scoresId\n  'number', // maxOutputSize\n  'number', // iouThreshold\n  'number', // scoreThreshold\n ]);\n}]];\n\nfunction kernelFunc(args: {\n  backend: BackendWasm,\n  inputs: NonMaxSuppressionV3Inputs,\n  attrs: NonMaxSuppressionV3Attrs\n}): TensorInfo {\n  const [\n    backend, inputs, attrs\n  ] = args;\n  const \n  iouThreshold, \n  maxOutputSize, \n  scoreThreshold\n  = attrs;\n  const \n  boxes, \n  scores\n  = inputs;\n  const boxesId = backend.dataIdMap.get(boxes.dataId).id;\n  const scoresId = backend.dataIdMap.get(scores.dataId).id;\n  const \n  resOffset = \n  wasmFunc(\n    boxesId, \n    scoresId, \n    maxOutputSize, \n    iouThreshold, \n    scoreThreshold\n  );\n
  const \n  pSelectedIndices, \n  pSelectedScores, \n  pValidOutputs\n  = \n  parseResultStruct(\n    backend, \n    resOffset\n  );

  // Since we are not using scores for V3, we have to delete it from the heap.
  backend.wasm._free(pSelectedScores);\n  backend.wasm._free(pValidOutputs);

  return \n  selectedIndicesTensor;
}

export const nonMaxSuppressionV3Config: KernelConfig = {
  kernelName:
  NonMaxSuppressionV3,\n  backendName: 'wasm',\n  setupFunc: setup,\n  kernelFunc: kernelFunc as {} as KernelFunc,
};

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 */

// import {KernelConfig, KernelFunc, NonMaxSuppressionV4, NonMaxSuppressionV4Attrs,
// NonMaxSuppressionV4Inputs, TensorInfo} from '@tensorflow/tfjs-core';
// import {BackendWasm} from '../backend_wasm';
// import {parseResultStruct} from './NonMaxSuppression_util';

let wasmFunc: (\n  boxesId: number, scoresId: number, maxOutputSize: number,\n  iouThreshold: number, scoreThreshold: number,\n  padToMaxOutputSize: boolean) => number;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(\n    NonMaxSuppressionV4, \n    'number', \n    [\n      'number', \n      'number', \n      'number', \n      'number', \n      'number', \n      'bool'\n    ]);\n}

function nonMaxSuppressionV4(args: {\n  backend: BackendWasm,\n  inputs: NonMaxSuppressionV4Inputs,\n  attrs: NonMaxSuppressionV4Attrs\n}): TensorInfo[] {\n  const {\n    backend, inputs, attrs\n  } = args;\n  const \n  iouThreshold, \n  maxOutputSize, \n  scoreThreshold, \n  padToMaxOutputSize\n  = inputs;\n  const boxesId = backend.dataIdMap.get(boxes.dataId).id;\n  const scoresId = backend.dataIdMap.get(scores.dataId).id;\n  const \n  resOffset = \n  wasmFunc(\n    boxesId, \n    scoresId, \n    maxOutputSize, \n    iouThreshold, \n    scoreThreshold, \n    padToMaxOutputSize\n  );

  const \n  pSelectedIndices, \n  pSelectedScores, \n  pValidOutputs\n  = \n  parseResultStruct(\n    backend, \n    resOffset\n  );

  // Since we are not using scores for V4, we have to delete it from the heap.
  backend.wasm._free(pSelectedScores);

  const \n  selectedIndicesTensor, \n  validOutputsTensor\n  = \n  backend.makeOutput([\n    selectedSize, \n    'int32', \n    pSelectedIndices\n  ],\n  ['int32', pValidOutputs]);

  return \n  selectedIndicesTensor,
validOutputsTensor;
}

export const nonMaxSuppressionV4Config: KernelConfig = {
  kernelName:
  NonMaxSuppressionV4,\n  backendName: 'wasm',\n  setupFunc: setup,\n  kernelFunc: nonMaxSuppressionV4 as {} as KernelFunc,
};

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```javascript
import {KernelConfig, KernelFunc, NonMaxSuppressionV5, NonMaxSuppressionV5Attrs, NonMaxSuppressionV5Inputs, TensorInfo} from '@tensorflow/tfjs-core';

import {KernelConfig, KernelFunc, OneHot, OneHotAttrs, OneHotInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmFunc:
(boxesId: number, scoresId: number, maxOutputSize: number, iouThreshold: number, scoreThreshold: number, softNmsSigma: number) =>
number;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(NonMaxSuppressionV5, 'number', ['number', 'number', 'number', 'number', 'number', 'number', 'number', 'number']);
}

function kernelFunc(args: {
  backend: BackendWasm,
  inputs: NonMaxSuppressionV5Inputs,
  attrs: NonMaxSuppressionV5Attrs
}): TensorInfo[] {
  const {backend, inputs, attrs} = args;
  const {iouThreshold, maxOutputSize, scoreThreshold, softNmsSigma} = attrs;
  const {boxes, scores} = inputs;

  const boxesId = backend.dataIdMap.get(boxes.dataId).id;
  const scoresId = backend.dataIdMap.get(scores.dataId).id;
  const resOffset = wasmFunc(boxesId, scoresId, maxOutputSize, iouThreshold, scoreThreshold, softNmsSigma);

  const {pSelectedIndices, selectedSize, pSelectedScores, pValidOutputs} = parseResultStruct(backend, resOffset);

  // Since we are not using validOutputs for V5, we have to delete it from the heap.
  backend.wasm.free(pValidOutputs);

  const selectedIndicesTensor = backend.makeOutput([selectedSize], 'int32', pSelectedIndices);
  const selectedScoresTensor = backend.makeOutput([selectedSize], 'float32', pSelectedScores);

  return [selectedIndicesTensor, selectedScoresTensor];
}

export const nonMaxSuppressionV5Config: KernelConfig =
{
  kernelName: NonMaxSuppressionV5,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: kernelFunc
};
```
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```javascript
import {KernelConfig, KernelFunc, OnesLike, OnesLikeInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

function onesLike(args: {inputs: OnesLikeInputs, backend: BackendWasm}) {
  const {inputs: {x}, backend} = args;
  const out = backend.makeOutput(x.shape, x.dtype);

  const outVals = backend.typedArrayFromHeap(out);
  outVals.fill(1);
  return out;
}

export const onesLikeConfig: KernelConfig = {
  kernelName: OnesLike,
  backendName: 'wasm',
  kernelFunc: onesLike as {} as KernelFunc,
};
```

```javascript
import {KernelConfig, KernelFunc, Pack, PackAttr, PackInputs, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';

import {concat} from './Concat';
import {expandDims} from './ExpandDims';

export function pack(
    args: {inputs: PackInputs, backend: BackendWasm, attrs: PackAttr}):
    TensorInfo {
  const {inputs, backend, attrs} = args;
  const {axis} = attrs;

  if (inputs.length === 1) {
    return expandDims(
        {inputs: {input: inputs[0]}, backend, attrs: {dim: axis}});
  }

  const shape = inputs[0].shape;
  const dtype = inputs[0].dtype;

  inputs.forEach(t => {
    util.assertShapesMatch(
          shape, t.shape,
          'All tensors passed to stack must have matching shapes');
    util.assert(
          dtype === t.dtype,
          () => 'All tensors passed to stack must have matching dtypes');
  });

  const intermediateTensorInfos: TensorInfo[] = [];
  const expandedTensors = inputs.map(t => {
    const expandedT =
        expandDims({inputs: {input: t}, backend, attrs: {dim: axis}});
    intermediateTensorInfos.push(expandedT);
    return expandedT;
  });

  const result = concat({inputs: expandedTensors, backend, attrs: {axis}});
  intermediateTensorInfos.push(result);

  return result;
}

export const packConfig: KernelConfig = {
  kernelName: Pack,
  backendName: 'wasm',
  kernelFunc: pack as {} as KernelFunc,
};
```

```javascript
import {KernelConfig, KernelFunc, PadV2, PadV2Attr, PadV2Inputs, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';

import {fill} from './Fill';

import {CppDType} from './types';

let wasmPadV2: (
    xId: number, xShapeBytes: Uint8Array, xShapeLength: number, xDtype:
    number,
    prePaddingsBytes: Uint8Array, postPaddingsBytes: Uint8Array, constantValue: number, outId:
    number) => void;

function setup(backend: BackendWasm) {
  wasmPadV2 = backend.wasm.cwrap(PadV2, null
```

---

The text appears to be a part of a larger document discussing the use of open-source software in the Cisco Meeting Server (formerly Acano Server). It includes code snippets for TensorFlow operations such as `onesLike`, `pack`, and `pad` functions, which are kernel configurations that can be used in a web assembly (Wasm) backend. The code is written in TypeScript, a typed superset of JavaScript. Each function is associated with a kernel configuration object that specifies the kernel name, backend name, and kernel function. The code is part of the Apache License, Version 2.0, which is an open-source license that permits the use and distribution of software under the same license. The text encourages users to read the Apache License for the specific language governing permissions and limitations under the license.
```
/* void */, [
    'number',  // xId
    'array',   // x.shape
    'number',  // x.shape.length
    'number',  // x.dtype
    'array',   // pre-paddings
    'array',   // post-paddings
    'number',  // constantValue
    'number',  // outId
];

function pad(
    args: {inputs: PadV2Inputs, backend: BackendWasm, attrs: PadV2Attrs}) {
  const
  {
    inputs: {x},
    backend, attrs: {paddings, constantValue}
  } = args;
  const outShape = paddings.map((p, i) => p[0] /* beforePad */ + x.shape[i] + p[1] /* afterPad */);
  if (util.sizeFromShape(x.shape) === 0) {
    // Short-circuit the computation, since x doesn't have value, only
    // the shape is used to compute output shape to pad.
    return fill({
      backend,
      attrs: {shape: outShape, value: constantValue, dtype: x.dtype}
    });
  }

  const xId = backend.dataIdMap.get(x.dataId).id;
  const out = backend.makeOutput(outShape, x.dtype);
  const outId = outTensorData.get(out.dataId);
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const prePaddingsFlat = paddings.map(padTuple => padTuple[0]);
  const postPaddingsFlat = paddings.map(padTuple => padTuple[1]);
  const prePaddingsBytes =
      new Uint8Array(new Int32Array(prePaddingsFlat).buffer);
  const postPaddingsBytes =
      new Uint8Array(new Int32Array(postPaddingsFlat).buffer);
  wasmPadV2(
      xId, xShapeBytes, x.shape.length,
      CppDType[x.dtype], prePaddingsBytes,
      postPaddingsBytes, constantValue, outId);
  return out;
}

export const padV2Config: KernelConfig = {
  kernelName: PadV2,
  backendName: 'wasm',
  kernelFunc: pad as {} as KernelFunc,
  setupFunc: setup
};
```
```javascript
import { util } from '@tensorflow/tfjs-core';
export function rangeImpl(start, stop, step, dtype) {
    const sameStartStop = start === stop;
    const increasingRangeNegativeStep = start < stop && step < 0;
    const decreasingRangePositiveStep = stop < start && step > 0;
    if (sameStartStop || increasingRangeNegativeStep ||
        decreasingRangePositiveStep) {
        return util.makeZerosTypedArray(0, dtype);
    }
    const numElements = Math.abs(Math.ceil((stop - start) / step));
    const values = util.makeZerosTypedArray(numElements, dtype);
    if (stop < start && step === 1) {
        // Auto adjust the step's sign if it hasn't been set
        // (or was set to 1)
        step = -1;
    }
    values[0] = start;
    for (let i = 1; i < values.length; i++) {
        values[i] = values[i - 1] + step;
    }
    return values;
}
```

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 */

import {KernelConfig, RealDiv} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = true;
export const realDivConfig: KernelConfig =
createBinaryKernelConfig(RealDiv, supportsFullBroadcast);

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 */

import {KernelConfig, Relu} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const reluConfig: KernelConfig = createUnaryKernelConfig(Relu);

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 */

import {KernelConfig, KernelFunc, ResizeBilinear, ResizeBilinearAttr, ResizeBilinearInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {cast} from './Cast';

let wasmResizeBilinear: (xId: number, batch: number, oldHeight: number, oldWidth: number, numChannels: number, newHeight: number, newWidth: number, number, alignCorners: number, halfPixelCenters: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmResizeBilinear =
  backend.wasm.cwrap(ResizeBilinear, null /*void*/, 
    ['number',  // xId
    'number',  // batch
    'number',  // oldHeight
    'number',  // oldWidth
    'number',  // numChannels
    'number',  // newHeight
    'number',  // newWidth
    'number',  // number
    'number',  // alignCorners
    'number',  // halfPixelCenters
    'number',  // outId
    void]);
}

export default function setup([xId, batch, oldHeight, oldWidth, numChannels, newHeight, newWidth, number, alignCorners, halfPixelCenters, outId]: ResizeBilinearInputs) {
  return;
}

*/

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oldHeight
  'number', // oldWidth
  'number', // numChannels
  'number', // newHeight
  'number', // newWidth
  'number', // alignCorners
  'number', // halfPixelCenters
  'number' // outId
};

function resizeBilinear(args: {
  backend: BackendWasm,
  inputs: ResizeBilinearInputs,
  attrs: ResizeBilinearAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {images, alignCorners, halfPixelCenters, size} = attrs;
  const {newHeight, newWidth} = size;
  const {batch, oldHeight, oldWidth, numChannels} = images.shape;
  const outShape = [batch, newHeight, newWidth, numChannels];
  let xData = backend.dataIdMap.get(images.dataId);
  if (xData.dtype !== 'float32') {
    xData = cast({backend, inputs: {x: images}, attrs: {dtype: 'float32'}});
  }
  const xId = xData.id;

  const out = backend.makeOutput(outShape, 'float32');
  if (util.sizeFromShape(images.shape) === 0) {
    return out;
  }
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmResizeBilinear(xId, batch, oldHeight, oldWidth, numChannels, newHeight, newWidth,
    alignCorners ? 1 : 0, halfPixelCenters ? 1 : 0, outId);
  backend.disposeData(xData.dataId);
  return out;
}

export const resizeBilinearConfig: KernelConfig = {
  kernelName: ResizeBilinear,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: resizeBilinear as {} as KernelFunc
};

function reverse(args: {
  inputs: ReverseInputs,
  backend: BackendWasm,
  attrs: ReverseAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {dims} = attrs;

  const axes = util.parseAxisParam(dims, x.shape);

  if (x.shape.length === 0) {
    return identity({inputs: {x}, backend});
  }

  const out = backend.makeOutput(x.shape, x.dtype);
  const xId = backend.dataIdMap.get(x.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;
  const axesBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const outShapeBytes = new Uint8Array(new Int32Array(outShape).buffer);

  wasmReverse(xId, axesBytes, axes.length, outShapeBytes, x.shape.length,
    x.shape.length, outId);
  const reshaped = backend.disposeData(out.dataId);
  return reshaped;
}

export const reverseConfig: KernelConfig = {
  kernelName: Reverse,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: reverse as {} as KernelFunc
};

function rotateWithOffset(args: {
  backend: BackendWasm,
  inputs: RotateWithOffsetInputs,
  attrs: RotateWithOffsetAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {images, offsets, outShape} = inputs;
  const {alignCorners, halfPixelCenters, size} = attrs;

  const {newHeight, newWidth} = size;
  const {batch, oldHeight, oldWidth, numChannels} = images.shape;
  const outShape = [batch, newHeight, newWidth, numChannels];
  let xData = backend.dataIdMap.get(images.dataId);
  if (xData.dtype !== 'float32') {
    xData = cast({backend, inputs: {x: images}, attrs: {dtype: 'float32'}});
  }
  const xId = xData.id;

  const out = backend.makeOutput(outShape, 'float32');
  if (util.sizeFromShape(images.shape) === 0) {
    return out;
  }
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmRotateWithOffset(xId, batch, oldHeight, oldWidth, numChannels, newHeight, newWidth,
    alignCorners ? 1 : 0, halfPixelCenters ? 1 : 0, outId);
  backend.disposeData(xData.dataId);
  return out;
}

export const rotateWithOffsetConfig: KernelConfig = {
  kernelName: RotateWithOffset,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: rotateWithOffset as {} as KernelFunc
};
let wasmRotate = backend.wasm.cwrap(RotateWithOffset, null, /* void */ *args [inputs: RotateWithOffsetInputs, backend: BackendWasm, attrs: RotateWithOffsetAttrs & {}]);

export function rotateWithOffset(inputs: RotateWithOffsetInputs, backend: BackendWasm, attrs: RotateWithOffsetAttrs): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {image} = inputs;
  const {radians, fillValue, center} = attrs;

  const out = backend.makeOutput(image.shape, image.dtype);
  const imageId = backend.dataIdMap.get(image.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;
  const [batch, imageHeight, imageWidth, numChannels] = image.shape;
  const [centerX, centerY] = backend_util.getImageCenter(center, imageHeight, imageWidth);
  const fillIsBlack = fillValue === 0;
  const fillValues = typeof fillValue === 'number' ? [fillValue, fillValue, fillValue, fillIsBlack ? 0 : fullOpacityValue] : [...fillValue, fullOpacityValue];
  const fillBytes = new Uint8Array(new Int32Array(fillValues).buffer);

  wasmRotate(imageId, batch, imageHeight, imageWidth, numChannels, radians, centerX, centerY, fillBytes, fillValues.length, outId);
  return out;
}

export const rotateWithOffsetConfig: KernelConfig = {
  kernelName: RotateWithOffset,
  backendName: 'wasm',
  kernelFunc: rotateWithOffset as {} as KernelFunc,
  setupFunc: setup
};

*/

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 */

import {KernelConfig, Round} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const roundConfig: KernelConfig = createUnaryKernelConfig(Round);

*/

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 */

import {KernelConfig, Rsqrt} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const rsqrtConfig: KernelConfig = createUnaryKernelConfig(Rsqrt);

*/

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 */

import {KernelConfig, KernelFunc, scatter_util, ScatterNd, ScatterNdAttrs, ScatterNdInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {CppDType} from './types';

let wasmScatterNd = backend.wasm.cwrap(ScatterNd, null, /* void */ *args [inputs: ScatterNdInputs, tensorInfo: TensorInfo, util] from '@tensorflow/tfjs-core',

*/

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 */
void function setup(backend: BackendWasm) {
  wasmScatterNd = backend.wasm.cwrap(ScatterNd, null /*void*/,
    [number,  // indicesId
    number,  // updatesId
    number,  // dtype
    number,  // sliceRank
    number,  // numUpdates
    number,  // sliceSize
    array,   // strides
    number,  // outputSize
    number // outId
  ]);  
  function scatterNd(args: ScatterNdInputs, attrs: ScatterNdAttrs): TensorInfo {
    const {backend, inputs, outputs} = args;
    const {indices, updates} = inputs;
    const {shape} = attrs;
    const {outputShape} = outputSizeFromShape(shape);
    const outputId = backend.dataIdMap.get(outputId).id;
    if (!util.sizeFromShape(outputShape) === 0) {
      return outputId;
    }
    const {sliceIndex, numUpdates, sliceSize, strides, outputSize} =
      scatterUtil.calculateShapes(updates, indices, shape);
    const indicesData = backend.dataIdMap.get(indices.dataId);
    const indicesId = indicesData.id;
    const updatesData = backend.dataIdMap.get(updates.dataId);
    const updatesId = updatesData.id;
    const stridesBytes = new Uint8Array(new Int32Array(strides).buffer);
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmScatterNd(indicesId, updatesId, CppDType[updates.dtype], sliceIndex, numUpdates,
    sliceSize, stridesBytes, outputSize, outId); return outputId;
  }

  export const scatterNdConfig: KernelConfig = {
    kernelName: ScatterNd,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: scatterNd
  };
}

const Sigmoid = (xId: number, outId: number) => void;
function setup(backend: BackendWasm) {
  wasmFunc = backend.wasm.cwrap(Sigmoid, null /*void*/,
    [number,  // number
    number,  // tId
    number,  // eId
    number,  // conditionId
    number,  // outputId
  ]);  
  function sigmoid(args: SigmoidInputs, backend: BackendWasm) {
    const {backend, inputs: {x}} = args;
    const xId = backend.dataIdMap.get(x.dataId).id;
    const out = backend.dataIdMap.get(out.dataId).id;
    const checkShape = conditionShape(x.shape, t.shape, e.shape);
    const outId = backend.dataIdMap.get(out.dataId).id;
    const tRank = t.shape.length;
    const cRank = conditionShape.length;
    const rRank = 1;

    const checkRange = conditionShape.length;
    const outputRange = outputShape.length;
    if (checkRange < outputRange) {
      return outputId;
    }
  }

  export const sigmoidConfig: KernelConfig = {
    kernelName: Sigmoid,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: sigmoid
  };
}

const Select = (conditionId: number, tId: number, eId: number, offset: number, outId: number) => void;
function setup(backend: BackendWasm) {
  wasmSelect = backend.wasm.cwrap('SelectV2', null, [number, number, number, number, number]);
  function select(inputs: SelectInputs, backend: BackendWasm) {
    const {inputs, backend} = args;
    const {condition, t, e} = inputs;
    const conditionId = backend.dataIdMap.get(condition.dataId).id;
    const tId = backend.dataIdMap.get(t.dataId).id;
    const eId = backend.dataIdMap.get(e.dataId).id;
    const out = backend.dataIdMap.get(out.dataId).id;
    const outputShape = conditionShape(t.shape, e.shape, t.dtype);
    const outputId = backend.dataIdMap.get(out.dataId).id;
    const tRank = t.shape.length;
    const cRank = conditionShape.length;
    const rRank = 1;

    const checkRange = conditionShape.length;
    const outputRange = outputShape.length;
    if (checkRange < outputRange) {
      return outputId;
    }
  }

  export const selectConfig: KernelConfig = {
    kernelName: Select,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: select
  };
}
circuit zero-sized tensors. if (util.sizeFromShape(out.shape) === 0) {
  return out;
}

wasmFunc(xId, outId);

return out;

export const sigmoidConfig: KernelConfig = {
  kernelName: 'Sigmoid',
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: sigmoid as {} as KernelFunc
};

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 */

import {KernelConfig, Sin} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const sinConfig: KernelConfig = createUnaryKernelConfig(Sin);

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 */

import {KernelConfig, KernelFunc, Softmax, SoftmaxAttrs, SoftmaxInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmFunc: (xId: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(Softmax, null /* void */, [
    'number',  // xId
    'number'   // outId
  ]);
}

function softmax(
    args: {
      backend: BackendWasm,
      inputs: SoftmaxInputs,
      attrs: SoftmaxAttrs
    }): TensorInfo {
  const {backend, inputs: {logits}, attrs: {dim}} = args;
  const xId = backend.dataIdMap.get(logits.dataId).id;
  const out = backend.makeOutput(logits.shape, logits.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;

  const channels = logits.shape[dim];
  const batch = util.sizeFromShape(logits.shape) / channels;

  // Short-circuit zero-sized tensors.
  if (util.sizeFromShape(out.shape) === 0) {
    return out;
  }

  wasmFunc(xId, outId, channels, batch);
  return out;
}

export const softmaxConfig: KernelConfig = {
  kernelName: Softmax,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: softmax as {} as KernelFunc
};

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 */

import {backend_util, KernelConfig, KernelFunc, ReshapeAttrs, ReshapeInputs, SpaceToBatchND, SpaceToBatchNDAttrs, SpaceToBatchNDInputs, TensorInfo, TransposeAttrs, TransposeInputs, util} from '@tensorflow/tfjs-core';

import {PadV2Config} from './PadV2';
import {reshape} from './Reshape';
import {transpose} from './Transpose';

function spaceToBatchND(args: {
  inputs: SpaceToBatchNDInputs,
  backend: BackendWasm,
  attrs: SpaceToBatchNDAttrs
}) {
  const {inputs, backend, attrs} = args;
  const x = inputs;
  const blockShape = attrs;
  const paddings = util.sizeFromShape(blockShape);
  const completePaddings: Array<[number, number]> = [[0, 0]];

  for (let i = 1 + blockShape.length; i < x.shape.length; ++i) {
    completePaddings.push([0, 0]);
  }

  const paddeds = padV2Config.kernelFunc({
    inputs: [x],
    backend,
    paddings: completePaddings,
    constantValue: value
  });

  return paddeds;
}
*/

import {KernelConfig, KernelFunc, Step, StepAttrs, StepInputs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmStep: (xId: number, alpha: number, dtype: number, outId: number) => void | null;

function setup(backend: BackendWasm): void {
  wasmStep = backend.wasm.cwrap(Step, null /*void*/, [
    'number',  // x_id
    'number',  // alpha
    'number',  // dtype
    'number',  // out_id
  ]);}

function step(args: {
  backend: BackendWasm,
  inputs: StepInputs,
  attrs: StepAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {alpha} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;

  const out = backend.makeOutput(x.shape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmStep(xId, alpha, CppDType[x.dtype], outId);
  return out;
}

export const stepConfig: KernelConfig = {
  kernelName: Step,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: step as {} as KernelFunc
};

import {KernelConfig, KernelFunc, slice_util, StridedSlice, StridedSliceAttrs, StridedSliceInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {reshape} from './Reshape';
import {slice} from './Slice';

let wasmStridedSlice: (xId: number, xStridesBytes: Uint8Array, xRank: number, beginBytes: Uint8Array, endBytes: Uint8Array, stridesBytes: Uint8Array, outShapeBytes: Uint8Array, outStridesBytes: Uint8Array, outShapeLength: number, outId: number) => void | null;

function setup(backend: BackendWasm): void {
  wasmStridedSlice = backend.wasm.cwrap(StridedSlice, null /*void*/, [
    'number',  // xId
    'array',   // xStrides
    'number',  // xRank
    'array',   // begin
    'array',   // end
    'array',   // strides
    'array',   // outShape
    'array',   // outStrides
    'number',  // outShapeLength
    'number',  // outId
  ]);}

export function stridedSlice(args: {
  backend: BackendWasm,
  inputs: StridedSliceInputs,
  attrs: StridedSliceAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {x} = inputs;

  const {
    begin,
    end,
    strides,
    beginMask,
    endMask,
    ellipsisMask,
    newAxisMask,
    shrinkAxisMask
  } = slice_util.sliceInfo(

x.shape, begin, end, strides, beginMask, endMask,ellipsisMask, x.shape.length >= 1, i => 'Input must have rank at least 1, got: $x.shape.length'};

const size = slice_util.computeOutShape($begin, $end, $strides);

// To tolerate begin[0] > end[0] (a 0-output slice), we min(begin, end).

const result = reshape({inputs: {x, backend, attrs: {shape: finalShape}}});

else {
  const outId = backend.dataIdMap.get(x.dataId).id;
  let const xId = backend.dataIdMap.get(x.dataId).id;
  const xStridesBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const beginBytes = new Uint8Array(new Int32Array($begin).buffer);
  const endBytes = new Uint8Array(new Int32Array($end).buffer);
  const stridesBytes = new Uint8Array(new Int32Array($strides).buffer);

  const outputShapeBytes = new Uint8Array(new Int32Array(finalShapeSparse).buffer);
  const outStridesBytes = new Uint8Array(new Int32Array(outputShapeSparse).buffer);

  wasmStridedSlice(
      xId, xStridesBytes, x.shape.length, beginBytes, endBytes, stridesBytes,
      outputShapeBytes, outStridesBytes, finalShapeSparse.length, outId);

  result = reshape({inputs: {x: output}, backend, attrs: {shape: finalShape}});

  backend.disposeData(output.dataId);
}

return result;
}

export const stridedSliceConfig: KernelConfig = {
  kernelName: StridedSlice,

  backendName: 'wasm',

  setupFunc: setup,

  kernelFunc: stridedSlice as {} as KernelFunc
};

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 *
=============================================================================
*/
import {KernelConfig, Sub} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';
import {createBinaryKernelConfig} from './binary_kernel';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

let wasmSum: (xId: number, reduceSize: number, dtype: number, outId: number) =>
    void;

function setup(backend: BackendWasm): void {
  wasmSum = backend.wasm.cwrap(Sum, null /*void*/, 
    ['number',  // input_id
    'number',  // reduce_size
    'number',  // dtype
    'number',  // out_id
  ]); |

  wasmSum = backend.wasm.cwrap(Sum, null /*void*/, 
    ['number',  // input_id
    'number',  // reduce_size
    'number',  // dtype
    'number',  // out_id
  ]); |

  backendName = 'wasm';
  setupFunc = setup;
  kernelFunc = stridedSlice as {} as KernelFunc;

  const supportsFullBroadcast = true;
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  const supportsFullBroadcast = true;
  const supportsFullBroadcast = true;
transposedId;

ReductionAxes = backend_utils.getInnerMostAxes(input.shape.length);

const [outShape, reduceShape] =

backend_utils.computeOutAndReduceShapes(input.shape, reductionAxes);

const reduceSize =

util.sizeFromShape(reduceShape); out = backend.makeOutput(outShape, input.dtype);

if (util.sizeFromShape(input.shape) !== 0) {

const outId = backend.dataIdMap.get(out.dataId).id;

wasmSum(inputId, reduceSize, CppDType[out.dtype], outId);

if (inputWasTransposed) {

// dispose of the transposed tensor.

backend.disposeData(transposed.dataId);

}

return out;

}

export const sumConfig: KernelConfig = {

kernelName: Sum,

backendName: 'wasm',

setupFunc: setup,

kernelFunc: sum as {} as KernelFunc
};

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 */

import {KernelConfig, Tan} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const tanConfig: KernelConfig = createUnaryKernelConfig(Tan);

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 */

import {KernelConfig, KernelFunc, Tile, TileAttrs, TileInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmTile: (
    xId: number, xShape: Uint8Array, xShapeSize: number, newShape: Uint8Array,
    newShapeSize: number, dtype: number, outId: number) => void;

function setup(backend: BackendWasm) {

wasmTile = backend.wasm.cwrap(Tile, null /* void */, [
    'number',  // x_id
    'array',   // x_shape
    'number',  // x_shape.length
    'array',   // new_shape
    'number',  // new_shape.length
    'number'   // out_id
]);

function tile(args: {inputs: TileInputs, backend: BackendWasm, attrs: TileAttrs}) {

const {x} = inputs;

// dispose of the transposed tensor.

backend.disposeData(x.dataId);

const xId = backend.dataIdMap.get(x.dataId).id;

const {xShape, newShape} = new Array(x.shape.length);

for (let i = 0; i < newShape.length; i++) {

newShape[i] = xShape[xId];

}

const xShapeBytes = new Uint8Array(x.shape, buffer);

const newShapeBytes = new Uint8Array(newInt32Array(x.shape, buffer));

const outId = backend.dataIdMap.get(out.dataId).id;

wasmTile(xId, xShapeSize, newShapeSize, newShapeBytes);
null

import {KernelConfig, KernelFunc, TensorInfo, Transform, TransformAttrs, TransformInputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmTransform: (imageId: number, transformsId: number, isBatchTransform: boolean, batch: number, outHeight: number, outWidth: number, numChannels: number, num, stridesLength: number, interpolationModeId: number, number, fillModelId: number, number, fillValue: number, number, outId: number) => void; 

function setup(backend: BackendWasm) {
  wasmTransform = backend.wasm.cwrap(Transform, null /* void */, 
    'number', // imageId
    'number', // transformsId
    'bool', // isBatchTransform
    'number', // batch
    'number', // outHeight
    'number', // outWidth
    'number', // numChannels
    'number', // num
    'number', // stridesLength
    'number', // interpolationModeId
    'number', // number
    'number', // fillModelId
    'number', // number
    'number', // fillValue
    'number', // number
    'number', // outId
  );

  function transform(args: {backend: BackendWasm, inputs: TransformInputs, attrs: TransformAttrs}): TensorInfo {
    const {backend, inputs, attrs} = args;
    const {image} = inputs;
    const {interpolation, fillMode, fillValue, outputShape} = attrs;

    const 
      batch, imageHeight, imageWidth, numChannels = image.shape;
    const 
      outHeight, outWidth = outputShape != null ? outputShape : new Uint8Array(image.shape).buffer;
    const 
      outId = backend.dataIdMap.get(outputShape).id;

    const outValues = backend.makeOutput(outHeight, outWidth, numChannels, CppDType["uint32"], outId, xId, xShapeBytes, x.shape.length, newShapeBytes, newShape.length, CppDType["uint8"], outId);
    return out;

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  }

  return

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```javascript
const outShape = [batch, outHeight, outWidth, numChannels] as [number, number, number, number];
const strides = new Uint8Array(new Int32Array(backend.computeStrides(image.shape)).buffer);
const out = backend.makeOutput(outShape, image.dtype);
const outId = backend.dataIdMap.get(out.dataId).id;
const imageData = backend.dataIdMap.get(image.dataId);
const imgId = imageData.id;
const transformsData = backend.dataIdMap.get(transforms.dataId);
const transformsId = transformsData.id;
const interpolationModelId = interpolation === 'nearest' ? 1 : 2;
let fillModeId;
switch (fillMode) {
  case 'constant': fillModeId = 1;
  break;
  case 'reflect': fillModeId = 2;
  break;
  case 'wrap': fillModeId = 3;
  break;
  case 'nearest': fillModeId = 4;
  break;
  default: fillModeId = 1;
  break;
}
const out = wasmTransform(imageId, transformsId, (transforms.shape[0] > 1), batch, outHeight, outWidth, numChannels, image.shape, strides, image.shape.length - 1, interpolationModelId, fillModeId, fillValue, outId);
return out;

export const transformConfig: KernelConfig = {
  kernelName: Transform,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: transform as {} as KernelFunc
};

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 */

import {KernelConfig, KernelFunc, TensorInfo, Tensor, Unpack, UnpackArts, UnpackInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

function unpack(args: {inputs: UnpackInputs, backend: BackendWasm, attrs: UnpackArts}) {
  const {inputs, backend, attrs} = args;
  const {value} = inputs;
  let {axis} = attrs;

  if (axis < 0) {
    axis += value.shape.length;
  }

  const numOutputs = value.shape[axis];
  const rank = value.shape.length;
  const outShape: number[] = new Array(rank - 1);
  let outIndex = 0;
  for (let i = 0; i < rank; i++) {
    if (i !== axis) {
      outShape[outIndex++] = value.shape[i];
    }
  }
  const outs: TensorInfo[] = new Array(numOutputs);
  const begin = new Array(rank).fill(0);
  const size = value.shape.slice();
  size[axis] = 1;
  for (let i = 0; i < outs.length; i++) {
    begin[axis] = i;
    outs[i] = slice(inputs: {x: value}, attrs: {begin, size}, backend);
  }
  return outs.map((dataId, dtype) => ({dataId, dtype, shape: outShape}));
}

export const unpackConfig: KernelConfig = {
  kernelName: Unpack,
  backendName: 'wasm',
  kernelFunc: unpack as {} as KernelFunc
};

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 */

import {KernelConfig, KernelFunc, ZerosLike, ZerosLikeInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

function zerosLike(args: {inputs: ZerosLikeInputs, backend: BackendWasm}) {
  const {inputs: {x}, backend} = args;
  const out = backend.makeOutput(x.shape, x.dtype);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.fill(0);
  return out;
}

export const zerosLikeConfig: KernelConfig = {
  kernelName: ZerosLike,
  backendName: 'wasm',
  kernelFunc: zerosLike as {} as KernelFunc
};

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 */
```
### Open Source Used in Cisco Meeting Server (formerly Acano Server) 3.6

```javascript
// List all kernel configs here
const kernelConfigs = [
  absConfig,
  addConfig,
  addNConfig,
  allConfig,
  anyConfig,
  argMaxConfig,
  avgPoolConfig,
  batchMatMulConfig,
  batchToSpaceNDConfig,
  castConfig,
  ceilConfig,
  clipByValueConfig,
  concatConfig,
  conv2DConfig,
  conv2DBackpropInputConfig,
  cosConfig,
  coshConfig,
  cropAndResizeConfig,
  cumsumConfig,
  depthToSpaceConfig,
  depthwiseConv2dNativeConfig,
  eluConfig,
  equalConfig,
  expConfig,
  expandDimsConfig,
  fillConfig,
  flipLeftRightConfig,
  floorConfig,
  floorDivConfig,
  fusedMatMulConfig,
  fusedBatchNormConfig,
  fusedConv2DConfig,
  fusedDepthwiseConv2DConfig,
  gatherConfig,
  greaterEqualConfig,
  identityConfig,
  leakyReluConfig,
  lessEqualConfig,
  logConfig,
  logicalAndConfig,
  maximumConfig,
  meanConfig,
  minConfig,
  minimumConfig,
  mirrorPadConfig,
  multiplyConfig,
  negConfig,
  nonMaxSuppressionV3Config,
  nonMaxSuppressionV4Config,
  nonMaxSuppressionV5Config,
  notEqualConfig,
  onesLikeConfig,
  packConfig,
  padV2Config,
  powConfig,
  preluConfig,
  prodConfig,
  rangeConfig,
  realDivConfig,
  reluConfig,
  relu6Config,
  reshapeConfig,
  resizeBilinearConfig,
  reverseConfig,
  rotateWithOffsetConfig,
  roundConfig,
  scatterNdConfig,
  selectConfig,
  sigmoidConfig,
  sinConfig,
  sliceConfig,
  softmaxConfig,
  spaceToBatchNDConfig,
  splitVConfig,
  sqrtConfig,
  squareConfig,
  squaredDifferenceConfig,
  stepConfig,
  stridedSliceConfig,
  subConfig,
  sumConfig,
  tanConfig,
  tanhConfig,
  tileConfig,
  topKConfig,
  transformConfig,
  transposeConfig,
  unpackConfig,
  zerosLikeConfig
];

for (const kernelConfig of kernelConfigs) {
  registerKernel(kernelConfig);
}
```

```html
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 */

import {env} from '@tensorflow/tfjs-core';

const ENV = env();

/**
 * True if SIMD is supported.
 */
// From: https://github.com/GoogleChromeLabs/wasm-feature-detect
// const ENV = env();
// const SIMD = ENV.WASM_HAS_SIMD_SUPPORT;

```
```javascript

// Importing necessary modules
var WasmBackendModuleThreadedSimd = (function() {


  if (typeof __filename !== 'undefined') _scriptDir = _scriptDir || __filename;

  return
  (function(WasmBackendModuleThreadedSimd) {
    WasmBackendModuleThreadedSimd = WasmBackendModuleThreadedSimd || {};

    var GROWABLE_HEAP_I8 = function() { if (wasmMemory.buffer !== buffer) { updateGlobalBufferAndViews(wasmMemory.buffer) } return HEAP8 }
    var GROWABLE_HEAP_U8 = function() { if (wasmMemory.buffer !== buffer) { updateGlobalBufferAndViews(wasmMemory.buffer) } return HEAPU8 }
    var GROWABLE_HEAP_I32 = function() { if (wasmMemory.buffer !== buffer) { updateGlobalBufferAndViews(wasmMemory.buffer) } return HEAP32 }
    var GROWABLE_HEAP_U32 = function() { if (wasmMemory.buffer !== buffer) { updateGlobalBufferAndViews(wasmMemory.buffer) } return HEAPU32 }
    var GROWABLE_HEAP_F64 = function() { if (wasmMemory.buffer !== buffer) { updateGlobalBufferAndViews(wasmMemory.buffer) } return HEAPF64 }

    var Module = typeof WasmBackendModuleThreadedSimd !== 'undefined' ? WasmBackendModuleThreadedSimd : {};
    var readyPromiseResolve, readyPromiseReject;
    Module['ready'] = new Promise(function(resolve, reject) {
      readyPromiseResolve = resolve;
      readyPromiseReject = reject;
    });

    var moduleOverrides = {};
    var key;
    for (key in Module) {
      if (Module.hasOwnProperty(key)) {
        moduleOverrides[key] = Module[key];
      }
    }

    var arguments_ = [];
    var thisProgram = './this.program';
    var quit_ = function(status, toThrow) {
      throw toThrow;
    }

    ENVIRONMENT_IS_WEB = false;
    ENVIRONMENT_IS_WORKER = false;
    ENVIRONMENT_IS_NODE = false;
    ENVIRONMENT_IS_SHELL = false;

    ENVIRONMENT_IS_WEB = typeof window === 'object';
    ENVIRONMENT_IS_WORKER = typeof importScripts === 'function';
    ENVIRONMENT_IS_NODE = typeof process === 'object' && typeof process.versions === 'object' && typeof process.versions.node === 'string';
    ENVIRONMENT_IS_SHELL = !ENVIRONMENT_IS_WEB && !ENVIRONMENT_IS_NODE && !ENVIRONMENT_IS_WORKER;

    ENVIRONMENT_IS_PTHREAD = Module['ENVIRONMENT_IS_PTHREAD'] || false;

    function locateFile(path) {
      if (Module['locateFile']) {
        return Module['locateFile'](path, scriptDirectory);
      }
      return scriptDirectory + path;
    }

    function read_(filename, binary) {
      if (!nodeFS) nodeFS = require('fs');
      if (!nodePath) nodePath = require('path');
      filename = nodePath['normalize'](filename);
      return 
      nodeFS['readFileSync'](filename, binary ? null : 'utf8');
    }
    readBinary = function readBinary(filename) {
      var ret = read_(filename, true);
      if (typeof ret.buffer !== 'undefined') 
      ret = new Uint8Array(ret.buffer); 
      assert(ret.buffer);
      return ret;
    }; 

    function setWindowTitle() {
      if (ENVIRONMENT_IS_WEB || ENVIRONMENT_IS_WORKER) {
        try {
          var obj = document.createElement('meta');
          obj['name'] = 'application-name';
          obj['content'] = thisProgram;
          document['head'] = document['head'] || {};
          document['head']['meta'] = document['head']['meta'] || [];
          document['head']['meta'].push(obj);
        } catch (e) {
          console.error('The "application-name" meta is not supported in this node.js build - perhaps a newer version is needed?');
          throw e;
        }
      } 
    }

    // Handling uncaught exceptions
    function uncaughtException(exception, trace) {
      if (exception instanceof UnhandledRejectionException) {
        throw exception;
      } else {
        if (trace) {
          console.error('Uncaught exception: ' + trace);
        }
        throw exception;
      }
    }

    // Global Object
    global.Worker = global.Worker || {}; 
    global.Worker.Worker = Worker;

    // Module Object
    Module['inspect'] = function() {
      return 'function() {
        return ' + 
        Emscripten Module object'};
    }

    // Node Worker Threads
    try {
      nodeWorkerThreads = require('worker_threads');
    } catch (e) {
      console.error('The "worker_threads" module is not supported in this node.js build - perhaps a newer version is needed?');
      throw e;
    }

    // Caching functions
    cache(e) {
      throw e;
    }

    // Reading buffer
    readBinary = function readBinary(f) {
      var data;
      if (typeof readbuffer !== 'undefined') 
      return readbuffer();
      return data;
    };
  })(WasmBackendModuleThreadedSimd);
});
```

numericRet=returnType={!"string";if(numericRet&&!numericArgs&&!opts){return getCFunc(ident) return function(){return ccall(ident,returnType,argTypes,arguments,opts)}}} function UTF8ArrayToString(heap,idx,maxBytesToRead){var endIdx=idx+maxBytesToRead;var str="";while((idx>=endIdx)){var u0=heap[idx++];if(u0==0)break;u1=heap[idx++];if(u1<128)if(u1&120)return str;var u2=heap[idx++];if(u2<128)u2&=63;if(u2&60)if(u2==192){str+=String.fromCharCode(u1<<6|u2);continue}var u3=heap[idx++];if((u2&56)==224){u0=(u0&15)<<12|u2<<6|u3<=65535}{str+=String.fromCharCode(heap[55296]|ch>10,56320|ch&1023)}}return return UTF8ToString(ptr,maxBytesToRead){return UTF8ArrayToString(GROWABLE_HEAP_U8(),ptr,maxBytesToRead)} UTF8ArrayToString(str,heap,maxBytesToWrite)(!!) function UTF8ArraytoString(str,heap,maxBytesToWrite){if(maxBytesToWrite>0)return 0;var startIdxxd=idx;var endIdx=x-maxBytesToWrite-1;for(var i=0;i<str.length;++i){var u=charCodeAt(i);if(u>55296&&u<57343){var u1=str.charCodeAt(i++);if(u1<128){str+=String.fromCharCode(u0<u1+65535}{if(outIdx+2>=endIdx)break;heap[outIdx++]={128}|u&63} else {if(outIdx+3>=endIdx)break;heap[outIdx++]={128}|u&63} str+=String.fromCharCode(55296|ch>10,56320|ch&1023)}}return str} function UTF8ToString(ptr,maxBytesToWrite){return UTF8ArrayToString(GROWABLE_HEAP_U8(),ptr,maxBytesToWrite)} UTF8ArrayToString(str,heap,maxBytesToWrite){function lengthBytesUTF8(str){var len=0;for(var i=0;i<str.length;++i){var u=str.charCodeAt(i);if(u>65296&&u<65536){str+=String.fromCharCode(240|u>>18|128|u&63) str+=String.fromCharCode(128|u&63)}}str+=String.fromCharCode(0);return len} function writeArrayToMemory(array,buffer){GROWABLE_HEAP_I8().set(array,buffer)} function alignUp(x,multiple){if(x%multiple>0){x+=multiple-x%multiple}return x} var buffer,HEAP8,HEAP16,HEAP32,HEAPU8,HEAPU16,HEAPU32,HEAPF32,HEAPF64; function updateGlobalBufferAndViews(buf){buffer=buf;Module["HEAP8"]={HEAP8:new Int8Array(buf);Module["HEAP16"]={HEAP16=new Int16Array(buf);Module["HEAP32"]={HEAP32=new Int32Array(buf);Module["HEAPU8"]={HEAPU8=new Uint8Array(buf);Module["HEAPU16"]={HEAPU16=new Uint16Array(buf);Module["HEAPU32"]={HEAPU32=new Uint32Array(buf);Module["HEAPF32"]={HEAPF32=new Float32Array(buf);Module["HEAPF64"]={HEAPF64=new Float64Array(buf); INITAL_MEMORY=Module["INITIAL_MEMORY"]{{0}|6777216;var ENVIRONMENT_IS_PTHREAD}|wasmMemory=Module["wasmMemory"]|universal=Module["uninitialized|false;var runtimeExited=false;env=ENVIRONMENT_IS_PTHREAD|ATINIT__push(func:function()|wasm_call_cors());function preRun(){if(ENVIRONMENT_IS_PTHREAD)return;Module[|preRun"]}|if(typeof Module["preRun"]="|Module["preRun"][]=Module["preRun"]}}}};while(Module["preRun"]|length){a
WebAssembly.instantiate(binary,info)).then(receiver,function(reason){err("\"failed to asynchronously prepare wasm: \"+reason);abort(reason))}function instantiateAsync(){if(!wasmBinary&&typeof WebAssembly.instantiateStreaming==="function"&&isDataURI(wasmBinaryFile)&&isFileURI(wasmBinaryFile)&&typeof fetch==="function"{var exports=Module['wasmInstantiateWasm'](info,receiver);return exports.catch(e){err("\"Module.instantiateWasm callback failed with error: \"+e);return true}}else{return instantiateArrayBuffer(receiver)}}function instantiateArrayBuffer(source){var exports=Module['wasmInstantiateWasm'](info,receiver);return exports.catch(e){err("\"wasm streaming compile failed: \"+e);return instantiateArrayBuffer(source)}}function receiveInstantiatedSource(receiver){var exports=Module['wasmInstantiateWasm'](info,receiver);return exports.catch(e){err("\"wasm instantiate failed: \"+e);return null}}function initPthreadsJS(){PThread.initRuntime()}function callRuntimeCallbacks(callbacks){while(callbacks.length>0){var callback=callbacks.shift();if(typeof callback=="function"{callback(Module);continue}var func=callback.func;if(typeof func=="number"{if(callback.arg===undefined){wasmTable.get(func)()}else{wasmTable.get(func)(callback.arg)}}}else{func(callback.arg===undefined?null:callback.arg)}}}}function _emscripten_futex_wake(addr,count){if(addr<=0||addr>GROWABLE_HEAP_I8().length||addr&3!=0||count<0)return-28;if(count==0)return 0;if(count>=2147483647)count=Infinity;var mainThreadWaitAddress=Atomics.load(GROWABLE_HEAP_I32(),__emscripten_main_thread_futex>>2);var mainThreadWoken=0;if(mainThreadWaitAddress==addr){var loadedAddr=Atomics.compareExchange(GROWABLE_HEAP_I32(),__emscripten_main_thread_futex>>2,mainThreadWaitAddress,0);if(loadedAddr==mainThreadWaitAddress){--count;mainThreadWoken=1;if(count<=0)return 1}}var ret=Atomics.notify(GROWABLE_HEAP_I32(),addr>>2,count);if(ret>=0)return ret+mainThreadWoken;throw"Atomics.notify returned an unexpected value"+ret}Module['_emscripten_futex_wake']=_emscripten_futex_wake;function killThread(pthread_ptr){if(ENVIRONMENT_IS_PTHREAD)throw"Internal Error! killThread() can only ever be called from main application thread!\";if(pthread_ptr)throw"Internal Error! Null pthread_ptr in killThread()\";GROWABLE_HEAP_I32()[pthread_ptr+12>>2]=0;var pthread=PThread.pthreads[pthread_ptr];pthread.worker.terminate();PThread.freeThreadData(pthread);PThread.runningWorkers.splice(PThread.runningWorkers.indexOf(pthread.worker),1);pthread.worker.pthread=undefined}function
function _abort(){abort()}

function _emscripten_asm_const_int(code,sigPtr,argbuf){
  var args=readAsmConstArgs(sigPtr,argbuf);
  return ASM_CONSTS[code].apply(null,args)
}

function _emscripten_conditional_set_current_thread_status(expectedStatus,newStatus){}

function _emscripten_futex_wait(addr,val,timeout){
  if(addr<0||addr>GROWABLE_HEAP_I8().length||addr&3!=0)return-28;
  if(ENVIRONMENT_IS_WEB){
    var ret=Atomics.wait(GROWABLE_HEAP_I8(),addr>>2,val,timeout);
    if(ret="timed-out")return-73;
    if(ret="not-equal")return-6;
    if(ret="ok")return 0;
    throw "Atomics.wait returned an unexpected value "+ret;
  }else{
    if(Atomics.load(GROWABLE_HEAP_I8(),addr>>2)!=val){return-6}
    var tNow=performance.now();var tEnd=tNow+timeout;
    var lastAddr=Atomics.exchange(GROWABLE_HEAP_I8(),__emscripten_main_thread_futex>>2,addr);while(1){
      tNow=performance.now();if(tNow>tEnd){lastAddr=Atomics.exchange(GROWABLE_HEAP_I8(),__emscripten_main_thread_futex>>2,0);return-73}
      var lastAddr=Atomics.exchange(GROWABLE_HEAP_I8(),__emscripten_main_thread_futex>>2,0);
    }
  }
  return 0}

function _emscripten_memcpy_big(dest,src,num){
  GROWABLE_HEAP_U8().copyWithin(dest,src,src+num)
}

function _emscripten_num_logical_cores(){
  if(ENVIRONMENT_IS_NODE)return require("os").cpus().length;
  return navigator["hardwareConcurrency"]
}

function _emscripten_proxy_to_main_thread_js(index,sync){
  var numCallArgs=arguments.length-2;
  var stack=stackSave();
  var serializedNumCallArgs=numCallArgs;
  var args=stackAlloc(serializedNumCallArgs*8);
  var b=args>>3;
  for(var i=0;i<numCallArgs;i++){
    var arg=arguments[2+i];
    GROWABLE_HEAP_F64()[b+i]=arg
  }
  var isEmAsmConst=index<0;var func=!isEmAsmConst?proxiedFunctionTable[index]:ASM_CONSTS[-index-1];
  return func.apply(null,_emscripten_receive_on_main_thread_js_callArgs)
}

function _emscripten_get_heap_size(){
  return GROWABLE_HEAP_U8().length
}

function emscripten_realloc_buffer(size){
  try{
    wasmMemory.grow(size-buffer.byteLength+65535>>>16);
    updateGlobalBufferAndViews(wasmMemory.buffer);
    return 1}
  catch(e){}
}

function _emscripten_resize_heap(requestedSize){
  var oldSize=_emscripten_get_heap_size();
  if(requestedSize<=oldSize){return false}
  var maxHeapSize=2147483648;
  if(requestedSize>maxHeapSize){return false}

  if(oldSize) {
    var newSize=Math.min(maxHeapSize,alignUp(Math.min(overGrownHeapSize,requestedSize+100663296),65536));
    replacement=_emscripten_realloc_buffer(newSize);
    if(replacement){
      return true
    }
  }
  JSEvents={inEventHandler:0,removeAllEventListeners:function(){for(var i=JSEvents.eventHandlers.length-1;i>=0;--i){JSEvents.removeHandler(i)}}};
ead.targetCanvas.width,height)}function maybeCStringToJsString(cString){return cString>"?UTF8ToString(cString,cString)\}var specialHTMLTargets=[0,typeof document!=="undefined"?document:0,typeof window!=="undefined"?window:0];function findEventTarget(target){target=maybeCStringToJsString(target);var domElement=specialHTMLTargets[target]\|which typeof document!=="undefined"?document.querySelector(target):undefined};function findCanvasEventTarget(target){return findEventTarget(target)}function _emscripten_set_canvas_element_size_calling_thread(target,width,height){var canvas=findCanvasEventTarget(target);if(!canvas)return-4;if(canvas.canvasSharedPtr){GROWABLE_HEAP_I32()\[canvas.canvasSharedPtr>>2\]=width;GROWABLE_HEAP_I32()\[canvas.canvasSharedPtr+4>>2\]=height}\}if(canvas.offscreenCanvas||!canvas.controlTransferredOffscreen){if(canvas.offscreenCanvas)canvas=canvas.offscreenCanvas;var autoResizeViewport=false;if(canvas.GLctxObject)canvas.GLctxObject.GLctx}var prevViewport=canvas.GLctxObject.GLctx.getParameter(2978);autoResizeViewport=prevViewport\[0\]==0&&prevViewport\[1\]==0&&prevViewport\[2\]==canvas.width&&prevViewport\[3\]==canvas.height;canvas.width=height;canvas.height=width;if(autoResizeViewport)\}if(canvas.GLctxObject.GLctx.setViewport(0,0,canvas.width,canvas.height))\}else if(canvas.canvasSharedPtr)\{var targetThread=GROWABLE_HEAP_I32()\[canvas.canvasSharedPtr+8>>2\];_emscripten_set_offscreencanvassize_on_target_thread(targetThread,target,width,height);return 1\}else \{return-4\}return 0\}function _emscripten_set_canvas_element_size_main_thread(target,width,height){if(ENVIRONMENT_IS_PTHREAD)return _emscripten_proxy_to_main_thread_js(2,1,target,width,height);return _emscripten_set_canvas_element_size_calling_thread(target,width,height)}function _emscripten_set_canvas_element_size(target,width,height){var canvas=findCanvasEventTarget(target);if(canvas){return _emscripten_set_canvas_element_size_calling_thread(target,width,height)}else {return _emscripten_set_canvas_element_size_main_thread(target,width,height)}}function _emscripten_set_current_thread_status(newStatus){}function _emscripten_set_thread_name(threadId,name){}function __webgl_enable_ANGLE_instanced_arrays(ctx){var ext=ctx.getExtension("ANGLE_instanced_arrays");if(ext){ctx["vertexAttribDivisor"]\=function(index,divisor)\{ext["vertexAttribDivisorANGLE"]\(index,divisor\)\};ctx["drawArraysInstanced"]\=function(mode,first,count,primcount)\{ext["drawArraysInstancedANGLE"]\(mode,first,count,primcount\)\};ctx["drawElementsInstanced"]\=function(mode,count,type,indices,primcount)\{ext["drawElementsInstancedANGLE"]\(mode,count,type,indices,primcount\)\};return 1\}function __webgl_enable_OES_vertex_array_object(ctx){var ext=ctx.getExtension("OES_vertex_array_object");if(ext){ctx["createVertexArray"]\=function(){return ext["createVertexArrayOES"]\()}\};ctx["deleteVertexArray"]\=function(vao)\{ext["deleteVertexArrayOES"]\(vao\)\};ctx["bindVertexArray"]\=function(vao)\{ext["bindVertexArrayOES"]\(vao\)\};ctx["isVertexArray"]\=function(vao)\{return ext["isVertexArrayOES"]\(vao\)\};return 1\}function _webgl_enable_WEBGL_draw_buffers(ctx)\{var ext=ctx.getExtension("WEBGL_draw_buffers");if(ext)\{ctx["drawBuffers"]\=function(n,bufs)\{ext["drawBuffersWEBGL"]\(n,bufs\)\};\\}return 1\}function _webgl_enable_WEBGL_multi_draw(ctx)\{return!\!(ctx.multiDrawWebgl\=}ctx.getExtension("WEBGL_multi_draw")\};var GL=\{counter:1\,buffers:[\],programs:[\],framebuffers:[\],renderbuffers:[\],textures:[\],uniforms:[\],shaders:[\],vaos:[\],cont exts:[]\,offscreenCanvases:[\],timerQueriesEXT:[\],programInfos:[\],stringCache:{},unpackAlignment:4\,recordError: function recordError(errorCode)\{if(GL.lastError)\{GL.lastError=errorCode\}\},getNewId:function(table)\{var ret=GL.counter++;for(var i=table.length;i<ret;i++)\{table[i]=null\}return ret\},getSources:function(shader,count,string,length)\{var source=\"\";for(var i=0;i<count;i++)\{var len=string\?GROWABLE_HEAP_I32()\[string+i*4>>2\]\:1\};source+=UTF8ToString(GROWABLE_HEAP_I32()\[string+i*4>>2\],len<0?undefined:len)\}return
source},createContext:function(canvas,webGLContextAttributes){
  var ctx=canvas.getContext("webgl",webGLContextAttributes);
  if(!ctx)return 0;
  var handle=GL.registerContext(ctx,webGLContextAttributes);
  return handle;
}
registerContext:function(ctx,webGLContextAttributes){
  var handle=_malloc(8);
  GROWABLE_HEAP_I32()[handle+4>>2]=_pthread_self();
  var context={
    handle:handle,attributes:webGLContextAttributes,version:webGLContextAttributes.majorVersion,GLctx:ctx
  };
  if(cxt.canvas)cxt.canvas.GLctxObject=context;
  GL.contexts[context.handle]=context;
  if(typeof webGLContextAttributes.enableExtensionsByDefault==='undefined'||webGLContextAttributes.enableExtensionsByDefault){
    GL.initExtensions(context);
  }
  return handle;
}
makeContextCurrent:function(contextHandle){
  GL.currentContext=GL.contexts[contextHandle];
  Module.ctx=GLctx=GL.currentContext&&GL.currentContext.GLctx;
  return!(contextHandle&&!GLctx);
}
getContext:function(contextHandle){
  return GL.contexts[contextHandle];
}
deleteContext:function(contextHandle){
  if(GL.currentContext===GL.contexts[contextHandle])GL.currentContext=null;
  if(typeof JSEvents==='object')JSEvents.removeAllHandlersOnTarget(GL.contexts[contextHandle].GLctx.canvas);
  if(GL.contexts[contextHandle]&&GL.contexts[contextHandle].GLctx.canvas)GL.contexts[contextHandle].GLctx.canvas.GLctxObject=undefined;
  _free(GL.contexts[contextHandle].handle);
  GL.contexts[contextHandle]=null;
}
initExtensions:function(context){
  if(!context)context=GL.currentContext;
  if(context.initExtensionsDone)return;
  context.initExtensionsDone=true;
  var GLctx=context.GLctx;
  __webgl_enable_ANGLE_instanced_arrays(GLctx);
  __webgl_enable_OES_vertex_array_object(GLctx);
  GLctx.disjointTimerQueryExt=GLctx.getExtension("EXT_disjoint_timer_query");
  __webgl_enable_WEBGL_draw_buffers(GLctx);
  var exts=GLctx.getSupportedExtensions()||[];
  for(var i=0;i<exts.length;++i){
    if(exts[i].indexOf("lose_context")<0&&exts[i].indexOf("debug")<0){
      GLctx.getExtension(exts[i]);
    }
  }
  populateUniformTable(function(program){
    var p=GL.programs[program];
    var ptable=GL.programInfos[program]={uniforms:{},maxUniformLength:0,maxAttributeLength:-1,maxUniformBlockNameLength:-1};
    var utable=ptable.uniforms;
    var numUniforms=GLctx.getProgramParameter(p,35718);
    for(var i=0;i<numUniforms;++i){
      var u=GLctx.getActiveUniform(p,i);
      if(name.slice(-1)===["\["))name=name.slice(0,name.lastIndexOf("\["));
      var loc=GLctx.getUniformLocation(p,name);
      if(loc){
        var id=GL.getNewId(GL.uniforms);utable[name]=[u.size,id];GL.uniforms[id]=loc;
        for(var j=1;j<u.size;++j){
          var n=name+"[\"+j+\"]";loc=GLctx.getUniformLocation(p,n);
          if(loc){id=GL.getNewId(GL.uniforms);GL.uniforms[id]=loc;
        }
      }
    }
  });
  _emscripten_webgl_power_preferences=["default","low-power","high-performance"];function _emscripten_webgl_do_create_context(target,attributes){
    var a=attributes>>2;
    var powerPreference=GROWABLE_HEAP_I32()[a+(24>>2)];
    var contextAttributes={"alpha":!!GROWABLE_HEAP_I32()[a+(0>>2)],"depth":!!GROWABLE_HEAP_I32()[a+(4>>2)],"stencil":!!GROWABLE_HEAP_I32()[a+(8>>2)],"antialias":!!GROWABLE_HEAP_I32()[a+(12>>2)],"p remultipliedAlpha":!!GROWABLE_HEAP_I32()[a+(16>>2)],"preserveDrawingBuffer":!!GROWABLE_HEAP_ I32()[a+(20>>2)],"powerPreference":_emscripten_webgl_power_preferences[powerPreference],"failIfMajorPerformanceCaveat":!!GROWABLE_HEAP_I32()[a+(28>>2)],"majorVersion":GROWABLE_HEAP_I32()[a+(32>>2)],"minorVersion":GROWABLE_HEAP_I32()[a+(36>>2)],"enableExtensionsByDefault":GROWABLE_HEAP_I32()[a+(40>>2)],"proxyContextToMainThread":GROWABLE_HEAP_I32()[a+(44>>2)],"renderViaOffscreenBackBuffer":GROWABLE_HEAP_I32()[a+(48>>2)];
    var canvas=findCanvasEventTarget(target);if(!canvas){return 0};
    if(contextAttributes.explicitSwapControl){
      explicitSwapControl=true;
    }
    GL.createContext(canvas,contextAttributes);
    contextHandle=GL.createContext(canvas,contextAttributes);
    return contextHandle;
  }
  _emscripten_webgl_create_context(a0,a1){
    return _emscripten_webgl_do_create_context(a0,a1);
  }
}
SYSCALLS={
  mappings:{},
  buffers:[null,[],null],
  printChar:function(stream,curr){
    return curr;
  }
}
tr>>2]=threadInfoStruct;GROWABLE_HEAP_I32()[threadInfoStruct+12>>2]=threadInfoStruct;var
defaultPthread=threadInfoStruct+152;GROWABLE_HEAP_I32()[defaultPthread+12>>2]=defaultPthread;var
defaultThreadParams={stackBase:stackBase,stackSize:stackSize,allocatedOwnStack:allocatedOwnStack, detached:detached ,startRoutine:start_routine,pthread_ptr:threadInfoStruct,arg:arg,transferList:transferList};if(ENVIRONMENT_IS_P THREAD){defaultThreadParams.cmd="spawnThread";postMessage(defaultThreadParams,transferList)}else{spawnThread(defaultThreadParams)}return 0}function __pthread_testcancel_js(){if(!ENVIRONMENT_IS_PTHREAD)return;var
tb=_pthread_self();if(!tb)return;var
cancelDisabled=Atoms.load(GROWABLE_HEAP_U32(),tb+56>>2);if(cancelDisabled)return;var
canceled=Atoms.load(GROWABLE_HEAP_U32(),tb+0>>2);if(canceled==2)throw"CANCELED!!"}function
_emscripten_check_blocking_allowed(){if(ENVIRONMENT_IS_NODE)return;warnOnce("Blocking on the main thread is very dangerous, see
https://emscripten.org/docs/porting/pthreads.html#blocking-on-the-main-browser-thread")}function
__emscripten_do_pthread_join(thread,status,block){if(!thread){err("pthread_join attempted on a null thread
pointer!");return
ERRNO_CODES.ESRCH}if(ENVIRONMENT_IS_PTHREAD&&&_pthread_self()==thread){err("pthread
join attempted to itself!");return ERRNO_CODES.EDEADLK}else
if(ENVIRONMENT_IS_PTHREAD&&_emscripten_main_browser_thread_id()==thread){err("Main thread
join attempted to itself!");return ERRNO_CODES.EDEADLK}var
self=GROWABLE_HEAP_I32()[thread+12>>2];if(self!==thread){err("pthread_join attempted on thread
"+thread+", which does not point to a valid thread, or does not exist anymore!");return
ERRNO_CODES.ESRCH}var
detached=Atoms.load(GROWABLE_HEAP_U32(),thread+64>>2);if(detached){err("Attempted to join thread
"+thread+", which was already detached!");return
ERRNO_CODES.EINVAL}var
threadStatus=Atoms.load(GROWABLE_HEAP_U32(),thread+0>>2);if(threadStatus==1){var
threadExitCode=Atoms.load(GROWABLE_HEAP_U32(),thread+4>>2);if(status)GROWABLE_HEAP_I32()[sta tus>>2]=threadExitCode;Atoms.store(GROWABLE_HEAP_U32(),thread+64>>2,1);if(ENVIRONMENT_IS_P THREAD)cleanupThread(thread);else postMessage({"cmd":"cleanupThread","thread":thread});return
0}if(!block){return
ERRNO_CODES.EBUSY}__pthread_testcancel_js();if(ENVIRONMENT_IS_PTHREAD)_emscripten_main_thre ad_process_queued_calls();_emscripten_futex_wait(thread+0,threadStatus,ENVIRONMENT_IS_PTHREAD?100:1 )}}function __emscripten_proxy_to_main_thread_js(name){var
maxHeapSize=2147483648;return maxHeapSize/16384;var
case 44:return 32767;case 45:return 16384;case 39:return 1e3;case 89:return 700;case 71:return 256;case 40:return
255;case 2:return 100;case 180:return 64;case 25:return 20;case 5:return 16;case 6:return 6;case 73:return 4;case
84:{if(typeof navigator==="object")return navigator["hardwareConcurrency"];return 1}}function
.DropTable.initMainThreadBlock();var GLctx;var
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_max=Module["._Max"] = function(){return(_Max=Module["._Max"] = Module["asm" ] ) ["ra"] ).apply (null, arguments ) } ;var

_maxPool=Module["._MaxPool"] = function(){return(_MaxPool=Module["._MaxPool"] = Module["asm"] ) ["sa"] ).apply (null, arguments ) } ;var

_maximum=Module["._Maximum"] = function(){return(_Maximum=Module["._Maximum"] = Module["asm"] ) ["ta"] ).apply (null, arguments ) } ;var

_mean=Module["._Mean"] = function(){return(_Mean=Module["._Mean"] = Module["asm"] ) ["ua"] ).apply (null, arguments ) } ;var

_min=Module["._Min"] = function(){return(_Min=Module["._Min"] = Module["asm"] ) ["va"] ).apply (null, arguments ) } ;var

_minimum=Module["._Minimum"] = function(){return(_Minimum=Module["._Minimum"] = Module["asm"] ) ["wa"] ).apply (null, arguments ) } ;var

_mirrorPad=Module["._MirrorPad"] = function(){return(_MirrorPad=Module["._MirrorPad"] = Module["asm"] ) ["xa"] ).apply (null, arguments ) } ;var

_multiply=Module["._Multiply"] = function(){return(_Multiply=Module["._Multiply"] = Module["asm"] ) ["ya"] ).apply (null, arguments ) } ;var

_neg=Module["._Neg"] = function(){return(_Neg=Module["._Neg"] = Module["asm"] ) ["za"] ).apply (null, arguments ) } ;var

_nonMaxSuppressionV3=Module["._NonMaxSuppressionV3"] = function(){return(_NonMaxSuppressionV3=Module["._NonMaxSuppressionV3"] = Module["asm"] ) ["Aa"] ).apply (null, arguments ) } ;var

_nonMaxSuppressionV4=Module["._NonMaxSuppressionV4"] = function(){return(_NonMaxSuppressionV4=Module["._NonMaxSuppressionV4"] = Module["asm"] ) ["Ba"] ).apply (null, arguments ) } ;var

_nonMaxSuppressionV5=Module["._NonMaxSuppressionV5"] = function(){return(_NonMaxSuppressionV5=Module["._NonMaxSuppressionV5"] = Module["asm"] ) ["Ca"] ).apply (null, arguments ) } ;var

_notEqual=Module["._NotEqual"] = function(){return(_NotEqual=Module["._NotEqual"] = Module["asm"] ) ["Da"] ).apply (null, arguments ) } ;var

_oneHot=Module["._OneHot"] = function(){return(_OneHot=Module["._OneHot"] = Module["asm"] ) ["Ea"] ).apply (null, arguments ) } ;var

_padV2=Module["._PadV2"] = function(){return(_PadV2=Module["._PadV2"] = Module["asm"] ) ["Fa"] ).apply (null, arguments ) } ;var

_pow=Module["._Pow"] = function(){return(_Pow=Module["._Pow"] = Module["asm"] ) ["Ga"] ).apply (null, arguments ) } ;var

_prelu=Module["._Prelu"] = function(){return(_Prelu=Module["._Prelu"] = Module["asm"] ) ["Ha"] ).apply (null, arguments ) } ;var

_prod=Module["._Prod"] = function(){return(_Prod=Module["._Prod"] = Module["asm"] ) ["Ia"] ).apply (null, arguments ) } ;var

_realDiv=Module["._RealDiv"] = function(){return(_RealDiv=Module["._RealDiv"] = Module["asm"] ) ["Ja"] ).apply (null, arguments ) } ;var

_relu=Module["._Relu"] = function(){return(_Relu=Module["._Relu"] = Module["asm"] ) ["Ka"] ).apply (null, arguments ) } ;var

_relu6=Module["._Relu6"] = function(){return(_Relu6=Module["._Relu6"] = Module["asm"] ) ["La"] ).apply (null, arguments ) } ;var

_resizeBilinear=Module["._ResizeBilinear"] = function(){return(_ResizeBilinear=Module["._ResizeBilinear"] = Module["asm"] ) ["Ma"] ).apply (null, arguments ) } ;var

_reverse=Module["._Reverse"] = function(){return(_Reverse=Module["._Reverse"] = Module["asm"] ) ["Na"] ).apply (null, arguments ) } ;var

_rotateWithOffset=Module["._RotateWithOffset"] = function(){return(_RotateWithOffset=Module["._RotateWithOffset"] = Module["asm"] ) ["Oa"] ).apply (null, arguments ) } ;var
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_Round=Module["_Round"] = function(){return(_Round=Module["_Round"] = Module["asm"]["fa"] ).apply(null, arguments)}; var
_RSqrt=Module["_RSqrt"] = function(){return(_RSqrt=Module["_RSqrt"] = Module["asm"]["QB"] ).apply(null, arguments)}; var
_ScatterNd=Module["_ScatterNd"] = function(){return(_ScatterNd=Module["_ScatterNd"] = Module["asm"]["ra "] ).apply(null, arguments)}; var
_SelectV2=Module["_SelectV2"] = function(){return(_SelectV2=Module["_SelectV2"] = Module["asm"]["sa "] ).apply(null, arguments)}; var
_Sigmoid=Module["_Sigmoid"] = function(){return(_Sigmoid=Module["_Sigmoid"] = Module["asm"]["Ta"] ).apply(null, arguments)}; var
_Sin=Module["_Sin"] = function(){return(_Sin=Module["_Sin"] = Module["asm"]["Ua"] ).apply(null, arguments)}; var
_Softmax=Module["_Softmax"] = function(){return(_Softmax=Module["_Softmax"] = Module["asm"]["Va"] ).apply(null, arguments)}; var
_Sqrt=Module["_Sqrt"] = function(){return(_Sqrt=Module["_Sqrt"] = Module["asm"]["Wa"] ).apply(null, arguments)}; var
_Square=Module["_Square"] = function(){return(_Square=Module["_Square"] = Module["asm"]["Xa"] ).apply(null, arguments)}; var
_SquaredDifference=Module["_SquaredDifference"] = function(){return(_SquaredDifference=Module["_Squared Difference"] = Module["asm"]["Ya"] ).apply(null, arguments)}; var
_Step=Module["_Step"] = function(){return(_Step=Module["_Step"] = Module["asm"]["Za"] ).apply(null, arguments)}; var
_StridedSlice=Module["_StridedSlice"] = function(){return(_StridedSlice=Module["_StridedSlice"] = Module["asm"]["a"] ).apply(null, arguments)}; var
_Sub=Module["_Sub"] = function(){return(_Sub=Module["_Sub"] = Module["asm"]["sa"] ).apply(null, arguments)}; var
_Sum=Module["_Sum"] = function(){return(_Sum=Module["_Sum"] = Module["asm"]["ab"] ).apply(null, arguments)}; var
_Tan=Module["_Tan"] = function(){return(_Tan=Module["_Tan"] = Module["asm"]["bb"] ).apply(null, arguments)}; var
_Tanh=Module["_Tanh"] = function(){return(_Tanh=Module["_Tanh"] = Module["asm"]["cb"] ).apply(null, arguments)}; var
_Tile=Module["_Tile"] = function(){return(_Tile=Module["_Tile"] = Module["asm"]["db"] ).apply(null, arguments)}; var
_TopK=Module["_TopK"] = function(){return(_TopK=Module["_TopK"] = Module["asm"]["eb"] ).apply(null, arguments)}; var
_Transform=Module["_Transform"] = function(){return(_Transform=Module["_Transform"] = Module["asm"]["fb"] ).apply(null, arguments)}; var
_Transpose=Module["_Transpose"] = function(){return(_Transpose=Module["_Transpose"] = Module["asm"]["gb"] ).apply(null, arguments)}; var
__FusedMatMul=Module["__FusedMatMul"] = function(){return(__FusedMatMul=Module["__FusedMatMul"] = Module["asm"]["hb"] ).apply(null, arguments)}; var
_malloc=Module["_malloc"] = function(){return(_malloc=Module["_malloc"] = Module["asm"]["ib"] ).apply(null, arguments)}; var
_free=Module["_free"] = function(){return(_free=Module["_free"] = Module["asm"]["jb"] ).apply(null, arguments)}; var
__errno_location=Module["__errno_location"] = function(){return(__errno_location=Module["__errno_location"] = Module["asm"]["kb"] ).apply(null, arguments)}; var
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ExitStatus(status) { this.name = "ExitStatus"; this.message = "Program terminated with exit(" + status + ");"; this.status = status; }

dependenciesFulfilled = function runCaller() { if (!calledRun) run(); if (!calledRun) dependenciesFulfilled = runCaller; }

run(args) { args = args || arguments; if (runDependencies > 0) { return; } if (ENVIRONMENT_IS_PTHREAD) { readyPromiseResolve(Module); initRuntime(); postMessage({ "cmd": "loaded" }); } return; }

preRun(); runCaller(); }

function run() {
  doRun();
  if (calledRun) return; calledRun = true;
  Module["calledRun"] = true;
  if (ABORT) return;
  initRuntime();
  preMain();

  tryPromiseResolve(Module);
  if (Module["onRuntimeInitialized"])
    Module["onRuntimeInitialized"]();

  if (Module["setStatus"])
    Module["setStatus"]("Running...");

  setTimeout(function() {
    setUserWindowTitle();
    setTimeout(function() {
      Module["setStatus"]("");
    }, 1);
  }, 1);
}

else { doRun(); }

Module["run"] = run;

function exit(status, implicit) {
  if (implicit && !noExitRuntime && status === 0) {
    return;
  }
}

if (ENVIRONMENT_IS_PTHREAD) {
  PThread.terminateAllThreads();
  EXITSTATUS = status;
  exitRunner();
}

if (Module["onExit"])
  Module["onExit"](status);

ABORT = true;
quit_(_status, new ExitStatus(status));

if (Module["preInit"]) {
  if (typeof Module["preInit"] == "function") Module["preInit"] = 
    [Module["preInit"]].pop();
}

if (ENVIRONMENT_IS_NODE) {
  if (ENVIRONMENT_IS_WORKER) {
    scriptDirectory = require("path").dirname(scriptDirectory) + "/";
  } else {
    scriptDirectory = __dirname + "/";
  }
}

if (process.argv.length > 1) {
  thisProgram = process.argv[1].replace(/\W+/g, "/");
}

arguments_ = process.argv.slice(2);

var setWindowTitle = function() {
  setUserWindowTitle();
}

nodeFS = require("fs");
nodePath = require("path");

define("fs", () => nodeFS);

define("path", () => nodePath);

moduleOverrides = {};

for (key in Module) {
  if (Module.hasOwnProperty(key)) {
    moduleOverrides[key] = Module[key];
  }
}

arguments_ = arguments_.slice(2);

if (ENVIRONMENT_IS_PTHREAD) {
  userWindowTitle = function() {
    setUserWindowTitle();
  }
}

WasmBackendModule = function() {

  if (typeof __filename !== "undefined") {
    _scriptDir = _scriptDir || __filename;
  }

  return (
    function(WasmBackendModule) {
      WasmBackendModule = WasmBackendModule || {};

      Module = typeof WasmBackendModule !== "undefined" ? WasmBackendModule : {};

      var Module = Module || {};

      Module["preInit"] = 
        function() {
          Module["filename"] = "WasmBackendModuleThreadedSimd.js";
          Module["preInit", "WasmBackendModuleThreadedSimd"] = 
            WasmBackendModuleThreadedSimd;
        };

      var program\_overrides = {}

      var _scriptDir = _scriptDir || ".\";

      Module["filename"] = "WasmBackendModuleThreadedSimd.js";

      var userWindowTitle = function() {
        setUserWindowTitle();
      }

      WasmBackendModule = function() {
        WasmBackendModule = function() {
          WasmBackendModule = function() {
            WasmBackendModule = WasmBackendModule || {};
          }
        }
      }

      moduleOverrides["WasmBackendModule"] = WasmBackendModule;

      if (typeof readyPromiseResolve !== "undefined") {
        readyPromiseResolve(require("WasmBackendModule"));
      } else {
        readyPromiseReject();
      }

      moduleOverrides["WasmBackendModule"] = WasmBackendModule;

      var module = require("/\"WasmBackendModule\"/");

      moduleOverrides["WasmBackendModule"] = WasmBackendModule;

      if (typeof readyPromiseResolve !== "undefined") {
        readyPromiseResolve = resolve;
      }

      if (typeof readyPromiseReject !== "undefined") {
        readyPromiseReject = reject;
      }

      moduleOverrides["WasmBackendModule"] = WasmBackendModule;

      module.versions = module.versions || "0.1.0";

      module.node = module.node || "0.1.0";

      module.__dirname = module.__dirname || "/\";

      module.__filename = module.__filename || "/\";

      module.exports = module.exports || {
        WasmBackendModuleThreadedSimd: function() {
          return WasmBackendModuleThreadedSimd.ready
        }
      });
    });

    if (typeof exports === "object" && typeof module === "object") {
      module.exports = WasmBackendModuleThreadedSimd;
    } else if (typeof define === "function" && define["amd"] && define["amd", WasmBackendModuleThreadedSimd]) {
      define([], function() { return WasmBackendModuleThreadedSimd; });
    }
  }
};
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```
if (ENVIRONMENT_IS_WEB || ENVIRONMENT_IS_WORKER) {
    if (ENVIRONMENT_IS_WORKER) {
        scriptDirectory = self.location.href
    } else if (typeof document !== "undefined" && document.currentScript) {
        scriptDirectory = document.currentScript.src
    }
    if (scriptDirectory) {
        scriptDirectory = scriptDirectory.replace(/\/g, "/");
    }
    readBinary = function readBinary(f) {
        var data = read(f, "binary");
        return new Uint8Array(data);  // Wasi spec
    }
    readAsync = function readAsync(url, onload, onerror) {
        var xhr = new XMLHttpRequest;
        xhr.open("GET", url, true);
        xhr.responseType = "arraybuffer";
        xhr.onload = function () {
            if (xhr.status === 200 || xhr.status === 0) {
                onload(xhr.response);
            } else {
                onerror();
            }
        };
        xhr.send(null);
    }
}
```

```
assert(condition, text) {
    if (!condition) {
        throw new Error("Assertion failed: " + text);
    }
}
```
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WebAssembly.RuntimeError(what);readyPromiseReject(e);throw e} function hasPrefix(str,prefix){return String.prototype.startsWith?str.startsWith(prefix):str.indexOf(prefix)===0} var fileURIPrefix="file://";function isFileURI(filename){return hasPrefix(filename,fileURIPrefix)} var wasmBinaryFile="tfjs-backend-wasm.wasm"; if(isDataURI(wasmBinaryFile)){wasmBinaryFile=locateFile(wasmBinaryFile)} function getBinary(file){try{if(file==wasmBinaryFile&&wasmBinary){return new Uint8Array(wasmBinaryFile)}else{throw"both async and sync fetching of the wasm failed"}}catch(err){abort(err)}} function getBinaryPromise(){if(!wasmBinary&&(!ENVIRONMENT_IS_WEB||!ENVIRONMENT_IS_WORKER)){if(typeof fetch==='function'){return fetch(wasmBinaryFile,{credentials:"same-origin"}).then(function(response){if(!response["ok"]){throw"failed to load wasm binary file at "+wasmBinaryFile+"`}catch(function(){return getBinary(wasmBinaryFile)}))else{throw"both async and sync fetching of the wasm failed"}}catch(err){abort(err)}} function createWasm(){var info={"a":asmLibraryArg}; function receiveInstance(instance,module){var exports=instance.exports;Module["asm"]=exports;wasmMemory=Module["asm\["j"]"];updateGlobalBufferAndViews(wasmMemory.buffer);wasmTable=Module["asm\["r"]"];removeRunDependency("wasm-instantiate");function receiveInstantiatedSource(output){receiveInstance(output["instance"])} function instantiateArrayBuffer(receiver){return getBinaryPromise().then(function(binary){return WebAssembly.instantiate(binary,info)}).then(receiver,function(reason){err("failed to asynchronously prepare wasm: "+reason);abort(reason)})} function instantiateAsync(){if(!wasmBinary&&typeof WebAssembly.instantiateStreaming==='function'&&!isDataURI(wasmBinaryFile)&&!isFileURI(wasmBinaryFile)&&typeof fetch==='function'){return fetch(wasmBinaryFile,{credentials:"same-origin"}).then(function(response){var result=WebAssembly.instantiateStreaming(response,info);return result.then(receiveInstantiatedSource,function(reason){err("wasm streaming compile failed: "+reason);err("falling back to ArrayBuffer instantiation");return instantiateArrayBuffer(receiveInstantiatedSource)})})else{return instantiateArrayBuffer(receiveInstantiatedSource)}} if(Module["instantiateWasm"]){try{var exports=Module["instantiateWasm"](info,receiveInstance);return exports}catch(e){err("Module.instantiateWasm callback failed with error: "+e);return false}}} catch(e){abort(e)} function _abort(){abort()} function _emscripten_memcpy_big(dest,src,num){HEAPU8.copyWithin(dest,src,src+num)} function _emscripten_get_heap_size(){return HEAPU8.length} function emscripten_realloc_buffer(size){try{wasmMemory.grow(size-buffer.byteLength+65535>>>16);updateGlobalBufferAndViews(wasmMemory.buffer);return 1}catch(e){}} function _emscripten_resize_heap(requestedSize){var oldSize=_emscripten_get_heap_size();var maxHeapSize=2147483648;if(requestedSize>maxHeapSize){return false}var cutDown=1;while(cutDown.length>0){var callback=callbacks.shift();if(typeof callback==='function'){callback(callback,arguments)} else{callback["abort"]()} } else{callback["abort"]()} return requestedSize-oldSize*2 if(replacement){return true} return false} var overGrownHeapSize=oldSize*(1.2/cutDown);overGrownHeapSize=Math.min(overGrownHeapSize,requestedSize+100663296);var newSize=Math.min(maxHeapSize,alignUp(Math.max(requestedSize,overGrownHeapSize),65536));var replacement=emscripten_realloc_buffer(newSize);if(replacement){return true} return false}
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_GatherNd=Module["_GatherNd"] = function() { return (_GatherNd=Module["_GatherNd"] = Module["asm"]["U"] ).apply(null, arguments); };

_Greater=Module["_Greater"] = function() { return (_Greater=Module["_Greater"] = Module["asm"]["V"] ).apply(null, arguments); };

_GreaterEqual=Module["_GreaterEqual"] = function() { return (_GreaterEqual=Module["_GreaterEqual"] = Module["asm"]["W"] ).apply(null, arguments); };

_LeakyRelu=Module["_LeakyRelu"] = function() { return (_LeakyRelu=Module["_LeakyRelu"] = Module["asm"]["X"] ).apply(null, arguments); };

_Less=Module["_Less"] = function() { return (_Less=Module["_Less"] = Module["asm"]["Y"] ).apply(null, arguments); };

_LessEqual=Module["_LessEqual"] = function() { return (_LessEqual=Module["_LessEqual"] = Module["asm"]["Z"] ).apply(null, arguments); };

_Log=Module["_Log"] = function() { return (_Log=Module["_Log"] = Module["asm"]["_" ]).apply(null, arguments); };

_LogicalAnd=Module["_LogicalAnd"] = function() { return (_LogicalAnd=Module["_LogicalAnd"] = Module["asm"]["$"] ).apply(null, arguments); };

_Max=Module["_Max"] = function() { return (_Max=Module["_Max"] = Module["asm"]["aa"] ).apply(null, arguments); };

_MaxPool=Module["_MaxPool"] = function() { return (_MaxPool=Module["_MaxPool"] = Module["asm"]["ba"] ).apply(null, arguments); };

_Maximum=Module["_Maximum"] = function() { return (_Maximum=Module["_Maximum"] = Module["asm"]["ca"] ).apply(null, arguments); };

_Mean=Module["_Mean"] = function() { return (_Mean=Module["_Mean"] = Module["asm"]["da"] ).apply(null, arguments); };

_Min=Module["_Min"] = function() { return (_Min=Module["_Min"] = Module["asm"]["ea"] ).apply(null, arguments); };

_Minimum=Module["_Minimum"] = function() { return (_Minimum=Module["_Minimum"] = Module["asm"]["fa"] ).apply(null, arguments); };

_MirrorPad=Module["_MirrorPad"] = function() { return (_MirrorPad=Module["_MirrorPad"] = Module["asm"]["ga"] ).apply(null, arguments); };

_Multiply=Module["_Multiply"] = function() { return (_Multiply=Module["_Multiply"] = Module["asm"]["ha"] ).apply(null, arguments); };

_Neg=Module["_Neg"] = function() { return (_Neg=Module["_Neg"] = Module["asm"]["ia"] ).apply(null, arguments); };

_NonMaxSuppressionV3=Module["_NonMaxSuppressionV3"] = function() { return (_NonMaxSuppressionV3=Module["_NonMaxSuppressionV3"] = Module["asm"]["ja"] ).apply(null, arguments); };

_NonMaxSuppressionV4=Module["_NonMaxSuppressionV4"] = function() { return (_NonMaxSuppressionV4=Module["_NonMaxSuppressionV4"] = Module["asm"]["ka"] ).apply(null, arguments); };

_NonMaxSuppressionV5=Module["_NonMaxSuppressionV5"] = function() { return (_NonMaxSuppressionV5=Module["_NonMaxSuppressionV5"] = Module["asm"]["la"] ).apply(null, arguments); };

_NotEqual=Module["_NotEqual"] = function() { return (_NotEqual=Module["_NotEqual"] = Module["asm"]["ma"] ).apply(null, arguments); };

_OneHot=Module["_OneHot"] = function() { return (_OneHot=Module["_OneHot"] = Module["asm"]["na"] ).apply(null, arguments); };

_PadV2=Module["_PadV2"] = function() { return (_PadV2=Module["_PadV2"] = Module["asm"]["oa"] ).apply(null, arguments); };

_Pow=Module["_Pow"] = function() { return (_Pow=Module["_Pow"] = Module["asm"]["pa"] ).apply(null, arguments); };

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TensorData { id: number; memoryOffset: number; shape: number[]; dtype: DataType; refCount: number; } /* Only used for string tensors, storing encoded bytes. */ stringBytes?: Uint8Array | { } /* unexport type DataId = object; // object instead of {} to force non-primitive. */ unexport class BackendWasm extends KernelBackend { // 0 is reserved for null data ids. private dataIdNextNumber = 1; dataIdMap: DataStorage<TensorData>; constructor(public wasm: BackendWasmModule | BackendWasmThreadedSimdModule) { super(); }

this.wasm.tfjs.initWithThreadsCount(threadsCount); actualThreadsCount = this.wasm.tfjs.getThreadsCount(); this.dataIdMap = new DataStorage(this, engine());

async write(values: backend_util.BackendValues, shape: number[], dtype: DataType): DataId {
  const dataId = { id: this.dataIdNextNumber++ ];

  this.move(dataId, values, shape, dtype, 1);
  return dataId;
}

async time(f: () => void): Promise<BackendTimingInfo> {
  const start = util.now();
  f();
  const kernelMs = util.now() - start;
  return { kernelMs: [] };
}

async move(dataId: DataId, values: backend_util.BackendValues, shape: number[], dtype: DataType, refCount: number): void {
  if (dtype === 'string') {
    const stringBytes = values as Uint8Array[];
  
  } else {
    const size = util.sizeFromShape(shape);
    const numBytes = size * util.bytesPerElement(dtype);
    const memoryOffset = this.wasm._malloc(numBytes);
    this.dataIdMap.set(dataId, { id, memoryOffset, shape, dtype, refCount });
    this.wasm.tfjs.registerTensor(id, size, memoryOffset);
  
    if (values != null) {
      this.wasm.HEAPU8.set(new Uint8Array(values as backend_util.TypedArray).buffer,
          (values as backend_util.TypedArray).byteOffset, numBytes);
    }
}

async read(dataId: DataId): Promise<backend_util.BackendValues> {
  return this.readSync(dataId);
}

readSync(dataId: DataId): backend_util.BackendValues {
  const { memoryOffset, dtype, shape, stringBytes } = this.dataIdMap.get(dataId);

  if (dtype === 'string') {
    return stringBytes;
  }
  const bytes = this.wasm.HEAPU8.slice(memoryOffset, memoryOffset + util.sizeFromShape(shape) * util.bytesPerElement(dtype));
  return typedArrayFromBuffer(bytes.buffer, dtype);
}

disposeData(dataId: DataId, force = false): boolean {
  if (this.dataIdMap.has(dataId)) {
    const data = this.dataIdMap.get(dataId);
    data.refCount--;
    if (!force && data.refCount > 0) {
      return false;
    }
    this.wasm._free(data.memoryOffset);
    this.wasm.tfjs.disposeData(data.id);
    this.dataIdMap.delete(dataId);
    return true;
  }

  return false;
}

/* Return refCount of a 'TensorData'. */
refCount(dataId: DataId): number {
  if (this.dataIdMap.has(dataId)) {
    const tensorData = this.dataIdMap.get(dataId);
    return tensorData.refCount;
  }
  return 0;
}

incRef(dataId: DataId) {
  this.dataIdMap.get(dataId).refCount++;
}

getMemoryOffset(dataId: DataId): number {
  return this.dataIdMap.get(dataId).memoryOffset;
}

dispose() {
  this.wasm.tfjs.dispose();
}

/* Dispose the memory if the dataId has 0 refCount. Return true if the memory isn't released, false otherwise. */
* @param dataId
* @param force Optional, remove the data regardless of refCount
* @param disposeDataCached true if (this.dataIdMap.has(dataId)) { const data = this.dataIdMap.get(dataId); data.refCount++; } return false;
* @param disposeDataCached=false: boolean { 
  if (this.dataIdMap.has(dataId)) { const data = this.dataIdMap.get(dataId); data.refCount++; } return false;
}

const data = this.wasm._malloc(size);

this.wasm.tfjs.registerTensor(id, size, memoryOffset + util.sizeFromShape(shape) * util.bytesPerElement(dtype));
return typedArrayFromBuffer(bytes.buffer, dtype);
}

disposeDataCached(dataId: DataId, force = false) {
  if (this.dataIdMap.has(dataId)) {
    const data = this.dataIdMap.get(dataId);
    data.refCount--;
    if (!force && data.refCount > 0) {
      return false;
    }
    this.wasm._free(data.memoryOffset);
    this.wasm.tfjs.disposeData(data.id);
    this.dataIdMap.delete(dataId);
    return true;
  }

  return false;
}

/* Dispose of a 'TensorData'. */
refCountCached(dataId: DataId): number {
  if (this.dataIdMap.has(dataId)) {
    const tensorData = this.dataIdMap.get(dataId);
    return tensorData.refCount;
  }
  return 0;
}

incRefCached(dataId: DataId) {
  this.dataIdMap.get(dataId).refCount++;
}

getMemoryOffsetCached(dataId: DataId): number {
  return this.dataIdMap.get(dataId).memoryOffset;
}

disposeCached() {
  this.wasm.tfjs.dispose();
}

/* Make a tensor info for the output of an op. If 'memoryOffset' is not present, this method allocates memory on the WASM heap. If 'memoryOffset' is present, the memory was allocated elsewhere (in c++) and we just record the pointer that memory lives. */
makeOutput(shape: number[], dtype: DataType, memoryOffset?: number): TensorInfo {
  let datalId = {};
  if (memoryOffset == null) {
    datalId = this.write(null, shape, dtype);
  } else {
    const id = this.dataIdNextNumber++;
    datalId = { id: this.dataIdMap.set(datalId, id, memoryOffset, shape, dtype, refCount: 1); }
    this.dataIdMap.set(datalId, id, memoryOffset, shape, dtype, refCount: 1);
  } const size = util.sizeFromShape(shape);
  this.wasm.tfjs.registerTensor(id, size, memoryOffset);
  return datalId;
}

/* Switch the dtype */
switch (dtype) {
case 'float32':
      return new Float32Array(buffer, memoryOffset, size);
    case 'int32':
      return new Int32Array(buffer, memoryOffset, size);
    default:
      throw new Error(`Unknown dtype ${dtype}`);
  }
}

function createInstantiateWasmFunc(path: string) {
  // this will be replace by rollup plugin patchWebAssembly
  // miniprogram's output.
  // tls:lint:disable-next-line:no-any
  return (imports: any, callback: any) => {
    if (!response.ok) {
      imports.env.a('failed to load wasm binary file at '${path}')
    }
    response.arrayBuffer().then(binary => {
      WebAssembly.instantiate(binary, imports).then(output => {
        callback(output.instance, output.module);
      })
    });
  }
}

function getPathToWasmBinary(
  simdSupported: boolean, threadsSupported: boolean,
  wasmModuleFolder: string) {
  if (wasmPath != null) {
    return wasmPath;
  }

  let path: WasmBinaryName = 'tfjs-backend-wasm.wasm';
  if (simdSupported &&
      threadsSupported) {
    path = 'tfjs-backend-wasm-threaded-simd.wasm';
  } else if (simdSupported) {
    path = 'tfjs-backend-wasm-simd.wasm';
  }

  if (wasmFileMap != null) {
    if (wasmFileMap[path] != null) {
      return wasmFileMap[path];
    }
  }

  return wasmModuleFolder + path;
}

/**
 * Initializes the wasm module and creates the js <-> wasm bridge.
 *
 * NOTE: We wrap the wasm module in a object with property
 * 'wasm' instead of returning Promise<BackendWasmModule> to avoid freezing Chrome (last tested in
 * Chrome 76).
 * @param async function init(): Promise<{wasm: BackendWasmModule}> { }
 */
export async function init(): Promise<{wasm: BackendWasmModule}> {
  const [simdSupported, threadsSupported] = await Promise.all([
    env().getAsync('WASM_HAS_SIMD_SUPPORT'),
    env().getAsync('WASM_HAS_MULTITHREAD_SUPPORT')
  ]);,

  return new Promise((resolve, reject) => {
    const factoryConfig: WasmFactoryConfig = {};

    /**
     * This function overrides the Emscripten
     * module locateFile utility.
     * @param path The relative path to the file that needs to be loaded.
     * @param prefix The path to the main JavaScript file's directory.
     * @param path The relative path to the file that needs to be loaded.
     */
    factoryConfig.locateFile = (path, prefix) => {
      if (path.endsWith('.worker.js')) {
        const response = wasmWorkerContents;
        const blob = new Blob([response], {type: 'application/javascript'});
        return URL.createObjectURL(blob);
      }

      if (path.endsWith('.wasm')) {
        return getPathToWasmBinary(
          simdSupported as boolean,
          threadsSupported as boolean,
          wasmPathPrefix != null ? wasmPathPrefix : prefix);
      }
      return prefix + path;
    };

    // Use the instantiateWasm binary override when system fetch is not available.
    // Reference:
    // https://github.com/emscripten-core/emscripten/blob/2bca083cbbd5a4133db61fbd74d04f7eeefca907/tests/manual_wasm_instantiate.html#L170
    if (customFetch) {
      factoryConfig.instantiateWasm =
        createInstantiateWasmFunc(getPathToWasmBinary(
          simdSupported as boolean, threadsSupported as boolean,
          wasmPathPrefix != null ? wasmPathPrefix : '')
        )
    }

    let initialized = false;

    factoryConfig.onAbort = () => {
      if (initialized) {
        // Emscripten already called console.warn so no need to
        return;
      }
      if (initAborted) {
        // Emscripten calls 'onAbort' twice, resulting in double
        // messages.
        return;
      }
      initAborted = true;
      const rejectMsg =
        'Make sure the server can serve the `.wasm` file relative to the ' +
        'bundled js file. For more details see
      reject({message: rejectMsg});
    }

    // Use the instantiateWasm override when system fetch is not available.
    // Reference:
    // https://github.com/emscripten-core/emscripten/blob/2bca083cbbd5a4133db61fbd74d04f7eeefca907/tests/manual_wasm_instantiate.html#L170
    if (customFetch) {
      factoryConfig.instantiateWasm =
        createInstantiateWasmFunc(getPathToWasmBinary(
          simdSupported as boolean, threadsSupported as boolean,
          wasmPathPrefix != null ? wasmPathPrefix : '')
        )
    }

    return new Promise((resolve, reject) => {
      const voidReturnType: string =

null;\n
// Using the tfjs namespace to avoid conflict with emscripten's API.\n
module.tfjs = {\n
init:
module.cwrap('init', null, []),\n
initWithThreadsCount:\n
module.cwrap('init_with_threads_count', null,
['number']),\n
getThreadsCount: module.cwrap('get_threads_count', 'number', []),\n
registerTensor:
module.cwrap(\n
'register_tensor', null,\n
[\n
'number', // id\n
'number', // size\n
'number', // memoryOffset\n
]),\n
disposeData: module.cwrap('dispose_data', voidReturnType,
['number']),\n
dispose: module.cwrap('dispose', voidReturnType, []),\n
};\n\n
resolve({wasm: module});\n
});\n });\n}\n\nfunction typedArrayFromBuffer(\n buffer: ArrayBuffer, dtype: DataType):
backend_util.TypedArray {\n switch (dtype) {\n case 'float32':\n
return new Float32Array(buffer);\n case
'int32':\n
return new Int32Array(buffer);\n case 'bool':\n
return new Uint8Array(buffer);\n default:\n
throw new Error(`Unknown dtype ${dtype}`);\n }\n}\n\nconst wasmBinaryNames = [\n 'tfjs-backendwasm.wasm', 'tfjs-backend-wasm-simd.wasm',\n 'tfjs-backend-wasm-threaded-simd.wasm'\n] as const ;\ntype
WasmBinaryName = typeof wasmBinaryNames[number];\n\nlet wasmPath: string = null;\nlet wasmPathPrefix:
string = null;\nlet wasmFileMap: {[key in WasmBinaryName]?: string} = {};\nlet initAborted = false;\nlet
customFetch = false;\n\n/**\n * @deprecated Use `setWasmPaths` instead.\n * Sets the path to the `.wasm` file
which will be fetched when the wasm\n * backend is initialized. See\n *
https://github.com/tensorflow/tfjs/blob/master/tfjs-backend-wasm/README.md#using-bundlers\n * for more
details.\n * @param path wasm file path or url\n * @param usePlatformFetch optional boolean to use platform fetch
to download\n * the wasm file, default to false.\n *\n * @doc {heading: 'Environment', namespace: 'wasm'}\n
*/\nexport function setWasmPath(path: string, usePlatformFetch = false): void {\n deprecationWarn(\n
'setWasmPath has been deprecated in favor of setWasmPaths and' +\n
' will be removed in a future release.');\n if
(initAborted) {\n throw new Error(\n
'The WASM backend was already initialized. Make sure you call ' +\n
'`setWasmPath()` before you call `tf.setBackend()` or `tf.ready()`');\n }\n wasmPath = path;\n customFetch =
usePlatformFetch;\n}\n\n/**\n * Configures the locations of the WASM binaries.\n *\n * ```js\n * setWasmPaths({\n
* 'tfjs-backend-wasm.wasm': 'renamed.wasm',\n * 'tfjs-backend-wasm-simd.wasm': 'renamed-simd.wasm',\n *
'tfjs-backend-wasm-threaded-simd.wasm': 'renamed-threaded-simd.wasm'\n * });\n * tf.setBackend('wasm');\n *
```\n *\n * @param prefixOrFileMap This can be either a string or object:\n * - (string) The path to the directory
where the WASM binaries are located.\n * Note that this prefix will be used to load each binary (vanilla,\n *
SIMD-enabled, threading-enabled, etc.).\n * - (object) Mapping from names of WASM binaries to custom\n *
full paths specifying the locations of those binaries. This is useful if\n * your WASM binaries are not all located
in the same directory, or if your\n * WASM binaries have been renamed.\n * @param usePlatformFetch optional
boolean to use platform fetch to download\n * the wasm file, default to false.\n *\n * @doc {heading:
'Environment', namespace: 'wasm'}\n */\nexport function setWasmPaths(\n prefixOrFileMap: string|{[key in
WasmBinaryName]?: string},\n usePlatformFetch = false): void {\n if (initAborted) {\n throw new Error(\n
'The WASM backend was already initialized. Make sure you call ' +\n
'`setWasmPaths()` before you call
`tf.setBackend()` or ' +\n
'`tf.ready()`');\n }\n\n if (typeof prefixOrFileMap === 'string') {\n wasmPathPrefix
= prefixOrFileMap;\n } else {\n wasmFileMap = prefixOrFileMap;\n const missingPaths =\n
wasmBinaryNames.filter(name => wasmFileMap[name] == null);\n if (missingPaths.length > 0) {\n
throw new
Error(\n
`There were no entries found for the following binaries: ` +\n
`${missingPaths.join(',')}. Please
either call setWasmPaths with a ` +\n
`map providing a path for each binary, or with a string indicating ` +\n
`the directory where all the binaries can be found.`);\n }\n }\n\n customFetch = usePlatformFetch;\n}\n\n/**
Used in unit tests. */\nexport function resetWasmPath(): void {\n wasmPath = null;\n wasmPathPrefix = null;\n
wasmFileMap = {};\n customFetch = false;\n initAborted = false;\n}\n\nlet threadsCount = -1;\nlet
actualThreadsCount = -1;\n\n/**\n * Sets the number of threads that will be used by XNNPACK to create\n *
threadpool (default to the number of logical CPU cores).\n *\n * This must be called before calling
`tf.setBackend('wasm')`.\n */\nexport function setThreadsCount(numThreads: number) {\n threadsCount =
numThreads;\n}\n\n/**\n * Gets the actual threads count that is used by XNNPACK.\n *\n * It is set after the
backend is intialized.\n */\nexport function getThreadsCount(): number {\n if (actualThreadsCount === -1) {\n
throw new Error(`WASM backend not initialized.`);\n }\n return actualThreadsCount;\n}\n","export const

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import './flags_wasm';

import {registerBackend} from '@tensorflow/tfjs-core';

import {BackendWasm, init} from './backend_wasm';

export {BackendWasm, getThreadsCount, setThreadsCount, setWasmPath,
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import {backend_util, KernelConfig, KernelFunc, Cumsum, CumsumAttr, CumsumInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

import {transpose} from './Transpose';

let wasmCumsum: (xId: number, exclusive: number, reverse: number, finalDim: number, outId: number, dtype: CppDType) => void;

function setup(backend: BackendWasm) {
  wasmCumsum = backend.wasm.cwrap(Cumsum, null /* void */, [
    'number', // x_id
    'number', // exclusive
    'number', // reverse
    'number', // final_dim
    'number', // out_id
    'number'  // dtype
  ]);}

export function cumsum(
  args: {inputs: CumsumInputs, backend: BackendWasm, attrs: CumsumAttr}):
TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {axis, exclusive, reverse} = attrs;
  const xRank = x.shape.length;

  util.assert(x.dtype === 'float32' || x.dtype === 'int32', () => `cumsum does not support ${x.dtype} tensors in the WASM backend`);
  // permute required axis to inner most axis
  const permutation = backend_util.getAxesPermutation([axis], xRank);
  let permutedX = x;
  if (permutation !== null) {
    permutedX = transpose({inputs: {x}, attrs: {perm: permutation}, backend});
  }

  const permutedAxis = backend_util.getInnerMostAxes(1, xRank)[0];

  backend_util.assertAxesAreInnerMostDims('cumsum', [permutedAxis], xRank);

  const permutedOut = backend.makeOutput(x.shape, x.dtype);
  const finalDim = x.shape[permutedAxis];

  const permutedXId = backend.dataIdMap.get(permutedX.dataId).id;
  const permutedOutId =
backend.dataIdMap.get(permutedOut.dataId);\n  wasmCumsum(permutedXId, exclusive ? 1 : 0, reverse ? 1 : 0, finalDim, \n  permutedOutId, CppDType[x.dtype]);\n}\n// transpose data back if permuted
if (permutation !== null) {
  const undoPermutation = backend_util.getUndoAxesPermutation(permutation);
  out = transpose({inputs: {x: permutedOut}, attrs: \{perm: undoPermutation, backend\}});
}

export const cumsumConfig: KernelConfig = \{
  kernelName: Cumsum,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: cumsum as {} as KernelFunc
};

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Cumsum.js.map

No license file was found, but licenses were detected in source scan.
import {backend_util, KernelConfig, KernelFunc, Slice, slice_util, SliceInputs, TypedArray, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {sliceImplCPU} from '../kernel_utils/shared';

export function slice(
    args: {inputs: SliceInputs, attrs: SliceAttrs, backend: BackendWasm}) {
  const {inputs: {x}, attrs: {begin, size}, backend} = args;

  const [begin_, size_] = slice_util.parseSliceParams(x, begin, size);

  const isContinuous = slice_util.isSliceContinous(x.shape, begin_, size_);
  const xVals = backend.readSync(x.dataId);
  const out = backend.makeOutput(size_, x.dtype);
  const xStrides = util.computeStrides(x.shape);
  const outData = backend.dataIdMap.get(out.dataId);

  if (isContinuous)
  {
    const flatOffset = slice_util.computeFlatOffset(begin_, xStrides);

    if (x.dtype === 'string') {
      outData.stringBytes = (xVals as Uint8Array[]) .slice(flatOffset, flatOffset + util.sizeFromShape(size_));
    } else {
      const outVals = backend.typedArrayFromHeap(out);
      outVals.set((xVals as TypedArray).subarray(flatOffset, flatOffset + util.sizeFromShape(size_))); return out;
    }
  }

  if (x.dtype === 'string') {
    const res = sliceImplCPU(xVals, begin_, size_, x.shape, x.dtype);
    outData.stringBytes = res as Uint8Array[];
    return out;
  }

  const outVals = backend.typedArrayFromHeap(out);
  const rank = x.shape.length;
  if (rank === 2)
  {
    slice2d(xVals as TypedArray, xStrides[0], outVals, begin_ as [number, number], size_ as number, size_ as number, x.shape, x.dtype);
  }

  return out;
}
Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/Slice.js.map

No license file was found, but licenses were detected in source scan.

{ "version":3,"file":"ScatterNd.js","sourceRoot":null,"sources":null,"names":null,"mappings":null}
import {KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = true;

export const addConfig: KernelConfig = {
  kernelName: 'Add',
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: (args: {backend: BackendWasm, inputs: ScatterNdInputs, attrs: ScatterNdAttrs}) => {
    const {backend, inputs, attrs} = args;
    const {dataIdMap, backend} = inputs; // BackendWasm
    const {shape} = attrs;

    const out = backend.makeOutput(shape, inputs[0].dtype);
    if (util.sizeFromShape(shape) === 0) {
      return out;
    }

    const {sliceRank, numUpdates, sliceSize, strides, outputSize} = 
      scatter_util.calculateShapes(inputs[0], inputs[1], shape);

    const indicesData = backend.dataIdMap.get(indices.dataId);
    const updatesData = backend.dataIdMap.get(updates.dataId);
    const stridesBytes = new Uint8Array(new Int32Array(strides).buffer);

    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmScatterNd(indicesId, updatesId, CppDType[inputs[0].dtype], sliceRank, numUpdates, sliceSize, stridesBytes, outputSize, outId);

    return out;
  }
};

export const addAttrConfig: KernelConfig = {
  kernelName: 'Add',
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: (args: {backend: BackendWasm, inputs: ScatterNdInputs, attrs: ScatterNdAttrs}) => {
    const {backend, inputs, attrs} = args;
    const {dataIdMap, backend} = inputs; // BackendWasm
    const {shape} = attrs;

    const out = backend.makeOutput(shape, inputs[0].dtype);
    if (util.sizeFromShape(shape) === 0) {
      return out;
    }

    const {sliceRank, numUpdates, sliceSize, strides, outputSize} = 
      scatter_util.calculateShapes(inputs[0], inputs[1], shape);

    const indicesData = backend.dataIdMap.get(indices.dataId);
    const updatesData = backend.dataIdMap.get(updates.dataId);
    const stridesBytes = new Uint8Array(new Int32Array(strides).buffer);

    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmScatterNd(indicesId, updatesId, CppDType[inputs[0].dtype], sliceRank, numUpdates, sliceSize, stridesBytes, outputSize, outId);

    return out;
  }
};

export const addNDConfig: KernelConfig = {
  kernelName: 'AddNd',
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: (args: {backend: BackendWasm, inputs: ScatterNdInputs, attrs: ScatterNdAttrs}) => {
    const {backend, inputs, attrs} = args;
    const {dataIdMap, backend} = inputs; // BackendWasm
    const {shape} = attrs;

    const out = backend.makeOutput(shape, inputs[0].dtype);
    if (util.sizeFromShape(shape) === 0) {
      return out;
    }

    const {sliceRank, numUpdates, sliceSize, strides, outputSize} = 
      scatter_util.calculateShapes(inputs[0], inputs[1], shape);

    const indicesData = backend.dataIdMap.get(indices.dataId);
    const updatesData = backend.dataIdMap.get(updates.dataId);
    const stridesBytes = new Uint8Array(new Int32Array(strides).buffer);

    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmScatterNd(indicesId, updatesId, CppDType[inputs[0].dtype], sliceRank, numUpdates, sliceSize, stridesBytes, outputSize, outId);

    return out;
  }
};

export const addAttrNDConfig: KernelConfig = {
  kernelName: 'AddNd',
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: (args: {backend: BackendWasm, inputs: ScatterNdInputs, attrs: ScatterNdAttrs}) => {
    const {backend, inputs, attrs} = args;
    const {dataIdMap, backend} = inputs; // BackendWasm
    const {shape} = attrs;

    const out = backend.makeOutput(shape, inputs[0].dtype);
    if (util.sizeFromShape(shape) === 0) {
      return out;
    }

    const {sliceRank, numUpdates, sliceSize, strides, outputSize} = 
      scatter_util.calculateShapes(inputs[0], inputs[1], shape);

    const indicesData = backend.dataIdMap.get(indices.dataId);
    const updatesData = backend.dataIdMap.get(updates.dataId);
    const stridesBytes = new Uint8Array(new Int32Array(strides).buffer);

    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmScatterNd(indicesId, updatesId, CppDType[inputs[0].dtype], sliceRank, numUpdates, sliceSize, stridesBytes, outputSize, outId);

    return out;
  }
};
createBinaryKernelConfig(Add, supportsFullBroadcast);
"

No license file was found, but licenses were detected in source scan.
We explicitly import the modular kernels so they get registered in the global registry when we compile the library. A modular build would replace the contents of this file and import only the kernels that are needed.

```javascript
import {KernelConfig, registerKernel} from '@tensorflow/tfjs-core';
import {fusedMatMulConfig} from './kernels/_FusedMatMul';
import {absConfig} from './kernels/Abs';
import {addConfig} from './kernels/Add';
import {addNConfig} from './kernels/AddN';
import {allConfig} from './kernels/All';
import {anyConfig} from './kernels/Any';
import {argMaxConfig} from './kernels/ArgMax';
import {avgPoolConfig} from './kernels/AvgPool';
import {batchMatMulConfig} from './kernels/BatchMatMul';
import {batchToSpaceNDConfig} from './kernels/BatchToSpaceND';
import {castConfig} from './kernels/Cast';
import {ceilConfig} from './kernels/Ceil';
import {clipByValueConfig} from './kernels/ClipByValue';
import {concatConfig} from './kernels/Concat';
import {conv2DConfig} from './kernels/Conv2D';
import {conv2DBackpropInputConfig} from './kernels/Conv2DBackpropInput';
import {cosConfig} from './kernels/Cos';
```

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greaterEqualConfig, identityConfig, leakyReLuConfig, lessConfig, lessEqualConfig, logConfig, logicalAndConfig, maxConfig, maximumConfig, maxPoolConfig, meanConfig, minConfig, minimumConfig, mirrorPadConfig, multiplyConfig, negConfig, nonMaxSuppressionV3Config, nonMaxSuppressionV4Config, nonMaxSuppressionV5Config, notEqualConfig, oneHotConfig, onesLikeConfig, packConfig, padV2Config, powConfig, prodConfig, rangeConfig, realDivConfig, reluConfig, relu6Config, reshapeConfig, resizeBilinearConfig, reverseConfig, rotateWithOffsetConfig, rsqrtConfig, roundConfig, scatterNdConfig, selectConfig, sigmoidConfig, sinConfig, sliceConfig, softmaxConfig, spaceToBatchNDConfig, splitVConfig, sqrtConfig, squareConfig, squaredDifferenceConfig, stepConfig, stridedSliceConfig, subConfig, sumConfig, tanConfig, tanhConfig, tileConfig, topKConfig, transformConfig, transposeConfig, unpackConfig, zerosLikeConfig

for (const kernelConfig of kernelConfigs) {
  registerKernel(kernelConfig);
}

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/register_all_kernels.js.map

No license file was found, but licenses were detected in source scan.

{"version":3,"file":"Floor.js","sourceRoot":null,"sources":["../../src/kernels/Floor.ts"],"names":null,"mappings":null,"AAAA:;;;;;;;GaG;AACH,OAAB,EAAC,KAAC,EAAC,MAAM,uBAAAuB,CAAC,AA Ted,OAAB,EAAC,uBAAAuB,E AAC,MAAM,gBAAgB,CAAC,AAACd,MAAM,CAAC,MAAM,WAAB,GAABBuBAuB,CAAC,KAAC,CAAC, CAAC","sourcesContent":null} * @license *
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import {Floor, KernelConfig} from '@tensorflow/tfjs-core';
import {createUnaryKernelConfig} from './unary_kernel';
export const floorConfig: KernelConfig = createUnaryKernelConfig(Floor);

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Floor.js.map

No license file was found, but licenses were detected in source scan.

{"version":3,"file":"All.js","sourceRoot":null,"sources":["../../src/kernels/All.ts"],"names":null,"mappings":null,"AAAA:;;;;;;GaG;AACH,OAAB,EAAC,GAAG,EAAB,YAAY,EAABwC,IAALEAAC,MAAM,uBAAAuB,CAAC,AAAzH, OAAB,EAAC,uBAAAuB,EAAC,MAAM,gBAAgB,CAAC,AAAcVd,IAAI,OAAbE,CAAC,AAAbE,SAAS,KAAC,CA AC,OAAbB,IAQC,OAAB,GAAG,OAAB,CAAC,IAAI,CAAC,KAAC,CAAC,GAAG,EAAB,IAAI,CAAC,QAQQ, EAAE,CAAC,wBAAAwB,CAAC,CAAC,CAAC,AAAC/e,CAAC,AAED,SAAS,GAAG,CAAC,IAAgE,IAE3E,MAA M,EAAC,OAAB,EAAB,MAAM,EAAB,KAAC,EAAC,GAAG,IAAI,CAAC,IAAC,MAAM,EAAC,IAAI,EAAB,QA AQ,EAAC,GAAG,KAAC,CAAC,IAAC/B,MAAM,EAAC,CAAC,EAAC,CAAC,GAAG,MAAM,CAAC,CAAC,EAAC,BMA AM,GAAG,GAAG,OAAB,CAAC,SAAS,GAAG,CAAC,GAAG,CAAC,CAAC,MAAM,CAAC,CAAC,EAAC,CAAC,I A/C,IAAI,OAAB,GAAG,GAAG,CAAC,IAACB,IAAI,KAAC,GAAG,CAAC,CAAC,IAEd,MAAM,EAAC,UA AAU,EAAB,IAAI,EAAB,YAAY,EAABkBAkB,EAAC,GAAC,UAAB BuBAuB,CAAC,CAAC,EAAC,IAAI,EAAB,OAAB, CAAC,CAAC;IAE9C,IAAI,kBAAkB,EAAB,QAAB,MAAM,YAAY,GAAG,OAAB,CAAC,SAAS,CAAC,GAAG, CAAC,UAAB,CAAC,MAAM,CAAC,CAAC,EAAC,EAAC,QAAC,IAKAAK,GAAG,UAAB,CAAC,QAACnB,OAAB
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---

```javascript
import {backend_util, Conv2D, Conv2DAttrs, Conv2DInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmConv2d: (
    xId: number, batchSize: number, inputHeight: number, inputWidth: number,
    filterId: number, filterHeight: number, filterWidth: number, padTop: number,
    padRight: number, padBottom: number, padLeft: number, isSamePad: number,
    dilationHeight: number, dilationWidth: number, strideHeight: number,
    strideWidth: number, inputChannels: number, outputChannels: number,
    outId: number) => void;

function setup(backend: BackendWasm) {
  wasmConv2d = backend.wasm.cwrap(Conv2D, null /* void */, [
    'number',  // xId
    'number',  // batchSize
    'number',  // inputHeight
    'number',  // inputWidth
    'number',  // filterId
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // padTop
    'number',  // padRight
    'number',  // padBottom
    'number',  // padLeft
    'number',  // isSamePad
    'number',  // dilationHeight
    'number',  // dilationWidth
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // inputChannels
    'number',  // outputChannels
    'number',  // outId
    void]);
}
```

---

SourcesContent:

```javascript
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 */

import {backend_util, Conv2D, Conv2DAttrs, Conv2DInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmConv2d: (
    xId: number, batchSize: number, inputHeight: number, inputWidth: number,
    filterId: number, filterHeight: number, filterWidth: number, padTop: number,
    padRight: number, padBottom: number, padLeft: number, isSamePad: number,
    dilationHeight: number, dilationWidth: number, strideHeight: number,
    strideWidth: number, inputChannels: number, outputChannels: number,
    outId: number) => void;

function setup(backend: BackendWasm) {
  wasmConv2d = backend.wasm.cwrap(Conv2D, null /* void */, [
    'number',  // xId
    'number',  // batchSize
    'number',  // inputHeight
    'number',  // inputWidth
    'number',  // filterId
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // padTop
    'number',  // padRight
    'number',  // padBottom
    'number',  // padLeft
    'number',  // isSamePad
    'number',  // dilationHeight
    'number',  // dilationWidth
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // inputChannels
    'number',  // outputChannels
    'number',  // outId
    void]);
}
```

---

SourcesContent:

```javascript
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 */

import {backend_util, Conv2D, Conv2DAttrs, Conv2DInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmConv2d: (
    xId: number, batchSize: number, inputHeight: number, inputWidth: number,
    filterId: number, filterHeight: number, filterWidth: number, padTop: number,
    padRight: number, padBottom: number, padLeft: number, isSamePad: number,
    dilationHeight: number, dilationWidth: number, strideHeight: number,
    strideWidth: number, inputChannels: number, outputChannels: number,
    outId: number) => void;

function setup(backend: BackendWasm) {
  wasmConv2d = backend.wasm.cwrap(Conv2D, null /* void */, [
    'number',  // xId
    'number',  // batchSize
    'number',  // inputHeight
    'number',  // inputWidth
    'number',  // filterId
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // padTop
    'number',  // padRight
    'number',  // padBottom
    'number',  // padLeft
    'number',  // isSamePad
    'number',  // dilationHeight
    'number',  // dilationWidth
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // inputChannels
    'number',  // outputChannels
    'number',  // outId
    void]);
}
```
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// outputChannels

    'number',  // outId
  ];
}

function conv2d(
    args: {inputs: Conv2DInputs, backend: BackendWasm, attr: Conv2DAttr}) {
  const {inputs, attr, backend} = args;
  const xId = backend.dataIdMap.get(x.dataId);
  const filterId = backend.dataIdMap.get(filter.dataId);
  const [strides, dilations, pad, dimRoundingMode, dataFormat] = attr;
  const $dataFormat = backend_util.convertConv2DDataFormat(dataFormat);
  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const padTop = convInfo.padInfo.top;
  const padRight = convInfo.padInfo.right;
  const padBottom = convInfo.padInfo.bottom;
  const padLeft = convInfo.padInfo.left;
  const dilationHeight = convInfo.dilationHeight;
  const dilationWidth = convInfo.dilationWidth;
  const strideHeight = convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;

  const inputChannels = convInfo.inChannels;
  const outputChannels = convInfo.outChannels;
  const isSamePad = convInfo.padInfo.type === 'SAME';

  if (convInfo.dataFormat !== 'channelsLast') {
    throw new Error('wasm backend Conv2D does not support dataFormat: ' + convInfo.dataFormat). Please use 'channelsLast'.
  }

  const out = backend.makeOutput(convInfo.outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmConv2d(
      xId, x.shape[0], x.shape[1], x.shape[2], filterId,
      filterHeight, filterWidth, padTop, padRight, padBottom, padLeft, isSamePad,
      dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, 
      outputChannels, outId);
  return out;
}

export const conv2DConfig: KernelConfig = {
  kernelName: Conv2D,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: conv2d as {} as KernelFunc
};
src/kernels/ScatterNd.ts","./src/kernels/Select.ts","./src/kernels/Sigmoid.ts","./src/kernels/Sin.ts","./src/kernels/Sof
tmax.ts","./src/kernels/SpaceToBatchND.ts","./src/kernels/SplitV.ts","./src/kernels/Sqrt.ts","./src/kernels/Square.ts
c/flags_wasm.ts","./wasm-out/tfjs-backend-wasm-threaded-simd.js","./wasm-out/tfjs-backend-wasm-threaded-
["/**
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 */

// This enum must align with the enum defined in cc/backend.h.
export enum CppDType {
  float32 = 0,
  int32 = 2,
  bool = 3,
  complex64 = 4
}

// Must match enum in cc/fusable_activations.h.
export enum FusableActivation {
  linear = 0,
  relu = 1,
  relu6 = 2,
  prelu = 3,
  leakyrelu = 4,
  sigmoid = 5,
  elu = 6
}

import {_FusedMatMul, _FusedMatMulAttrs, _FusedMatMulInputs, KernelConfig, KernelFunc} from
'@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {FusableActivation} from
'./types';

let wasmFusedMatMul:
    (aId: number, aShape: Uint8Array, aShapeSize: number, bId: number,
     bShape: Uint8Array, bShapeSize: number, transposeA: boolean,
     transposeB: boolean, activation: number,
     biasId: number, 
     preluActivationWeightsId: number, leakyreluAlpha: number, outId: number) =>
    void;

function setup(backend: BackendWasm) {
  wasmFusedMatMul = backend.wasm.cwrap(_FusedMatMul,
    null /* void */, 
    ['number',  // a_id
     'array',   // a_shape
     'number',  // a_shape.length
     'number',  // b_id
     'array',   // b_shape
     'number',  // b_shape.length
     'number',  // transpose_a
     'number',  // transpose_b
     'number',  // activation
     'number',  // biasId
     'number'   // preluActivationWeightsId
    ]); // void
}

function fusedBatchMatMul(args: {
  inputs:
    _FusedMatMulInputs,
    backend: BackendWasm,
    attrs: _FusedMatMulAttrs
}) {
  const {inputs, backend,
    attrs} = args;
  const {a, b, bias, preluActivationWeights} = inputs;
  if (a.dtype !== 'float32' || b.dtype !==
      'float32') {
    throw new Error(
        `_FusedMatMul for non non-float32 tensors not yet supported.`);
  }

  const {transposeA, transposeB} = attrs;
  const aId = backend.dataIdMap.get(a.dataId).id;
  const bId = backend.dataIdMap.get(b.dataId).id;

  if (bias != null) {
    const biasData = backend.dataIdMap.get(bias.dataId);
    if (biasData.shape.length !== 1) {
      throw new Error(
          `_FusedMatMul only supports rank-1 bias but got ` +
          `rank ${biasData.shape.length}.`);
    }
    const biasId = biasData.id;
  }

  // activationId 'number', 'biasId' 'number', 'preluActivationWeightsId' 'number', 'leakyreluAlpha' 'number', 'out_id' ])

  return fusedBatchMatMul(args: { 
    inputs: 
    _FusedMatMulInputs,
    backend: BackendWasm, 
    attrs: _FusedMatMulAttrs
  })
}
const batchDim = a.shape[0];
const out = backend.makeOutput([batchDim, leftDim, rightDim], a.dtype);
const outId = backend.dataIdMap.get(out.dataId).id;
const aShapeBytes = new Uint8Array(new Int32Array(a.shape).buffer);
const bShapeBytes = new Uint8Array(new Int32Array(b.shape).buffer);

const matMul = backend.makeOutput([batchDim, leftDim, rightDim], a.dtype);
const matMulId = backend.dataIdMap.get(matMul.dataId).id;

// Short-circuit zero-sized tensors.
if (util.sizeFromShape(out.shape) === 0) {
  return out;
}

wasmFusedMatMul(aId, aShapeBytes, a.shape.length, bId, bShapeBytes, b.shape.length,
    transposeA, transposeB, fusedActivation, biasId, preluActivationWeightsId,
    leakyreluAlpha || 0, outId);

return out;
}

export const fusedMatMulConfig: KernelConfig = {
  kernelName: _FusedMatMul,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: fusedBatchMatMul as {} as KernelFunc
};

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 */

import {DataType, KernelConfig, TensorInfo, UnaryInputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

export function createUnaryKernelConfig(
    kernelName: string, outType?: DataType): KernelConfig {
  let wasmFunc: (xId: number, dtype: number, outId: number) => void;

  function setupFunc(backend: BackendWasm): void {
    wasmFunc = backend.wasm.cwrap(kernelName, null, ["number", "number", "number"]);
  }

  function kernelFunc(args: {backend: BackendWasm, inputs: UnaryInputs}):
      TensorInfo {
    const {backend, inputs: {x}} = args;
    const xId = backend.dataIdMap.get(x.dataId).id;
    const out = backend.makeOutput(x.shape, outType || x.dtype);
    const outId = backend.dataIdMap.get(out.dataId).id;

    // Short-circuit zero-sized tensors.
    if (util.sizeFromShape(out.shape) === 0) {
      return out;
    }

    wasmFusedFunc(xId, CppDType[x.dtype], outId);
    return out;
  }

  return {kernelName, backendName: 'wasm',
    setupFunc, kernelFunc};
}

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 */

import {backend_util, BinaryInputs, DataType, KernelConfig, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

export function createBinaryKernelConfig(
    kernelName: string, supportsFullBroadcast: boolean,
    dtype?: DataType): KernelConfig {
  let wasmFunc:
      (aId: number, aShape: Uint8Array, aShapeLen: number, bId:
       number, bShape: Uint8Array, bShapeLen: number, dtype: number, outId: number) =>
          void;

  function setupFunc(backend: BackendWasm): void {
    wasmFunc = backend.wasm.cwrap(kernelName, null, ["number", "number", "number", "number",
        "number", "number", "number", "number"]);
  }

  function kernelFunc(args: {backend: BackendWasm, inputs: BinaryInputs}):
      TensorInfo {
    const {backend, inputs: {a, b}} = args;
    const aId = backend.dataIdMap.get(a.dataId).id;
    const bId = backend.dataIdMap.get(b.dataId).id;
    const aShapeBytes = new Uint8Array(new Int32Array(a.shape).buffer);
    const bShapeBytes = new Uint8Array(new Int32Array(b.shape).buffer);

    // Short-circuit zero-sized tensors.
    if (util.sizeFromShape(out.shape) === 0) {
      return out;
    }

    wasmFusedFunc(aId, aShapeBytes, a.shape.length, bId, bShapeBytes, b.shape.length,
        transposeA, transposeB, fusedActivation, biasId, preluActivationWeightsId,
        leakyreluAlpha || 0, outId);

    return out;
  }

  return {kernelName, backendName: 'wasm',
    setupFunc, kernelFunc};
}
```javascript
void */ [ln 'number', ]\n  'array', \n  'a_shape\n  'number', \n  'a_shape.length\n  'number', \n  'b_id\n  'array', \n  'b_shape\n  'number', \n  'b_shape.length\n  'number', \n  'dtype\n  'number', \n  'out_id\n]);\n
function kernelFunc(args: {backend: BackendWasm, inputs: BinaryInputs})\n{\n  TensorInfo | ln const [backend, inputs] = args;\n  ln const [a, b] = inputs;\n  ln const ald = backend.dataldMap.get(a.datald.id);\n  ln const bld = backend.dataldMap.get(b.datald.id);\n  ln const outputType = dtype != null ? dtype : a.dtype;\n  ln const newShape = backend._util.assertAndGetBroadcastShape(a.shape, b.shape);\n  ln const out = backend.makeOutput(newShape, outputType);\n  ln \n  // Short-circuit zero-sized tensors if (util.sizeFromShape(newShape) === 0) {\n    ln return out;\n  }\n  ln const aShapeBytes = new Uint8Array(new Int32Array(a.shape).buffer);\n  ln const bShapeBytes = new Uint8Array(new Int32Array(b.shape).buffer);\n  ln const outId = backend.dataldMap.get(out.datald.id);\n  ln const kernelFunc = () => wasmFunc(\n    aId, aShapeBytes, a.shape.length, bId, bShapeBytes, b.shape.length,\n    CppDType[a.dtype], outId);\n  ln \n  // Currently only some float operations support full broadcast. if (supportsFullBroadcast && a.dtype === 'float32') \n    kernelFunc();\n  ln return out;\n}

function setupFunc(backend: BackendWasm): void {\n  wasmFunc = backend.wasm.cwrap(Addn, null /* void */, \n    'array', // inputIds\n    'number', // inputIds.length\n    'number', // dtype\n    'number', // outId\n  ]);\n}

function addn(args: {inputs: TensorInfo[], backend: BackendWasm}) {\n  const {inputs, backend} = args;\n  const out = backend.makeOutput(inputs[0].shape, inputs[0].dtype);\n  ln \n  // Short-circuit zero-sized tensors if (util.sizeFromShape(out.shape) === 0) {\n    ln return out;\n  }\n  ln const inputIds = inputs.map(x =>\n    backend.dataldMap.get(x.datald.id);\n  ln const inputIdsBytes = new Uint8Array(new Int32Array(inputIds).buffer);\n  ln const outId = backend.dataldMap.get(out.datald.id);\n  ln wasmFunc(inputIdsBytes, inputs.length,\n    CppDType[out.dtype], outId);\n  ln return out;\n}
```

---

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---

**Import**

```javascript
import {Add, KernelConfig} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = true;

export const addConfig: KernelConfig = createBinaryKernelConfig(Add, supportsFullBroadcast);
```

---

**Import**

```javascript
import {AddN, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmFunc: (inputIds: Uint8Array, inputIdsLen: number, dtype: number, outId: number) => void;

function setupFunc(backend: BackendWasm) {\n  wasmFunc = backend.wasm.cwrap(Addn, null /* void */, \n    'array', // inputIds\n    'number', // inputIds.length\n    'number', // dtype\n    'number', // outId\n  ]);\n}

function addn(args: {inputs: TensorInfo[], backend: BackendWasm}) {\n  const {inputs, backend} = args;\n  const out = backend.makeOutput(inputs[0].shape, inputs[0].dtype);\n  ln \n  // Short-circuit zero-sized tensors if (util.sizeFromShape(out.shape) === 0) {\n    ln return out;\n  }\n  ln const inputIds = inputs.map(x =>\n    backend.dataldMap.get(x.datald.id);\n  ln const inputIdsBytes = new Uint8Array(new Int32Array(inputIds).buffer);\n  ln const outId = backend.dataldMap.get(out.datald.id);\n  ln wasmFunc(inputIdsBytes, inputs.length,\n    CppDType[out.dtype], outId);\n  ln return out;\n}
```

---

**Import**

```javascript
import {AddN, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = true;

export const addConfig: KernelConfig = createBinaryKernelConfig(Add, supportsFullBroadcast);
```
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=============================================================================

import {Identity, IdentityInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';
import {TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function identity(args: {inputs: IdentityInputs, backend: BackendWasm}): TensorInfo {
  const {inputs: {x}, backend} = args;
  const out = backend.makeOutput(x.shape, x.dtype);
  const inVals = backend.typedArrayFromHeap(x);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.set(inVals);
  return out;
}

export const identityConfig: KernelConfig = {
  kernelName: Identity,
  backendName: 'wasm',
  kernelFunc: identity as {} as KernelFunc,
};

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=============================================================================

import {KernelConfig, KernelFunc, TensorInfo, Transpose, TransposeAttrs, TransposeInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {identity} from './Identity';
import {CppDType} from './types';

let wasmTranspose: (xId: number, xShape: Uint8Array, xShapeLength: number, dtype: CppDType, outId: number, perm: Uint8Array, permLength: number) => void;

function setup(backend: BackendWasm) {
  wasmTranspose = backend.wasm.cwrap(Transpose, null /* void */, ['number',  // xId
   'array',   // x.shape
   'number',  // x.shape.length
   'number',  // dtype
   'number',  // outId
   'array',   // perm
   'number',  // perm.length
   ]);//@ts-ignore
}

export function transpose(args: {inputs: TransposeInputs, backend: BackendWasm, attrs: TransposeAttrs}): TensorInfo {
  const {inputs, backend, attrs} = args;
  // Reduce any dimensions with size one. Lower-rank transpose kernel performs better due to simpler memory access pattern.
  const [reducedShape, perm] = removeOneSizeDims(inputs.x.shape, attrs.perm);
  const permIsNoOp = true;
  for (let i = 0; i < perm.length; i++) {
    if (perm[i] !== i) {
      permIsNoOp = false;
    }
  }
  const outShape = computeOutShape(inputs.x.shape, attrs.perm);
  const x = {
    dataId: inputs.x.dataId,
    shape: reducedShape,
    dtype: inputs.x.dtype
  };
  if (permIsNoOp) {
    const cloned = identity({inputs, backend});
    cloned.shape = outShape;
    return cloned;
  }
  const out = backend.makeOutput(outShape, x.dtype);
  const xId = backend.dataIdMap.get(x.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;
  const permBytes = new Uint8Array(new Int32Array(perm).buffer);
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  wasmTranspose(xId, xShapeBytes, x.shape.length, CppDType[x.dtype], outId, permBytes, perm.length);
  return out;
}

function computeOutShape(inShape: number[], perm: number[]): number[] {
  const outShape = new Array(inShape.length);
  for (let i = 0; i < outShape.length; i++) {
    outShape[i] = inShape[perm[i]];
  }
  return outShape;
}

function removeOneSizeDims(shape: number[], perm: number[]): [number[], number[]] {
  const newShape: number[] = [];
  for (let i = 0; i < shape.length; i++) {
    if (shape[i] !== 1) {
      newShape.push(shape[i]);
    }
    if (perm[perm[i]] !== i) {
      newPerm.push(perm[i]);
    }
  }
  return [newShape, newPerm];
}

export const transposeConfig: KernelConfig = {
  kernelName: Transpose,
  backendName: 'wasm',
  kernelFunc: transpose as {} as KernelFunc,
  setupFunc: setup,
};

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=============================================================================

*/
import {backend_util, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {transpose} from './Transpose';

/**
 * Compute permutation axes and do a transpose
 * if necessary.
 * Used by reduction ops.
 *
 * @param x input TensorInfo
 * @param axis reduction axes
 * @param backend wasm backend instance
 * @export function permuteAxesAndTranspose
 *
 * @param x: TensorInfo
 * @param axis: number
 * @param backend: BackendWasm
 *
 * @returns {Object}
 */
export function permuteAxesAndTranspose(
    x: TensorInfo,
    axis: number|number[],
    backend: BackendWasm): {
  transposed: TensorInfo|null,
  axes: number[],
  originalAxes: number[],
  inputWasTransposed: boolean
} {
  const xShape = x.shape;
  const xRank = x.shape.length;

  const originalAxes = util.parseAxisParam(axis, xShape);
  let axes = originalAxes;
  const permutedAxes = backend_util.getAxesPermutation(axes, xRank);
  let xTransposed = null;
  let inputWasTransposed = false;
  if (permutedAxes != null) {
    const newShape: number[] = new Array(xRank);
    for (let i = 0; i < newShape.length; i++) {
      newShape[i] = xShape[permutedAxes[i]];
    }

    axes = backend_util.getInnerMostAxes(axes.length, xRank);
    xTransposed = transpose({inputs: {x}, attrs: {perm: permutedAxes}, backend});
    const xId = backend.dataIdMap.get(x.dataId).id;
    const constId = backend.dataIdMap.get(xTransposed.dataId).id;
    if (inputWasTransposed === true) {
      xTransposed = x;
      xId = constId;
    }

    return {transposed: xTransposed, originalAxes, axes, inputWasTransposed: inputWasTransposed};
  }

  return {transposed: null, originalAxes, axes, inputWasTransposed};
}
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=============================================================================

*/

import {Any, AnyAttrs, AnyInputs, backend_util, KernelConfig, KernelFunc, TensorInfo, util} from
'@tensorflow/tfjs-core';

import {BackendWasm} from 'tensorflow-backend-wasm';

import {permuteAxesAndTranspose} from './kernel_utils';

let wasmAny: (xId: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmAny = backend.wasm.cwrap(Any, null /*void*/, [ 'number', 'number', 'number']);
}

function any(args: {backend: BackendWasm, inputs: AnyInputs, attrs: AnyAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;

  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    input = transposed;
    inputId = transposedId;
  }

  const inputRank = input.shape.length;
  backend_util.assertAxesAreInnerMostDims('any', axes, inputRank);
  const [outShape, reduceShape] =
      backend_util.computeOutAndReduceShapes(input.shape, axes);
  const reduceSize = util.sizeFromShape(reduceShape);

  const out = backend.makeOutput(outShape, x.dtype);
  if (util.sizeFromShape(input.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmAny(inputId, reduceSize, outId);
  }

  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  if (keepDims) {
    // reshape
    const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
    out.shape = newShape;

    return out;
  }

  export const anyConfig: KernelConfig = {
    kernelName: Any,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: any as {} as KernelFunc
  };

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   ==============================================================

   */

   import {ArgMax, ArgMaxAttrs, ArgMaxInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-
   core';

   import {BackendWasm} from 'tensorflow-backend-wasm';

   import {permuteAxesAndTranspose} from './kernel_utils';
   import {CppDType} from './types';

   let wasmFunc: (xId: number, dtype: number, outerSize: number, innerSize: number, outId: number) => void;

   function setup(backend: BackendWasm): void {
     wasmFunc = backend.wasm.cwrap(ArgMax, null /* void */, [ 'number', 'number', 'number', 'number', 'number' ]); // x_id, dtype, outer_size, inner_size, out_id
   }

   function argmax(args: {inputs: ArgMaxInputs, backend: BackendWasm, attrs: ArgMaxAttrs}) {
     const {backend, inputs, attrs} = args;
     const {axis} = attrs;

     const {x} = inputs;
     const xId = backend.dataIdMap.get(x.dataId).id;
     let inputId = xId;
     let input = x;

     const {transposed, axes, originalAxes, inputWasTransposed} =
         permuteAxesAndTranspose(x, axis, backend);

     if (inputWasTransposed) {
       const transposedId = backend.dataIdMap.get(transposed.dataId).id;
       input = transposed;
       inputId = transposedId;
     }

     const outShape = input.shape.slice(0, -1);
     const out = backend.makeOutput(outShape, 'int32');
     const outId = backend.dataIdMap.get(out.dataId).id;

     const outerSize = util.sizeFromShape(outShape);
     const innerSize = input.shape[axes[0]];

     wasmFunc(inputId, CppDType[input.dtype], outerSize, innerSize, outId);

     if (inputWasTransposed) {
       // dispose of the
transposed tensor.

```typescript
backend.disposeData(transposed.dataId);
}

export const argMaxConfig: KernelConfig = {
  kernelName: ArgMax,
  backendName: 'wasm',
  kernelFunc: argmax as {} as KernelFunc,
  setupFunc: setup
};

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 */

import {AvgPool, AvgPoolAttrs, AvgPoolInputs, backend_util, KernelConfig, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmAvgPool: (xId: number, batchSize: number, inputHeight: number, inputWidth: number, filterHeight: number, filterWidth: number, padTop: number, padRight: number, padBottom: number, padLeft: number, strideHeight: number, strideWidth: number, channels: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmAvgPool = backend.wasm.cwrap(AvgPool, null /* void */, [
    'number',  // xId
    'number',  // batchSize
    'number',  // inputHeight
    'number',  // inputWidth
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // padTop
    'number',  // padRight
    'number',  // padBottom
    'number',  // padLeft
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // channels
    'number'   // outId
  ]);
}

function avgPool(args: {inputs: AvgPoolInputs, backend: BackendWasm, attrs: AvgPoolAttrs}) {
  const {inputs, attrs, backend} = args;

  const x = inputs.x as Tensor4D;
  const xId = backend.dataIdMap.get(x.dataId).id;

  const filterSize = attrs.filterSize;
  const strides = attrs.strides;
  const pad = attrs.pad;
  const dimRoundingMode = attrs.dimRoundingMode;

  const filterHeight = attrs.filterHeight;
  const filterWidth = attrs.filterWidth;
  const padTop = attrs.padTop;
  const padRight = attrs.padRight;
  const padBottom = attrs.padBottom;
  const padLeft = attrs.padLeft;
  const strideHeight = attrs.strideHeight;
  const strideWidth = attrs.strideWidth;
  const channels = attrs.channels;

  if (backend.dataFormat !== 'channelsLast') {
    throw new Error(`backend does not support dataFormat:'` +
        `${backend.dataFormat}'. Please use 'channelsLast'.`);
  }

  if (backend.dilationWidth !== 1 || backend.dilationHeight !== 1) {
    throw new Error(`backend only supports average pooling with dilation = 
        `[1, 1], 'got ' + attr.dilationHeight);
  }

  const out = backend.makeOutput(attrs.outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmAvgPool(xId, x.shape[0], x.shape[1], x.shape[2],
    filterHeight, filterWidth, padTop, padRight, padBottom, padLeft, strideHeight, strideWidth, channels,
    outId);

  return out;
}

export const avgPoolConfig: KernelConfig = {
  kernelName: AvgPool,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: avgPool as {} as KernelFunc
};

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 */

import {KernelConfig, KernelFunc, Reshape, ReshapeAttrs, ReshapeInputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function reshape(args: {inputs: ReshapeInputs, attrs: ReshapeAttrs, backend: BackendWasm}) {
  const {inputs, attrs, backend} = args;

  const x = inputs.x as Tensor4D;
  const xId = backend.dataIdMap.get(x.dataId).id;

  const outId = backend.dataIdMap.get(out.dataId).id;
  const out = backend.makeOutput(attrs.outShape, 'float32');

  if (backend.dilationWidth !== 1 || backend.dilationHeight !== 1) {
    throw new Error(`backend only supports average pooling with dilation = 
        `[1, 1], 'got ' + attr.dilationHeight);
  }

  const out = backend.makeOutput(attrs.outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  const out = backend.makeOutput(attrs.outShape, 'float32');

  if (backend.dilationWidth !== 1 || backend.dilationHeight !== 1) {
    throw new Error(`backend only supports average pooling with dilation = 
        `[1, 1], 'got ' + attr.dilationHeight);
  }

  const out = backend.makeOutput(attrs.outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  const out = backend.makeOutput(attrs.outShape, 'float32');

  if (backend.dilationWidth !== 1 || backend.dilationHeight !== 1) {
    throw new Error(`backend only supports average pooling with dilation = 
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        `[1, 1], 'got ' + attr.dilationHeight);
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  const outId = backend.dataIdMap.get(out.dataId).id;
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  if (backend.dilationWidth !== 1 || backend.dilationHeight !== 1) {
    throw new Error(`backend only supports average pooling with dilation = 
        `[1, 1], 'got ' + attr.dilationHeight);
  }

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  if (backend.dilationWidth !== 1 || backend.dilationHeight !== 1) {
    throw new Error(`backend only supports average pooling with dilation = 
        `[1, 1], 'got ' + attr.dilationHeight);
  }

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  const outId = backend.dataIdMap.get(out.dataId).id;
  const out = backend.makeOutput(attrs.outShape, 'float32');

  if (backend.dilationWidth !== 1 || backend.dilationHeight !== 1) {
    throw new Error(`backend only supports average pooling with dilation = 
        `[1, 1], 'got ' + attr.dilationHeight);
  }

  const out = backend.makeOutput(attrs.outShape, 'float32');
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  const out = backend.makeOutput(attrs.outShape, 'float32');

  if (backend.dilationWidth !== 1 || backend.dilationHeight !== 1) {
    throw new Error(`backend only supports average pooling with dilation = 
        `[1, 1], 'got ' + attr.dilationHeight);
  }

  const out = backend.makeOutput(attrs.outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  const out = backend.makeOutput(attrs.outShape, 'float32');

  if (backend.dilationWidth !== 1 || backend.dilationHeight !== 1) {
    throw new Error(`backend only supports average pooling with dilation = 
        `[1, 1], 'got ' + attr.dilationHeight);
  }

  const out = backend.makeOutput(attrs.outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  const out = backend.makeOutput(attrs.outShape, 'float32');

  if (backend.dilationWidth !== 1 || backend.dilationHeight !== 1) {
    throw new Error(`backend only supports average pooling with dilation = 
        `[1, 1], 'got ' + attr.dilationHeight);
  }

  const out = backend.makeOutput(attrs.outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  const out = backend.makeOutput(attrs.outShape, 'float32');

  if (backend.dilationWidth !== 1 || backend.dilationHeight !== 1) {
    throw new Error(`backend only supports average pooling with dilation = 
        `
```
elements.

// Backend needs to track refCount for the dataId for reshape op
args.backend.incRef(x.dataId);

return {dataId: x.dataId, shape: $shape, dtype: x.dtype};

// Backend needs to track refCount for the dataId for reshape op
args.backend.incRef(x.dataId);

return {dataId: x.dataId, shape: $shape, dtype: x.dtype};

export const reshapeConfig: KernelConfig = {
  kernelName: Reshape,
  backendName: 'wasm',
  kernelFunc: reshape as {} as KernelFunc
};

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 */

import {BatchMatMul, BatchMatMulAttrs, BatchMatMulInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {reshape} from './Reshape';

let wasmBatchMatMul: (aId: number, aShape: Uint8Array, aShapeSize: number, bId: number, bShape: Uint8Array, bShapeSize: number, transposeA: boolean, transposeB: boolean, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmBatchMatMul = backend.wasm.cwrap(BatchMatMul, null /* void */, 
  [ 'number', // a_id
    'array',   // a_shape
    'number',  // a_shape.length
    'number',  // b_id
    'array',   // b_shape
    'number',  // b_shape.length
    'number',  // transpose_a
    'number',  // transpose_b
    'number'   // out_id
  ]);}

function batchMatMul(args: {
  inputs: BatchMatMulInputs,
  backend: BackendWasm,
  attrs: BatchMatMulAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {a, b} = inputs;

  const {transposeA, transposeB} = attrs;

  if (a.dtype !== 'float32' || b.dtype !== 'float32') {
    throw new Error(`BatchMatMul for non-float32 tensors not yet supported.`);
  }

  const aRank = a.shape.length;
  const bRank = b.shape.length;

  const innerShapeA = transposeA ? a.shape[aRank - 2] : a.shape[aRank - 1];
  const innerShapeB = transposeB ? b.shape[bRank - 1] : b.shape[bRank - 2];

  const outerShapeA = transposeA ? a.shape[aRank - 1] : a.shape[aRank - 2];
  const outerShapeB = transposeB ? b.shape[bRank - 2] : b.shape[bRank - 1];

  const outerDimsA = a.shape.slice(0, -2);  // outer dims of A
  const outerDimsB = b.shape.slice(0, -2);  // outer dims of B

  const batchDimA = util.sizeFromShape(outerDimsA);
  const batchDimB = util.sizeFromShape(outerDimsB);

  const batchDimsCompatible = batchDimA === batchDimB || batchDimA === 1 || batchDimB === 1;

  util.assert(aRank >= 2 && bRank >= 2 && batchDimsCompatible, () => `Error in matMul: the input batch dimensions must either be the same or at least one input batch dimension must be 1. Got input batch dimensions of (${outerDimsA}) and (${outerDimsB}).`);

  const outShapeOuterDims = batchDimA === batchDimB ? batchDimA : [batchDimA, batchDimB];
  const outShape = outShapeOuterDims.concat([outerShapeA, outerShapeB]);

  const outShapeOuterDims = util.sizeFromShape(outShapeOuterDims);
  const outShapeDims = outShape.slice(0, -2);

  const out = backend.makeOutput(outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;

  const aId = backend.dataIdMap.get(a.dataId).id;
  const bId = backend.dataIdMap.get(b.dataId).id;

  const aShapeBytes = new Uint8Array(new Int32Array(a.shape).buffer);
  const bShapeBytes = new Uint8Array(new Int32Array(b.shape).buffer);

  wasmBatchMatMul(aId, aShapeBytes, aShape.length, bId, bShapeBytes, bShape.length, transposeA, transposeB, outId);
  backend.disposeData(aId);
  backend.disposeData(bId);

  out.shape = outShape;
  return out;
}

export const batchMatMulConfig: KernelConfig = {
  kernelName: BatchMatMul,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: batchMatMul
};
batchMatMul as \{\} as KernelFunc

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 */
import { backend_util, util } from '@tensorflow/tfjs-core';
export function concatImpl(inputs, outShape, dtype, simplyConcat) {
    const outVals = util.getArrayFromDType(dtype, util.sizeFromShape(outShape));
    if (simplyConcat && dtype !== 'string') {
        // Use built-in TypedArray.set() method for speed.
        let offset = 0;
        inputs.forEach(input => {
            let size = util.sizeFromShape(input.shape);
            outVals.set(input.vals, offset);
            offset += size;
        });
    } else {
        let colOffset = 0;
        inputs.forEach(input => {
            const decodedData = dtype === 'string' ?
                util.fromUint8ToStringArray(input.vals) :
                input.vals;
            let tIdx = 0;
            for (let row = 0; row < input.shape[0]; ++row) {
                const resIdx = row * outShape[1] + colOffset;
                for (let col = 0; col < input.shape[1]; ++col) {
                    outVals[resIdx + col] = decodedData[tIdx++];
                }
                colOffset += input.shape[1];
            }
        });
    }
    return outVals;
}
```javascript
import { util } from '@tensorflow/tfjs-core';
export function rangeImpl(start, stop, step, dtype) {
    const sameStartStop = start === stop;
    const increasingRangeNegativeStep = start < stop && step < 0;
    const decreasingRangePositiveStep = stop < start && step > 0;
    if (sameStartStop || increasingRangeNegativeStep ||
    decreasingRangePositiveStep) {
        return util.makeZerosTypedArray(0, dtype);
    }
    const numElements = Math.abs(Math.ceil((stop - start) / step));
    const values = util.makeZerosTypedArray(numElements, dtype);

    if (stop < start && step === 1) {
        // Auto adjust the step's sign if it hasn't been set
        // (or was set to 1)
        step = -1;
    }
    values[0] = start;
    for (let i = 1; i < values.length; i++) {
        values[i] = values[i - 1] + step;
    }
    return values;
}
```

---

Open Source Used in Cisco Meeting Server (formerly Acano Server) 3.6 2417

GFwGxfY2FibGUgGF3Ig9yIGFncmVtZCBobyBpb2BtcmloaW5nLCBzZ2d2dFyZXVzIuCogZGIldzHJpYnV0Z
WQdGW5aZGhlIExpY2Vuc2UgaXMgZGhldHJpYnV0ZGVQb24gYW4gXCJjUyBkJU1wiiEJBUT0fLFXuCo
vG0VtUE9vVVCVQVJQSQU5USUVTIENPTkRjJQVjUiLm5vcmFtcmVtZHJvKFt0Y2ggZnJvKFt0Y2ggZnJv
ZCkm5gbmMxGyWY2zci2bnMgMW5XK3Xg4kBiBsaW1pbWduaSBDaWFiLW9ucyB1bnRlckl0aGUgTGlj
ZWNsZSBpc3RlAQIDPT09PT09PT09PT09PT09PT09PT09PT09PT09PT09PT09PT09PT09PT09PT09PT
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FUeXBLBCUeXBIXEcycmF5LClbIDGlGSmcm9tCdAdGVuc29y9Zmxvdy90ZmpzLWNvcmVuOnI1aXZ5IHZhb
HmbGSGpBbGlGcm9tU2hhKGpBbGlGcnJlOnNpcmVc9mt0uhcuOG9tAQs
`````````````````````````````````````````````````````
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 *
 *=============================================================================

*/
import { backend_util, buffer, Slice, slice_util, util } from '@tensorflow/tfjs-core';
import { assertNotComplex
from '../cpu_util';

export function sliceImpl(vals, begin, size, dtype) {
  const isContinous = slice_util.isSliceContinuous(shape, begin, size);
  const length = util.sizeFromShape(size);
  const xStrides = util.computeStrides(shape);
  if (isContinous) {
    const flatOffset = slice_util.computeFlatOffset(begin, xStrides);
    if (dtype === 'string') {
      return vals.slice(flatOffset, flatOffset + length);
    }
    return vals.subarray(flatOffset, flatOffset + length);
  }
  const decodedData = dtype === 'string' ?
    backend_util.fromUint8ToStringArray(vals) :
    vals;
  const outBuf = buffer(size, dtype, decodedData);
  for (let i = 0; i < outBuf.size; ++i) {
    const outLoc = outBuf.indexToLoc(i);
    const inLoc = outLoc.map((idx, j) => idx + begin[j]);
    outBuf.set(inBuf.get(...inLoc), ...outLoc);
  }
  if (dtype === 'string') {
    return backend_util.fromStringArrayToUint8(outBuf.values);
  }
  return outBuf.values;
}

export function slice(args) {
  const { inputs, backend, attrs } = args;
  const { x } = inputs;
  const { begin, size } = attrs;
  assertNotComplex(x, 'slice');
  const [begin, size] = slice_util.parseSliceParams(x, begin, size);
  slice_util.assertParamsValid(x, begin, size);
  const vals = backend.data.get(x.dataId).values;
  const outVals = sliceImpl(vals, begin, size, x.shape, x.dtype);
  return backend.makeTensorInfo(size, x.dtype, outVals);
}

export const sliceConfig = {
  kernelName: Slice,
  backendName: 'cpu',
  kernelFunc: slice
};

sourceMappingURL=data:application/json;base64,eyJ2ZXJzaW9uIjozLCJmaWxlIjoiU2xpY2UuanMiLCJzb3VyY2VSb290IjoiLCAiLCJmcm9tZSI6W10sIm5ldC1vZyI6W10sImlkIjoiIiwiaGVpZ2h0IjoiIiwicGF5bGVhc2V0IjozLCJzaW5Db3VudCI6W10sInByb3BvaWRpdCI6IiJ9
import {backend_util, KernelConfig, KernelFunc, Slice, slice_util, SliceAttrs, SliceInputs, TypedArray, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {sliceImplCPU} from '../kernel_utils/shared';

export function slice(
    args: {inputs: SliceInputs, attrs: SliceAttrs, backend: BackendWasm}) {
  const {inputs: {x}, attrs: {begin, size}, backend} = args;

  const [begin_, size_] = slice_util.parseSliceParams(x, begin, size);

  const isContinous = slice_util.isSliceContinous(x.shape, begin_, size_);
  const xVals = backend.readSync(x.dataId);
  const out = backend.makeOutput(size_, x.dtype);
  const xStrides = util.computeStrides(x.shape);
  const outData = backend.dataIdMap.get(out.dataId);

  if (isContinous)
  {
    const flatOffset = slice_util.computeFlatOffset(begin_, xStrides);

    if (x.dtype === 'string') {
      outData.stringBytes = (xVals as Uint8Array[]) .slice(flatOffset, flatOffset + util.sizeFromShape(size_));
    } else {
      const outVals = backend.typedArrayFromHeap(out);
      outVals.set((xVals as TypedArray) .subarray(flatOffset, flatOffset + util.sizeFromShape(size_)));
    }

    return out;
  }

  if (x.dtype === 'string') {
    const res = sliceImplCPU(xVals, begin_, size_, x.shape, x.dtype) as TypedArray;
    outVals.set(res);
  }

  return out;
}

function slice2d(
    xVals: backend_util.TypedArray, xStride: number,
    outVals: backend_util.TypedArray, begin: [number, number],
    size: [number, number]): void {
  let outOffset = 0;
  const beginI = begin[0];
  const beginJ = begin[1];
  const endI = beginI + size[0];
  for (let i = beginI; i < endI; i++) {
    const xOffset = i * xStride + beginJ;
    outVals.set(xVals.subarray(xOffset, xOffset + size[1]), outOffset);
    outOffset += size[1];
  }
}

function slice3d(
    xVals: backend_util.TypedArray, xStride1: number, xStride2: number,
    outVals: backend_util.TypedArray, begin: [number, number, number],
    size: [number, number, number]): void {
  let outOffset = 0;
  const beginI = begin[0];
  const beginJ = begin[1];
  const beginK = begin[2];
  const endI = beginI + size[0];
  const endJ = beginJ + size[1];
  const endK = beginK + size[2];
  for (let i = beginI; i < endI; i++) {
    for (let j = beginJ; j < endJ; j++) {
      const xOffset = i * xStride1 + j * xStride2 + beginK;
      outVals.set(xVals.subarray(xOffset, xOffset + size[2]), outOffset);
      outOffset += size[2];
    }
  }
}

function slice4d(
    xVals: backend_util.TypedArray, xStride1: number, xStride2: number,
    xStride3: number,
    outVals: backend_util.TypedArray, begin: [number, number, number, number],
    size: [number, number, number, number]): void {
  let outOffset = 0;
  const beginI = begin[0];
  const beginJ = begin[1];
  const beginK = begin[2];
  const beginL = begin[3];
  const endI = beginI + size[0];
  const endJ = beginJ + size[1];
  const endK = beginK + size[2];
  const endL = beginL + size[3];
  for (let i = beginI; i < endI; i++) {
    for (let j = beginJ; j < endJ; j++) {
      for (let k = beginK; k < endK; k++) {
        const xOffset = i * xStride1 + j * xStride2 + k * xStride3 + beginL;
        outVals.set(xVals.subarray(xOffset, xOffset + size[3]), outOffset);
        outOffset += size[3];
      }
    }
  }
}

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*/

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const beginK = begin[2];
const endI = beginI + size[0];
const endJ = beginJ + size[1];
const endK = beginK + size[2];
const beginL = begin[3];
for (let i = beginI; i < endI; i++) {
  for (let j = beginJ; j < endJ; j++) {
    for (let k = beginK; k < endK; k++) {
      const xOffset = i * xStride1 + j * xStride2 + k * xStride3 + beginL;
      outVals.set(xVals.subarray(xOffset, xOffset + size[3]), outOffset);
      outOffset += size[3];
    }
  }
}

export const sliceConfig: KernelConfig = {
  kernelName: Slice,
  backendName: 'wasm',
  kernelFunc: slice as {} as KernelFunc
};

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 */

import {backend_util, BatchToSpaceND, BatchToSpaceNDAttrs, BatchToSpaceNDInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {reshape} from './Reshape';
import {slice} from './Slice';
import {transpose} from './Transpose';

function batchToSpaceND(args: {
  inputs: BatchToSpaceNDInputs,
  backend: BackendWasm,
  attrs: BatchToSpaceNDAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {blockShape, crops} = attrs;

  const prod = blockShape.reduce((a, b) => a * b);

  const reshaped = backend_util.getReshaped(x.shape, blockShape, prod);
  const permuted = backend_util.getPermuted(reshaped.length, blockShape.length);
  const reshapedPermuted = backend_util.getReshapedPermuted(x.shape, blockShape.length);
  const sliceBeginCoords = backend_util.getSliceBeginCoords(crops, blockShape.length);
  const sliceSize = backend_util.getSliceSize(reshapedPermuted, crops, blockShape.length);

  const xReshaped = reshape({inputs: {x}, backend, attrs: {shape: reshaped}});
  const xTransposed = transpose({inputs: {x: xReshaped}, backend, attrs: {perm: permuted}});
  const xReshapedPermuted = reshape({inputs: {x: xTransposed}, backend, attrs: {shape: reshapedPermuted}});
  const result = slice({inputs: {x: xReshapedPermuted}, backend, attrs: {begin: sliceBeginCoords, size: sliceSize}});

  backend.disposeData(xReshaped.dataId);
  backend.disposeData(xTransposed.dataId);
  backend.disposeData(xReshaped.dataId);

  return result;
}

export const batchToSpaceNDConfig: KernelConfig = {
  kernelName: BatchToSpaceND,
  backendName: 'wasm',
  kernelFunc: batchToSpaceND as {} as KernelFunc
};

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 */

import {Cast, CastAttrs, CastInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';
import {TensorInfo} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';

export function cast(
    args: {inputs: CastInputs, attrs: CastAttrs, backend: BackendWasm}):
    TensorInfo {
  const {inputs: {x}, attrs: {dtype}, backend} = args;
  const out = backend.makeOutput(x.shape, dtype);
  const inVals = backend.typedArrayFromHeap(x);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.set(inVals);
  return out;
}

export const castConfig: KernelConfig = {
  kernelName: Cast,
  backendName: 'wasm',
  kernelFunc: cast as {} as KernelFunc
};

/*=============================================================================

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/*=============================================================================

const beginK = begin[2];
const endI = beginI + size[0];
const endJ = beginJ + size[1];
const endK = beginK + size[2];
const beginL = begin[3];
for (let i = beginI; i < endI; i++) {
  for (let j = beginJ; j < endJ; j++) {
    for (let k = beginK; k < endK; k++) {
      const xOffset = i * xStride1 + j * xStride2 + k * xStride3 + beginL;
      outVals.set(xVals.subarray(xOffset, xOffset + size[3]), outOffset);
      outOffset += size[3];
    }
  }
}
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=============================================================================
*/

import {KernelConfig, Ceil} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const ceilConfig: KernelConfig = createUnaryKernelConfig(Ceil);

/*=============================================================================

import {ClipByValue, ClipByValueAttrs, ClipByValueInputs, KernelConfig, KernelFunc} from
'@tensorflow/tfjs-core';

import {backend_util, Concat, ConcatAttrs, ConcatInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {concatImplCPU} from '../kernel_utils/shared';
import {identity} from './Identity';
import {reshape} from './Reshape';

export function concat(
    args: {inputs: ConcatInputs, backend: BackendWasm, attrs: ConcatAttrs}) {
  const {inputs, backend} = args;

  const axis = util.parseAxisParam(args.attrs.axis, inputs[0].shape)[0];

  let outShape = backend_util.computeOutShape(inputs.map(t => t.shape), axis);

  // Keep only non-empty tensors (ignore tensors with 0 in their shape).
  const $inputs = inputs.filter(t => util.sizeFromShape(t.shape) > 0);
  if ($inputs.length === 1) {
    return identity({inputs: {x: $inputs[0]}, backend});
  }

  const out = backend.makeOutput(outShape, inputs[0].dtype);

  if (util.sizeFromShape(outShape) === 0) {
    return out;
  }

  const shapes = $inputs.map(t => t.shape);
  backend_util.assertParamsConsistent(shapes, axis);

  if ($inputs[0].dtype === 'string') {
    // Any concat of n-dimensional tensors across any axis can be reduced to
    // a concatenation of two-dimensional tensors across the axis 1 by first flatten
    // partitioning the axes of the original tensors into those less than the
    // axis to be concatenated and the rest. Then reshape the tensors across
    // into a two-dimensional tensor by collapsing these two sets of axes and
    // concatenate the resulting matrices across the axis 1, finally reshaping
    // the result to have the proper shape.
    let const inputs2D = $inputs.map(t => {
      const innerSize = util.sizeFromShape(t.shape, axis);
      return reshape({inputs: {x: t, backend, attrs: {shape}}});
    });

    return reshapes(...inputs2D.map(t => {
      return {vals: util.sizeFromShape(t.shape, slice(axis))};
    }));
  }

  return out;

}
backend.readSync(t.dataId, shape: t.shape);\n
// Concat 2d tensors along axis=1.
outShape = [inputShapes[0].shape[0] + inputShapes[1].shape[0]]

const simplyConcat = inputs2D[0].shape[0] === 1 ?
    const outVals = concatImplCPU(outValShapes, outShape,
    inputs[0].dtype, simplyConcat)

const finalOutShape = backend_util.computeOutShape(inputs.map(t => t.shape), axis);
out.shape = finalOutShape
const outData = backend_dataIdMap.get(out.dataId)
outData.stringBytes = backend_util.fromStringArrayToUint8(outVals);

inputs2D.forEach(t => backend.disposeData(t.dataId));

return out;
}

const batchDim = util.sizeFromShape($inputs[0].shape.slice(0, axis));
let sumInnerDims = 0;
const innerDims = $inputs.map(input => {
    const innerDim = util.sizeFromShape(input.shape.slice(axis));
    sumInnerDims += innerDim;
    return input.shape[0] === 1 ?
        let inOffset = b * sumInnerDims;
        for (let i = 0; i < inVals.length; i++) {
            const innerDim = input.shape[0] === 1 ?
                inVals[i].set(vals, inOffset);
                return out;
        } return out;

export const concatConfig: KernelConfig = {
    kernelName: Concat,
    backendName: 'wasm',
    kernelFunc: concat as {} as KernelFunc,
};
const out = backend.makeOutput(convInfo.outShape, 'float32');

const outId = backend.dataIdMap.get(out.dataId).id;

return outId;

export const conv2DConfig: KernelConfig = {
  kernelName: Conv2D,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: conv2d as {} as KernelFunc
};

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 */

import {backend_util, Conv2DBackpropInput, Conv2DBackpropInputAttrs, Conv2DBackpropInputInputs, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

let wasmConv2DBackpropInput: (
  dyId: number, filterId: number, batchSize: number,
  filterHeight: number,
  filterWidth: number, inHeight: number, inWidth: number, inChannels: number,
  outHeight: number, outWidth: number, outChannels: number,
  strideHeight: number, strideWidth: number,
  topPad: number, leftPad: number,
  fltS0: number, fltS1: number, fltS2: number, xBatchStride: number,
  xRowStride: number, xColStride: number,
  yBatchStride: number, yRowStride: number, yColStride: number,
  outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmConv2DBackpropInput = backend.wasm.cwrap(Conv2DBackpropInput, null, [
    'number',  // dyId
    'number',  // filterId
    'number',  // batchSize
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // inHeight
    'number',  // inWidth
    'number',  // inChannels
    'number',  // outHeight
    'number',  // outWidth
    'number',  // outChannels
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // topPad
    'number',  // leftPad
    'number',  // fltS0
    'number',  // fltS1
    'number',  // fltS2
    'number',  // xBatchStride
    'number',  // xRowStride
    'number',  // xColStride
    'number',  // yBatchStride
    'number',  // yRowStride
    'number',  // yColStride
    'number',  // outId
  ]);}

function conv2DBackpropInput(args: {
  backend: BackendWasm,
  inputs: Conv2DBackpropInputInputs,
  attrs: Conv2DBackpropInputAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {dy, filter} = inputs;
  const {strides, pad, dataFormat, dimRoundingMode, inputShape} = attrs;

  const dilations = 1;

  const $dataFormat = backend_util.convertConv2DDataFormat(dataFormat);
  const convInfo = backend_util.computeConv2DInfo(
    inputShape, filter.shape as [number, number, number, number], strides, dilations, pad, dimRoundingMode,
    false, */ depthwise */, $dataFormat);

  const out = backend.makeOutput(convInfo.outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;

  const dyId = backend.makeOutput(dy.shape, 'float32');
  const dyId = backend.dataIdMap.get(dy.dataId).id;

  wasmConv2DBackpropInput(dyId, filterId, batchSize, filterHeight, filterWidth, inHeight, inWidth,
  inChannels, outHeight, outWidth, outChannels, strideHeight, strideWidth,
  topPad, leftPad, fltS0, fltS1, fltS2,
xBatchStride, xRowStride, xColStride, xChannelStride, yBatchStride, yRowStride, yColStride,

yChannelStride, outId); return out;

export const conv2DBackpropInputConfig: KernelConfig = {
  kernelName: Conv2DBackpropInput,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc:.conv2DBackpropInput as {} as KernelFunc
};

export const conv2DBackpropInputConfig: KernelConfig = {
  kernelName: Conv2DBackpropInput,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: conv2DBackpropInput as {} as KernelFunc
};

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 */

import {Cos, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const cosConfig: KernelConfig = createUnaryKernelConfig(Cos);

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 */

import {Cosh, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const coshConfig: KernelConfig = createUnaryKernelConfig(Cosh);

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 */

import {CropAndResize, CropAndResizeAttrs, CropAndResizeInputs, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {cast} from './Cast';

// Must match enum in CropAndResize.cc/enum InterpolationMethod {
//  bilinear = 0,
//  nearest = 1
//} --> void

function setup(backend: BackendWasm): void {
  wasmCropAndResize = backend.wasm.cwrap(CropAndResize, null /*void*/, 
    'number',  // imagesId
    'number',  // boxesId
    'number',  // boxIndId
    'number',  // numBoxes
    'array',   // images shape
    'number',  // cropHeight
    'number',  // cropWidth
    'number',  // method
    'number',  // extrapolationValue
    'number',  // outId
  
}

function cropAndResize(args: {
  backend: BackendWasm,
  inputs: CropAndResizeInputs,
  attrs: CropAndResizeAttrs
}): TensorInfo {

  const {backend, inputs, attrs} = args;
  const {method,
    extrapolationValue, cropSize} = attrs;
  const {image, boxes, boxInd} = inputs;

  const numBoxes = boxes.shape[0];
  const [cropHeight, cropWidth] = cropSize as [number, number];
  const outShape = [numBoxes, cropHeight, cropWidth, image.shape[3]];

  let imagesData = backend.dataIdMap.get(image.dataId);

  let castedData;

  if (image.dtype !== 'float32') {
    castedData = cast((backend, inputs: [x: image], attrs: {dtype: 'float32'}));
    imagesData = backend.dataIdMap.get(castedData.dataId);
  }

  const castedImagesId = imagesData.id;
  const boxesIds = backend.dataIdMap.get(boxes.dataId).id;
  const boxIndId = backend.dataIdMap.get(boxInd.dataId).id;

  let out = backend.makeOutput(outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;

  const
InterpolationMethod[method as {} as keyof typeof InterpolationMethod], extrapolationValue, outId) if (castedData != null) { in backend.disposeData(castedData.dataId)* } in return out; } in export const cropAndResizeConfig: KernelConfig = { kernelName: CropAndResize, backendName: 'wasm', setupFunc: setup, kernelFunc: cropAndResize as {} as KernelFunc };

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 */

import {backend_util, KernelConfig, KernelFunc, Cumsum, CumsumAttrs, CumsumInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

import {transpose} from './Transpose';

let wasmCumsum: (xId: number, exclusive: number, reverse: number, finalDim: number, outId: number, dtype: CppDType) => void; function setup(backend: BackendWasm) { wasmCumsum = backend.wasm.cwrap(Cumsum, null /* void */, [ 'number', // x_id
... exclusive? 1 : 0, // reverse? 0, // final_dim? number, // out_id? number // dtype? ] );
}

export function cumsum( args: {inputs: CumsumInputs, backend: BackendWasm, attrs: CumsumAttrs}):
TensorInfo { const {inputs, backend, attrs} = args;
const {x} = inputs;
const {axis, exclusive, reverse} = attrs;
const xRank = x.shape.length;
util.assert(x.dtype === 'float32' || x.dtype === 'int32', () => `cumsum does not support $x.dtype$ tensors in the WASM backend`);
// permute required axis to inner most axis
const permutedXId = backend.dataIdMap.get(x.dataId).id;
const permutedOutId = backend.dataIdMap.get(backend.makeOutput(x.shape, CppDType[x.dtype]).dataId);
const permutedException = backend.util.getPermutation(x.shape, CppDType[x.dtype]).id;
const permutedAxis = backend.getInnerMostAxes(x.shape, xRank)[0];
const parsedAxes = backend_util.parseAxesAndCheck(x.shape, xRank);
const permutedAxisId = backend.dataIdMap.get(permutedOutId.dataId).id; // permute back to original shape
const permutedException = backend.getPermutation(permutedX.shape, CppDType[x.dtype]).id;
const permutedOutId = backend.dataIdMap.get(permutedOutId.dataId).id; // permute data back if permuted
const undoPermutation = backend_util.undoAxesPermutation(permutedOutId, undoAxesPermutation(x.shape, CppDType[x.dtype]));
const parsedAxes = backend_util.parseAxesAndCheck(permutedOutId.shape, xRank);
const xId = backend.dataIdMap.get(x.dataId).id; // permute and return output
const cumsumConfig = { kernelName: Cumsum, backendName: 'wasm', setupFunc: setup, kernelFunc: cumsum as {} as KernelFunc };

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 */

import {DepthToSpace, DepthToSpaceAttrs, DepthToSpaceInputs, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmDepthToSpace: ( xId: number, blockSize: number, channelsLast: number, xStrides: Uint8Array, xStridesLength: number, outputShape: Uint8Array, outputStrides: Uint8Array, outSize: number, outId: number ) => void;

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```javascript
setup(backend: BackendWasm): void {
  const wasmDepthToSpace = backend.wasm.cwrap(DepthToSpace, null /*void*/,
    ['number', xId, 'number', 'number', 'number', 'number', 'number', 'number', 'number'],
    [0, 0, 0, 0, 0, 0, 0, 0, 0]);

  const x = inputs[0];
  const xStridesLength = array.length;
  const outputShape = array[0];
  const outputStrides = array[1];
  const out = backend.makeOutput(outputShape, 'float32');
  const xData = backend.dataIdMap.get(x.dataId);

  wasmDepthToSpace(
    xId, inputHeight = outputHeight / (blockSize * blockSize);
    outputShapeBytes, outputStridesBytes, outputShape.length, outId);

  return out;
}

export const depthToSpaceConfig: KernelConfig = {
  kernelName: DepthToSpace,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: depthToSpace as {} as KernelFunc
};

import {backend_util, DepthwiseConv2dNative, DepthwiseConv2dNativeAttrs, DepthwiseConv2dNativeInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmDepthwiseConv2d: (xId: number, batchSize: number, inputHeight: number, inputWidth: number, filterId: number, filterHeight: number, filterWidth: number, padTop: number, padRight: number, padBottom: number, padLeft: number, isSamePad: number, dilationHeight: number, dilationWidth: number, strideHeight: number, strideWidth: number, inputChannels: number, outputChannels: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmDepthwiseConv2d = backend.wasm.cwrap(DepthwiseConv2dNative, null /*void*/,
    ['number', xId, 'number', 'number', 'number', 'number', 'number', 'number', 'number'],
    [0, 0, 0, 0, 0, 0, 0, 0, 0]);

  const x = inputs[0];
  const xStridesLength = array.length;
  const outputShape = array[0];
  const outputStrides = array[1];
  const out = backend.makeOutput(outputShape, 'float32');
  const xData = backend.dataIdMap.get(x.dataId);

  wasmDepthwiseConv2d(
    xId, inputHeight = outputHeight / (blockSize * blockSize);
    outputShapeBytes, outputStridesBytes, outputShape.length, outId);

  return out;
}

function depthwiseConv2d(args: {
  inputs: DepthwiseConv2dNativeInputs,
  backend: BackendWasm,
  attrs: DepthwiseConv2dNativeAttrs
}) {
  const xId = backend.dataIdMap.get(x.dataId);
  const filterId = backend.dataIdMap.get(filter.dataId);

  const strides, dilations, pad, dimRoundingMode = attrs;
  const convInfo = backend_util.computeConv2DInfo(x as Tensor4D).shape,
    (filter as Tensor4D).shape,
    strides,
    (dilations as number | number),
    dimRoundingMode,
    true /* depthwise */);

  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const padTop = convInfo.padTop;
  const padRight = convInfo.padRight;
  const padBottom = convInfo.padBottom;
```
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const padLeft = convInfo.padInfo.left;
const dilationHeight = convInfo.dilationHeight;
const dilationWidth = convInfo.dilationWidth;
const strideHeight = convInfo.strideHeight;
const strideWidth = convInfo.strideWidth;
const inputChannels = convInfo.inChannels;
const outputChannels = convInfo.outChannels;
const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;

if (convInfo.dataFormat !== 'channelsLast') {
  throw new Error(`wasm backend DepthwiseConv2d Native does not support dataFormat: '${convInfo.dataFormat}'. Please use 'channelsLast'.`);
}

const out = backend.makeOutput(convInfo.outShape, 'float32');
const outId = backend.dataIdMap.get(out.dataId).id;

wasmDepthwiseConv2d(xId, x.shape[0], x.shape[1], x.shape[2], filterId, filterHeight, padTop, padRight, padBottom, padLeft, isSamePad,
  dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, outId);

return out;
}

export const depthwiseConv2dNativeConfig: KernelConfig = {
  kernelName: DepthwiseConv2dNative,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: depthwiseConv2d as {} as KernelFunc
};

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import {Elu, KernelConfig} from '@tensorflow/tfjs-core';

export const eluConfig: KernelConfig = createUnaryKernelConfig(Elu);

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import {Equal, KernelConfig} from '@tensorflow/tfjs-core';

export const equalConfig: KernelConfig = createBinaryKernelConfig(Equal, supportsFullBroadcast, 'bool');

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import {Exp, KernelConfig} from '@tensorflow/tfjs-core';

export const expConfig: KernelConfig = createUnaryKernelConfig(Exp, 'float32');

/* vim: set sw=2 sts=2 tw=80: */
import {KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';
import {Fill, FillAttrs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function fill(args: {attrs: FillAttrs, backend: BackendWasm}) {
  const {attrs: {shape, value, dtype}, backend} = args;
  const out = backend.makeOutput(shape, dtype);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.fill(value as number);
  return out;
}

export const fillConfig: KernelConfig = {
  kernelName: Fill,
  backendName: 'wasm',
  kernelFunc: fill as {} as KernelFunc,
};

import {FlipLeftRight, FlipLeftRightInputs, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmFlipLeftRight: (xId: number, batch: number, imageHeight: number, imageWidth: number, numChannels: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmFlipLeftRight = backend.wasm.cwrap(FlipLeftRight, null /* void */, [
    'number',  // xId
    'number',  // batch
    'number',  // imageHeight
    'number',  // imageWidth
    'number',  // numChannels
    'number',  // outId
  ]);
}

export function flipLeftRight(
  args: {inputs: FlipLeftRightInputs, backend: BackendWasm}): TensorInfo {
  const {inputs, backend} = args;
  const {image} = inputs;

  const out = backend.makeOutput(image.shape, image.dtype);
  const imageId = backend.dataIdMap.get(image.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;
  const [batch, imageHeight, imageWidth, numChannels] = image.shape;
  wasmFlipLeftRight(imageId, outId, imageHeight, imageWidth, numChannels, outId);
  return out;
}

export const flipLeftRightConfig: KernelConfig = {
  kernelName: FlipLeftRight,
  backendName: 'wasm',
  kernelFunc: flipLeftRight as {} as KernelFunc,
  setupFunc: setup,
};

// @tensorflow/tfjs-core';

export function expandDims(args: {
  inputs: ExpandDimsInputs,
  attrs: ExpandDimsAttrs,
  backend: BackendWasm
}) {
  const {inputs, attrs, backend} = args;
  const {input} = inputs;
  const {dim} = attrs;

  const inputRank = input.shape.length;
  const newShape = input.shape.slice();
  let $dim = dim;
  if (dim < 0) {
    // Negative value is counted from the tail of rank.
    util.assert(
        -(inputRank + 1) <= dim,
        () => `Axis must be in the interval [\(- (inputRank + 1), \$\{inputRank + 1\}\)`);
    $dim = inputRank + dim + 1;
  }
  newShape.splice($dim, 0, 1);

  return reshape({inputs: {x: input}, backend, attrs: {shape: newShape}});
}

export const expandDimsConfig: KernelConfig = {
  kernelName: ExpandDims,
  backendName: 'wasm',
  kernelFunc: expandDims as {} as KernelFunc,
};

// @tensorflow/tfjs-core';

export function reshape(args: {
  inputs: ReshapeInputs,
  attrs: ReshapeAttrs,
  backend: BackendWasm
}) {
  const {inputs, attrs, backend} = args;
  const {x} = inputs;
  const {newShape} = attrs;
  util.assert(newShape.length > 0, () => `newShape.length must be > 0`);

  return new Tensor(backend, backend.reshape(x, newShape));
}

export const reshapeConfig: KernelConfig = {
  kernelName: Reshape,
  backendName: 'wasm',
  kernelFunc: reshape as {} as KernelFunc,
};

// @tensorflow/tfjs-core';

export function transpose(args: {
  inputs: TransposeInputs,
  attrs: TransposeAttrs,
  backend: BackendWasm
}) {
  const {inputs, attrs, backend} = args;
  const {x} = inputs;
  const {perm} = attrs;

  const n = x.shape.length;
  util.assert(perm.length == n, () => `perm.length must be == x.shape.length`);

  util.assert(perm.every((p) => p >= 0 && p < n), () => `perm contains a negative or invalid positive value`);

  const out = x.clone();
  const outId = backend.dataIdMap.get(out.dataId).id;
  backend.transpose(xId, outId, perm);
  return out;
}

export const transposeConfig: KernelConfig = {
  kernelName: Transpose,
  backendName: 'wasm',
  kernelFunc: transpose as {} as KernelFunc,
};
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 */

import {FloorDiv, KernelConfig} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;
export const floorDivConfig: KernelConfig = createBinaryKernelConfig(FloorDiv, supportsFullBroadcast);

import {backend_util, FusedConv2D, FusedConv2DAttrs, FusedConv2DInputs, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {FusableActivation} from './types';

let wasmFusedConv2d:
    (xId: number, batchSize: number, inputHeight: number, inputWidth: number, filterId: number, filterHeight: number, filterWidth: number, biasId: number, varianceEpsilon: number, outputs: [FusableActivation], inputs: [TensorInfo, FusedConv2DInputs]) => void;

function setup(backend: BackendWasm): void {
  wasmFusedConv2d = backend.wasm.cwrap(FusedConv2D, null /* void */,
    ['number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number'], util.FusableActivation);
}

function fusedConv2d(args: {
  backend: BackendWasm, 
  inputs: FusedConv2DInputs,
  attrs: FusedConv2DAttrs
}): Tensor4D {
  const {backend, inputs, attrs} = args;
  const {varianceEpsilon} = attrs;
  const {x, mean, variance, offset, scale} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const meanId = backend.dataIdMap.get(mean.dataId).id;
  const varianceId = backend.dataIdMap.get(variance.dataId).id;
  const offsetId = offset != null ? backend.dataIdMap.get(offset.dataId).id : 0;
  const scaleId = scale != null ? backend.dataIdMap.get(scale.dataId).id : 0;

  const out = backend.makeOutput(x.shape, x.dtype).
  // Short-circuit zero-sized tensors.
  if (util.sizeFromShape(x.shape) === 0) {
    return out;
  }

  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmFusedConv2d(xId, meanId, varianceId, offsetId, scaleId, varianceEpsilon, outId);
  return out;
}

export const fusedConv2dConfig: KernelConfig = {
  kernelName: FusedConv2D,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: fusedConv2d as {} as KernelFunc
};

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 */

import {backend_util, FusedBatchNorm, FusedBatchNormAttrs, FusedBatchNormInputs, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmBatchNorm: (
    xId: number, meanId: number, varianceId: number, offsetId: number,
    scaleId: number, varianceEpsilon: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmBatchNorm = backend.wasm.cwrap(FusedBatchNorm, null /* void */,
    ['number', 'number', 'number', 'number', 'number', 'number', 'number', 'number'], util.FusedBatchNorm);
}

function fusedBatchNorm(args: {
  backend: BackendWasm, 
  inputs: FusedBatchNormInputs, 
  attrs: FusedBatchNormAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {varianceEpsilon} = attrs;
  const {x, mean, variance, offset, scale} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const meanId = backend.dataIdMap.get(mean.dataId).id;
  const varianceId = backend.dataIdMap.get(variance.dataId).id;
  const offsetId = offset != null ? backend.dataIdMap.get(offset.dataId).id : 0;
  const scaleId = scale != null ? backend.dataIdMap.get(scale.dataId).id : 0;

  const out = backend.makeOutput(x.shape, x.dtype);
  // Short-circuit zero-sized tensors.
  if (util.sizeFromShape(x.shape) === 0) {
    return out;
  }

  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmBatchNorm(xId, meanId, varianceId, offsetId, scaleId, varianceEpsilon, outId);
  return out;
}

export const fusedBatchNormConfig: KernelConfig = {
  kernelName: FusedBatchNorm,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: fusedBatchNorm as {} as KernelFunc
};

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 */

import {backend_util, FusedActivation, FusedActivationInputs, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmFusedActivation: (xId: number, batchSize: number, inputHeight: number, inputWidth: number, filterId: number, filterHeight: number, filterWidth: number, biasId: number, outputs: [FusedActivation], inputs: [TensorInfo, FusedActivationInputs]) => void;

function setup(backend: BackendWasm): void {
  wasmFusedActivation = backend.wasm.cwrap(FusedActivation, null /* void */,
    ['number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number'], util.FusedActivation);
}

function fusedActivation(args: {
  backend: BackendWasm, 
  inputs: FusedActivationInputs, 
  attrs: FusedActivationAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {outputs} = attrs;
  const {x, mean, variance, offset, scale} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const meanId = backend.dataIdMap.get(mean.dataId).id;
  const varianceId = backend.dataIdMap.get(variance.dataId).id;
  const offsetId = offset != null ? backend.dataIdMap.get(offset.dataId).id : 0;
  const scaleId = scale != null ? backend.dataIdMap.get(scale.dataId).id : 0;

  const out = backend.makeOutput(x.shape, x.dtype);
  // Short-circuit zero-sized tensors.
  if (util.sizeFromShape(x.shape) === 0) {
    return out;
  }

  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmFusedActivation(xId, meanId, varianceId, offsetId, scaleId, outputs, inputs);
  return out;
}

export const fusedActivationConfig: KernelConfig = {
  kernelName: FusedActivation,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: fusedActivation as {} as KernelFunc
};
padTop: number, padRight: number, padBottom: number, padLeft: number, isSamePad: number, dilationHeight: number, dilationWidth: number, strideHeight: number, strideWidth: number, inputChannels: number, outputChannels: number, activation: number, preluActivationWeightsId: number, leakyreluAlpha: number, outId: number => void; protected function setup(backend: BackendWasm) {

  wasmFusedConv2d = backend.wasm.cwrap(FusedConv2D, null /* void */, [
    'number',                    // xId
    'number',                    // batchSize
    'number',                    // inputHeight
    'number',                    // inputWidth
    'number',                    // filterId
    'number',                    // filterHeight
    'number',                    // biasId
    'number',                    // padTop
    'number',                    // padRight
    'number',                    // padBottom
    'number',                    // padLeft
    'number',                    // isSamePad
    'number',                    // dilationHeight
    'number',                    // dilationWidth
    'number',                    // strideHeight
    'number',                    // strideWidth
    'number',                    // inputChannels
    'number',                    // outputChannels
    'number',                    // activation
    'number',                    // preluActivationWeightsId
    'number',                    // leakyreluAlpha
    'number',                    // outId
  ]);
}

function fusedConv2d(args: {
  inputs: FusedConv2DInputs,
  backend: BackendWasm,
  attrs: FusedConv2DAttrs
}) {

  const {inputs, attrs, backend} = args;
  const {x, filter, bias, preluActivationWeights = null} = inputs;
  const {strides, pad, dilations, dataFormat, dimRoundingMode, activation, leakyreluAlpha = null} = attrs;
  const convInfo = backend_util.computeConv2DInfo(x as Tensor4D, filter as Tensor4D, strides, dilations, dataFormat, dimRoundingMode, activation, leakyreluAlpha);

  const fusedActivation = FusableActivation[activation as {} as keyof typeof FusableActivation] || new Error(`FusedConv2D only supports rank-1 bias but got ${bias ? 'rank 1' : 'rank 0'}.`);
  if (fusedActivation == null) {
    if (bias != null) {
      const biasData = backend.dataIdMap.get(bias.dataId);
      if (biasData.shape.length !== 1) {
        throw new Error(`FusedConv2D bias shape (${biasData.shape}) does not match the number of output channels.`);
      }
      if (biasData.shape[0] !== outputChannels) {
        throw new Error(`FusedConv2D bias shape (${biasData.shape}) does not match the number of output channels.`);
      }
      biasId = biasData.id;
    }
  }

  const {inputChannels, outputChannels, activation, preluActivationWeightsId = null} = args;
  const {xId, batchSize, inputHeight, inputWidth, filterId, filterHeight, filterWidth, biasId, padTop, padRight, padBottom, padLeft, isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels} = args;

  if (dataFormat !== 'NHWC') {
    throw new Error('wasm backend FusedConv2D does not support dataFormat: ');
  }

  const out = backend.makeOutput(convInfo.outShape, 'float32');
}

export const fusedConv2DConfig:
  KernelConfig = {
    kernelName: FusedConv2D,
    backendName: 'wasm',
    setupFunc: setup, kernelFunc: fusedConv2D as {} as KernelFunc;
};
import {backend_util, FusedDepthwiseConv2D, FusedDepthwiseConv2DAttrs, FusedDepthwiseConv2DInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {FusableActivation} from './types';

let wasmFusedDepthwiseConv2d:
    (xId: number, batchSize: number, inputHeight: number, inputWidth: number,
     filterId: number, filterHeight: number, filterWidth: number,
     biasId: number, padTop: number, padRight: number, padBottom: number, 
     padLeft: number, isSamePad: number, dilationHeight: number, 
     dilationWidth: number, strideHeight: number, strideWidth: number, 
     inputChannels: number, outputChannels: number, 
     activation: number, 
     preluActivationWeightsId: number, leakyreluAlpha: number, outId: number) =>
     void;

function setup(backend: BackendWasm) {
  wasmFusedDepthwiseConv2d =
      backend.wasm.cwrap(FusedDepthwiseConv2D, null /* void */, [
        'number',  // xId
        'number',  // batchSize
        'number',  // inputHeight
        'number',  // inputWidth
        'number',  // filterId
        'number',  // filterHeight
        'number',  // filterWidth
        'number',  // biasId
        'number',  // padTop
        'number',  // padRight
        'number',  // padBottom
        'number',  // padLeft
        'number',  // isSamePad
        'number',  // dilationHeight
        'number',  // dilationWidth
        'number',  // strideHeight
        'number',  // strideWidth
        'number',  // outputChannels
        'number',  // activation
        'number',  // preluActivationWeightsId
        'number',  // leakyreluAlpha
        'number',  // outId
      ])\n
function fusedDepthwiseConv2d(args: {
  inputs: FusedDepthwiseConv2DInputs,
  backend: BackendWasm,
  attrs: FusedDepthwiseConv2DAttrs
}) {
  const {inputs, attrs, backend} = args;
  const {x, filter, bias, 
          preluActivationWeights} = inputs;
  const {
    strides, 
    pad, 
    dilations, 
    dataFormat, 
    dimRoundingMode, 
    activation, 
    leakyreluAlpha
  } = attrs;

  const convInfo =
      backend_util.computeConv2DInfo(
          (x as Tensor4D).shape, (filter as Tensor4D).shape, strides, dilations, 
          pad, dimRoundingMode, true /* depthwise */);\n
  const fusedActivation =
      FusableActivation[activation as {} as keyof typeof FusableActivation];
  if (fusedActivation == null) {
    throw new Error(
        `${activation} activation not yet supported for FusedDepthwiseConv2D ` +
        `in the wasm backend.`);
  }

  const xId =
      backend.dataIdMap.get(x.dataId).id;
  const filterId = backend.dataIdMap.get(filter.dataId).id;

  const outputChannels = convInfo.outChannels;\n
  let biasId = 0;\n    if (bias != null) {\n      const biasData =
          backend.dataIdMap.get(bias.dataId);\n      if (biasData.shape.length !== 1) {\n        throw new Error(`FusedDepthwiseConv2D only supports rank-1 bias but got 
            +n \  `rank ${biasData.shape.length}`.\);\n      }\n      biasId = biasData.id;\n    }\n
  const filterHeight = convInfo.filterHeight;\n  const filterWidth =
      convInfo.filterWidth;\n  const padTop = convInfo.padInfo.top;\n  const padRight = convInfo.padInfo.right;\n  const padBottom = convInfo.padInfo.bottom;\n  const padLeft = convInfo.padInfo.left;\n  const dilationHeight =
      convInfo.dilationHeight;\n  const dilationWidth = convInfo.dilationWidth;\n  const strideHeight =
      convInfo.strideHeight;\n  const strideWidth = convInfo.strideWidth;\n  const inputChannels =
      convInfo.inChannels;\n  const isSamePad = convInfo.padInfo.type === 'SAME'? 1 : 0;\n  const batchSize =
      convInfo.batchSize;\n  const inHeight = convInfo.inHeight;\n  const inWidth = convInfo.inWidth;\n  if ((dataFormat !== 'NHWC') {\n    throw new Error(`wasm backend FusedDepthwiseConv2D does not support 
        dataFormat: 
        'NHWC'. Please use 'NHWC'.`);
  }\n
  const out =
      backend.makeOutput(convInfo.outShape, 'float32');\n  const outId =
      backend.dataIdMap.get(out.dataId);\n
  const preluActivationWeightsId =
      preluActivationWeights == null ? 0 : \n  backend.dataIdMap.get(preluActivationWeights.dataId);\n  const xId, batchSize, 
          inHeight, inWidth, filterId, filterHeight, filterWidth, 
          biasId, padTop, padRight, padBottom, padLeft, 
          isSamePad, dilationHeight, 
          dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, 
          fusedActivation, 
          preluActivationWeightsId, leakyreluAlpha || 0, outId);\n
  return out;
}

export const fusedDepthwiseConv2DConfig: KernelConfig = {
  kernelName: FusedDepthwiseConv2D, 
  backendName: 'wasm', 
  setupFunc: setup, 
  kernelFunc: fusedDepthwiseConv2D as {} as KernelFunc
};/* */

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*/

import {gather_util, GatherNd, GatherNdInputs, KernelConfig, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmGatherNd: (xId: number, dtype: CppDType, indicesId: number, numSlices: number, sliceRank: number, sliceSize: number, strides: Uint8Array, outId: number) => void =

function setup(backend: BackendWasm): void {
  wasmGatherNd = backend.wasm.cwrap(GatherNd, null /*void*/, [
    'number',  // xId
    'number',  // dtype
    'number',  // indicesId
    'number',  // numSlices
    'number',  // sliceRank
    'number',  // sliceSize
    'array',   // strides
    'number'   // outId
  ]);}

function gatherNd(inputs: GatherNdInputs): TensorInfo {
  const {backend, inputs} = args;
  const {params, indices} = inputs;

  const [resultShape, numSlices, sliceSize, strides] =
      gather_util.prepareAndValidate(params, indices);

  const out = backend.makeOutput(resultShape, numSlices, sliceSize, strides);
  if (numSlices === 0) {
    return out;
  }

  const indicesShape = indices.shape;
  const sliceRank = indicesShape[indicesShape.length - 1];

  const xData = backend.dataIdMap.get(params.dataId);
  const xId = xData.id;
  const indicesData = backend.dataIdMap.get(indices.dataId);
  const indicesId = indicesData.id;

  const stridesBytes = new Uint8Array(new Int32Array(strides).buffer);
  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmGatherNd(xId, CppDType[params.dtype], indicesId, numSlices, sliceRank, sliceSize, stridesBytes, outId);

  return out;
}

export const gatherNdConfig: KernelConfig = {
  kernelName: GatherNd,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: gatherNd
};

/*=============================================================================
*/

import {backend_util, GatherV2, GatherV2Attrs, GatherV2Inputs, KernelConfig, KernelFunc, Tensor, TensorInfo, TypedArray, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {reshape} from './Reshape';
import {CppDType} from './types';

let wasmGather: (xId: number, dtype: CppDType, xStrides: Uint8Array, stridesSize: number, indicesId: number, batchSize: number, outStrides: Uint8Array, outId: number) => void =

function setup(backend: BackendWasm): void {
  wasmGather = backend.wasm.cwrap('Gather', null /*void*/, [
    'number',  // xId
    'number',  // dtype
    'array',   // xStrides
    'number',  // stridesSize
    'number',  // indicesId
    'number',  // batchSize
    'array',   // outStrides
    'number'   // outId
  ]);}

function gatherV2(inputs: GatherV2Inputs, attrs: GatherV2Attrs): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {x, indices} = inputs;

  const [axis, batchDims] = attrs; // Throw error when any index is out of bound.
  const parsedAxis = util.parseAxisParam(axis, x.shape)[0];

  const indicesVals = backend.readSync(indices.dataId) as TypedArray;
  const axisDim = x.shape[parsedAxis];
  for (let i = 0; i < indicesVals.length; ++i) {
    const index = indicesVals[i];
    const indexVal = x.shape[axis] * index;
    if (indexVal < 0) {
      throw new Error(`GatherV2: the index value ${index} is not in [0, x.shape[axis] - 1]`);
    }
  }

  const flattenX = reshape({
    inputs: [x],
    attrs: {
      shape: [x.shape[batchDims]],
      outerSize: x.shape[batchDims] * x.shape[parsedAxis],
      dimSize: x.shape[parsedAxis],
      sliceSize: x.shape[parsedAxis]
    }
  }, backend);

  const flattenIndex = reshape({
    inputs: [x, indices],
    attrs: {shape: [x.shape[batchDims], x.shape[batchDims]]},
    outerSize: x.shape[batchDims] * x.shape[batchDims],
    dimSize: x.shape[batchDims],
    sliceSize: x.shape[batchDims],
    sliceIndex: x.shape[parsedAxis]
  }, backend);

  const gatherV2 = backend_util.segment_util.GatherOpShapeInfo(x, x.shape, parsedAxis, batchDims);
  const flattenShapeInfo = backend_util.GatherOpShapeInfo(x, indices, parsedAxis, batchDims);
  const flattenXToShape = reshape({
    inputs: [x, indices],
    attrs: {
      shape: [flattenX.shape[batchDims], flattenX.shape[batchDims]],
      outerSize: flattenX.shape[batchDims] * flattenX.shape[batchDims],
      dimSize: flattenX.shape[batchDims],
      sliceIndex: flattenX.shape[parsedAxis]
    }
  }, backend);
const out = backend.makeOutput(flatOutputShape, x.dtype());
if (util.sizeFromShape(x.shape) === 0) {
  return out;
}
const stridesSize = flatOutputShape.length - 1;
const xData = backend.dataIdMap.get(flatX.dataId); const xId = xData.id;
const indicesData = backend.dataIdMap.get(flatIndex.dataId); const indicesId = indicesData.id;
const outId = backend.dataIdMap.get(out.dataId).id;
const xStridesBytes = new Uint8Array(new Int32Array(util.computeStrides(flatX.shape)).buffer);
const outStridesBytes = new Uint8Array(new Int32Array(util.computeStrides(flatOutputShape)).buffer);
wasmGather(xId, CppDType[x.dtype()], xStridesBytes, stridesSize, indicesId,
shapeInfo.batchSize, outStridesBytes, outId);
backend.disposeData(flatX.dataId);
backend.disposeData(flatIndex.dataId);
// reshape
out.shape = shapeInfo.outputShape;
return out;
}

export const gatherV2Config: KernelConfig = {
  kernelName: GatherV2,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: gatherV2 as {} as KernelFunc
};

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 */

import {Greater, KernelConfig} from '@tensorflow/tfjs-core';

const supportsFullBroadcast = false;
export const greaterConfig: KernelConfig = createBinaryKernelConfig(Greater, supportsFullBroadcast, 'bool');

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 */

import {KernelConfig, KernelFunc, LeakyRelu, LeakyReluAttrs, LeakyReluInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmFunc: (xId: number, dtype: number, leakyreluAlpha: number, outId: number) => void;

function setupFunc(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(LeakyRelu,
    null /* void */,['number',  // x_id
    'number',  // dtype
    'number',  // leakyrelu_alpha
    'number'] /* out_id
  });
}

export function leakyRelu(args: {inputs: LeakyReluInputs, attrs: LeakyReluAttrs, backend: BackendWasm}): TensorInfo {
  const {inputs: {x}, attrs: {alpha}, backend} = args;
  const xId = backend.dataIdMap.get(x.dataId).id;
  // According to TF API, LeakyRelu returns float32 when input is either...
// or int32
const out = backend.makeOutput(x.shape, 'float32');
if (util.sizeFromShape(x.shape) !== 0) {
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmFunc(xId, CppDType[x.dtype], alpha, outId);
  return out;
}

export const leakyReluConfig: KernelConfig = {
  kernelName: LeakyRelu,
  backendName: 'wasm',
  setupFunc: kernelFunc: leakyRelu as {} as KernelFunc,
  kernelFunc: leakyRelu as {} as KernelFunc,
  transform: /* @license */
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  const supportsFullBroadcast = false;
  export const lessEqualConfig: KernelConfig = createBinaryKernelConfig(LessEqual, supportsFullBroadcast, 'bool');

  const supportsFullBroadcast = false;
  export const logConfig: KernelConfig = createUnaryKernelConfig(Log);

  const supportsFullBroadcast = false;
  export const logicalAndConfig: KernelConfig = createBinaryKernelConfig(LogicalAnd, supportsFullBroadcast, 'bool');

  const supportsFullBroadcast = false;
  export const logicalOrConfig: KernelConfig = createBinaryKernelConfig(LogicalOr, supportsFullBroadcast, 'bool');
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=============================================================================
*/

import {backend_util, KernelConfig, KernelFunc, Max, MaxAttr, MaxInputs, TensorFlowInfo, util} from '@tensorflow/tfjs-core';

export const maximumConfig = createBinaryKernelConfig(Maximum, supportsFullBroadcast);

export const maxConfig: KernelConfig = {
  kernelName: Max,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: max as {} as KernelFunc
};

=============================================================================
*/

import {backend_util, KernelConfig, KernelFunc, Max, MaxAttr, MaxInputs, TensorFlowInfo, util} from '@tensorflow/tfjs-core';

export const maxConfig: KernelConfig = {
  kernelName: Max,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: max as {} as KernelFunc
};

=============================================================================
*/

import {backend_util, KernelConfig, KernelFunc, Max, MaxAttr, MaxInputs, TensorFlowInfo, util} from '@tensorflow/tfjs-core';

export const maxConfig: KernelConfig = {
  kernelName: Max,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: max as {} as KernelFunc
};

=============================================================================
*/

import {backend_util, KernelConfig, KernelFunc, Max, MaxAttr, MaxInputs, TensorFlowInfo, util} from '@tensorflow/tfjs-core';

export const maxConfig: KernelConfig = {
  kernelName: Max,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: max as {} as KernelFunc
};

=============================================================================
*/

import {backend_util, KernelConfig, KernelFunc, Max, MaxAttr, MaxInputs, TensorFlowInfo, util} from '@tensorflow/tfjs-core';

export const maxConfig: KernelConfig = {
  kernelName: Max,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: max as {} as KernelFunc
};

=============================================================================
*/

import {backend_util, KernelConfig, KernelFunc, Max, MaxAttr, MaxInputs, TensorFlowInfo, util} from '@tensorflow/tfjs-core';

export const maxConfig: KernelConfig = {
  kernelName: Max,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: max as {} as KernelFunc
};

=============================================================================
*/

import {backend_util, KernelConfig, KernelFunc, Max, MaxAttr, MaxInputs, TensorFlowInfo, util} from '@tensorflow/tfjs-core';

export const maxConfig: KernelConfig = {
  kernelName: Max,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: max as {} as KernelFunc
};

=============================================================================
```
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 */

import {backend_util, KernelConfig, KernelFunc, Mean, MeanAttrs, MeanInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {cast} from './Cast';

import {permuteAxesAndTranspose} from './kernel_utils';

let wasmMean: (xId: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmMean = backend.wasm.cwrap(Mean, null /*void*/, ['number, number, number']);
}

export function mean(
    args:
    {backend: BackendWasm, inputs: MeanInputs, attrs: MeanAttrs}):
    TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} = permuteAxesAndTranspose(x, axis, backend);
  const reductionAxes = backend_util.getInnerMostAxes(axes.length, input.shape.length);
  let reductionAxes = axes;
  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose of this input
      // once we are done.
      return true;
    }
  }

  backend_util.assertAxesAreInnerMostDims('mean', reductionAxes, input.shape.length);
  const [outShape, reduceShape] = backend_util.computeOutAndReduceShapes(input.shape, reductionAxes);
  const reduceSize = util.sizeFromShape(reduceShape);
  let castedInput = input;
  if (input.dtype !== 'float32') {
    castedInput = cast({backend, inputs: {x: input}, attrs: {dtype: 'float32'}});
    inputId =
  }
```

const mean = (input, reduceSize, outId) => {
  const inputId = backend.dataIdMap.get(input.dataId).id;
  wasmMean(inputId, reduceSize, outId);
}

const out = backend.makeOutput(outShape, 'float32');
if (util.sizeFromShape(input.shape) !== 0) {
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmMean(inputId, reduceSize, outId);
  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }
  if (keepDims) {
    // reshape
    const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
    out.shape = newShape;
  }
  if (input.dtype !== 'float32') {
    backend.disposeData(castedInput.dataId);
  }
  return out;
}

export const meanConfig = {
  kernelName: Mean,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: mean as {} as KernelFunc
};

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 */

import {KernelConfig, Minimum} from '@tensorflow/tfjs-core';

export const minimumConfig = createBinaryKernelConfig(Minimum, false);

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 */

import {backend_util, KernelConfig, KernelFunc, Min, MinAttrs, MinInputs, TensorInfo, util} from 'tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

let wasmMin: (xId: number, dtype: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmMin = backend.wasm.cwrap(Min, null /*void*/, [
    'number',  // x_id
    'number',  // dtype
    'number',  // reduce_size
    'number',  // out_id
  ]);
}

function min(args: {backend: BackendWasm, inputs: MinInputs, attrs: MinAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} = permuteAxesAndTranspose(x, axis, backend);

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose
      // of this once we are done.
      input = transposed;
      inputId = transposedId;
    }
  }

  const inputRank = input.shape.length;
  backend_util.assertAxesAreInnerMostDims('min', axes, inputRank);
  const [outShape, reduceShape] = backend_util.computeOutAndReduceShapes(input.shape, axes);
  const reduceSize = util.sizeFromShape(reduceShape);
  const out = backend.makeOutput(outShape, input.dtype);
  if (util.sizeFromShape(input.shape) !== 0) {
    // transpose was not a no-op. We will need to dispose of this once we are done.
    const reuseShape = backend_util.expandShapeToKeepDim(reduceShape, originalAxes);
    out.shape = reuseShape;
  }
  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }
  if (keepDims) {
    // reshape
    const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
    out.shape = newShape;
  }
  return out;
}

export const minimumConfig = {
  kernelName: Min,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: min as {} as KernelFunc
};

============================================================================

*/

//------------------------------------------------------------------------------

import {backend_util, KernelConfig, KernelFunc, Min, MinAttrs, MinInputs, TensorInfo, util} from 'tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

let wasmMin: (xId: number, dtype: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmMin = backend.wasm.cwrap(Min, null /*void*/, [
    'number',  // x_id
    'number',  // dtype
    'number',  // reduce_size
    'number',  // out_id
  ]);
}

function min(args: {backend: BackendWasm, inputs: MinInputs, attrs: MinAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} = permuteAxesAndTranspose(x, axis, backend);

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose
      // of this once we are done.
      input = transposed;
      inputId = transposedId;
    }
  }

  const inputRank = input.shape.length;
  backend_util.assertAxesAreInnerMostDims('min', axes, inputRank);
  const [outShape, reduceShape] = backend_util.computeOutAndReduceShapes(input.shape, axes);
  const reduceSize = util.sizeFromShape(reduceShape);
  const out = backend.makeOutput(outShape, input.dtype);
  if (util.sizeFromShape(input.shape) !== 0) {
    // transpose was not a no-op. We will need to dispose of this once we are done.
    const reuseShape = backend_util.expandShapeToKeepDim(reduceShape, originalAxes);
    out.shape = reuseShape;
  }
  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }
  if (keepDims) {
    // reshape
    const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
    out.shape = newShape;
  }
  return out;
}

export const minimumConfig = {
  kernelName: Min,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: min as {} as KernelFunc
};

============================================================================

*/

//------------------------------------------------------------------------------

*/
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=============================================================================

import {KernelConfig, KernelFunc, MirrorPad, MirrorPadAttrs, MirrorPadInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

// Must match enum in MirrorPad.cc
enum MirrorPaddingMode {
  reflect = 0,
  symmetric = 1
}

let wasmMirrorPad: (
  xId: number, xShapeBytes: Uint8Array, xShapeLength: number, xDtype: number, 
  prePaddingsBytes: Uint8Array, postPaddingsBytes: Uint8Array, mode: number, 
  outId: number) => void;

function setup(backend: BackendWasm) {
  wasmMirrorPad = backend.wasm.cwrap(MirrorPad, null /* void */, 
    ['number', // xId
    'array', // xShape
    'number', // xShape.length
    'number', // xDtype
    'array', // prePaddings
    'array', // postPaddings
    'number', // mode
    'number', // outId
  ]);
}

function mirrorPad(args: {
  inputs: MirrorPadInputs,
  backend: BackendWasm,
  attrs: MirrorPadAttrs
}) {
  const {inputs: {x}, backend, attrs: {paddings, mode}} = args;
  const outShape = paddings.map((p, i) => (p[0] + x.shape[i] + p[1]));
  const xId = backend.dataIdMap.get(x.dataId).id;
  const out = backend.makeOutput(outShape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const prePaddingsFlat = paddings.map((padTuple) => padTuple[0]);
  const postPaddingsFlat = paddings.map((padTuple) => padTuple[1]);
  const prePaddingsBytes = new Uint8Array(new Int32Array(prePaddingsFlat).buffer);
  const postPaddingsBytes = new Uint8Array(new Int32Array(postPaddingsFlat).buffer);
  const xId = backend.dataIdMap.get(x.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const prePaddingsBytes = new Uint8Array(new Int32Array(prePaddingsFlat).buffer);
  const postPaddingsBytes = new Uint8Array(new Int32Array(postPaddingsFlat).buffer);
  const xDtype = x.dtype;
  const prePaddingsBytes = args.inputs.MirrorPadInputs.x;
  const postPaddingsBytes = args.inputs.MirrorPadInputs.x;
  const backend: BackendWasm = args.backend;
  const mirroringPadFunc = args.attrs.MirrorPadAttrs.mirroringPad;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const prePaddingsBytes = new Uint8Array(new Int32Array(prePaddingsFlat).buffer);
  const postPaddingsBytes = new Uint8Array(new Int32Array(postPaddingsFlat).buffer);
  const xDtype = x.dtype;

  return out;
}

export const mirrorPadConfig: KernelConfig = {
  kernelName: MirrorPad,
  backendName: 'wasm',
  kernelFunc: mirrorPad as {} as KernelFunc,
  setupFunc: setup
};

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 */

import {KernelConfig, Multiply} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

export const multiplyConfig: KernelConfig = createBinaryKernelConfig(Multiply, supportsFullBroadcast);

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 */

import {KernelConfig, Neg} from '@tensorflow/tfjs-core';

export const negConfig: KernelConfig = createUnaryKernelConfig(Neg);

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import {KernelConfig, Multiply} from '@tensorflow/tfjs-core';

export const multiplyConfig: KernelConfig = createBinaryKernelConfig(Multiply, supportsFullBroadcast);

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=============================================================================

*/

import {BackendWasm} from '../backend_wasm';

// Analogous to \`struct Result\` in `non_max_suppression_impl.h`.\n
interface Result {
  pSelectedIndices: number;
  selectedSize: number;
  pValidOutputs: number;
  pValidScores: number;
  pSelectedScores: number;
  pValidOutput: number;
  pValidSize: number;
);
  const result = new Int32Array(backend.wasm.HEAPU8.buffer, resOffset, 4);
  const pSelectedIndices = result[0];
  const selectedSize = result[1];
  const pSelectedScores = result[2];
  const pValidOutput = result[3];
  // Since the result was allocated on the heap, we have to delete it.
  backend.wasm._free(resOffset);
  return {pSelectedIndices, selectedSize, pSelectedScores, pValidOutput};
}

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*/

import {KernelConfig, KernelFunc, NonMaxSuppressionV3, NonMaxSuppressionV3Attrs, NonMaxSuppressionV3Inputs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {parseResultStruct} from './NonMaxSuppression_util';

let wasmFunc: (
  boxesId: number, scoresId: number, maxOutputSize: number,
  iouThreshold: number, scoreThreshold: number)
    => number;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(
    NonMaxSuppressionV3,
    'number',  // Result*
    [  
      'number',  // boxesId
      'number',  // scoresId
      'number',  // maxOutputSize
      'number',  // iouThreshold
      'number',  // scoreThreshold
    ]); basic
  function setup(backend: BackendWasm): void {
    \n    basic
  }

  const {pSelectedIndices, selectedSize, pSelectedScores, pValidOutput} =
      parseResultStruct(backend, resOffset);
  backend.wasm._free(pSelectedScores);
  backend.wasm._free(pValidOutput);
  const selectedIndicesTensor =
      backend.makeOutput([selectedSize], 'int32', pSelectedIndices);
  return
}

export const nonMaxSuppressionV3Config: KernelConfig = {
  kernelName: NonMaxSuppressionV3,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: kernelFunc as {} as KernelFunc,
};

*/

import {KernelConfig, KernelFunc, NonMaxSuppressionV4, NonMaxSuppressionV4Attrs, NonMaxSuppressionV4Inputs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from
```javascript
import {parseResultStruct} from './NonMaxSuppression_util';

// backend_wasm

let wasmFunc: (boxesId: number, scoresId: number, maxOutputSize: number, iouThreshold: number, scoreThreshold: number, padToMaxOutputSize: boolean) => number;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap('NonMaxSuppressionV4', 'number', ['number', 'number', 'number', 'number', 'number', 'number', 'number'],
    ['number', 'number', 'number', 'number', 'number', 'number', 'number', 'number']);
}

function nonMaxSuppressionV4(args: {
  backend: BackendWasm,
  inputs: NonMaxSuppressionV4Inputs,
  attrs: NonMaxSuppressionV4Attrs
}): TensorInfo[] {
  const {backend, inputs, attrs} = args;
  const {iouThreshold, maxOutputSize, scoreThreshold, padToMaxOutputSize} = attrs;
  const {boxes, scores} = inputs;
  const boxesId = backend.dataIdMap.get(boxes.dataId).id;
  const scoresId = backend.dataIdMap.get(scores.dataId).id;
  const resOffset = wasmFunc(boxesId, scoresId, maxOutputSize, iouThreshold, scoreThreshold, padToMaxOutputSize);
  const {pSelectedIndices, selectedSize, pSelectedScores, pValidOutputs} = parseResultStruct(backend, resOffset);
  // Since we are not using scores for V4, we have to delete it from the heap.
  backend.wasm._free(pSelectedScores);
  const selectedIndicesTensor = backend.makeOutput([selectedSize], 'int32', pSelectedIndices);
  const validOutputsTensor = backend.makeOutput([], 'int32', pValidOutputs);
  return [selectedIndicesTensor, validOutputsTensor];
}

export const nonMaxSuppressionV4Config: KernelConfig = {
  kernelName: NonMaxSuppressionV4,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: nonMaxSuppressionV4 as {} as KernelFunc,
};
```

---

```
import {KernelConfig, KernelFunc, NonMaxSuppressionV5, NonMaxSuppressionV5Attrs, NonMaxSuppressionV5Inputs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {parseResultStruct} from './NonMaxSuppression_util';

let wasmFunc = backend.wasm.cwrap('NonMaxSuppressionV5', 'number', ['number', 'number', 'number', 'number', 'number', 'number', 'number', 'number'],
    ['number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number']);

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap('NonMaxSuppressionV5', 'number', ['number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number']);
}

function kernelFunc(args: {
  backend: BackendWasm,
  inputs: NonMaxSuppressionV5Inputs,
  attrs: NonMaxSuppressionV5Attrs
}): TensorInfo[] {
  const {backend, inputs, attrs} = args;
  const {iouThreshold, maxOutputSize, scoreThreshold, softNmsSigma} = attrs;
  const {boxes, scores} = inputs;
  const boxesId = backend.dataIdMap.get(boxes.dataId).id;
  const scoresId = backend.dataIdMap.get(scores.dataId).id;
  const resOffset = wasmFunc(boxesId, scoresId, maxOutputSize, iouThreshold, scoreThreshold, softNmsSigma);
  const {pSelectedIndices, selectedSize, pSelectedScores, pValidOutputs} = parseResultStruct(backend, resOffset);
  // Since we are not using validOutputs for V5, we have to delete it from the heap.
  backend.wasm._free(pValidOutputs);
  const selectedIndicesTensor = backend.makeOutput([selectedSize], 'int32', pSelectedIndices);
  const selectedScoresTensor = backend.makeOutput([selectedSize], 'float32', pSelectedScores);
  return [selectedIndicesTensor, selectedScoresTensor];
}

export const nonMaxSuppressionV5Config: KernelConfig = {
  kernelName: NonMaxSuppressionV5,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: kernelFunc as {} as KernelFunc,
};
```

---

`/usr/bin/terraform`
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=============================================================================

*/

import {KernelConfig, NotEqual} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from
  './binary_kernel';

const supportsFullBroadcast = false;

export const notEqualConfig: KernelConfig =
  createBinaryKernelConfig(NotEqual, supportsFullBroadcast, 'bool');

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=============================================================================

*/

import {KernelConfig, KernelFunc, OneHot, OneHotAttrs, OneHotInputs} from '@tensorflow/tfjs-
core';

import {BackendWasm} from '../backend_wasm';

let wasmOneHot: (
    indicesId: number, depth:
    number, onValue: number, offValue: number,
    outId: number) => void;

function setup(backend:
    BackendWasm) {
  wasmOneHot = backend.wasm.cwrap(OneHot, null /* void */, 
    ['number', // indices_id
    'number', // depth,
    'number', // onValue
    'number', // offValue
    'number']   // out_id
  ];
}

function
oneHot(
    args: {inputs: OneHotInputs, attrs: OneHotAttrs, backend: BackendWasm}) {
  const {inputs, backend, attrs} = args;
  const {indices} = inputs;
  const {depth, onValue, offValue} = attrs;

  const out = backend.makeOutput([...indices.shape, depth], 'int32');
  const outId = backend.dataIdMap.get(out.dataId).id;

  const indicesData = backend.dataIdMap.get(indices.dataId);
  const indicesId = indicesData.id;

  wasmOneHot(indicesId, depth, onValue, offValue, outId);

  return out;
}

export const oneHotConfig:
  KernelConfig = {
    kernelName: OneHot,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: oneHot as
    {} as KernelFunc,
};

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=============================================================================

*/

import {KernelConfig, KernelFunc, OnesLike, OnesLikeInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

function onesLike(args: {inputs: OnesLikeInputs, backend:
    BackendWasm}) {
  const {inputs: {x}, backend} = args;
  const out = backend.makeOutput(x.shape, 'int32');
  const outVals = backend.typedArrayFromHeap(out);
  outVals.fill(1);
  return out;
}

export const
onesLikeConfig: KernelConfig = {
  kernelName: OnesLike,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: onesLike as
  {} as KernelFunc,
};

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=============================================================================

*/

import {KernelConfig, KernelFunc, Pack, PackAttrs, PackInputs, TensorInfo, util} from '@tensorflow/tfjs-
import {BackendWasm} from '@tensorflow/tfjs-core';

export function pack(
    args: {inputs: PackInputs, backend: BackendWasm, attr: PackAttrs}) {  
  const {inputs, backend, attr} = args;
  const shape = inputs[0].shape;
  const dtype = inputs[0].dtype;
  const expandedT = expandDims({
      inputs: [inputs[0]],
      backend, attr: {dim: axis}});
  const intermediateTensorInfos: TensorInfo[] = [];
  backend.disposeData(expandedT.dataId);

  return expandedT;
}

export const packConfig: KernelConfig = {
  kernelName: Pack,
  backendName: 'wasm',
  kernelFunc: pack as {} as KernelFunc
};

import {KernelConfig, KernelFunc, PadV2, PadV2Attrs, PadV2Inputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '@backend_wasm';

import {concat} from './Concat';
import {expandDims} from './ExpandDims';

export function pack(
    args: {inputs: PackInputs, backend: BackendWasm, attr: PackAttrs}) {  
  const {inputs, backend, attr} = args;
  const shape = inputs[0].shape;
  const dtype = inputs[0].dtype;
  const expandedT = expandDims({
      inputs: [inputs[0]],
      backend, attr: {dim: axis}});
  const intermediateTensorInfos: TensorInfo[] = [];
  backend.disposeData(expandedT.dataId);

  return expandedT;
}

export const packConfig: KernelConfig = {
  kernelName: Pack,
  backendName: 'wasm',
  kernelFunc: pack as {} as KernelFunc
};
import {KernelConfig, Pow} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;

export const powConfig: KernelConfig =
createBinaryKernelConfig(Pow, supportsFullBroadcast);

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 */

import {KernelConfig, Prelu, PreluInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {cast} from './Cast';

let wasmPrelu: (xId: number, weightsId: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmPrelu = backend.wasm.cwrap(Prelu, null /* void */, 
    ['number', // x_id
     'number', // weights_id
     'number'] // out_id
  );
}

function prelu(args: {
  inputs: PreluInputs,
  backend: BackendWasm
}) {
  const {inputs, backend} = args;
  const {x, alpha} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;

  const weightsId = backend.dataIdMap.get(alpha.dataId).id;

  let inputId = xId;
  let input = x;
  let castedInput = input;
  if (input.dtype !== 'float32') {
    castedInput = cast({backend, inputs: {x}, attrs: {dtype: 'float32'}});
    inputId = backend.dataIdMap.get(castedInput.dataId).id;
  }

  const out = backend.makeOutput(x.shape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmPrelu(inputId, weightsId, outId);

  if (input.dtype !== 'float32') {
    backend.disposeData(castedInput.dataId);
  }
  return out;
}

export const preluConfig:
KernelConfig = {
  kernelName: Prelu,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: prelu as {} as KernelFunc
};

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 */

import {backend_util, KernelConfig, KernelFunc, Prod, ProdAttrs, ProdInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';

import {CppDType} from './types';

let wasmProd: (xId: number, reduceSize: number, dtype: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmProd = backend.wasm.cwrap(Prod, null /* void */, 
    ['number',
     'number',
     'number',
     'number']
  );
}

function prod(args: {
  backend: BackendWasm,
  inputs: ProdInputs,
  attrs: ProdAttrs
}) {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;

  let inputId = xId;
  let input = x;
  const {transposed, axes, originalAxes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);

  let reductionAxes = axes;
  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose of this
      // once we are done.
      input = transposed;
      inputId = transposedId;
    }

    const axesAsInnerMost = backend_util.getInnerMostAxes(axes, reductionAxes.length, input.shape.length);
    const prodShape = util.sizeFromShape(reductionAxes);
    const reduceSize = util.sizeFromShape(input.shape);
  }

  backend.assertAxesAreInnerMostDims('prod', reductionAxes, inputWasTransposed);

  const out = backend.makeOutput(Prod(shape, prodShape, reduceSize), outId);

  if (inputWasTransposed) {
    // dispose of
the transposed tensor.
    backend.disposeData(transposed.dataId);
  }
  
  } // reshape

  return out;
}

export const prodConfig: KernelConfig = {
  kernelName: Prod,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: prod as {} as KernelFunc
};

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 */

import {KernelConfig, KernelFunc, Range, RangeAttrs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {rangeImplCPU} from '../kernel_utils/shared';

export const range = (args: {backend: BackendWasm, attrs: RangeAttrs}): TensorInfo => {
  const {backend, attrs} = args;
  const {start, stop, step, dtype} = attrs;
  const values = rangeImplCPU(start, stop, step, dtype);

  const out = backend.makeOutput([values.length], dtype);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.set(values);
  return out;
};

export const rangeConfig: KernelConfig = {
  kernelName: Range,
  backendName: 'wasm',
  kernelFunc: range as {} as KernelFunc
};

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 */

import {createBinaryKernelConfig} from './binary_kernel';
import {createUnaryKernelConfig} from './unary_kernel';

const supportsFullBroadcast = true;
export const realDivConfig: KernelConfig = createBinaryKernelConfig(RealDiv, supportsFullBroadcast);

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 */

import {KernelConfig, Relu} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const reluConfig: KernelConfig = createUnaryKernelConfig(Relu);

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 */

import {KernelConfig, Relu6} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const relu6Config: KernelConfig = createUnaryKernelConfig(Relu6);
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=============================================================================

import {KernelConfig, KernelFunc, ResizeBilinear, ResizeBilinearAttrs, ResizeBilinearInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {cast} from './Cast';

let wasmResizeBilinear: (
    xId: number, batch: number, oldHeight: number, oldWidth: number, numChannels: number, newHeight: number, newWidth: number, alignCorners: number, halfPixelCenters: number, outId: number) => void;  // void

function setup(backend: BackendWasm): void {
  wasmResizeBilinear = backend.wasm.cwrap(ResizeBilinear, null, ['number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number']);
}

function resizeBilinear(args: {
  backend: BackendWasm,
  inputs: ResizeBilinearInputs,
  attrs: ResizeBilinearAttrs
}):
    TensorInfo {
  const {backend, inputs, attrs} = args;

  const {images} = inputs;
  const {alignCorners, halfPixelCenters, size} = attrs;
  const [newHeight, newWidth] = size;

  const [batch, oldHeight, oldWidth, numChannels] = images.shape;
  const outShape = [batch, newHeight, newWidth, numChannels];

  let xData = backend.dataIdMap.get(images.dataId);
  let castedData;  // castedData = cast({backend, inputs: {x: images}, attrs: {dtype: 'float32'}});
  xData = backend.dataIdMap.get(castedData.dataId);

  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmResizeBilinear(
      xId, batch, oldHeight, oldWidth, numChannels, newHeight, newWidth, alignCorners ? 1 : 0, halfPixelCenters ? 1 : 0, outId);

  if (castedData != null) {
    backend.disposeData(castedData.dataId);
  }

  return out;
}

export const resizeBilinearConfig: KernelConfig = {
  kernelName: ResizeBilinear,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: resizeBilinear as {} as KernelFunc
};

/*=============================================================================

import {KernelConfig, KernelFunc, Reverse, ReverseAttrs, ReverseInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {identity} from './Identity';
import {reshape} from './Reshape';

let wasmReverse: (
    xId: number, axes: Uint8Array, axesLength: number, outShape: Uint8Array, outShapeLength: number, outId: number) => void;  // void

function setup(backend: BackendWasm) {
  wasmReverse = backend.wasm.cwrap(Reverse, null, ['number', 'array', 'number', 'array', 'number', 'array', 'array', 'number', 'number', 'number', 'number']);
}

export function reverse(
    args: {inputs: ReverseInputs, backend: BackendWasm, attrs: ReverseAttrs}):
    TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {dims} = attrs;

  const axes = util.parseAxisParam(dims, x.shape);

  if (x.shape.length === 0) {
    return identity({inputs: {x}, backend, attrs: {dtype: 'float32'}});
  }

  const out = backend.makeOutput(out.shape, x.dtype);
  const xId = backend.dataIdMap.get(x.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmReverse(xId, axes, axesLength, outShape, outShapeLength, outId);

  const reshaped = reshape({inputs: {x}, backend, attrs: {shape: x.shape}});

  return out;
}

export const reverseConfig: KernelConfig = {
  kernelName: Reverse,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: reverse as {} as KernelFunc
};

/*=============================================================================

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backend.disposeData(out.dataId);\nreturn reshaped;\n\nexport const reverseConfig: KernelConfig = {
    kernelName: Reverse,\n    backendName: 'wasm',\n    kernelFunc: reverse as {} as KernelFunc,\n    setupFunc: setup\n};

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 */

import {KernelConfig, KernelFunc, RotateWithOffset, RotateWithOffsetAttrs, RotateWithOffsetInputs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmRotate: (xId: number, batch: number, imageHeight: number, numChannels: number, radians: number, centerX: number, centerY: number, fillBytes: Uint8Array, fillLength: number, outId: number) => void;

function setup(backend: BackendWasm) {
    wasmRotate = backend.wasm.cwrap(RotateWithOffset, null /* void */, [
        'number',  // xId
        'number',  // batch
        'number',  // imageHeight
        'number',  // numChannels
        'number',  // radians
        'number',  // centerX
        'number',  // centerY
        'array',   // fillBytes
        'number',  // fillLength
        'number',  // outId
    ]);}

export function rotateWithOffset(args: {
    inputs: RotateWithOffsetInputs,
    backend: BackendWasm,
    attrs: RotateWithOffsetAttrs
}): TensorInfo {
    const {inputs, backend, attrs} = args;
    const {image} = inputs;
    const {radians, fillValue, center} = attrs;

    const out = backend.makeOutput(image.shape, image.dtype);
    const imageId = backend.dataIdMap.get(image.dataId).id;
    const outId = backend.dataIdMap.get(out.dataId).id;
    const [batch, imageHeight, imageWidth, numChannels] = image.shape;
    const [centerX, centerY] = backend_util.getImageCenter(center, imageHeight, imageWidth);
    const fillIsBlack = fillValue === 0;
    const fullOpacityValue = 255;
    const fillValues = typeof fillValue === 'number' ? [fillValue, fillValue, fillValue, fillIsBlack ? 0 : fullOpacityValue] : [...fillValue, fullOpacityValue];
    const fillBytes = new Uint8Array(new Int32Array(fillValues).buffer);
    wasmRotate(imageId, batch, imageHeight, imageWidth, numChannels, radians, centerX, centerY, fillBytes, fillValues.length, outId);
    return out;\
}

export const rotateWithOffsetConfig: KernelConfig = {
    kernelName: RotateWithOffset,\n    backendName: 'wasm',\n    kernelFunc: rotateWithOffset as {} as KernelFunc,\n    setupFunc: setup\n};

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 */

import {KernelConfig, Round} from '@tensorflow/tfjs-core';

export const roundConfig: KernelConfig = createUnaryKernelConfig(Round);

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import {KernelConfig, Rsqrt} from '@tensorflow/tfjs-core';

export const rsqrtConfig: KernelConfig = createUnaryKernelConfig(Rsqrt);

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'\unary_kernel\nexport const rsqrtConfig: KernelConfig = createUnaryKernelConfig(Rsqrt);\n/**
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import {KernelConfig, KernelFunc, ScatterNd, ScatterNdAttrs, ScatterNdInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmScatterNd: (indicesId: number, updatesId: number, dtype: CppDType, sliceRank:
number, numUpdates: number, sliceSize: number, strides: Uint8Array, outputSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmScatterNd = backend.wasm.cwrap(ScatterNd, null /*void*/, [
    'number', // indicesId
    'number', // updatesId
    'number', // dtype
    'number', // sliceRank
    'number', // numUpdates
    'number', // sliceSize
    'array', // strides
    'number', // outputSize
    'number' // outId
  ]);\n}

function scatterNd(
    args:
        {backend: BackendWasm, inputs: ScatterNdInputs, attrs: ScatterNdAttrs}):
    TensorInfo {
  const {backend, inputs, attrs} = args;
  const {indices, updates} = inputs;
  const {shape} = attrs;

  const out = backend.makeOutput(shape, updates.dtype);
  if (util.sizeFromShape(shape) === 0) {
    return out;
  }

  const {sliceRank, numUpdates, sliceSize, strides, outputSize} =
      scatter_util.calculateShapes(updates, indices, shape);

  const indicesData = backend.dataIdMap.get(indices.dataId);
  const indicesId = indicesData.id;

  const updatesData = backend.dataIdMap.get(updates.dataId);
  const updatesId = updatesData.id;

  const stridesBytes = new Uint8Array(new Int32Array(strides).buffer);

  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmScatterNd(indicesId, updatesId, CppDType[updates.dtype], sliceRank, numUpdates, sliceSize, stridesBytes, outputSize, outId);

  return out;
}

export const scatterNdConfig: KernelConfig = {
  kernelName: ScatterNd,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: scatterNd as {} as KernelFunc
};

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import {KernelConfig, KernelFunc, Select, SelectInputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmSelect: (conditionId: number, tId: number, eId: number, offset: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmSelect = backend.wasm.cwrap('SelectV2', null, [
    'number', // conditionId
    'number', // tId
    'number', // eId
    'number' // offset
  ]);\n}

function select(args: {inputs: SelectInputs, backend: BackendWasm}) {
  const {inputs, backend} = args;
  const {condition, t, e} = inputs;

  const conditionId = backend.dataIdMap.get(condition.dataId).id;
  const tId = backend.dataIdMap.get(t.dataId).id;
  const eId = backend.dataIdMap.get(e.dataId).id;

  const cRank = condition.shape.length;
  const tRank = util.sizeFromShape(t.shape);\n
  const c = backend.dataIdMap.get(condition.dataId).id;
  const t = backend.dataIdMap.get(t.dataId).id;
  const e = backend.dataIdMap.get(e.dataId).id;

  const out = backend.makeOutput(t.shape, t.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  const cRank = condition.shape.length;
  const cT = t.shape.length;

  const offset = cT === 0 ? 0 : cT - 1;

  util.sizeFromShape(t.shape.slice(1));\n
  wasmSelect(conditionId, tId, eId, offset, outId);

  return out;
}

export const selectConfig: KernelConfig = {
  kernelName: Select,
  backendName: 'wasm',
  setupFunc: setup as {} as KernelFunc
};
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=============================================================================
*/

import {KernelConfig, KernelFunc, Sigmoid, SigmoidInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmFunc: (xId: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(Sigmoid, null /* void */,[ 'number', 'number' ]); // an
  function sigmoid(args: {backend: BackendWasm, inputs: SigmoidInputs}): TensorInfo {
    const {backend, inputs: {x}} = args;
    const xId = backend.dataIdMap.get(x.dataId).id;
    const outId = backend.dataIdMap.get(out.dataId).id; // Short-circuit
    return backend.makeOutput(x.shape, x.dtype); // an
  }

  export const sigmoidConfig: KernelConfig = {
    kernelName: 'Sigmoid',
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: sigmoid as {} as KernelFunc
  };
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import {backend_util, KernelConfig, KernelFunc, ReshapeAtts, ReshapeInputs, SpaceToBatchND, SpaceToBatchNDAttrs, SpaceToBatchNDInputs, TensorInfo, TransposeAtts, TransposeInputs, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from './backend_wasm';
import {padV2Config} from './PadV2';
import {reshape} from './Reshape';
import {transpose} from './Transpose';

function spaceToBatchND(args: {
  inputs: SpaceToBatchNDInputs,
  backend: BackendWasm,
  attrs: SpaceToBatchNDAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {blockShape, paddings} = attrs;

  const prod = util.sizeFromShape(blockShape);

  const completePaddings: Array<[number, number]> = 
  paddings as Array<[number, number]>]]
  [0, 0])
  [0, 0]);

  for (let i = 1 + blockShape.length; i < x.shape.length; ++i) {
    completePaddings.push([0, 0]);
  }

  const paddedX =
  padV2Config.kernelFunc({
    inputs: {x},
    backend,
    attrs: {paddings: completePaddings, constantValue: 0}
  }) as TensorInfo;

  const reshapedPaddedShape =
  backend_util.getReshaped(paddedX.shape, blockShape, prod, false);

  const paddedXT =
  transpose({inputs: {x: paddedX}, backend, attrs: {perm: permutedReshapedPaddedPermutation}});

  const resultReshapeInputs: ReshapeInputs = {x: paddedXT};
  const resultReshapeAttrs: ReshapeAttrs = {shape: flattenShape};

  return
  reshape({inputs: resultReshapeInputs, backend, attrs: resultReshapeAttrs});
}

export const spaceToBatchNDConfig: KernelConfig = {
  kernelName: SpaceToBatchND,
  backendName: 'wasm',
  kernelFunc: spaceToBatchND as {} as KernelFunc
};

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 */

import {KernelConfig, KernelFunc, SplitV, SplitVAtts, SplitVInputs, util} from '@tensorflow/tfjs-core';
import {backend_util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {slice} from './Slice';

export function splitV(
    args: {inputs: SplitVInputs, attrs: SplitVAtts, backend: BackendWasm}) {
  const {inputs, attrs, backend} = args;
  const {x} = inputs;
  const {numOrSizeSplits, axis} = attrs;

  const $axis = util.parseAxisParam(axis, x.shape)[0]
  const splitSizes =
  backend_util.prepareSplitSize(x, numOrSizeSplits, $axis);
  const begin = new Array(x.shape.length).fill(0);
  const size = x.shape.slice();

  return splitSizes.map(s => {
    const xSliceSize = [...size.slice($axis)];
    return splitSizes.map(s => { const xSliceSize = [...size.slice($axis)];
    const xSlice = slice({inputs: {x}, attrs: {begin, size: xSliceSize}, backend});
    return xSlice;
  });
}

export const splitVConfig: KernelConfig = {
  kernelName: SplitV,
  backendName: 'wasm',
  kernelFunc: splitV as {} as KernelFunc
};

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=============================================================================
*/

import {KernelConfig, Sqrt} from '@tensorflow/tfjs-core';
import {createUnaryKernelConfig} from './unary_kernel';
const supportsFullBroadcast = true;
export const sqrtConfig: KernelConfig = createUnaryKernelConfig(Sqrt, supportsFullBroadcast);

*/

import {KernelConfig, Square} from '@tensorflow/tfjs-core';
import {createUnaryKernelConfig} from './unary_kernel';
export const squareConfig: KernelConfig = createUnaryKernelConfig(Square, supportsFullBroadcast);

*/

import {KernelConfig, SquaredDifference} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';
export const squaredDifferenceConfig: KernelConfig = createBinaryKernelConfig(SquaredDifference, supportsFullBroadcast);

*/

import {KernelConfig, KernelFunc, Step, StepAttrs, StepInputs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmStep:
(xId: number, alpha: number, dtype: number, outId: number) =>
    void;

function setup(backend: BackendWasm): void {
  wasmStep = backend.wasm.cwrap(Step, null /*void*/, [
    'number',  // x_id
    'number',  // alpha
    'number',  // dtype
    'number',  // out_id
  ]);
}

function step(
    args: {backend: BackendWasm, inputs: StepInputs, attrs: StepAttrs}):
    TensorInfo {
  const {backend, inputs, attrs} = args;
  const {alpha} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;

  const out = backend.makeOutput(x.shape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmStep(xId, alpha, CppDType[x.dtype], outId);
  return out;
}

export const stepConfig: KernelConfig = {
  kernelName: Step,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: step as {} as KernelFunc
};

*/

import {KernelConfig, KernelFunc, slice_util, StridedSlice, StridedSliceAttrs, StridedSliceInputs, TensorInfo,
from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {reshape} from './Reshape';
import {slice} from './Slice';

let wasmStridedSlice: (xId: number, xStridesBytes: Uint8Array, xRank: number, beginBytes: Uint8Array, beginMask: number, endBytes: Uint8Array, endMask: number, beginMask: number, ellipsisMask: number, newAxisMask: number, shrinkAxisMask: number) => void;

function setup(backend: BackendWasm): void {
  wasmStridedSlice = backend.wasm.cwrap(StridedSlice, null /*void*/, ['number', // xId
    'array', // xStrides
    'number', // xRank
    'array', // beginBytes
    'array', // endBytes
    'array', // stridesBytes
    'array', // outputShapeBytes
    'array', // outputShapeLength
    'number', // outputId
  ]);
}

export function stridedSlice(args: {
  backend: BackendWasm,
  inputs: StridedSliceInputs,
  attrs: StridedSliceAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {x} = inputs;

  const {
    begin,
    end,
    strides,
    beginMask,
    endMask,
    ellipsisMask,
    newAxisMask,
    shrinkAxisMask
  } = attrs;

  const {
    finalShapeSparse,
    finalShape,
    isIdentity,
    sliceDim0,
    isSimpleSlice,
    begin: $begin,
    end: $end,
    strides: $strides
  } =
      slice_util.sliceInfo(
          x.shape, begin, end, strides, beginMask, endMask, ellipsisMask,
          newAxisMask, shrinkAxisMask);

  let result;

  if (isIdentity) {
    // Optimization #1, slice is a no-op plus reshape
    result = reshape({inputs: [x], backend, attrs: {shape: finalShape}});
  } else if (sliceDim0 || isSimpleSlice) {
    // Optimization #2, slice is memory contiguous (only occurs in dim 0)
    util.assert(
        x.shape.length >= 1,
        () => `Input must have rank at least 1, got: ${x.shape.length}`);
    const size = slice_util.computeOutShape($begin, $end, $strides);
    // To tolerate begin[0] > end[0] (a 0-output slice), we min(begin, end).
    const sliced = slice({inputs: [x], backend, attrs: {begin: $begin, size}});
    result =
        reshape({inputs: {x: sliced}, backend, attrs: {shape: finalShape}});
    backend.disposeData(sliced.dataId);
  } else {
    const out =
        backend.makeOutput(finalShapeSparse, 'float32');
    const xId = backend.dataIdMap.get(x.dataId).id;
    const xStridesBytes =
        new Uint8Array(new Int32Array(util.computeStrides(x.shape)).buffer);
    const beginBytes =
        new Uint8Array(new Int32Array($begin).buffer);
    const endBytes =
        new Uint8Array(new Int32Array($end).buffer);
    const stridesBytes =
        new Uint8Array(new Int32Array($strides).buffer);
    const outputShapeBytes =
        new Uint8Array(new Int32Array(finalShapeSparse).buffer);
    const outputShapeBytes =
        new Uint8Array(new Int32Array(finalShapeSparse).buffer);
    const outId =
        backend.dataIdMap.get(out.dataId).id;
    const wasmStridedSlice =
        backend.wasm.cwrap(StridedSlice, null /*void*/, ['number', // xId
    'array', // xStrides
    'array', // outputShape
    'array', // outputShapeLength
    'number', // outputId
  ]);
    wasmStridedSlice(
      xId, xStridesBytes, x.shape.length,
      beginBytes, endBytes, stridesBytes,
      outputShapeBytes, outputShapeBytes.length, outId);

    result = reshape({inputs: [x, backend, attrs: {shape: finalShape}]},

  }
}

export const stridedSliceConfig: KernelConfig = {
  kernelName: StridedSlice,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: stridedSlice as {} as KernelFunc
};

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 *=============================================================================

import {KernelConfig, Sub} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = true;
export const subConfig: KernelConfig =
    createBinaryKernelConfig(Sub, supportsFullBroadcast);
import {backend_util, KernelConfig, Sum, SumAttr, SumInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {KernelConfig, Tan} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const tanConfig: KernelConfig = createUnaryKernelConfig(Tan);

export const tanhConfig: KernelConfig = createUnaryKernelConfig(Tanh);

export const sumConfig: KernelConfig = {
  kernelName: Sum,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: sum as {} as KernelFunc
};
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=============================================================================

*/

import {KernelConfig, KernelFunc, ZerosLike, ZerosLikeInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';\n
function zerosLike(args: {inputs: ZerosLikeInputs, backend: BackendWasm}) {\n  const {inputs: {x}, backend} = args;\n  const out = backend.makeOutput(x.shape, x.dtype);\n  const outVals = backend.typedArrayFromHeap(out);\n  outVals.fill(0);\n  return out;\n}\n
export const zerosLikeConfig: KernelConfig = {\n  kernelName: ZerosLike,\n  backendName: 'wasm',\n  kernelFunc: zerosLike\n};

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 *
=============================================================================

We explicitly import the modular kernels so they get registered in the global registry when we compile the library. A modular build would replace the contents of this file and import only the kernels that are needed.

import {KernelConfig, registerKernel} from '@tensorflow/tfjs-core';\n
import {fusedMatMulConfig} from './kernels/_FusedMatMul';\nimport {absConfig} from './kernels/Abs';\nimport {addConfig} from './kernels/Add';\nimport {addNConfig} from './kernels/AddN';\nimport {allConfig} from './kernels/All';\nimport {argMaxConfig} from './kernels/ArgMax';\nimport {avgPoolConfig} from './kernels/AvgPool';\nimport {batchMatMulConfig} from './kernels/BatchMatMul';\nimport {batchToSpaceNDConfig} from './kernels/BatchToSpaceND';\nimport {castConfig} from './kernels/Cast';\nimport {ceilConfig} from './kernels/Ceil';\nimport {clipByValueConfig} from './kernels/ClipByValue';\nimport {concatConfig} from './kernels/Concat';\nimport {conv2DConfig} from './kernels/Conv2D';\nimport {conv2DBackpropInputConfig} from './kernels/Conv2DBackpropInput';\nimport {cosConfig} from './kernels/Cos';\nimport {coshConfig} from './kernels/Cosh';\nimport {cropAndResizeConfig} from './kernels/CropAndResize';\nimport {cumsumConfig} from './kernels/Cumsum';\nimport {depthToSpaceConfig} from './kernels/DepthToSpace';\nimport {depthwiseConv2dNativeConfig} from './kernels/DepthwiseConv2dNative';\nimport {eluConfig} from './kernels/Elu';\nimport {equalConfig} from './kernels/Equal';\nimport {expConfig} from './kernels/Exp';\nimport {expandDimsConfig} from './kernels/ExpandDims';\nimport {fillConfig} from './kernels/Fill';\nimport {flipLeftRightConfig} from './kernels/FlipLeftRight';\nimport {floorConfig} from './kernels/Floor';\nimport {floorDivConfig} from './kernels/FloorDiv';\nimport {fusedBatchNormConfig} from './kernels/FusedBatchNorm';\nimport {fusedConv2DConfig} from './kernels/FusedConv2D';\nimport {fusedDepthwiseConv2DConfig} from './kernels/FusedDepthwiseConv2D';\nimport {gatherNdConfig} from './kernels/GatherNd';\nimport {gatherV2Config} from './kernels/GatherV2';\nimport {greaterConfig} from './kernels/Greater';\nimport {greaterEqualConfig} from './kernels/GreaterEqual';\nimport {identityConfig} from './kernels/Identity';\nimport {leakyReluConfig} from './kernels/LeakyRelu';\nimport {lessConfig} from './kernels/Less';\nimport {lessEqualConfig} from './kernels/LessEqual';\nimport {logConfig} from './kernels/Log';\nimport {logicalAndConfig} from './kernels/LogicalAnd';\nimport {maxConfig} from './kernels/Max';\nimport {maximumConfig} from './kernels/Maximum';\nimport {maxPoolConfig} from './kernels/MaxPool';\nimport {meanConfig} from './kernels/Mean';\nimport {minConfig} from './kernels/Min';\nimport {minimumConfig} from './kernels/Minimum';\nimport {mirrorPadConfig} from './kernels/MirrorPad';\nimport {multiplyConfig} from './kernels/Multiply';\nimport {negConfig} from './kernels/Neg';\nimport {nonMaxSuppressionV3Config} from './kernels/NonMaxSuppressionV3';\nimport {nonMaxSuppressionV4Config} from './kernels/NonMaxSuppressionV4';
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'./kernels/NonMaxSuppressionV4';
import {nonMaxSuppressionV5Config} from
'./kernels/NonMaxSuppressionV5';
import {notEqualConfig} from ' ./kernels/NotEqual';
import {oneHotConfig} from
'./kernels/OneHot';
import {onesLikeConfig} from ' ./kernels/OnesLike';
import {packConfig} from
'./kernels/Pack';
import {padV2Config} from './kernels/PadV2';
import {powConfig} from
'./kernels/Pow';
import {preluConfig} from ' ./kernels/Prelu';
import {prodConfig} from ' ./kernels/Prod';
import {rangeConfig} from ' ./kernels/Range';
import {realDivConfig} from ' ./kernels/RealDiv';
import {reluConfig} from
'./kernels/Relu';
import {relu6Config} from ' ./kernels/Relu6';
import {reshapeConfig} from
'./kernels/Reshape';
import {resizeBilinearConfig} from ' ./kernels/ResizeBilinear';
import {reverseConfig} from
'./kernels/Reverse';
import {rotateWithOffsetConfig} from ' ./kernels/RotateWithOffset';
import {roundConfig} from
'./kernels/Round';
import {rsqrtConfig} from ' ./kernels/Rsqrts';
import {scatterNdConfig} from
'./kernels/ScatterNd';
import {selectConfig} from ' ./kernels/Select';
import {sigmoidConfig} from
'./kernels/Sigmoid';
import {sinConfig} from ' ./kernels/Sin';
import {sliceConfig} from ' ./kernels/Slice';
import {softmaxConfig} from ' ./kernels/Softmax';
import {spaceToBatchNDConfig} from
'./kernels/SpaceToBatchND';
import {splitVConfig} from ' ./kernels/SplitV';
import {sqrtConfig} from ' ./kernels/Sqrt';
import {squareConfig} from ' ./kernels/Square';
import {squaredDifferenceConfig} from
'./kernels/SquaredDifference';
import {stepConfig} from ' ./kernels/Step';
import {stridedSliceConfig} from
'./kernels/StridedSlice';
import {subConfig} from ' ./kernels/Sub';
import {sumConfig} from
'./kernels/Sum';
import {tanConfig} from ' ./kernels/Tan';
import {tanhConfig} from ' ./kernels/Tanh';
import {tileConfig} from ' ./kernels/Tile';
import {topKConfig} from ' ./kernels/TopK';
import {transformConfig} from
'./kernels/Transform';
import {transposeConfig} from ' ./kernels/Transpose';
import {unpackConfig} from
'./kernels/Unpack';
import {zerosLikeConfig} from ' ./kernels/ZerosLike';

const kernelConfigs: KernelConfig[] = [
  absConfig,
  addConfig,
  addNConfig,
  allConfig,
  anyConfig,
  argMaxConfig,
  avgPoolConfig,
  batchMatMulConfig,
  batchToSpaceNDConfig,
  castConfig,
  ceilConfig,
  clipByValueConfig,
  concatConfig,
  conv2DConfig,
  conv2DBackpropInputConfig,
  conv2DConfig,
  conv2DTransposeConfig,
  cropAndResizeConfig,
  cumsumConfig,
  depthToSpaceConfig,
  depthwiseConv2dNativeConfig,
  eluConfig,
  equalConfig,
  expConfig,
  expandDimsConfig,
  fillConfig,
  flipLeftRightConfig,
  floorConfig,
  floorDivConfig,
  fusedMatMulConfig,
  fusedBatchNormConfig,
  fusedConv2DConfig,
  fusedDeconv2DConfig,
  gatherNdConfig,
  gatherV2Config,
  greaterEqualConfig,
  identityConfig,
  leakyReluConfig,
  lessConfig,
  lessEqualConfig,
  logConfig,
  logicalAndConfig,
  maximumConfig,
  maxPoolConfig,
  meanConfig,
  minimumConfig,
  mirrorPadConfig,
  multiplyConfig,
  negConfig,
  nonMaxSuppressionV3Config,
  nonMaxSuppressionV4Config,
  nonMaxSuppressionV5Config,
  notEqualConfig,
  oneHotConfig,
  onesLikeConfig,
  packConfig,
  padV2Config,
  powConfig,
  preluConfig,
  prodConfig,
  rangeConfig,
  realDivConfig,
  reluConfig,
  relu6Config,
  reshapeConfig,
  reshapeConfig,
  roundConfig,
  reshapeConfig,
  resizeBilinearConfig,
  reverseConfig,
  rotateWithOffsetConfig,
  rsqrtConfig,
  roundConfig,
  scatterNdConfig,
  selectConfig,
  sigmoidConfig,
  sinConfig,
  sliceConfig,
  softmaxConfig,
  spaceToBatchNDConfig,
  splitVConfig,
  sqrtConfig,
  squareConfig,
  squaredDifferenceConfig,
  stepConfig,
  stridedSliceConfig,
  subConfig,
  sumConfig,
  tanConfig,
  tanhConfig,
  tileConfig,
  topKConfig,
  transformConfig,
  transposeConfig,
  unpackConfig,
  zerosLikeConfig];

for (const kernelConfig of kernelConfigs) {
  registerKernel(kernelConfig);
}

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* Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.
*/

import {env} from '@tensorflow/tfjs-core';

const ENV = env();

/**
* True if SIMD is supported.
* From: https://github.com/GoogleChromeLabs/wasm-feature-detect
*/

/*

*/

/*
*/

/*
*/

passed in to WebAssembly.validate is WebAssembly binary

    // code. In this case it is a small program that contains SIMD
    // instructions.
    'WASM_HAS_SIMD_SUPPORT', async () => WebAssembly.validate(new
    Uint8Array([0, 97, 115, 109, 1, 0, 0, 0, 1, 4, 1, 96, 0, 0, 3, 2, 1, 0, 5, 4, 1, 3, 1, 1, 10, 11, 1, 9, 0, 65, 0, 254, 16, 2, 0, 26, ''
    ]));
    // new MessageChannel().port1.postMessage(new SharedArrayBuffer(1));
    // This typed array is a WebAssembly program containing threaded
    // instructions. return WebAssembly.validate(new Uint8Array([0, 97, 115, 109, 1, 0, 0, 0, 1, 4, 1, 96, 0, 0, 3, 2, 1, 0, 5, 4, 1, 3, 1, 1, 10, 11, 1, 9, 0, 65, 0, 254, 16, 2, 0, 26, 11
    )));
    // catch (e) {
    // return false;
    // }
    // Test for transferability of SABs (needed for Firefox)
    // From: https://github.com/GoogleChromeLabs/wasm-
    // feature-detect
    ENV.registerFlag('WASM_HAS_MULTITHREAD_SUPPORT', async () => {
      if (ENV.get('IS_NODE')) {
        return false;
      }
      try {
        new MessageChannel().port1.postMessage(new SharedArrayBuffer(1));
        // This typed array is a WebAssembly
        // program containing threaded
        // instructions.
        return WebAssembly.validate(new Uint8Array([0, 97, 115, 109, 1, 0, 0, 0, 1, 4, 1, 96, 0, 0, 3, 2, 1, 0, 5, 4, 1, 3, 1, 1, 10, 11, 1, 9, 0, 65, 0, 254, 16, 2, 0, 26, 11
    ]));
    // var WasmBackendModuleThreadedSimd = (function() {
    //   var _scriptDir = typeof document !== 'undefined' && document.currentScript ? document.currentScript.src : 
    //     undefined; 
    //   if (typeof __filename !== 'undefined') _scriptDir = _scriptDir || __filename;
    //   return (function(WasmBackendModuleThreadedSimd) {
    //     WasmBackendModuleThreadedSimd = WasmBackendModuleThreadedSimd || {};
    //     function
    //     GROWABLE_HEAP_I8(){
    //       if(wasmMemory.buffer!=buffer){updateGlobalBufferAndViews(wasmMemory.buffer)}
    //       return HEAP8
    //     } function
    //     GROWABLE_HEAP_U8(){
    //       if(wasmMemory.buffer!=buffer){updateGlobalBufferAndViews(wasmMemory.buffer)}
    //       return HEAPU8
    //     } function
    //     GROWABLE_HEAP_I32(){
    //       if(wasmMemory.buffer!=buffer){updateGlobalBufferAndViews(wasmMemory.buffer)}
    //       return HEAP32
    //     } function
    //     GROWABLE_HEAP_U32(){
    //       if(wasmMemory.buffer!=buffer){updateGlobalBufferAndViews(wasmMemory.buffer)}
    //       return HEAPU32
    //     } function
    //     GROWABLE_HEAP_F64(){
    //       if(wasmMemory.buffer!=buffer){updateGlobalBufferAndViews(wasmMemory.buffer)}
    //       return HEAPF64
    //     } module|typeof
    //     WasmBackendModuleThreadedSimd={"undefined"?WasmBackendModuleThreadedSimd:{};
    //     var readyPromiseResolve,readyPromiseReject;Module["ready"]=new
    //     Promise(function(resolve,reject){readyPromiseResolve=resolve;readyPromiseReject=reject});var
    //     moduleOverrides={};var key;for(key in
    //     Module){if(Module.hasOwnProperty(key))moduleOverrides[key]=Module[key]}
    //     var arguments_=[];var
    //     thisProgram="./this.program";var quit_=function(status,toThrow){throw toThrow};var
    //     ENVIRONMENT_IS_WEB=false;var ENVIRONMENT_IS_WORKER=false;var
    //     ENVIRONMENT_IS_NODE=false;var ENVIRONMENT_IS_SHELL=false;ENVIRONMENT_IS_WEB=typeof
    //     window==='object';ENVIRONMENT_IS_WORKER=typeof
    //     window==='function';ENVIRONMENT_IS_NODE=typeof process==="object"&&
    //     typeof
    //     process.versions.node==="string"&&!ENVIRONMENT_IS_SHELL&&!ENVIRONMENT_IS_WEB&&!
    //     ENVIRONMENT_IS_NODE&&!ENVIRONMENT_IS_WORKER;var
    //     ENVIRONMENT_IS_PTHREAD=Module["ENVIRONMENT_IS_PTHREAD"]!!false;if(ENVIRONMENT_IS_P
    //     THREAD)(buffer=Module["buffer"]);var scriptDirectory="\"function"
    //     locateFile(path)(if(Module["locateFile"]){return Module["locateFile"]}[path,scriptDirectory])return
    //     scriptDirectory+path||read_readAsync,readBinary,setWindowTitle;var nodeFS;var
    //     nodePath;if(ENVIRONMENT_IS_NODE)(if(ENVIRONMENT_IS_WORKER){scriptDirectory=require("path").
    //     dirname(scriptDirectory)+"\"}else{scriptDirectory=_dirname+"\"})read=_function
    //     shell_read(filename,binary)(if(!nodeFS)nodeFS=require("fs"));if(!nodePath)nodePath=require("path");filename=nodePath["normalize"](filename);return

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nodeFS["readFileSync"]([filename,binary=null,"utf8"])},readBinary=function readBinary(filename){var ret=read_(filename,true);if(!ret.buffer)ret=new Uint8Array(ret);assert(ret.buffer);return ret};if(process["argv"].length>1) {thisProgram=process["argv"][1].replace(/\\/g,"/")};arguments._=process["argv"][slice(2);process["on"]("uncaughtException",function(ex){if(!ex instanceof ExitStatus) {throw ex} });process["on"]("unhandledRejection",abort);quit_=function(status){process["exit"]([status]);};Module["inspect"]={function(){return"[Emscripten Module object]"};var nodeWorkerThreads;try{nodeWorkerThreads=require("worker_threads")}catch(e){console.error(\"The \"worker_threads\" module is not supported in this node.js build - perhaps a newer version is needed?\");throw e}global.Worker=nodeWorkerThreads.Worker}else if(ENVIRONMENT_IS_SHELL){if(typeof read!="undefined"){read_=function shell_read(f){return read(f)}}readBinary=function readBinary(f){var data;if(typeof readbuffer==="function"){return new Uint8Array(readbuffer(f))}data=read(f,"binary");assert(typeof data==="object");return data};if(typeof scriptArgs!="undefined"){arguments_=scriptArgs}else if(typeof arguments!="undefined"){arguments_=arguments}if(typeof quit==="function"){quit_=function(status){quit(status)}}if(typeof print!=="undefined"){if(typeof console==="undefined")console={};console.log=print;console.warn=console.error=typeof printErr!=="undefined"?printErr:print}}else if(ENVIRONMENT_IS_WEB||ENVIRONMENT_IS_WORKER){if(ENVIRONMENT_IS_WORKER){scriptDirectory=self.location.href}else if(typeof document!=="undefined"&&document.currentScript){scriptDirectory=document.currentScript.src}if(typeof _scriptDir !== "undefined" & & _scriptDir){scriptDirectory=_scriptDir}else{Module["scriptDirectory"]=""}if(ENVIRONMENT_IS_NODE){read_=function
shell_read(filename,binary){if(!nodeFS)nodeFS=require("fs");if(!nodePath)nodePath=require("path");filename=nodePath["normalize"](filename);return
nodeFS["readFileSync"]([filename,binary,null,"utf8"])},readBinary=function readBinary(filename){var ret=read_(filename,true);if(!ret.buffer)ret=new Uint8Array(ret);assert(ret.buffer);return ret}}else{read_=function(url){var xhr=new XMLHttpRequest;xhr.open("GET",url,false);xhr.send(null);return xhr.responseText};if(ENVIRONMENT_IS_WORKER){readBinary=function(url){var xhr=new XMLHttpRequest;xhr.open("GET",url,false);xhr.responseType="arraybuffer";xhr.send(null);return new Uint8Array(xhr.response)}},readAsync=function(url,onload,onerror){var xhr=new XMLHttpRequest;xhr.open("GET",url,true);xhr.responseType="arraybuffer";xhr.onload=function(){if(xhr.status==200||xhr.status==0&&xhr.response){onload(xhr.response);return}onerror()};xhr.onerror=onerror;xhr.send(null)}},setWindowTitle=function(title){document.title=title}}else{}if(ENVIRONMENT_IS_NODE){if(typeof performance==="undefined"){global.performance=require("perf_hooks").performance}}var out=Module["print"]||console.log.bind(console);var err=Module["printErr"]||console.warn.bind(console);for(key in moduleOverrides){if(moduleOverrides.hasOwnProperty(key)){Module[key]=moduleOverrides[key]}}moduleOverrides=null;if(Module["arguments"]){arguments_=Module["arguments"]};Module["thisProgram"]="",function warnOnce(text){if(!warnOnce.shown){warnOnce.shown=1;error(text)}}},Atomics_load=Atomics.load;var wasmMemory;var wasmBinary;var ABORT=false;var EXITSTATUS;function assert(condition,text){if(!condition){abort("Assertion failed: \"+	ext\"\")}function getFunc(ident){var
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getBinary(wasmBinaryFile))} else if(readAsync){return new Promise(function(resolve,reject){readAsync(wasmBinaryFile,function(response){resolve(new Uint8Array(response))},reject)})} return Promise.resolve().then(function() {return getBinary(wasmBinaryFile)}) function createWasm() {var info={"a":asmLibraryArg};function receiveInstance(instance,module){var exports=instance.exports;Module["asm"] = exports;wasmTable = Module["asm"]["I"]; wasmModule = module; if(!ENVIRONMENT_IS_PTHREAD) {var numWorkersToLoad = PThread-unusedWorkers.length; PThread-unusedWorkers.forEach(function(w) { PThread.loadWasmModuleToWorker(w, function() { if(!--numWorkersToLoad) removeRunDependency("wasm-instantiate") }) }); if(!ENVIRONMENT_IS_PTHREAD) {addRunDependency("wasm-instantiate")}; function receiveInstantiatedSource(output){receiveInstance(output["instance"],output["module"])}} else {return instantiateArrayBuffer(receiveInstantiatedSource)} function instantiateArrayBuffer(receiver){return getBinaryPromise().then(function(binary){return WebAssembly.instantiate(binary,info)}).then(receiver,function(reason){err("failed to asynchronously prepare wasm: "+reason);abort(reason)})} function instantiateAsync() {if(!wasmBinary&&typeof WebAssembly.instantiateStreaming==="function"&&!isDataURI(wasmBinaryFile)&&!isFileURI(wasmBinaryFile)&&typeof fetch==="function"){return fetch(wasmBinaryFile,{credentials:"same-origin"}).then(function(response){var result=WebAssembly.instantiateStreaming(response,info);return result.then(receiveInstantiatedSource,function(reason){err("wasm streaming compile failed: "+reason);err("falling back to ArrayBuffer instantiation");return instantiateArrayBuffer(receiveInstantiatedSource)})})} else {return instantiateArrayBuffer(receiveInstantiatedSource)}} if(Module["instantiateWasm"]){try{var exports=Module["instantiateWasm"](info,receiveInstance);return exports}catch(e){err("Module.instantiateWasm callback failed with error: "+e);return false}}instantiateAsync().catch(readyPromiseReject);return{}} var ASM_CONSTS={10520:function(){throw"Canceled!"},10538:function($0,$1){setTimeout(function(){__emscripten_do_dispatch_to_thread($0,$1)},0)}};function initPthreadsJS(){PThread.initRuntime()} function callRuntimeCallbacks(callbacks){while(callbacks.length>0){var callback=callbacks.shift();if(typeof callback=="function"){callback(Module);continue}var func=callback.func;if(typeof func==="number"){if(callback.arg===undefined){wasmTable.get(func)()}else{wasmTable.get(func)(callback.arg)]]else{func(callback.arg===undefined?null:callback.arg)}}else{func(callback.arg===undefined?null:null:callback.arg)}}} function err(message){console.error(message);callRuntimeCallbacks([callback]);setImmediate(function(){callRuntimeCallbacks([callback])})} function readyPromiseReject(err){if(typeof window!=="undefined")err("Error on promise rejection: "+err);else err(err);throw err} function _emscripten_futex_wake(addr,count){if(addr<=0||addr>GROWABLE_HEAP_I8().length||addr&3!=0||count<0)return-28;if(count==0)return 0;if(count>=2147483647)count=Infinity;var _emscripten_futex_wake_addr=addr&GROWABLE_HEAP_I8().length;while(_emscripten_futex_wake_addr!=addr){if(_emscripten_futex_wake_addr&3==0){_emscripten_futex_wake(_emscripten_futex_wake_addr,count);break}if(__emscripten_do_dispatch_to_thread(_emscripten_futex_wake_addr,count)==false){count--;_emscripten_futex_wake(_emscripten_futex_wake_addr+1,count);}}};
mainThreadWaitAddress=Atomics.load(GROWABLE_HEAP_I32(),__emscripten_main_thread_futex>>2);var
mainThreadWoken=0;if(mainThreadWaitAddress===addr){var
loadedAddr=Atomics.compareExchange(GROWABLE_HEAP_I32(),__emscripten_main_thread_futex>>2,mainThreadWaitAddress,0);if(loadedAddr===mainThreadWaitAddress){--count;mainThreadWoken=1;if(count<=0)return
1}}var ret=Atomics.notify(GROWABLE_HEAP_I32(),addr>>2,count);if(ret!==0)return
ret+mainThreadWoken;throw"Atomics.notify returned an unexpected value
"+ret+Module["_emscripten_futex_wake"]=_emscripten_futex_wake;function
killThread(pthread_ptr){if(ENVIRONMENT_IS_PTHREAD)throw"Internal Error! killThread() can only ever be
called from main application thread";if(!pthread_ptr)throw"Internal Error! Null pthread_ptr in
killThread";GROWABLE_HEAP_I32()[pthread_ptr+12>>2]=0;var
pthread=PThread.pthreads[pthread_ptr];pthread.worker.terminate();PThread.freeThreadData(pthread);PThread.runni
gWorkers.splice(PThread.runningWorkers.indexOf(pthread.worker),1);pthread.worker.pthread=undefined;function
cancelThread(pthread_ptr){if(ENVIRONMENT_IS_PTHREAD)throw"Internal Error! cancelThread() can only
ever be called from main application thread";if(!pthread_ptr)throw"Internal Error! Null pthread_ptr in
cancelThread";var
pthread=PThread.pthreads[pthread_ptr];pthread.worker.postMessage({"cmd":"cancel"})}function
cleanupThread(pthread_ptr){if(ENVIRONMENT_IS_PTHREAD)throw"Internal Error! cleanupThread() can only
ever be called from main application thread";if(!pthread_ptr)throw"Internal Error! Null pthread_ptr in
cleanupThread";var
pthread=PThread.pthreads[pthread_ptr];if(pthread){GROWABLE_HEAP_I32()[pthread_ptr+12>>2]=0;var
worker=pthread.worker;PThread.returnWorkerToPool(worker)}var
PThread={unusedWorkers:[],runningWorkers:[],initMainThreadBlock:function(){var pthreadPoolSize=8;for(var
i=0;i<pthreadPoolSize;++i){PThread.allocateUnusedWorker()}},initRuntime:function(){var
tb=_malloc(228);for(var
i=0;i<228/4;++i)GROWABLE_HEAP_U32()[tb/4+i]=0;GROWABLE_HEAP_I32()[tb+12>>2]=tb;var
headPtr=tb+152;GROWABLE_HEAP_I32()[headPtr>>2]=headPtr;var tlsMemory=_malloc(512);for(var
i=0;i<128;++i)GROWABLE_HEAP_U32()[tlsMemory/4+i]=0;Atoms.store(GROWABLE_HEAP_U32(),tb+100
>>2,tlsMemory);Atoms.store(GROWABLE_HEAP_U32(),tb+40>>2,tb);__emscripten_thread_init(tb,ENVIRON
MENT_IS_WORKER,1);_emscripten_register_main_browser_thread_id(tb);threadExitHandlers.push(function()
){var
this=PThread.threadStatus;threadCancelHandlers.push(function()
){var
this=PThread.threadStatus;runExitHandlersAndDeinitThread(tb,0);delete PThread.initRuntime(tb);delete PThre
ad.threadStatus;delete PThread.threadCancelHandlers;delete PThread.exitHandlers;delete PThread.thread
InfoStruct;delete PThread neuroscienceworkers;delete PThread.freeThreadData;delete PThread.terminate;dele
te PThread.threadStatus;delete PThread.freeThreadData;delete PThread.terminate;delete PThread.thread
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d.allocatedOwnStack;delete PThread.stackBase;delete PThread.stackBase;delete PThread.allocatedO
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kBase;delete PThread.stackBase;delete PThread.allocatedOwnStack;delete PThread.stackBase;delete PT
hread.stackBase;delete PThread.allocatedOwnStack;delete PThread.stackBase;delete PThread.stackBas
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wnStack;delete PThread.stackBase;delete PThread.stackBase;delete PThread.allocatedOwnStack;dele

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GL={counter:1,buffers:[],programs:[],framebuffers:[],renderbuffers:[],textures:[],uniforms:[],shaders:[],vaos:[],contexts:[],offscreenCanvases:[],timerQueriesEXT:[],programInfos:{},stringCache:{},unpackAlignment:4,recordError:function recordError(errorCode){if(!GL.lastError){GL.lastError=errorCode}},getNewId:function(table){var ret=GL.counter++;for(var i=table.length;i<ret;i++){table[i]=null}return ret},getSource:function(shader,count,string,length){var source="";for(var i=0;i<count;++i){var len=length?GROWABLE_HEAP_I32()[length+i*4>>2]:-1;source+=UTF8ToString(GROWABLE_HEAP_I32()[string+i*4>>2],len<0?undefined:len)}return source},createContext:function(canvas,webGLContextAttributes){var ctx=canvas.getContext("webgl",webGLContextAttributes);if(!ctx)return 0;var handle=GL.registerContext(ctx,webGLContextAttributes);return handle},registerContext:function(ctx,webGLContextAttributes){var handle=_malloc(8);GROWABLE_HEAP_I32()[handle+4>>2]=_pthread_self();var context={handle:handle,attributes:webGLContextAttributes,version:webGLContextAttributes.majorVersion,GLctx:ctx};if(ctx.canvas)ctx.canvas.GLctxObject=context;GL.contexts[handle]=context;if(typeof webGLContextAttributes.enableExtensionsByDefault==="undefined"||webGLContextAttributes.enableExtensionsByDefault){GL.initExtensions(context)}return handle},makeContextCurrent:function(contextHandle){GL.currentContext=GL.contexts[contextHandle];Module.ctx=GLctx=GL.currentContext&&GL.currentContext.GLctx;return!(contextHandle&&!GLctx)},getContext:function(contextHandle){return GL.contexts[contextHandle]},deleteContext:function(contextHandle){if,GL.currentContext===GL.contexts[contextHandle])GL.currentContext=null;if(typeof JSEvents==="object")JSEvents.removeAllHandlersOnTarget(GL.contexts[contextHandle].GLctx.canvas);if(GL.contexts[contextHandle].GLctx.canvas.GLctxObject=undefined;_free(GL.contexts[contextHandle].handle);GL.contexts[contextHandle]=null},initExtensions:function(context){if(!context)context=GL.currentContext;if(context.initExtensionsDone)return;context.initExtensionsDone=true;var GLctx=GLctx;__emscripten_webgl_power_preferences=["default","low-power","high-performance"];function _emscripten_webgl_do_create_context(target,attributes){var a=attributes>>2;var powerPreference=GROWABLE_HEAP_132()[a+(24>>2)];var

```javascript
function __webgl_enable_WEBGL_draw_buffers(ctx){var ext=ctx.getExtension("WEBGL_draw_buffers");if(ext){ctx["drawBuffers"]={function(n,bufs){ext["drawBuffers_WEBGL"](n,bufs);return 1}}}

function __webgl_enable_WEBGL_multi_draw(ctx){return!!(ctx.multiDrawWebgl=ctx.getExtension("WEBGL_multi_draw");})

var GL={counter:1,buffers:[],programs:[],framebuffers:[],renderbuffers:[],textures:[],uniforms:[],shaders:[],vaos:[],contexts:[],offscreenCanvases:[],timerQueriesEXT:[],programInfos:{},stringCache:{},unpackAlignment:4,recordError:function recordError(errorCode){if(!GL.lastError){GL.lastError=errorCode}},getNewId:function(table){var ret=GL.counter++;for(var i=table.length;i<ret;i++){table[i]=null}return ret},getSource:function(shader,count,string,length){var source="";for(var i=0;i<count;++i){var len=length?GROWABLE_HEAP_I32()[length+i*4>>2]:-1;source+=UTF8ToString(GROWABLE_HEAP_I32()[string+i*4>>2],len<0?undefined:len)}return source},createContext:function(canvas,webGLContextAttributes){var ctx=canvas.getContext("webgl",webGLContextAttributes);if(!ctx)return 0;var handle=GL.registerContext(ctx,webGLContextAttributes);return handle},registerContext:function(ctx,webGLContextAttributes){var handle=_malloc(8);GROWABLE_HEAP_I32()[handle+4>>2]=_pthread_self();var context={handle:handle,attributes:webGLContextAttributes,version:webGLContextAttributes.majorVersion,GLctx:ctx};if(ctx.canvas)ctx.canvas.GLctxObject=context;GL.contexts[handle]=context;if(typeof webGLContextAttributes.enableExtensionsByDefault==="undefined"||webGLContextAttributes.enableExtensionsByDefault){GL.initExtensions(context)}return handle},makeContextCurrent:function(contextHandle){GL.currentContext=GL.contexts[contextHandle];Module.ctx=GLctx=GL.currentContext&&GL.currentContext.GLctx;return!(contextHandle&&!GLctx)},getContext:function(contextHandle){return GL.contexts[contextHandle]},deleteContext:function(contextHandle){if,GL.currentContext===GL.contexts[contextHandle])GL.currentContext=null;if(typeof JSEvents==="object")JSEvents.removeAllHandlersOnTarget(GL.contexts[contextHandle].GLctx.canvas);if(GL.contexts[contextHandle].GLctx.canvas.GLctxObject=undefined;_free(GL.contexts[contextHandle].handle);GL.contexts[contextHandle]=null},initExtensions:function(context){if(!context)context=GL.currentContext;if(context.initExtensionsDone)return;context.initExtensionsDone=true;var GLctx=GLctx;__emscripten_webgl_power_preferences=["default","low-power","high-performance"];function _emscripten_webgl_do_create_context(target,attributes){var a=attributes>>2;var powerPreference=GROWABLE_HEAP_132()[a+(24>>2)];var
```
function pthread_create(pthread_ptr, attr, startRoutine, arg) {
    if (typeof SharedArrayBuffer === "undefined") {
        err("Current environment does not support SharedArrayBuffer, pthreads are not available!"); return 6;
    } else if (!pthread_ptr) {
        err("pthread_create called with a null thread pointer!"); return 28;
    } else {
        var transferList = [];
        var error = 0;
        if (ENVIRONMENT_IS_PTHREAD && (transferList.length !== 0 || error)) {
            return _emscripten_sync_run_in_main_thread_4(687865856, pthread_ptr, attr, startRoutine, arg);
        }
        for (var threadInfoStruct = _malloc(228); ; threadInfoStruct = threadInfoStruct + 152) {
            GROWABLE_HEAP_I32()[threadInfoStruct >> 2] = threadInfoStruct;
            threadParams = {
                stackBase: stackBase,
                stackSize: stackSize,
                allocatedOwnStack: allocatedOwnStack,
                detached: detached
            };
            if (ENVIRONMENT_IS_PTHREAD) {
                threadParams.cmd = "spawnThread";
                postMessage(threadParams, transferList);
            } else {
                spawnThread(threadParams);
            }
        }
    }
}

function __pthread_testcancel_js() {
    if (!ENVIRONMENT_IS_PTHREAD) return;
    var tb = _pthread_self();
    if (!tb) return;
    var cancelDisabled = Atomics.load(GROWABLE_HEAP_U32(), tb + 56 >> 2);
    if (cancelDisabled) return;
    var canceled = Atomics.load(GROWABLE_HEAP_U32(), tb + 0 >> 2);
    if (canceled) throw "Canceled!"
}

function _sysconf(name) {
    if (ENVIRONMENT_IS_PTHREAD) {
        return _emscripten_proxy_to_main_thread_js(6, 1, name);
    } else {
        switch (name) {
            case 30: return 16384;
            case 85: var maxHeapSize = 2147483648;
                return maxHeapSize / 16384;
        }
    }
}

function __emscripten_do_pthread_join(thread, status, block) {
    if (thread) {
        err("pthread_join attempted on a null thread pointer!"); return;
    }
    ERRNO_CODES.ESRCH;if (ENVIRONMENT_IS_PTHREAD && _pthread_self() === thread) {
        err("pthread_join attempting to join itself!"); return ERRNO_CODES.EDEADLK;
    } else {
        _emscripten_check_blocking_allowed()||if (ENVIRONMENT_IS_NODE) return;
        var self = GROWABLE_HEAP_I32()[thread + 12 >> 2];
        if (self) {
            err("pthread_join attempted on thread \+thread\+\+", which does not point to a valid thread, or does not exist anymore!"); return;
        }
        ERRNO_CODES.ESRCH;
        var detached = Atomics.load(GROWABLE_HEAP_U32(), thread + 64 >> 2);
        if (detached) {
            err("Attempted to join thread \+thread\+\+", which was already detached!!"); return;
        }
        ERRNO_CODES.EINVAL; if (block) {_emscripten_check_blocking_allowed()||for (;;){
            var threadStatus = Atomics.load(GROWABLE_HEAP_U32(), thread + 0 >> 2);
            if (threadStatus === 1) {
                var threadExitCode = Atomics.load(GROWABLE_HEAP_U32(), thread + 4 >> 2);
                if (threadExitCode < 0) {
                    throw "Thread exited!
                }
            }
            if (ENVIRONMENT_IS_PTHREAD) cleanupThread(thread);
            else postMessage({"cmd": "cleanupThread","\"thread\": thread});
            return 0;
        }
    }
    ERRNO_CODES.EBUSY;function _pthread_testcancel_js() {
        if (ENVIRONMENT_IS_PTHREAD)_emscripten_main_thread_atad_process_queued_calls();
        _emscripten_futex_wait(thread + 0, threadStatus, ENVIRONMENT_IS_PTHREAD?100:1)
    }

    function _emscripten_proxy_to_main_thread_js(6, 1, name) switch (name) {
        case 30: return 16384;
        case 85: var maxHeapSize = 2147483648;
            return maxHeapSize / 16384;
```javascript
function(_RealDiv) {
  _RealDiv = Module['_RealDiv'] = function() {
    return _RealDiv = Module['_RealDiv'] = Module['asm']['Ja'].apply(null, arguments);
  }; var

  function(_Relu) {
    _Relu = Module['_Relu'] = function() {
      return _Relu = Module['_Relu'] = Module['asm']['Ka'].apply(null, arguments);
    }; var

    function(_Relu6) {
      _Relu6 = Module['_Relu6'] = function() {
        return _Relu6 = Module['_Relu6'] = Module['asm']['La'].apply(null, arguments);
      }; var

      function(_ResizeBilinear) {
        _ResizeBilinear = Module['_ResizeBilinear'] = function() {
          return _ResizeBilinear = Module['_ResizeBilinear'] = Module['asm']['Ma'].apply(null, arguments);
        }; var

        function(_Reverse) {
          _Reverse = Module['_Reverse'] = function() {
            return _Reverse = Module['_Reverse'] = Module['asm']['Na'].apply(null, arguments);
          }; var

          function(_RotateWithOffset) {
            _RotateWithOffset = Module['_RotateWithOffset'] = function() {
              return _RotateWithOffset = Module['_RotateWithOffset'] = Module['asm']['Oa'].apply(null, arguments);
            }; var

            function(_Round) {
              _Round = Module['_Round'] = function() {
                return _Round = Module['_Round'] = Module['asm']['Pa'].apply(null, arguments);
              }; var

              function(_Rsqrt) {
                _Rsqrt = Module['_Rsqrt'] = function() {
                  return _Rsqrt = Module['_Rsqrt'] = Module['asm']['Qa'].apply(null, arguments);
                }; var

                function(_ScatterNd) {
                  _ScatterNd = Module['_ScatterNd'] = function() {
                    return _ScatterNd = Module['_ScatterNd'] = Module['asm']['Ra'].apply(null, arguments);
                  }; var

                  function(_SelectV2) {
                    _SelectV2 = Module['_SelectV2'] = function() {
                      return _SelectV2 = Module['_SelectV2'] = Module['asm']['Sa'].apply(null, arguments);
                    }; var

                    function(_Sigmoid) {
                      _Sigmoid = Module['_Sigmoid'] = function() {
                        return _Sigmoid = Module['_Sigmoid'] = Module['asm']['Ta'].apply(null, arguments);
                      }; var

                      function(_Sin) {
                        _Sin = Module['_Sin'] = function() {
                          return _Sin = Module['_Sin'] = Module['asm']['Ua'].apply(null, arguments);
                        }; var

                        function(_Softmax) {
                          _Softmax = Module['_Softmax'] = function() {
                            return _Softmax = Module['_Softmax'] = Module['asm']['Va'].apply(null, arguments);
                          }; var

                          function(_Sqrt) {
                            _Sqrt = Module['_Sqrt'] = function() {
                              return _Sqrt = Module['_Sqrt'] = Module['asm']['Wa'].apply(null, arguments);
                            }; var

                            function(_Square) {
                              _Square = Module['_Square'] = function() {
                                return _Square = Module['_Square'] = Module['asm']['Xa'].apply(null, arguments);
                              }; var

                              function(_SquaredDifference) {
                                _SquaredDifference = Module['_SquaredDifference'] = function() {
                                  return _SquaredDifference = Module['_SquaredDifference'] = Module['asm']['Ya'].apply(null, arguments);
                                }; var

                                function(_Step) {
                                  _Step = Module['_Step'] = function() {
                                    return _Step = Module['_Step'] = Module['asm']['Za'].apply(null, arguments);
                                  }; var

                                  function(_StridedSlice) {
                                    _StridedSlice = Module['_StridedSlice'] = function() {
                                      return _StridedSlice = Module['_StridedSlice'] = Module['asm']['_a'].apply(null, arguments);
                                    }; var

                                    function(_Sub) {
                                      _Sub = Module['_Sub'] = function() {
                                        return _Sub = Module['_Sub'] = Module['asm']['_a'].apply(null, arguments);
                                      }; var

                                      function(_Sum) {
                                        _Sum = Module['_Sum'] = function() {
                                          return _Sum = Module['_Sum'] = Module['asm']['ab'].apply(null, arguments);
                                        }; var

                                        function(_Tan) {
                                          _Tan = Module['_Tan'] = function() {
                                            return _Tan = Module['_Tan'] = Module['asm']['bb'].apply(null, arguments);
                                          }; var

                                          function(_Tanh) {
                                            _Tanh = Module['_Tanh'] = function() {
                                              return _Tanh = Module['_Tanh'] = Module['asm']['cb'].apply(null, arguments);
                                            }; var

                                            function(_Tile) {
                                              _Tile = Module['_Tile'] = function() {
                                                return _Tile = Module['_Tile'] = Module['asm']['db'].apply(null, arguments);
                                              }; var

                                              function(_TopK) {
                                                _TopK = Module['_TopK'] = function() {
                                                  return _TopK = Module['_TopK'] = Module['asm']['eb'].apply(null, arguments);
                                                }; var
```

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**Open Source Used in Cisco Meeting Server (formerly Acano Server) 3.6 2475**
UTF8ArrayToString(heap, idx, maxBytesToRead) { var endIdx = idx + maxBytesToRead; var endPtr = idx; while (endPtr < endIdx) { if ((endPtr - idx) > 16 && heap.subarray && UTF8Decoder) { return UTF8Decoder.decode(heap.subarray(idx, endPtr)); } else { var str = "; while (idx < endPtr) { if (u0 <= heap[idx++]) { if (u0 & 128) { str += String.fromCharCode(u0); continue; } var u1 = heap[idx++]; if ((u0 & 224) == 192) { str += String.fromCharCode((u0 & 31) << 6 | u1); continue; } var u2 = heap[idx++]; if ((u0 & 240) == 224) { u0 = (u0 & 15) << 12 | u1 << 6 | u2; else { u0 = (u0 & 7) << 18 | u1 << 12 | u2 << 6 | heap[idx++]; } str += String.fromCharCode(u0); } else { var ch = u0 - 65536; str += String.fromCharCode(55296 | ch & 1023); } } } return str; } UTF8ToString(ptr, maxBytesToRead) { return UTF8ArrayToString(HEAPU8, ptr, maxBytesToRead); } stringToUTF8Array(str, heap, outIdx, maxBytesToWrite) { if (!(maxBytesToWrite > 0)) return 0; var startIdx = outIdx; var endIdx = outIdx + maxBytesToWrite - 1; for (var i = 0; i < str.length; i++) { var u = str.charCodeAt(i); if (u <= 127) { if (outIdx >= endIdx) break; heap[outIdx++] = u; } else if (u <= 2047) { if (outIdx + 1 >= endIdx) break; heap[outIdx++] = 192 | (u >> 6); heap[outIdx++] = 128 | u & 63; } else if (u <= 65535) { if (outIdx + 2 >= endIdx) break; heap[outIdx++] = 224 | (u >> 12); heap[outIdx++] = 128 | (u >> 6 & 63); heap[outIdx++] = 128 | u & 63; } else { if (outIdx + 3 >= endIdx) break; heap[outIdx++] = 240 | (u >> 18); heap[outIdx++] = 128 | (u >> 12 & 63); heap[outIdx++] = 128 | (u >> 6 & 63); heap[outIdx++] = 128 | u & 63; } heap[outIdx] = 0; return outIdx - startIdx; } writeArrayToMemory(array, buffer) { HEAP8.set(array.buffer); }
abort(what) if(Module["onAbort"]): Module["onAbort"](what) what="\"abort("+what+\")\" Build with -s ASSERTIONS=1 for more info\";var e=new WebAssembly.RuntimeError(what); throw e;function hasPrefix(str,prefix){return String.prototype.startsWith?str.startsWith(prefix):str.indexOf(prefix)===0}var dataURIPrefix="data:application/octet-stream;base64,\";function isDataURI(filename){return hasPrefix(filename,dataURIPrefix)}var fileURIPrefix="file://";function isFileURI(filename){return hasPrefix(filename,fileURIPrefix)}var wasmBinaryFile="tfjs-backend-wasm.wasm\";if(isDataURI(wasmBinaryFile)) { wasmBinaryFile=locateFile(wasmBinaryFile)} var getBinary(file){try{if(file==wasmBinaryFile&&wasmBinary){return new Uint8Array(wasmBinary)}if(readBinary){return readBinary(file)}else{throw"both async and sync fetching of the wasm failed\"}}catch(err){abort(err)]]function getBinaryPromise(){if(!wasmBinary&&(!ENVIRONMENT_IS_WEB||ENVIRONMENT_IS_WORKER)) { if(typeof fetch==="function"&&!isFileURI(wasmBinaryFile)){return fetch(wasmBinaryFile,{credentials:"same-origin"}).then(function(response){if(!response["ok"]){throw"failed to load wasm binary file at \"+wasmBinaryFile+\"\" return response["arrayBuffer\"]().catch(function(){return getBinary(wasmBinaryFile)})}else{if(readAsync){return new Promise(function(resolve,reject){readAsync(wasmBinaryFile,function(response){resolve(new Uint8Array(response))},reject)})}}}return Promise.resolve().then(function(){return getBinary(wasmBinaryFile)})}function createWasm(){var info={"a":asmLibraryArg};function receiveInstance(instance,module){var exports=instance.exports;Module["asm"]=exports;wasmMemory=Module["asm"]["j"];updateGlobalBufferAndViews(wasmMemory.buffer);wasmTable=Module["asm"]["r"] removeRunDependency("wasm-instantiate");function receiveInstantiatedSource(output){receiveInstance(output["instance"])}function instantiateArrayBuffer(receiver){return getBinaryPromise().then(function(binary){return WebAssembly.instantiate(binary,info)}).then(receiver,function(reason){err("failed to asynchronously prepare wasm: \"+reason+\";abort(reason)\") function instantiateAsync(){if(!wasmBinary&&typeof WebAssembly.instantiateStreaming==="function"&&!isDataURI(wasmBinaryFile)&&!isFileURI(wasmBinaryFile)&&typeof fetch==="function") { return fetch(wasmBinaryFile,{credentials:"same-origin"}).then(function(response){var result=WebAssembly.instantiateStreaming(response,info);return result.then(receiveInstantiatedSource,function(reason){err("wasm streaming compile failed: \"+reason+\";err("falling back to ArrayBuffer instantiation\";return instantiateArrayBuffer(receiveInstantiatedSource))})}else{return instantiateArrayBuffer(receiveInstantiatedSource)}} function callRuntimeCallbacks(callbacks){while(callbacks.length>0){var callback=callbacks.shift();if(typeof callback==="function"){callback(Module);continue}var func=callback.func;if(typeof func==="number"){if(callback.arg===undefined){wasmTable.get(func)()}else{wasmTable.get(func)(callback.arg)}}else{func(callback.arg===undefined?null:callback.arg)}}}function _emscripten_memcpy_big(dest,src,num){HEAPU8.copyWithin(dest,src,src+num)}function _emscripten_get_heap_size(){return HEAPU8.length}function emscripten_realloc_buffer(size){try{wasmMemory.grow(size-buffer.byteLength+65535)>>16);updateGlobalBufferAndViews(wasmMemory.buffer);return 1}catch(e){}function _emscripten_resize_heap(requestedSize){var oldSize=_emscripten_get_heap_size();var maxHeapSize=2147483648;if(requestedSize>maxHeapSize){return false}for(var cutDown=1;cutDown<4;cutDown*=2) var overGrownHeapSize=oldSize*(1+.2);overGrownHeapSize=Math.min(overGrownHeapSize requestedSize...
module"_FusedDepthwiseConv2D"=module"asm"["SV"].apply(null,arguments));var
"_Gather"=module"_Gather"=function(){return("_Gather"=module"_Gather"=module"asm"["TV"].apply(null,
arguments));var
"_GatherNd"=module"_GatherNd"=function(){return("_GatherNd"=module"_GatherNd"=module"asm"["U"].
apply(null,arguments));var
"_Greater"=module"_Greater"=function(){return("_Greater"=module"_Greater"=module"asm"["V"].apply
(null,arguments));var
"_GreaterEqual"=module"_GreaterEqual"=function(){return("_GreaterEqual"=module"_GreaterEqual"=module"asm"["W"].
apply(null,arguments));var
"_LeakyRelu"=module"_LeakyRelu"=function(){return("_LeakyRelu"=module"_LeakyRelu"=module"asm"["X"].
apply(null,arguments));var
"_Less"=module"_Less"=function(){return("_Less"=module"_Less"=module"asm"["Y"].apply(null,arguments));
var
"_LessEqual"=module"_LessEqual"=function(){return("_LessEqual"=module"_LessEqual"=module"asm"["Z"].
apply(null,arguments));var
"_Log"=module"_Log"=function(){return("_Log"=module"_Log"=module"asm"["_"].apply(null,arguments));
var
"_LogicalAnd"=module"_LogicalAnd"=function(){return("_LogicalAnd"=module"_LogicalAnd"=module"asm"
["$"].apply(null,arguments));var
"_Max"=module"_Max"=function(){return("_Max"=module"_Max"=module"asm"["aa"].apply(null,arguments));
var
"_MaxPool"=module"_MaxPool"=function(){return("_MaxPool"=module"_MaxPool"=module"asm"["ba"].
apply(null,arguments));var
"_Maximum"=module"_Maximum"=function(){return("_Maximum"=module"_Maximum"=module"asm"["ca"].
apply(null,arguments));var
"_Mean"=module"_Mean"=function(){return("_Mean"=module"_Mean"=module"asm"["da"].apply(null,arguments));
var
"_Min"=module"_Min"=function(){return("_Min"=module"_Min"=module"asm"["ea"].apply(null,arguments));
var
"_Minimum"=module"_Minimum"=function(){return("_Minimum"=module"_Minimum"=module"asm"["fa"].
apply(null,arguments));var
"_MirrorPad"=module"_MirrorPad"=function(){return("_MirrorPad"=module"_MirrorPad"=module"asm"["ga"].
apply(null,arguments));var
"_Multiply"=module"_Multiply"=function(){return("_Multiply"=module"_Multiply"=module"asm"["ha"].
apply(null,arguments));var
"_Neg"=module"_Neg"=function(){return("_Neg"=module"_Neg"=module"asm"["ia"].apply(null,arguments));
var
"_NonMaxSuppressionV3"=module"_NonMaxSuppressionV3"=function(){return("_NonMaxSuppressionV3"=module
["ja"].apply(null,arguments));var
"_NonMaxSuppressionV4"=module"_NonMaxSuppressionV4"=function(){return("_NonMaxSuppressionV4"=module
["ka"].apply(null,arguments));var
"_NonMaxSuppressionV5"=module"_NonMaxSuppressionV5"=function(){return("_NonMaxSuppressionV5"=module
["la"].apply(null,arguments));var
"_NotEqual"=module"_NotEqual"=function(){return("_NotEqual"=module"_NotEqual"=module"asm"["ma"].
apply(null,arguments));var
"_OneHot"=module"_OneHot"=function(){return("_OneHot"=module"_OneHot"=module"asm"["na"].apply
(null,arguments));var
"_PadV2"=module"_PadV2"=function(){return("_PadV2"=module"_PadV2"=module"asm"["oa"].apply(nul

functions();
  _Pow=Module["_Pow"]={constructor:Module["asm"]}["pa"].apply(null,arguments);
  _Prelu=Module["_Prelu"]={constructor:Module["asm"]}["qa"].apply(null,arguments);
  _Prod=Module["_Prod"]={constructor:Module["asm"]}["ra"].apply(null,arguments);
  _RealDiv=Module["_RealDiv"]={constructor:Module["asm"]}["sa"].apply(null,arguments);
  _Relu=Module["_Relu"]={constructor:Module["asm"]}["ta"].apply(null,arguments);
  _Relu6=Module["_Relu6"]={constructor:Module["asm"]}["ua"].apply(null,arguments);
  _ResizeBilinear=Module["_ResizeBilinear"]={constructor:Module["asm"]}["va"].apply(null,arguments);
  _Reverse=Module["_Reverse"]={constructor:Module["asm"]}["wa"].apply(null,arguments);
  _RotateWithOffset=Module["_RotateWithOffset"]={constructor:Module["asm"]}["xa"].apply(null,arguments);
  _Round=Module["_Round"]={constructor:Module["asm"]}["ya"].apply(null,arguments);
  _Rsqrt=Module["_Rsqrt"]={constructor:Module["asm"]}["za"].apply(null,arguments);
  _ScatterNd=Module["_ScatterNd"]={constructor:Module["asm"]}["Aa"].apply(null,arguments);
  _SelectV2=Module["_SelectV2"]={constructor:Module["asm"]}["Ba"].apply(null,arguments);
  _Sigmoid=Module["_Sigmoid"]={constructor:Module["asm"]}["Ca"].apply(null,arguments);
  _Sin=Module["_Sin"]={constructor:Module["asm"]}["Da"].apply(null,arguments);
  _Softmax=Module["_Softmax"]={constructor:Module["asm"]}["Ea"].apply(null,arguments);
  _Sqrt=Module["_Sqrt"]={constructor:Module["asm"]}["Fa"].apply(null,arguments);
  _Square=Module["_Square"]={constructor:Module["asm"]}["Ga"].apply(null,arguments);
  _SquaredDifference=Module["_SquaredDifference"]={constructor:Module["asm"]}["Ha"].apply(null,arguments);
  _Step=Module["_Step"]={constructor:Module["asm"]}["Ia"].apply(null,arguments);
  _StridedSlice=Module["_StridedSlice"]={constructor:Module["asm"]}["Ja"].apply(null,arguments);
  _Sub=Module["_Sub"]={constructor:Module["asm"]}["Ka"].apply(null,arguments);
  _Sum=Module["_Sum"]={constructor:Module["asm"]}["La"].apply(null,arguments);
  _Tan=Module["_Tan"]={constructor:Module["asm"]}["Ma"].apply(null,arguments);
import wasmFactoryThreadedSimd from '../wasm-out/tfjs-backend-wasm-threaded-simd.js';
import wasmFactory from '../wasm-out/tfjs-backend-wasm.js';

interface TensorData {
  id: number;
  memoryOffset: number;
  shape: number[];
  dtype: string;
  refCount: number;
}

export class BackendWasmThreadedSimd extends KernelBackend {
  constructor(public wasm: BackendWasmThreadedSimdModule) {
    super();
    this.wasm.tfjs.initWithThreadsCount(threadsCount);
    actualThreadsCount = this.wasm.tfjs.getThreadsCount();
    this.dataIdMap = new DataStorage(this, engine());
    this.move(dataId, values, shape, dtype, refCount: number);
  }

  async time(f: () => void): Promise<BackendTimingInfo> {
    const start = util.now();
    f();
    const kernelMs = util.now() - start;
    return {kernelMs};
  }

  disposeData(dataId: DataId, force = false): boolean {
    if (this.dataIdMap.has(dataId)) {
      const data = this.dataIdMap.get(dataId);
      data.refCount--;
      if (!force && data.refCount > 0) {
        return false;
      }
      this.wasm._free(data.memoryOffset);
      this.wasm.tfjs.disposeData(data.id);
      this.dataIdMap.delete(dataId);
    }
    return true;
  }

  /**
   * Make a tensor info for the output of an op. If `memoryOffset` is not
   * present, this method allocates memory on the WASM heap. If `memoryOffset`
   * is present, the memory was allocated elsewhere (in c++) and we just record
   * the pointer where that memory lives. This method allocates memory on the WASM heap. If the memoryOffset is not present, this method allocates memory on the WASM heap.
   */
  makeOutput(shape: number[], dtype: string, memoryOffset?: number): TensorInfo {
    let dataId: {};
    if (memoryOffset == null) {
      dataId = this.write(null /* values */, shape, dtype, refCount: number);
    } else {
      const id = this.dataIdNextNumber++;
      dataId = {id};
      this.dataIdMap.set(dataId, {id, memoryOffset, shape, dtype, refCount: 1});
    }
    const size = util.sizeFromShape(shape);
    const bytes = this.wasm.HEAPU8.slice(memoryOffset, memoryOffset + size);
    return typedArrayFromBuffer(bytes.buffer, dtype);
  }

  getMemoryOffset(dataId: DataId): number {
    if (this.dataIdMap.has(dataId)) {
      const data = this.dataIdMap.get(dataId);
      return data.memoryOffset;
    } else {
      return null;
    }
  }

  dispose() {
    this.wasm.tfjs.dispose();
    if ('PThread' in this.wasm) {
      this.wasm.PThread.terminateAllThreads();
    }
    this.wasm = null;
  }
}

export class BackendWasm extends KernelBackend {
  constructor(public wasm: BackendWasmModule) {
    super();
    this.wasm.tfjs.initWithThreadsCount(threadsCount);
    actualThreadsCount = this.wasm.tfjs.getThreadsCount();
    this.dataIdMap = new DataStorage(this, engine());
    this.move(dataId, values, shape, dtype, refCount: number);
  }

  async time(f: () => void): Promise<BackendTimingInfo> {
    const start = util.now();
    f();
    const kernelMs = util.now() - start;
    return {kernelMs};
  }

  disposeData(dataId: DataId, force = false): boolean {
    if (this.dataIdMap.has(dataId)) {
      const data = this.dataIdMap.get(dataId);
      data.refCount--;
      if (!force && data.refCount > 0) {
        return false;
      }
      this.wasm._free(data.memoryOffset);
      this.wasm.tfjs.disposeData(data.id);
      this.dataIdMap.delete(dataId);
    }
    return true;
  }

  /**
   * Make a tensor info for the output of an op. If `memoryOffset` is not
   * present, this method allocates memory on the WASM heap. If `memoryOffset`
   * is present, the memory was allocated elsewhere (in c++) and we just record
   * the pointer where that memory lives. This method allocates memory on the WASM heap.
   */
  makeOutput(shape: number[], dtype: string, memoryOffset?: number): TensorInfo {
    let dataId: {};
    if (memoryOffset == null) {
      dataId = this.write(null /* values */, shape, dtype, refCount: number);
    } else {
      const id = this.dataIdNextNumber++;
      dataId = {id};
      this.dataIdMap.set(dataId, {id, memoryOffset, shape, dtype, refCount: 1});
    }
    const size = util.sizeFromShape(shape);
    return typedArrayFromBuffer(this.wasm.HEAPU8.slice(memoryOffset, memoryOffset + size), dtype);
memoryOffset);
    }
    return {dataId, shape, dtype};
  }

  typedArrayFromHeap({shape, dtype, dataId}: TensorInfo):
      backend_util.TypedArray {
    const buffer = this.wasm.HEAPU8.buffer;
    const 
    memoryOffset = this.dataIdMap.get(dataId);
    const size = util.sizeFromShape(shape);
    switch (dtype) {
      case 'float32':
        return new Float32Array(buffer, memoryOffset, size);
      case 'int32':
        return new Int32Array(buffer, memoryOffset, size);
      case 'bool':
        return new Uint8Array(buffer, memoryOffset, size);
      default:
        throw new Error(`Unknown dtype ${dtype}`);
    }
  }

  createInstantiateWasmFunc(path: string) {
    // this will be replace by rollup plugin patchWechatWebAssembly in
    // minprogram's output
    // tslint:disable-next-line:no-any
    return (imports: any, callback: any) => {
      util.fetch(path, {credentials: 'same-origin'}).then((response) => {
        if (!response.ok) {
          imports.env.a(`failed to load wasm binary file at '${path}'`);
        }
        response.arrayBuffer().then(binary => {
          WebAssembly.instantiate(binary, imports).then(output => {
            callback(output.instance, output.module);
          });
        });
      });
    }

  getPathToWasmBinary(
    simdSupported: boolean, threadsSupported: boolean,
    wasmModuleFolder: string) {
    if (wasmPath != null) {
      // If wasmPath is defined, the user has supplied a full path to
      // the vanilla .wasm binary.
      return wasmPath;
    } else if (simdSupported &
      threadsSupported) {
      path = 'tfjs-backend-wasm-threaded-simd.wasm';
    } else if (simdSupported) {
      path = 'tfjs-backend-wasm-simd.wasm';
    } else {
      path = 'tfjs-backend-wasm.wasm';
    }
    if (wasmFileMap !== null) {
      if (wasmFileMap[path] !== null) {
        return wasmFileMap[path];
      }
    }
    return wasmModuleFolder + path;

  init(): Promise<{wasm: BackendWasmModule}> {
    // If `wasmPath` has
    // been defined we must initialize the vanilla module.
    if (wasmPath == null) {
      factoryConfig = new Blob([`var WasmBackendModuleThreadedSimd = ` +
          wasmFactoryThreadedSimd.toString()], {type: 'text/javascript'});
      wasm = wasmFactoryThreadedSimd();
    } else {
      wasm = wasmFactoryThreadedSimd();
    }

    const initAborted = false;
    initAborted = true;
    const rejectMsg =
        'Make sure the server can serve the `.wasm` file relative to the ' +
        'bundled js file. For more details see
    resolve({message: rejectMsg});
  }
```javascript
wasm = wasmFactory(factoryConfig);

module.wasm = wasm; // The WASM module has been successfully created by the factory.

if (module.wasm) {
  try {
    module.wasm.then((module) => {
      initialized = true;
      initAborted = false;

      const voidReturnType = 'void';
      const moduleCwrap = module.cwrap;

      module.cwrap('init', null, []).then((module) => {
        initialized = true;
        initAborted = false;

        const registerTensor = module.cwrap('register_tensor', 'number', []);
        const disposeData = module.cwrap('dispose_data', '').then((module) => {
          resolve({wasm: module});
        });
      });
    })
  } catch (error) {
    initAborted = true;
    wasmPath = null;
    throw Error('WASM initialization failed: ' + error.message);
  }
}

if (module.wasm) {
  try {
    module.wasm.then((module) => {
      initialized = true;
      initAborted = false;

      const voidReturnType = 'void';
      const moduleCwrap = module.cwrap;

      module.cwrap('init', null, []).then((module) => {
        initialized = true;
        initAborted = false;

        const registerTensor = module.cwrap('register_tensor', 'number', []);
        const disposeData = module.cwrap('dispose_data', '').then((module) => {
          resolve({wasm: module});
        });
      });
    })
  } catch (error) {
    initAborted = true;
    wasmPath = null;
    throw Error('WASM initialization failed: ' + error.message);
  }
}
```
numThreads:

*/

}* 

 * Gets the actual threads count that is used by XNNPACK.

 */

}* 

 * It is set after the backend is initialized.

 */

}* 

 * throw new Error("WASM backend not initialized.");

 */

}* 

 * return actualThreadsCount;

 */

 * See the LICENSE file.

 */

 * This code is auto-generated, do not modify this file! const version = '3.11.0';

 */

 * export {version} from './version';

 */

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 */

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 */

 * import './flags_wasm'; import {registerBackend} from '@tensorflow/tfjs-core';

 */

 * init from './backend_wasm'; export {BackendWasm, getThreadsCount, setThreadsCount, setWasmPath, setWasmPaths} from './backend_wasm'; export {version as version_wasm} from './version';

 */

 * const WASM_PRIORITY = 2;

 */

 * unregisterBackend('wasm', async () => {

 */

 * return new BackendWasm(wasm);

 */

 * registerBackend('wasm', async () => {

 */

 * await init();

 */

 * return new BackendWasm(wasm);

 */

 * const WASM_PRIORITY = 2;

 */

 * import {registerBackend} from '@tensorflow/tfjs-core';

 */

 * init from './backend_wasm'; export {BackendWasm, getThreadsCount, setThreadsCount, setWasmPath, setWasmPaths} from './backend_wasm'; export {version as version_wasm} from './version';

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 * init from './backend_wasm'; export {BackendWasm, getThreadsCount, setThreadsCount, setWasmPath, setWasmPaths} from './backend_wasm'; export {version as version_wasm} from './version';

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 * const WASM_PRIORITY = 2;

 */

 * import './flags_wasm'; import {registerBackend} from '@tensorflow/tfjs-core';

 */

 * init from './backend_wasm'; export {BackendWasm, getThreadsCount, setThreadsCount, setWasmPath, setWasmPaths} from './backend_wasm'; export {version as version_wasm} from './version';

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 * init from './backend_wasm'; export {BackendWasm, getThreadsCount, setThreadsCount, setWasmPath, setWasmPaths} from './backend_wasm'; export {version as version_wasm} from './version';

 */

 * const WASM_PRIORITY = 2;
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Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/tf-backend-wasm.node.js.map

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 */

// This enum must align with the enum defined in cc/backend.h
export enum CppDType {
  float32 = 0,
  int32 = 1,
  bool = 2,
  string = 3,
  complex64 = 4
}

// Must match enum in cc/fusable_activations.h
export enum FusableActivation {
  linear = 0,
  relu = 1,
  relu6 = 2,
  leakyrelu = 3,
  sigmoid = 4,
  elu = 5
}

import {_FusedMatMul, _FusedMatMulAttrs, _FusedMatMulInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {FusableActivation} from './types';

let wasmFusedMatMul:
  (aId: number, aShape: Uint8Array, aShapeSize: number, bId: number,
   bShape: Uint8Array, bShapeSize: number, transposeA: boolean,
   transposeB: boolean, activation: number,
   biasId: number, preluActivationWeightsId: number, leakyreluAlpha: number, outId: number) =>
  void;

function setup(backend: BackendWasm) {
  wasmFusedMatMul = backend.wasm.cwrap(_FusedMatMul,
    null /* void */, 
    ['number', // a_id
     'array',   // a_shape
     'number',  // a_shape.length
     'number',  // b_id
     'array',   // b_shape
     'number',  // b_shape.length
     'number',  // transpose_a
     'number',  // transpose_b
     'number',  // activation
     'number',  // bias_id
     'number'   // out_id
  ]);}

function fusedBatchMatMul(args: {
  inputs:_FusedMatMulInputs,
  backend: BackendWasm,
  attrs:_FusedMatMulAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {a, b, bias, preluActivationWeights} = inputs;
  if (a.dtype !== 'float32' || b.dtype !== 'float32') {
    throw new Error('
        FusedMatMul only supports rank-1 bias but got `');
  }

  const {transposeA, transposeB, activation, leakyreluAlpha} = attrs;
  const aId = backend.dataIdMap.get(a.dataId).id;
  const bId = backend.dataIdMap.get(b.dataId).id;
  let biasId = 0;
  if (bias != null) {
    const biasData = backend.dataIdMap.get(bias.dataId);
    if (biasData.shape.length !== 1) {
      throw new Error('
        FusedMatMul only supports rank-1 bias but got `');
    }
    biasId = biasData.id;
  }

  const fusedActivation = 
    FusableActivation[activation as { as keyof typeof FusableActivation}];
  if (fusedActivation == null) {
    throw new Error('
        FusedMatMul only supports rank-1 bias but got `');
  }

  // ...
FusedConv2D '+

`in the wasm backend.'

\n


const batchDim = a.shape[0];

const out = backend.makeOutput([batchDim, leftDim, rightDim], a.dtype);

const outId = backend.dataIdMap.get(out.dataId).id;

const aShapeBytes = new Uint8Array(new Int32Array(a.shape).buffer);

const bShapeBytes = new Uint8Array(new Int32Array(b.shape).buffer);

wasmFusedMatMul(aId, aShapeBytes, a.shape.length, bId, bShapeBytes, b.shape.length, transposeA, transposeB, fusedActivation, biasId, preluActivationWeightsId, leakyreluAlpha || 0, outId);

return out;
}

export const fusedMatMulConfig: KernelConfig = {
  kernelName: _FusedMatMul,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: fusedBatchMatMul as {} as KernelFunc
};

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 */

import {DataType, KernelConfig, TensorInfo, UnaryInputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

export function createUnaryKernelConfig(kernelName: string, outType?: DataType): KernelConfig {
  let wasmFunc: (xId: number, dtype: number, outId: number) => void;

  function setupFunc(backend: BackendWasm): void {
    wasmFunc = backend.wasm.cwrap(kernelName, null /* void */, 
      'number',  // x_id
      'number',  // dtype
      'number' // out_id
    );
  }

  function kernelFunc(args: {backend: BackendWasm, inputs: UnaryInputs}):
    TensorInfo {
    const {backend, inputs: {x}} = args;
    const xId = backend.dataIdMap.get(x.dataId).id;
    const out = backend.makeOutput(x.shape, outType || x.dtype);
    const outId = backend.dataIdMap.get(out.dataId).id;

    // Short-circuit zero-sized tensors.
    if (util.sizeFromShape(out.shape) === 0) {
      return out;
    }

    wasmFunc(xId, CppDType[x.dtype], outId);
    return out;
  }

  return {kernelName, backendName: 'wasm',
      setupFunc, kernelFunc: fusedBatchMatMul as {} as KernelFunc
  };
}

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 */

import {Abs, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const absConfig: KernelConfig = createUnaryKernelConfig(Abs);

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 */

import {backend_util, BinaryInputs, DataType, KernelConfig, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

export function createBinaryKernelConfig(kernelName: string, supportsFullBroadcast: boolean, dtype?: DataType): KernelConfig {
  let wasmFunc: (aId: number, aShapeBytes: Uint8Array, aShapeLen: number, bId: number, bShapeBytes: Uint8Array, bShapeLen: number, dtype: number, outId: number) => void;

  function setupFunc(backend: BackendWasm): void {
    wasm Func = backend.wasm.cwrap(kernelName, null /* void */, 
      'number',  // a_id
      'number',  // a_shape
      'number',  // a_shape_len
      'number',  // b_id
      'number',  // b_shape
      'number',  // b_shape_len
      'number' // out_id
    );
  }

  function kernelFunc(args: {backend: BackendWasm, inputs: BinaryInputs}):
    TensorInfo {
    const {backend, inputs: {a, b}} = args;
    const aId = backend.dataIdMap.get(a.dataId).id;
    const aShapeBytes = new Uint8Array(new Int32Array(a.shape).buffer);
    const aShapeLen = a.shape.length;
    const aShapeId = backend.dataIdMap.get(a.dataId).id;
    const aShapeShapeBytes = new Uint8Array(new Int32Array(a.shape).buffer);
    const aShape = backend.makeOutput(a.shape, a.dtype);
    const aShapeId = backend.dataIdMap.get(aShape.dataId).id;

    // Short-circuit zero-sized tensors.
    if (util.sizeFromShape(aShape.shape) === 0) {
      return aShape;
    }

    wasm Func(aId, aShapeBytes, aShapeLen, bId, bShapeBytes, bShapeLen, dtype, outId, number);
    return aShape;
  }

  return {kernelName, backendName: 'wasm',
      setupFunc, kernelFunc: fusedBatchMatMul as {} as KernelFunc
  };

*/

}
function setupFunc(backend: BackendWasm): void {
    wasmFunc = backend.wasm.cwrap(kernelName, null /* void */
        *, ["number", "a_id", "array", "a_shape", "number", "a_shape.length", "number", "b_id", "array", "b_shape", "number", "b_shape.length", "number", "dtype", "number", "out_id"], "")
    function kernelFunc(args: {backend: BackendWasm, inputs: BinaryInputs}): TensorInfo {
        const [a, b] = inputs;
        const ald = backend.dataIdMap.get(a.dataId).id;
        const bld = backend.dataIdMap.get(b.dataId).id;
        const outputType = dtype != null ? dtype : a.dtype;

        const newShape = backend_util.assertAndGetBroadcastShape(a.shape, b.shape);
        const out = backend.makeOutput(newShape, outputType);
        if (util.sizeFromShape(out.shape) === 0) {
            return out;
        }

        const aBytes = new Uint8Array(a.shape);  // aBytes
        const bBytes = new Uint8Array(b.shape);  // bBytes
        const outId = backend.dataIdMap.get(out.dataId).id;

        const kernelFunc = () => wasmFunc(
            aId, aBytes, aBytes.length, bId, bBytes, bBytes.length,
            CppDType[a.dtype], outId);
        if (supportsFullBroadcast && a.dtype === 'float32') {
            kernelFunc();
            return out;
        }

        const aBroadcastDims = backend_util.getBroadcastDims(a.shape, newShape);  // aBroadcastDim
        const bBroadcastDims = backend_util.getBroadcastDims(b.shape, newShape);  // bBroadcastDim
        if (ownsAllOfA && ownsAllOfB) {
            kernelFunc();
            return out;
        } else {
            throw new Error(`Broadcasting along outer dims is not yet ` +
                `supported for ${a.dtype} ${kernelName}.`);
        }
    }
}

const supportsFullBroadcast = true;

export const addConfig: KernelConfig =
    createBinaryKernelConfig(Add, supportsFullBroadcast);

export const addNConfig: KernelConfig = {
    kernelName: AddN,
    backendName: 'wasm',
    setupFunc,
    kernelFunc: addn as {} as KernelFunc,
};
import {Identity, IdentityInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';
import {TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function identity(args: {inputs: IdentityInputs, backend: BackendWasm}):
    TensorInfo {
  const {inputs: {x}, backend} = args;
  const out = backend.makeOutput(x.shape, x.dtype);
  const inVals = backend.ndarrayFromHeap(x);
  const outVals = backend.ndarrayFromHeap(out);
  outVals.set(inVals);
  return out;
}

export const identityConfig: KernelConfig = {
  kernelName: Identity,
  backendName: 'wasm',
  kernelFunc: identity as {} as KernelFunc,
};

import {KernelConfig, KernelFunc, TensorInfo, Transpose, TransposeAttrs, TransposeInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {identity} from './Identity';
import {CppDType} from './types';

let wasmTranspose: (xId: number, xShape: Uint8Array, xShapeLength: number, dtype: CppDType, outId: number, perm: Uint8Array, permLength: number) => void;

function setup(backend: BackendWasm) {
  wasmTranspose = backend.wasm.cwrap(Transpose, null /* void */, 
    ['number', // xId
      'array',   // x.shape
      'number',  // x.shape.length
      'number',  // dtype
      'number',  // outId
      'array',   // perm
      'number',  // perm.length
    ]);}

export function transpose(args:
    {inputs: TransposeInputs, backend: BackendWasm, attrs: TransposeAttrs}):
    TensorInfo {
  const {inputs, backend, attrs} = args;
  // Reduce any dimensions with size one. Lower-rank transpose kernel performs better due to simpler memory access pattern.
  const [reducedShape, perm] = removeOneSizeDims(inputs.x.shape, attrs.perm);
  const outShape = computeOutShape(inputs.x.shape, attrs.perm);

  let permIsNoOp = true;
  for (let i = 0; i < perm.length; i++) {
    if (perm[i] !== i) {
      permIsNoOp = false;
    }
  }
  const cloned = identity({inputs, backend});
  cloned.shape = outShape;
  return cloned;
}

function computeOutShape(inShape: number[], perm: number[]): number[] {
  const outShape = new Array(inShape.length);
  for (let i = 0; i < outShape.length; i++) {
    outShape[i] = inShape[perm[i]];
  }
  return outShape;
}

function removeOneSizeDims(shape: number[], perm: number[]): {[number]: number} {
  const newShape: number[] = []; // Reduce the new shape to keep it small.
  for (let i = 0; i < shape.length; i++) {
    if (shape[i] !== 1) {
      newShape.push(shape[i]);
    }
  }
  return newShape;
}

export const transposeConfig: KernelConfig = {
  kernelName: Transpose,
  backendName: 'wasm',
  kernelFunc: transpose as {} as KernelFunc,
};

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'wasm',
  kernelFunc: transpose as {} as KernelFunc,
  setupFunc: setup,
};

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 */

import {backend_util, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {transpose} from './Transpose';

/**
 * Compute permutation axes and do a transpose
 * if necessary.
 * @param x input TensorInfo
 * @param axis reduction axes
 * @param backend wasm backend instance
 * @export function permuteAxesAndTranspose
 */
export function permuteAxesAndTranspose(x: TensorInfo, axis: number|number[], backend: BackendWasm): {
  transposed: TensorInfo|null,
  axes: number[],
  originalAxes: number[],
  inputWasTransposed: boolean
} {
  const xShape = x.shape;
  const xRank = x.shape.length;

  const originalAxes = util.parseAxisParam(axis, xShape);
  let axes = originalAxes;
  const permutedAxes = backend_util.getAxesPermutation(axes, xRank);
  let xTransposed = null;
  let inputWasTransposed = false;
  if (permutedAxes != null) {
    const newShape: number[] = new Array(xRank);
    for (let i = 0; i < newShape.length; i++) {
      newShape[i] = xShape[permutedAxes[i]];
    }

    axes = backend_util.getInnerMostAxes(axes.length, xRank);
    xTransposed = transpose({inputs: {x}, attrs: {perm: permutedAxes}, backend});

    const xId = backend.dataIdMap.get(x.dataId).id;
    const transposedId = backend.dataIdMap.get(xTransposed.dataId).id;
    if (transposedId !== xId) {
      inputWasTransposed = true;
    }
  }

  return {transposed: xTransposed, originalAxes, axes, inputWasTransposed};
}

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 */

import {All, AllAttrs, AllInputs, backend_util, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';

let wasmAll: (xId: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmAll = backend.wasm.cwrap(All, null /*void*/, ['number, number, number']);
}

function all(args: {backend: BackendWasm, inputs: AllInputs, attrs: AllAttrs}):
    TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    input = transposed;
    inputId = transposedId;
  }

  const inputRank = input.shape.length;
  backend_util.assertAxesAreInnerMostDims('all', axes, inputRank);
  const outShape = backend.dataIdMap.get(transposed.dataId).id;
  const outputId = backend.dataIdMap.get(transposed.dataId).id;

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    input = transposed;
    inputId = transposedId;
  }

  if (input.shape.length === 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmAll(inputId, reduceSize, outId);
  } else if (inputWasTransposed) {
    // dispose of the transposed tensor
    backend.disposeData(transposed.dataId);
  } else if (keepDims) {
    backend.expandShapeToKeepDim(out.shape, originalAxes);
  }

  return allConfig = [null

  const kernelName: All, backendName: 'wasm', setupFunc:
  setup, kernelFunc: all as {} as KernelFunc
];

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=============================================================================

import {Any, AnyAttrs, AnyInputs, backend_util, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';

let wasmAny: (xId: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmAny = backend.wasm.cwrap(Any, null /*void*/, ['number', 'number', 'number']);
}

function any(args: {backend: BackendWasm, inputs: AnyInputs, attrs: AnyAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);
  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    input = transposed;
    inputId = transposedId;
  }

  const inputRank = input.shape.length;
  backend_util.assertAxesAreInnerMostDims('any', axes, keepDims);
  const [outShape, reduceShape] =
      backend_util.computeOutAndReduceShapes(input.shape, axes);
  const reduceSize =
      util.sizeFromShape(reduceShape);
  const out = backend.makeOutput(outShape, x.dtype);
  if (reduceSize !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmAny(inputId, reduceSize, outId);
  }

  if (inputWasTransposed) {
    backend.disposeData(transposed.dataId);
  }

  if (keepDims) {
    const newShape =
        backend_util.expandShapeToKeepDim(out.shape, originalAxes);
    out.shape = newShape;
  }

  return out;
}

export const anyConfig: KernelConfig = {
  kernelName: Any,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: any as {} as KernelFunc
};

=============================================================================

import {ArgMax, ArgMaxAttrs, ArgMaxInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

let wasmFunc: (xId: number, dtype: number, outerSize: number, innerSize: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmFunc = backend.wasm.cwrap(ArgMax, null /* void */, [
      'number',  // x_id
      'number',  // dtype
      'number',  // outer_size
      'number',  // inner_size
      'number'   // out_id
    ]);}

function argmax(args: {inputs: ArgMaxInputs, backend: BackendWasm, attrs: ArgMaxAttrs}) {
  const {backend, inputs, attrs} = args;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);
  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose of this
      // once we are done.
      input = transposed;
      inputId = transposedId;
    }
  }

  const outShape = input.shape.slice(0, -1);
  const out = backend.makeOutput(outShape, x.dtype);
  if (util.sizeFromShape(input.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmFunc(inputId, 0, outId, 0, outId);
  }

  return out;
}

export const argmaxConfig: KernelConfig = {
  kernelName: ArgMax,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: argmax as {} as KernelFunc
};

=============================================================================

import {ArgMax, ArgMaxAttrs, ArgMaxInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

let wasmFunc = backend.wasm.cwrap(ArgMax, null /* void */, ['number', // x_id
    'number', // number, // inner_size'
    'number', // outer_size'
    'number', // number
    'number', // number, // inner_size
    'number' // outputId
  ]);}

function argmax(args: {inputs: ArgMaxInputs, backend: BackendWasm, attrs: ArgMaxAttrs}) {
  const {backend, inputs, attrs} = args;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);
  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose of this
      // once we are done.
      input = transposed;
      inputId = transposedId;
    }
  }

  const outShape = input.shape.slice(0, -1);
  const out = backend.makeOutput(outShape, x.dtype);
  if (util.sizeFromShape(input.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmFunc(inputId, 0, outId, 0, outId);
  }

  return out;
}

export const argmaxConfig: KernelConfig = {
  kernelName: ArgMax,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: argmax as {} as KernelFunc
};

=============================================================================
CppDType[input.dtype], outerSize, innerSize, outId);

    if (inputWasTransposed) {
      // dispose of the transposed tensor.
      backend.disposeData(transposed.dataId);
    }
    return out;
  }

  return out;
}

export const argMaxConfig: KernelConfig = {
  kernelName: ArgMax,
  backendName: 'wasm',
  kernelFunc: argmax as {} as KernelFunc,
  setupFunc: setup;
};

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 */

import {AvgPool, AvgPoolAttrs, AvgPoolInputs, backend_util, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmAvgPool: (number, number, number, number, number, number, number, number, number, number, number) => void;

function setup(backend: BackendWasm) {
  wasmAvgPool = backend.wasm.cwrap(AvgPool, null /* void */, [
    'number',  // xId
    'number',  // batchSize
    'number',  // inputHeight
    'number',  // inputWidth
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // channels
    'number',  // outId
  ]);
}

function avgPool(
    inputs: AvgPoolInputs, backend: BackendWasm, attrs: AvgPoolAttrs) {
  const {inputs, backend, attrs} = args;

  const x = inputs.x as Tensor4D;
  const xId = backend.dataIdMap.get(x.dataId).id;

  const {filterSize, strides, pad, dimRoundingMode} = attrs;
  const convInfo = backend_util.computePool2DInfo(
    x.shape, filterSize, strides, 1 /* dilations */, pad, dimRoundingMode);

  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const strideHeight = convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;
  const channels = convInfo.channels;

  if (convInfo.dataFormat !== 'channelsLast') {
    throw new Error(`wasm backend does not support dataFormat: '${convInfo.dataFormat}'. Please use 'channelsLast'`);
  }

  if (convInfo.dilationWidth !== 1 || convInfo.dilationHeight !== 1) {
    throw new Error(`wasm backend only supports average pooling with dilation = [1, 1], got [${convInfo.dilationHeight}, ${convInfo.dilationWidth}]`);
  }

  const out = backend.makeOutput(convInfo.outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  backend.disposeData(outId);

  wasmAvgPool(
    xId, x.shape[0], x.shape[1], x.shape[2], filterHeight, filterWidth, strideHeight, strideWidth, channels, outId);

  return out;
}

export const avgPoolConfig: KernelConfig = {
  kernelName: AvgPool,
  backendName: 'wasm',
  setupFunc: setup;
};

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 */

import {KernelConfig, KernelFunc, Reshape, ReshapeAttrs, ReshapeInputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function reshape(
    inputs: ReshapeInputs, attrs: ReshapeAttrs, backend: BackendWasm) {
  const {inputs, attrs, backend} = args;

  const x = inputs.x as Tensor4D;
  const xId = backend.dataIdMap.get(x.dataId).id;

  const {shape} = attrs;
  const $shape = util.inferFromImplicitShape(shape, util.sizeFromShape(x.shape));

  const out = backend.makeOutput($shape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;

  const outSize = util.sizeFromShape($shape);

  util.assert(outSize === util.sizeFromShape($shape));

  if (out.size < outSize) {
    throw new Error(`wasm backend does not support dataSize: '${out.size}'. Please use '${outSize}'`);
  }

  const outShape = util.reshapeShape(xId, x.shape, $shape);

  backend.disposeData(xId);

  backend.makeOutput(outShape);

  backend.disposeData(outShape);

  return out;
}

export const reshapeConfig: KernelConfig = {
  kernelName: Reshape,
  backendName: 'wasm',
  setupFunc: setup;
};
'new shape: ${shape}', old shape: ${x.shape}. New shape and old `+\n` shape must have the same number of elements.');
  // Backend needs to track refCount for the dataId for reshape op
  args.backend.incRef(x.dataId);
  return {dataId: x.dataId, shape: shape, dtype: x.dtype};
}

export const reshapeConfig: KernelConfig = {
  kernelName: Reshape,
  backendName: 'wasm',
  kernelFunc: reshape as {} as KernelFunc
};

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;=============================================================================

import {BatchMatMul, BatchMatMulAttrs, BatchMatMulInputs, KernelConfig, KernelFunc, util} from
'@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {reshape} from './Reshape';

let wasmBatchMatMul: (aId: number, aShape: Uint8Array, aShapeSize: number, bId: number,
bShape: Uint8Array, bShapeSize: number, transposeA: boolean,
transposeB: boolean, outId: number) =>
void;

function setup(backend: BackendWasm) {
  wasmBatchMatMul = backend.wasm.cwrap(BatchMatMul,
null /* void */,
[
  'number',  // a_id
  'array',   // a_shape
  'number',  // a_shape.length
  'number',  // b_id
  'array',   // b_shape
  'number',  // b_shape.length
  'number',  // transpose_a
  'number',  // transpose_b
  'number'   // out_id
]);
}

function batchMatMul(args: {
  inputs: BatchMatMulInputs,
  backend: BackendWasm,
  attrs: BatchMatMulAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {a, b} = inputs;
  const {transposeA, transposeB} = attrs;

  if (a.dtype !== 'float32' || b.dtype !== 'float32') {
    throw new Error('BatchMatMul for non-float32 tensors not yet supported.';
  }

  const aRank = a.shape.length;
  const bRank = b.shape.length;
  const innerShapeA = transposeA ? a.shape[aRank - 2] : a.shape[aRank - 1];
  const innerShapeB = transposeB ? b.shape[bRank - 1] : b.shape[bRank - 2];
  const outerShapeA = transposeA ? a.shape[aRank - 1] : a.shape[aRank - 2];
  const outerShapeB = transposeB ? b.shape[bRank - 1] : b.shape[bRank - 2];
  const outerDimsA = a.shape.slice(0, -2);
  const outerDimsB = b.shape.slice(0, -2);
  const batchDimA = util.sizeFromShape(outerDimsA);
  const batchDimB = util.sizeFromShape(outerDimsB);
  const batchDimsCompatible = batchDimA === batchDimB || batchDimA === 1 || batchDimB === 1;

  util.assert(
    aRank >= 2 && bRank >= 2 && batchDimsCompatible,
    () => `Error in matMul: the input
batch dimensions must either be the` +
      `same or at least one input batch dimension must be 1. Got input` +
      `dimensions of (${outerDimsA}) and (${outerDimsB}).`);

  const outShapeOuterDims = batchDimA > batchDimB ? a.shape.slice(0, -2) : b.shape.slice(0, -2);
  const outShape = outShapeOuterDims.concat([outerShapeA, outerShapeB]);

  util.assert(outShape is innerShapeA === innerShapeB, () => `Error in matMul: the input
batch dimensions must be either the` +
      `same or at least one input batch dimension must be 1. Got input` +
      `dimensions of (${outerShapeA}) and (${outerShapeB}).`);

  const batchDimA = util.sizeFromShape(outShapeOuterDims);
  const batchMatDim = batchDimA == 1 || batchDimB == 1;
  const aRank = 2 & batchRank >= 2 & batchDimCompatible;

  const outShapeOuterDim = outShapeOuterDims.concat([outerShapeA, outerShapeB]);
  const aShapeOuterDim = innerShapeA === innerShapeB,
() => `Error in matMul: inner shapes ${innerShapeA} and` +
      `$innerShapeB() of Tensors with shapes
${a.shape} and` +
      `$b.shape and transposeA=${transposeA}` +
      `and transposeB=${transposeB} must match.`;

  const a3d = reshape({inputs: {x: a}, backend, attrs: {shape: a3Shape}});
  const b3d = reshape({inputs: {x: b}, backend, attrs: {shape: b3Shape}});

  const b3dId = backend.dataIdMap.get(b3d.dataId).id;
  const a3dId = backend.dataIdMap.get(a3d.dataId).id;
  const leftDim = transposeA ? a3d.shape[2] : a3d.shape[1];
  const batchDimA = Math.max(batchDimA, batchMatDim);
  const batchDimB = Math.min(batchDimB, batchMatDim);
  const out = backend.makeOutput([batchDimA, leftDim, rightDim], a3.dId);
  const outId = backend.dataIdMap.get(out.dataId).id;
  const aShapeBytes = new Uint8Array(new Int32Array(a3d.shape).buffer);
  const bShapeBytes = new Uint8Array(new Int32Array(b3d.shape).buffer);
  const wasmBatchMatMul = a3dId, aShapeBytes, a3d.shape.length, b3Id,
  bShapeBytes, b3d.shape.length, transposeA, transposeB, outId);
  backend.disposeData(a3d.dataId);
  backend.disposeData(b3d.dataId);

  out.shape = out.shape return out;
}

export const batchMatMulConfig:
KernelConfig = {
  kernelName: BatchMatMul,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: batchMatMul as {} as KernelFunc
};

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 */
import { backend_util, buffer, Slice, slice_util, util } from '@tensorflow/tfjs-core';
import { assertNotComplex } from '../cpu_util';
export function sliceImpl(vals, begin, size, shape, dtype) {
    const isContinous = slice_util.isSliceContinous(shape, begin, size);
    const length = util.sizeFromShape(size);
    const xStrides = util.computeStrides(shape);
    if (isContinous) {
        const flatOffset = slice_util.computeFlatOffset(begin, xStrides);
        if (dtype !== 'string') {
            return vals.slice(flatOffset, flatOffset + length);
        }
        return vals.subarray(flatOffset, flatOffset + length);
    }
    const decodedData = dtype === 'string' ?
        backend_util.fromUint8ToStringArray(vals) :
        vals;
    const inBuf = buffer(shape, dtype, decodedData);
    const outBuf = buffer(size, dtype);
    for (let i = 0; i < outBuf.size; ++i) {
        const outLoc = outBuf.indexToLoc(i);
        const inLoc = outLoc.map((idx, j) => idx + begin[j]);
        outBuf.set(inBuf.get(...inLoc), ...outLoc);
    }
    if (dtype === 'string') {
        return backend_util.fromStringArrayToUint8(outBuf.values);
    }
    return outBuf.values;
}
export function slice(args) {
    const { inputs, backend, attrs } = args;
    const { x } = inputs;
    const { begin, size } = attrs;
    assertNotComplex(x, 'slice');
    const [$begin, $size] = slice_util.parseSliceParams(x, begin, size);
    slice_util.assertParamsValid(x, $begin, $size);
    const vals = backend.data.get(x.dataId).values;
    const outVals = sliceImpl(vals, $begin, $size, x.shape, x.dtype);
    return backend.makeTensorInfo($size, x.dtype, outVals);
}
export const sliceConfig = {
  kernelName: Slice,
  backendName: 'cpu',
  kernelFunc: slice
};
//
import {backend_util, KernelConfig, KernelFunc, Slice, slice_util, SliceAttrs, SliceInputs, TypedArray, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {sliceImplCPU} from '../kernel_utils/shared';

export function slice(args: {inputs: SliceInputs, attrs: SliceAttrs, backend: BackendWasm}) {
  const {inputs: {x}, attrs: {begin, size}, backend} = args;

  const [begin_, size_] = slice_util.parseSliceParams(x, begin, size);
  const isContinuous = slice_util.isSliceContinous(x.shape, begin_, size_);
  const xVals = backend.readSync(x.dataId);
  const out = backend.makeOutput(size_, x.dtype);
  const xStrides = util.computeStrides(x.shape);
  const outData = backend.dataIdMap.get(out.dataId);

  if (isContinuous)
  {
    const flatOffset = slice_util.computeFlatOffset(begin_, xStrides);
    if (x.dtype === 'string') {
      outData.stringBytes = (xVals as Uint8Array[]) .slice(flatOffset, flatOffset + util.sizeFromShape(size_));
    } else {
      const outVals = backend.typedArrayFromHeap(out);
      outVals.set((xVals as TypedArray).subarray(flatOffset, flatOffset + util.sizeFromShape(size_)));
    }
    return out;
  }

  if (x.dtype === 'string') {
    const res = sliceImplCPU(xVals, begin_, size_, x.shape, x.dtype) as TypedArray;
    outVals.set(res);
    return out;
  }

  const outVals = backend.typedArrayFromHeap(out);
  const xStrides = util.computeStrides(x.shape);
  const outData = backend.dataIdMap.get(out.dataId);
  if (isContinuous)
  {
    const flatOffset = slice_util.computeFlatOffset(begin_, xStrides);
    if (x.dtype === 'string') {
      outData.stringBytes = slice_util.computeFlatOffset(begin_, xStrides);
    } else if (x.dtype === 'string') {
      outData.stringBytes = xVals as Uint8Array[] ;
    } else {
      outData.stringBytes = xVals as Uint8Array[] ;
    }
    return out;
  }

  const outData = backend.dataIdMap.get(out.dataId);
  if (isContinuous) {
    const flatOffset = slice_util.computeFlatOffset(begin_, xStrides);
    if (x.dtype === 'string') {
      outData.stringBytes = xVals as Uint8Array[] ;
    } else if (x.dtype === 'string') {
      outData.stringBytes = xVals as Uint8Array[] ;
    } else {
      outData.stringBytes = xVals as Uint8Array[] ;
    }
    return out;
  }

  return out;
}

function slice2d(xVals: backend_util.TypedArray, xStride: number, outVals: backend_util.TypedArray, begin: [number, number], size: [number, number]): void {
  let outOffset = 0;
  const beginI = begin[0];
  const beginJ = begin[1];
  const endI = beginI + size[0];
  for (let i = beginI; i < endI; i++) {
    const flatOffset = xStride * i;
    if (i === endI) {
      outOffset = flatOffset;
    }
    outVals[i + beginJ] = xVals[flatOffset] + outOffset;
  }
}
i++) {
    const xOffset = i * xStride + beginJ;
    outVals.set(xVals.subarray(xOffset, xOffset + size[1]),
        outOffset);
    outOffset += size[1];
  }
}

function slice3d(
    xVals: backend_util.TypedArray, xStride1:
    number, xStride2: number, outVals: backend_util.TypedArray, xStride1:
    number, xStride2: number, outVals: backend_util.TypedArray, xStride1:
    number, xStride2: number, size: [number, number, number]): void {
    for (let i = beginI; i < endI; i++) {
        for (let j = beginJ; j < endJ; j++) {
            const xOffset = i * xStride1 + j * xStride2 + beginK;
            outVals.set(xVals.subarray(xOffset, xOffset + size[2]), outOffset);
            outOffset += size[2];
        }
    }
}

function slice4d(
    xVals: backend_util.TypedArray, xStride1: number, xStride2: number,
    xStride3: number, outVals: backend_util.TypedArray, begin: [number, number, number, number],
    size: [number, number, number, number]): void {
    for (let i = beginI; i < endI; i++) {
        for (let j = beginJ; j < endJ; j++) {
            const xOffset = i * xStride1 + j * xStride2 + k * xStride3 + beginL;
            outVals.set(xVals.subarray(xOffset, xOffset + size[3]), outOffset);
            outOffset += size[3];
        }
    }
}

export const sliceConfig: KernelConfig = {
    kernelName: Slice,
    backendName: 'wasm',
    kernelFunc: slice as {} as KernelFunc,
};

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 */

import {backend_util, BatchToSpaceND, BatchToSpaceNDAttrs, BatchToSpaceNDInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {reshape} from './Reshape';
import {slice} from './Slice';
import {transpose} from './Transpose';

function batchToSpaceND(args: {
    inputs: BatchToSpaceNDInputs,
    backend: BackendWasm,
    attrs: BatchToSpaceNDAttrs
}) {
    const {inputs, backend, attrs} = args;
    const {x} = inputs;
    const {blockShape, crops} = attrs;
    const prod = blockShape.reduce((a, b) => a * b);
    const reshaped = backend_util.getReshaped(x.shape, blockShape, prod);
    const permuted = backend_util.getPermuted(reshaped.length, blockShape.length);
    const reshapedPermuted = backend_util.getReshapedPermuted(x.shape, blockShape, prod);
    const sliceBeginCoords = backend_util.getSliceBeginCoords(crops, blockShape.length);
    const sliceSize = backend_util.getSliceSize(reshapedPermuted, crops, blockShape.length);
    const xReshaped = reshape({ inputs: [x], backend, attrs: { shape: reshaped } });
    const xTransposed = transpose({ inputs: [x: xReshaped], backend, attrs: { perm: permuted } });
    const xTransposedReshaped = reshape({ inputs: [x: xTransposed], backend, attrs: { shape: reshapedPermuted } });
    const result = slice({ inputs: [x: xTransposedReshaped], backend, 
      attrs: { begin: sliceBeginCoords, size: sliceSize } });
    return backend.disposeData(reshaped.dataId); backend.disposeData(xReshaped.dataId);
}

export const batchToSpaceNDConfig: KernelConfig = {
    kernelName: BatchToSpaceND,
    backendName: 'wasm',
    kernelFunc: batchToSpaceND as {} as KernelFunc,
};

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 */

============================================================================
export const Concat = (inputs, outShape, dtype) => {
  const outVals = inputs.map(input => backend_util.makeOutput(outShape, input));
  const out = backend_util.concat(outVals);  
  return out;
};

export const concatImplCPU = (inputs, outShape, dtype) => {
  const outVals = inputs.map(input => backend_util.makeOutput(outShape, input));
  const out = backend_util.concat(outVals);  
  return out;
};

export const concatImplWASM = (inputs, outShape, dtype) => {
  const outVals = inputs.map(input => backend_util.makeOutput(outShape, input));
  const out = backend_util.concat(outVals);  
  return out;
};

export const ConcatConfig = {
  kernelName: 'Concat',
  backendName: 'wasm',
  kernelFunc: 'concatImplWASM',
};
import {backend_util, Conv2DBackpropInput, Conv2DBackpropInputAttrs, KernelConfig, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmConv2DBackpropInput: (
    dyId: number, filterId: number, batchSize: number,
    filterHeight: number, filterWidth: number, inHeight: number, inWidth: number, inChannels: number,
    outHeight: number, outWidth: number, outChannels: number, strideHeight: number, strideWidth: number,
    topPad: number, leftPad: number,fltS0: number,fltS1: number,fltS2: number, xBatchStride: number,
    xColStride: number, xChannelStride: number, yBatchStride: number, yRowStride: number,
    yColStride: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmConv2DBackpropInput = backend.wasm.cwrap(Conv2DBackpropInput, null, ['number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number']);
}

function conv2DBackpropInput(args: {backend: BackendWasm, inputs: Conv2DBackpropInputInputs, attrs: Conv2DBackpropInputAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {dy, filter} = inputs;
  const {strides, pad, dataFormat, dimRoundingMode, inputShape} = attrs;

  const dilations = 1;

  const $dataFormat = backend_util.convertConv2DDataFormat(dataFormat);
  const convInfo = backend_util.computeConv2DInfo(inputShape, filter.shape as [number, number, number, number], strides, dilations, pad, dimRoundingMode, false /* depthwise */, $dataFormat);
  const {batchSize, filterHeight, filterWidth, inChannels, inHeight, inWidth, outChannels, outHeight, outWidth, strideHeight, strideWidth} = convInfo;
  const topPad = filterHeight - 1 - convInfo.padInfo.top;
  const leftPad = filterWidth - 1 - convInfo.padInfo.left;
  const isChannelsLast = convInfo.dataFormat === 'channelsLast';
  const dxStrides = util.computeStrides(convInfo.inShape);
  const dyStrides = util.computeStrides(dy.shape);
  const [fltS0, fltS1, fltS2] = util.computeStrides(filter.shape);
  const xBatchStride = dxStrides[0];
  const xColStride = isChannelsLast ? dxStrides[1] : dxStrides[2];
  const xChannelStride = isChannelsLast ? dxStrides[1] : dxStrides[2];
  const xStrides = new Array(3);
  xStrides[0] = xBatchStride;
  xStrides[1] = xColStride;
  xStrides[2] = xChannelStride;
  const yBatchStride = dyStrides[0];
  const yColStride = isChannelsLast ? dyStrides[1] : dyStrides[2];
  const yRowStride = isChannelsLast ? 1 : dyStrides[1];
  const yStrides = new Array(2);
  yStrides[0] = yBatchStride;
  yStrides[1] = yRowStride;
  const yChannelStride = isChannelsLast ? 1 : yStrides[1];
  const yStrides = new Array(2);
  yStrides[0] = yBatchStride;
  yStrides[1] = yRowStride;
  yStrides[2] = yChannelStride;
  const outId = backend.dataIdMap.get(out.dataId).id;
  const dyId = backend.dataIdMap.get(dy.dataId).id;
  const filterId = backend.dataIdMap.get(filter.dataId).id;

  wasmConv2DBackpropInput(dyId, filterId, batchSize, filterHeight, filterWidth, inHeight, inWidth, inChannels, outHeight, outWidth, outChannels, strideHeight, strideWidth, topPad, leftPad, fltS0, fltS1, fltS2, xBatchStride, xRowStride, xColStride, xChannelStride, yBatchStride, yRowStride, yColStride, yChannelStride, outId);
  return out;
}

export const conv2DBackpropInputConfig: KernelConfig = {
  kernelName: Conv2DBackpropInput,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: conv2DBackpropInput as () => void,
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  * limitations under the License.
};

const {Cos, KernelConfig} from '@tensorflow/tfjs-core';

const wasmConv2DBackpropInput = backend.wasm.cwrap(Conv2DBackpropInput, null, ['number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number']);

const dxStrides = util.computeStrides(convInfo.inShape);
const dyStrides = util.computeStrides(dy.shape);
const [fltS0, fltS1, fltS2] = util.computeStrides(filter.shape);
const xBatchStride = dxStrides[0];
const xColStride = isChannelsLast ? dxStrides[1] : dxStrides[2];
const xChannelStride = isChannelsLast ? dxStrides[1] : dxStrides[2];
const xStrides = new Array(3);
xStrides[0] = xBatchStride;
xStrides[1] = xColStride;
xStrides[2] = xChannelStride;
const yBatchStride = dyStrides[0];
const yColStride = isChannelsLast ? dyStrides[1] : dyStrides[2];
const yRowStride = isChannelsLast ? 1 : dyStrides[1];
const yStrides = new Array(2);
yStrides[0] = yBatchStride;
yStrides[1] = yRowStride;
yStrides[2] = yChannelStride;
const yStrides = new Array(2);
yStrides[0] = yBatchStride;
yStrides[1] = yRowStride;
yStrides[2] = yChannelStride;
const yStrides = new Array(2);
yStrides[0] = yBatchStride;
yStrides[1] = yRowStride;
yStrides[2] = yChannelStride;
const outId = backend.dataIdMap.get(out.dataId).id;
const dyId = backend.dataIdMap.get(dy.dataId).id;
const filterId = backend.dataIdMap.get(filter.dataId).id;

was
```javascript
import {Cosh, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const cosConfig: KernelConfig = createUnaryKernelConfig(Cos);

import {KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';

import {Cast} from './Cast';

enum InterpolationMethod {
  bilinear = 0,
  nearest = 1
}

let wasmCropAndResize: (imagesId: number, boxesId: number, boxIndId: number, numBoxes: number, imagesShape: Uint8Array, cropHeight: number, cropWidth: number, method: number, extrapolationValue: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmCropAndResize = backend.wasm.cwrap(CropAndResize, null /*void*/, [
    'number',  // imagesId
    'number',  // boxesId
    'number',  // boxIndId
    'number',  // numBoxes
    'array',   // images shape
    'number',  // cropHeight
    'number',  // cropWidth
    'number',  // method
    'number',  // extrapolation value
    'number'   // out id
  ]);}

function cropAndResize(args: {
  backend: BackendWasm,
  inputs: CropAndResizeInputs,
  attrs: CropAndResizeAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {method, extrapolationValue, cropSize} = attrs;
  const {image, boxes, boxInd} = inputs;

  const numBoxes = boxes.shape[0];

  const [cropHeight, cropWidth] = cropSize as [number, number];
  const outShape = [numBoxes, cropHeight, cropWidth, image.shape[3]];

  let imagesData = backend.dataIdMap.get(image.dataId);
  let castedData;
  if (image.dtype !== 'float32') {
    castedData = cast({backend, inputs: {x: image}, attrs: {dtype: 'float32'}});
    imagesData = backend.dataIdMap.get(castedData.dataId);
  }

  const imagesId = imagesData.id;
  const boxesId = backend.dataIdMap.get(boxes.dataId).id;
  const boxIndId = backend.dataIdMap.get(boxInd.dataId).id;

  const out = backend.makeOutput(outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;

  const imagesShapeBytes = new Uint8Array(new Int32Array(image.shape).buffer);

  wasmCropAndResize(imagesId, boxesId, boxIndId, numBoxes, boxes.shape[0],'
```

```

```
```typescript
import {backend_util, KernelConfig, Cumsum, CumsumAttrs, CumsumInputs, TensorInfo, util}
from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

import {transpose} from './Transpose';

let wasmCumsum: (xId: number, exclusive: number, reverse: number, finalDim: number, outId: number, dtype: CppDType) => void;

function setup(backend: BackendWasm) {
  wasmCumsum = backend.wasm.cwrap(Cumsum, null /* void */, [/* void */]);
}

export function cumsum(args: {inputs: CumsumInputs, backend: BackendWasm, attrs: CumsumAttrs}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {axis, exclusive, reverse} = attrs;

  // permute required axis to inner most axis
  const permutation = backend_util.getAxesPermutation([axis], x.shape.length);
  let permutedX = x;
  if (permutation !== null) {
    permutedX = transpose({inputs: {x}, attrs: {perm: permutation}, backend});
  }

  const permutedAxis = backend_util.getInnerMostAxes(1, x.shape.length)[0];
  backend_util.assertAxesAreInnerMostDims('cumsum', [permutedAxis], x.shape.length);

  const permutedOut = backend.makeOutput(permutedX.shape, permutedX.dtype);
  const finalDim = permutedX.shape[permutedAxis];
  const permutedXId = backend.dataIdMap.get(permutedX.dataId).id;
  const permutedOutId = backend.dataIdMap.get(permutedOut.dataId).id;
  wasmCumsum(permutedXId, exclusive ? 1 : 0, reverse ? 1 : 0, finalDim, permutedOutId, CppDType[x.dtype]);

  // transpose data back if permuted
  let out = permutedOut;
  if (permutation !== null) {
    const undoPermutation = backend_util.getUndoAxesPermutation(permutation);
    out = transpose({inputs: {x: permutedOut}, attrs: {perm: undoPermutation}, backend});
    backend.disposeData(permutedX.dataId);
    backend.disposeData(permutedOut.dataId);
  }
  return out;
}

export const cumsumConfig: KernelConfig = {
  kernelName: Cumsum,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: cumsum as {} as KernelFunc
};
```
import {Elu, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const eluConfig: KernelConfig = createUnaryKernelConfig(Elu);

import {Equal, KernelConfig} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;
export const equalConfig: KernelConfig =
createBinaryKernelConfig(Equal, supportsFullBroadcast, 'bool');

import {Exp, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const expConfig: KernelConfig = createUnaryKernelConfig(Exp, 'float32');

import {ExpandDims, ExpandDimsAttrs, ExpandDimsInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {reshape} from './Reshape';

export function expandDims(args: {
  inputs: ExpandDimsInputs,
  attrs: ExpandDimsAttrs,
  backend: BackendWasm
}) {
  const {inputs, attrs, backend} = args;
  const {input} = inputs;
  const {dim} = attrs;

  const inputRank = input.shape.length;
  const newShape = input.shape.slice();
  let $dim = dim;
  if (dim < 0) {
    // Negative value is counted from the tail of rank.
    util.assert(
        -(inputRank + 1) <= dim,
        () => `Axis must be in the interval [\${- (inputRank + 1)}, \${inputRank}]`);
    $dim = inputRank + dim + 1;
  }

  // Negative value is counted from the tail of rank.
  $dim = inputRank + dim + 1;

  // Negative value is counted from the tail of rank.
  $dim = inputRank + dim + 1;

  // Negative value is counted from the tail of rank.
  $dim = inputRank + dim + 1;

  return reshape({inputs: {x: input}, backend, attrs: {shape: newShape}});
}

export const expandDimsConfig: KernelConfig = {
  kernelName: ExpandDims,
  backendName: 'wasm',
  kernelFunc: expandDims as {} as KernelFunc,
};

export {Exp, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const expConfig: KernelConfig = createUnaryKernelConfig(Exp, 'float32');

export const eluConfig: KernelConfig = createUnaryKernelConfig(Elu);

export const equalConfig: KernelConfig = createBinaryKernelConfig(Equal, supportsFullBroadcast, 'bool');

export const expandDimsConfig: KernelConfig = {
  kernelName: ExpandDims,
  backendName: 'wasm',
  kernelFunc: expandDims as {} as KernelFunc,
};
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import {KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';
import {Fill, FillAttrs} from '@tensorflow/tfjs-core';
import {BackendWasm} from '@tensorflow/tfjs-core';

export function fill(args: {attrs: FillAttrs, backend: BackendWasm}) {
  const {attrs: {shape, value, dtype}, backend} = args;
  const out = backend.makeOutput(shape, dtype);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.fill(value as number);
  return out;
}

export const fillConfig: KernelConfig = {
  kernelName: Fill,
  backendName: 'wasm',
  kernelFunc: fill as {} as KernelFunc,
};

import {FlipLeftRight, FlipLeftRightInputs, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const floorConfig: KernelConfig = createUnaryKernelConfig(Floor);

import {FloorDiv, KernelConfig} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;
export const floorDivConfig: KernelConfig =

createBinaryKernelConfig(FloorDiv, supportsFullBroadcast);"/***/n * @license
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 */

import {FusedBatchNorm, FusedBatchNormAttrs, FusedBatchNormInputs, KernelConfig, KernelFunc,
        TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let

wasmBatchNorm: (
    xId: number, meanId: number, varianceId: number, offsetId: number, 
    scaleId: number, varianceEpsilon: number, outId: number) => void;

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 *=============================================================================
 */

import {FusedConv2D, FusedConv2DAttrs, FusedConv2DInputs, KernelConfig, KernelFunc,
        Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {FusableActivation} from './types';

let

wasmFusedConv2d: 
    (xId: number, batchSize: number, inputHeight: number, inputWidth: number, 
     filterId: number, filterHeight: number, filterWidth: number, biasId: number, 
     padTop: number, padRight: number, padBottom: number, 
     padLeft: number, isSamePad: number, dilationHeight: number, dilationWidth: number, 
     strideHeight: number, strideWidth: number, 
     inputChannels: number, outputChannels: number, activation: number, 
     preluActivationWeightsId: number, leakyreluAlpha: number, outId: number) => void;

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 */
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```javascript
{
  \n  const {inputs, attrs, backend} = args; \n  const {x, filter, bias, preluActivationWeights} = inputs; \n  const {n, strides, pad, dilations, dataFormat, dimRoundingMode, activation, leakyreluAlpha\n    } = attrs; \n  const convInfo = backend_util.computeConv2DInfo(x as Tensor4D, shape, (filter as Tensor4D).shape, strides, dilations, pad, dimRoundingMode); \n  \n  const fusedActivation = \n    FusableActivation[activation as {} as keyof typeof FusableActivation]; \n  if (fusedActivation == null) { \n    throw new Error(`\n      FusedConv2D only supports rank-1 bias but got rank \n      ${{biasData.shape.length}}.\n    `); \n  } \n  \n  const \n    xId = backend.dataIdMap.get(x.dataId).id; \n  const filterId = \n    backend.dataIdMap.get(filter.dataId).id; \n  const outputChannels = convInfo.outChannels; \n  \n  let biasId = 0; \n  if (bias != null) { \n    const biasData = backend.dataIdMap.get(bias.dataId); \n    if (biasData.shape.length !== 1) \n      throw new Error(`\n        FusedConv2D bias shape (${biasData.shape}) does not \n        match the number of output channels \n        (${outputChannels})\n      `); \n    biasId = biasData.id; \n  } \n  \n  const \n    filterHeight = convInfo.filterHeight; \n  const \n    filterWidth = convInfo.filterWidth; \n  const \n    padTop = convInfo.padInfo.top; \n  const \n    padRight = convInfo.padInfo.right; \n  const \n    padBottom = convInfo.padInfo.bottom; \n  const \n    padLeft = convInfo.padInfo.left; \n  \n  const \n    dilationHeight = convInfo.dilationHeight; \n  const \n    dilationWidth = convInfo.dilationWidth; \n  const \n    strideHeight = convInfo.strideHeight; \n  const \n    strideWidth = convInfo.strideWidth; \n  const \n    inputChannels = convInfo.inChannels; \n  \n  const \n    isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0; \n  const \n    batchSize = \n      dataFormat !== 'NHWC' \n        ? 'wasm backend FusedConv2D does not support \n          dataFormat:' + (dataFormat !== 'NHWC') \n          ? '+' \n          : '' \n        : \n      'FusedConv2D bias shape (${biasData.shape}) does not \n        match the number of output channels \n        (${outputChannels})\n      '; \n  const \n    outId = backend.dataIdMap.get(out.dataId).id; \n  \n  const \n    preluActivationWeightsId = preluActivationWeights == null ? 0 : \n      backend.dataIdMap.get(preluActivationWeights.dataId).id; \n  \n  wasmFusedConv2d(xId, batchSize, strideHeight, strideWidth, \n                    padTop, padRight, padBottom, padLeft, isSamePad, \n                    dilationHeight, dilationWidth, \n                    strideHeight, strideWidth, \n                    biasId, inputChannels, outputChannels, \n                    fusedActivation, \n                    preluActivationWeightsId, leakyreluAlpha \n                      || 0, outId); \n  \n  return out;
}

export const fusedConv2DConfig: \n  KernelConfig = {
    \n    kernelName: FusedConv2D,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: \n      \n```
```
The code snippet appears to be related to neural network operations, specifically related to convolutional operations in a web assembly (Wasm) backend. Here is a transcription of the relevant parts of the code:

```javascript
function fusedDepthwiseConv2d(args: {
  inputs: FusedDepthwiseConv2DInputs,
  backend: BackendWasm,
  attrs: FusedDepthwiseConv2DAttrs
}) {
  const {inputs, attr, backend} = args;
  const {x, filter, bias, 
    preluActivationWeights} = inputs;
  const {
    strides, 
    pad, dilations,
    dataFormat,
  } = attr;
  const convInfo = backend_util.computeConv2DInfo(
    x as Tensor4D.shape, filter as Tensor4D.shape, strides, dilations,
    pad, dataFormat, true /* depthwise */);

  const outputChannels = convInfo.outChannels;
  let biasId = 0;

  if (bias != null)
    biasId = biasData.id;

  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const padTop = convInfo.padInfo.top;
  const padRight = convInfo.padInfo.right;
  const padBottom = convInfo.padInfo.bottom;
  const padLeft = convInfo.padInfo.left;
  const dilationHeight = convInfo.dilationHeight;
  const dilationWidth = convInfo.dilationWidth;
  const strideHeight = convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;

  const xId = backend.dataIdMap.get(x.dataId).id;
  const filterId = backend.dataIdMap.get(filter.dataId).id;
  const outputChannels = convInfo.outChannels;

  wasmFusedDepthwiseConv2d(
    xId, batchSize, 
    inHeight, inWidth, filterId, filterHeight, filterWidth,
    biasId, padTop, padRight, padBottom, padLeft, 
    strideHeight, strideWidth, inputChannels, outputChannels, 
    fusedActivation, preluActivationId, leakyreluAlpha);

  return out;
}
```

This function `fusedDepthwiseConv2d` is used to perform depthwise convolution in a Wasm backend. It takes arguments for the inputs, backend, and attributes, and returns the output of the convolution operation. The convolution is performed using the provided parameters such as strides, padding, dilation, and data format, and the output is returned to the caller.
sliceSize \ 'array', \ 'strides\n\ 'number' \ // outId\n});//\n}\n
function gatherNd(args: {backend: BackendWasm, inputs: GatherNdInputs}) {\n  const backend, inputs = args;\n  const {params, indices} = inputs;\n  const resultShape, numSlices, sliceSize, strides = gather_util.prepareAndValidate(params, indices);\n  const out = backend.makeOutput(resultShape, params.dtype);\n  if (numSlices === 0) {\n    return out;\n  }\n  const indicesShape = indices.shape;\n  const sliceRank = indicesShape.length - 1;\n  const xData = backend.dataIdMap.get(params.dataId);\n  const xId = xData.id;\n  const indicesData = backend.dataIdMap.get(indices.dataId);\n  const indicesId = indicesData.id;\n  const stridesBytes = new Uint8Array(new Int32Array(strides).buffer);\n  wasmGatherNd(xId, CppDType[params.dtype], indicesId, numSlices, sliceSize, \n      stridesBytes, outId);\n  return out;\n}\n
export const gatherNdConfig: KernelConfig = {\n  kernelName: GatherNd,\n  backendName: 'wasm',\n  setupFunc: setup,\n  kernelFunc: gatherNd\n};

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import {backend_util, GatherV2, GatherV2Attrs, GatherV2Inputs, KernelConfig, KernelFunc, Tensor, \n  TensorInfo, TypedArray, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {reshape} from './Reshape';
import {CppDType} from './types';

let wasmGather:\n  (xId: number, dtype: CppDType, xStrides: Uint8Array, stridesSize: number,\n    indicesId: number, batchSize: number, outStrides: Uint8Array,\n    outId: number) => void;\n
function setup(backend: BackendWasm): void {
  wasmGather = backend.wasm.cwrap('Gather', null /*void*/, [\n    'number',  // xId
    'number',  // dtype
    'array', \n    'number',  // xStrides
    'number',  // stridesSize
    'number',  // indicesId
    'number',  // batchSize
    'array', \n    'number'   // outId
  ]);\n}

function gatherV2(args: {backend: BackendWasm, inputs: GatherV2Inputs, attrs: GatherV2Attrs}) {\n  const backend, inputs, attrs = args;\n  const {x, indices} = inputs;\n  const {axis, batchDims} = attrs;\n  throw error when any index is out of bound;\n  const parsedAxis = util.parseAxisParam(axis, x.shape)[0];\n  const indicesVals = backend.readSync(indices.dataId) as TypedArray;\n  const axisDim = x.shape[parsedAxis];\n  for (let i = 0; i < indicesVals.length; ++i) {\n    const index = indicesVals[i];\n    util.assert(\n        index <= axisDim - 1 && index >= 0, () => \n            `GatherV2: the index value $\{index\}$ is not in \[0, ${axisDim - 1}\]`);\n  }\n  const flattenX = reshape({\n    inputs: {x},\n    attrs: {shape: [shapeInfo.batchSize, \n      shapeInfo.outerSize, shapeInfo.dimSize, \n      shapeInfo.slicexSize]}\n  });\n  const flattenIndex = reshape({\n    inputs: {x: indices},\n    attrs: {shape: [shapeInfo.batchSize, \n      indicesShape / shapeInfo.batchSize]}\n  });\n  const flattenOutputShape = [\n    shapeInfo.batchSize, \n    shapeInfo.outerSize, \n    indicesShape / shapeInfo.batchSize, \n    shapeInfo.slicexSize\n  ];\n  const out = backend.makeOutput(flattenOutputShape, x.dtype);\n  if (util.sizeFromShape(x.shape) === 0) {\n    return out;\n  }\n  const stridesSize = flattenX.shape.length - 1;\n  const xData = backend.dataIdMap.get(flattenX.dataId);\n  const xId = xData.id;\n  const indicesData = backend.dataIdMap.get(indices.dataId);\n  const indicesId = indicesData.id;\n  const outData = backend.dataIdMap.get(out.dataId);\n  const outId = out.dataId;\n  const outBytes = new Uint8Array(new Int32Array(x.shape).buffer);\n  wasmGather(xId, CppDType[x.dtype], xBytes, stridesSize, indicesId, \n      shapeInfo.batchSize, outBytes, outId);\n  backend.disposeData(flattenX.dataId);\n  backend.disposeData(flattenIndex.dataId);\n  const reshape = shapeInfo.outputShape;\n  return out;\n}\n
export const gatherV2Config: KernelConfig = {\n  kernelName: GatherV2,\n  backendName: 'wasm',\n  setupFunc: setup,\n  kernelFunc: gatherV2\n};
GatherV2

backendName: 'wasm',

setupFunc: setup,

kernelFunc: gatherV2 as {} as KernelFunc

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=============================================================================

import {Greater, KernelConfig} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;

export const greaterConfig: KernelConfig = createBinaryKernelConfig(Greater, supportsFullBroadcast, 'bool');

=============================================================================

import {GreaterEqual, KernelConfig} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;

export const greaterEqualConfig: KernelConfig = createBinaryKernelConfig(GreaterEqual, supportsFullBroadcast, 'bool');

=============================================================================

import {KernelConfig, KernelFunc, LeakyRelu, LeakyReluAttrs, LeakyReluInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmFunc: (xId: number, dtype: number, leakyreluAlpha: number, outId: number) => void;

function setupFunc(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(LeakyRelu, null /* void */, [
    'number', // x_id
    'number', // dtype
    'number', // leakyrelu_alpha
    'number' // out_id
  ]);}

export function leakyRelu(
    args:
        {inputs: LeakyReluInputs, attrs: LeakyReluAttrs, backend: BackendWasm}):
    TensorInfo {
  const {inputs: {x}, attrs: {alpha}, backend} = args;

  const xId = backend.dataIdMap.get(x.dataId).id;
  // According to TF API, LeakyRelu returns float32 when input is either float32 or int32.
  const out = backend.makeOutput(x.shape, 'float32');

  if (util.sizeFromShape(x.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmFunc(xId, CppDType[x.dtype], alpha, outId);
  }

  return out;
}

export const leakyReluConfig: KernelConfig = {
  kernelName: LeakyRelu,

  backendName: 'wasm',

  setupFunc,

  kernelFunc: leakyRelu as {} as KernelFunc,
};

=============================================================================

import {KernelConfig, Less} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from
//binary_kernel

import {KernelConfig, LessEqual} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;

export const lessEqualConfig: KernelConfig =
createBinaryKernelConfig(LessEqual, supportsFullBroadcast, 'bool');

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 */

import {KernelConfig, Log} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const logConfig: KernelConfig = createUnaryKernelConfig(Log);

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 */

import {KernelConfig, LogicalAnd} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;

export const logicalAndConfig: KernelConfig =
createBinaryKernelConfig(LogicalAnd, supportsFullBroadcast, 'bool');

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 */

import {backend_util, KernelConfig, KernelFunc, Max, MaxAttrs, MaxInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

let wasmMax: (xId: number, dtype: number, reduceSize: number, outId: number) =>
    void;

function setup(backend: BackendWasm): void {
  wasmMax = backend.wasm.cwrap(Max, null /*void*/, [
    'number',  // x_id
    'number',  // dtype
    'number',  // reduce_size
    'number',  // out_id
  ]);
}

function max(args: {backend: BackendWasm, inputs: MaxInputs, attrs: MaxAttrs}):
    TensorInfo {
  const {backend, inputs, attrs} = args;

  const {reductionIndices: axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);

  if (inputWasTransposed) {

```javascript
const transposedId = backend.dataIdMap.get(transposed.dataId).id;
  input = transposed;
  inputId = transposedId;
  const inputRank = input.shape.length;
  backend_util.assertAxesAreInnerMostDims('max', axes, inputRank);
  const [outShape, reduceShape] =
    backend_util.computeOutAndReduceShapes(input.shape, axes);
  const reduceSize = util.sizeFromShape(reduceShape);

  if (reduceSize !== 0) {
    const inputId = backend.dataIdMap.get(input.dataId).id;
    const transposed = backend.makeOutput(input.shape, input.dtype);
    transposedId = backend.dataIdMap.get(transposed.dataId).id;
    const input = transposed;
  }

  const inputRank = input.shape.length;
  backend_util.assertAxesAreInnerMostDims('max', axes, inputRank);
  const [outShape, reduceShape] =
    backend_util.computeOutAndReduceShapes(input.shape, axes);
  const reduceSize = util.sizeFromShape(reduceShape);

  const out = backend.makeOutput(outShape, x.dtype);

  if (reduceSize !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmMax(inputId, CppDType[x.dtype], reduceSize, outId);
  }

  if (inputWasTransposed) {
    backend.disposeData(transposed.dataId);
  }

  if (keepDims) {
    const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
    out.shape = newShape;
  }

  return out;
}

export const maxConfig: KernelConfig = {
  kernelName: Max,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: max as {} as KernelFunc
};
```

---

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 */

import {KernelConfig, Maximum} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = false;
export const maximumConfig: KernelConfig =
  createBinaryKernelConfig(Maximum, supportsFullBroadcast);

---

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 */

import {backend_util, KernelConfig, KernelFunc, MaxPool, MaxPoolAttrs, MaxPoolInputs, Tensor4D, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmMaxPool: (
    xId: number, batchSize: number, inputHeight: number, inputWidth: number,
    filterHeight: number, filterWidth: number, padTop: number, padRight: number,
    padBottom: number, padLeft: number, dilationHeight: number, dilationWidth: number,
    strideHeight: number, strideWidth: number, outputChannels: number, outputChannels: number, outputId: number) => void;

function setup(backend: BackendWasm) {
  wasmMaxPool = backend.wasm.cwrap(MaxPool, null /* void */, [
    'number',  // xId
    'number',  // batchSize
    'number',  // inputHeight
    'number',  // inputWidth
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // padTop
    'number',  // padRight
    'number',  // padBottom
    'number',  // padLeft
    'number',  // dilationHeight
    'number',  // dilationWidth
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // outputChannels
    'number',  // outputChannels
    'number',  // outputId
  ]);
}

```
```
padRight = convInfo.padInfo.right;
const padBottom = convInfo.padInfo.bottom;
const padLeft = convInfo.padInfo.left;
const dilationHeight = convInfo.dilationHeight;
const dilationWidth = convInfo.dilationWidth;
const strideHeight = convInfo.strideHeight;
const strideWidth = convInfo.strideWidth;
const inputChannels = convInfo.inChannels;
const outputChannels = convInfo.outChannels;
if (convInfo.dataFormat !== 'channelsLast') { throw new Error(`wasm backend does not support dataFormat: 

  \$\{convInfo.dataFormat\}.

Please use 'channelsLast'.`); }

const out = backend.makeOutput(convInfo.outShape, `float32`);
const outId = backend.dataIdMap.get(out.dataId).id;

wasmMaxPool(xId, x.shape[0], x.shape[1], x.shape[2],
filterHeight, filterWidth, padTop, padRight, padBottom, padLeft, dilationHeight, dilationWidth,
strideHeight, strideWidth, inputChannels, outputChannels, outId);

export const maxPoolConfig: KernelConfig = {
  kernelName: MaxPool,
  backendName: `wasm`,
  setupFunc: setup,
  kernelFunc: maxPool
};

import {backend_util, KernelConfig, KernelFunc, Mean, MeanAttrs, MeanInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {cast} from './Cast';

import {permuteAxesAndTranspose} from './kernel_utils';

let wasmMean: (xId: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmMean = backend.wasm.cwrap(Mean, null /*void*/, [`number, number, number`]);
}

export function mean(
    args:
{backend: BackendWasm, inputs: MeanInputs, attrs: MeanAttrs}):
    TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);
  let reductionAxes = axes;
  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose of this
      // once we are done. input = transposed;
      inputId = transposedId;
      reductionAxes = backend_util.getInnerMostAxes(
          reductionAxes.length, input.shape.length);
    }
  }

  backend_util.assertAxesAreInnerMostDims(
      'mean',
      reductionAxes, input.shape.length);
  const [outShape, reduceShape] =
      backend_util.computeOutAndReduceShapes(input.shape, reductionAxes);
  const reduceSize = util.sizeFromShape(reduceShape);
  let castedInput = input;
  if (input.dtype !== 'float32') {
    castedInput = cast({backend, inputs: {x: input}, attrs: {dtype: 'float32'}});
    inputId = backend.dataIdMap.get(castedInput.dataId).id;
  }

  const outId = backend.makeOutput(outShape, `float32`);
  if (util.sizeFromShape(input.shape) !== 0) {
    const oldId = backend.dataIdMap.get(out.dataId).id;
    wasmMean(inputId, reduceSize, oldId);
  }

  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  backend.disposeData(castedInput.dataId);
}

export const meanConfig:

  KernelConfig = {
    kernelName: Mean,
    backendName: `wasm`,
    setupFunc: setup,
    kernelFunc: mean
  };

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=============================================================================

*/

import {backend_util, KernelConfig, Min, MinAttrs, MinInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

// Must match enum in MirrorPad.cc
enum MirrorPaddingMode {
  reflect = 0,
  symmetric = 1
}

let wasmMirrorPad: (xId: number, xShapeBytes: Uint8Array, xShapeLength: number, xDtype: number, prePaddingsBytes: Uint8Array, postPaddingsBytes: Uint8Array, mode: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmMirrorPad = backend.wasm.cwrap(MirrorPad, null /* void */, [
    'number',  // x_id
    'number',  // dtype
    'number',  // reduceSize
    'number',  // out_id
  ]);}

setup(backend);

function mirrorPad(args: {backend: BackendWasm, inputs: MirrorPadInputs, attrs: MirrorPadAttrs}):
    TensorInfo {
  const {backend, inputs, attrs} = args;

  const {reflect, symmetric} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;

  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} =
    permuteAxesAndTranspose(x, axis, backend);

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op.
      input = transposed;
      inputId = transposedId;
    }
  }

  const inputRank = input.shape.length;

  backend_util.assertAxesAreInnerMostDims('mirror_pad', axes, inputRank);
  const [outShape, padShape] =
      backend_util.computeOutAndReduceShapes(input.shape,
    axes);

  const outputId = backend.makeOutput(outShape,
    input.dtype);
  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op.
      input = transposed;
      inputId = transposedId;
    }
  }

  if (reflect) {
    // flip the padding.
    const reflectShape = util.sizeFromShape(padShape);
    const reflectId = backend.makeOutput(reflectShape,
      CppDType[input.dtype]);

    const reflectData = backend.makeDataFromShape(reflectShape,
      reflectId);

    wasmMirrorPad(inputId, CppDType[input.dtype], reflectShapeLength, reflectId, prePaddingsBytes, postPaddingsBytes, reflect, reflectId);

    const reflectDataId = backend.dataIdMap.get(reflectData.dataId).id;
    input = ReflectData;
    inputId = reflectDataId;
  }

  if (symmetric) {
    // flip the padding.
    const symmetricShape = util.sizeFromShape(padShape);
    const symmetricId = backend.makeOutput(symmetricShape,
      CppDType[input.dtype]);

    const symmetricData = backend.makeDataFromShape(symmetricShape,
      symmetricId);

    wasmMirrorPad(inputId, CppDType[input.dtype], symmetricShapeLength, symmetricId, prePaddingsBytes, postPaddingsBytes, symmetric, symmetricId);

    const symmetricDataId = backend.dataIdMap.get(symmetricData.dataId).id;
    input = SymmetricData;
    inputId = symmetricDataId;
  }

  const newShape = backend_util.expandShapeToKeepDim(outShape,
    originalAxes);

  const newId = backend.makeOutput(newShape,
    CppDType[input.dtype]);

  const newData = backend.makeDataFromShape(newShape,
    newId);

  wasmMirrorPad(inputId, CppDType[input.dtype], newShapeLength, newId, prePaddingsBytes, postPaddingsBytes, symmetric, newId);

  const newDataId = backend.dataIdMap.get(newData.dataId).id;
  input = newShape?

  if (keepDims) {
    // reshape
    const newShape = backend_util.expandShapeToKeepDim(outShape,
      originalAxes);

    const newId = backend.makeOutput(newShape,
      CppDType[input.dtype]);

    const newData = backend.makeDataFromShape(newShape,
      newId);

    wasmMirrorPad(inputId, CppDType[input.dtype], newShapeLength, newId, prePaddingsBytes, postPaddingsBytes, symmetric, newId);

    const newDataId = backend.dataIdMap.get(newData.dataId).id;
  }

  return outputId;
}

export const mirrorPadConfig: KernelConfig = {
  kernelName: MirrorPad,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: mirrorPad as {} as KernelFunc
};

=============================================================================

*/

import {KernelConfig, Minimum} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;
export const minimumConfig: KernelConfig =
    createBinaryKernelConfig(Minimum, supportsFullBroadcast);
'number', // xId\n 'array', // x.shape\n 'number', // x.shape.length\n 'number', // x.dtype\n 'array', // pre-
paddings\n 'array', // post-paddings\n 'number', // mode\n 'number', // outId\n });\n\n function

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function
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pValidOutputs);\n}\\n/**\n * @license
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import {KernelConfig, KernelFunc, NonMaxSuppressionV3, NonMaxSuppressionV3Attrs,
NonMaxSuppressionV3Inputs, TensorInfo} from '@tensorflow/tfjs-core';\n
import {BackendWasm} from '../backend_wasm';\n
import {parseResultStruct} from './NonMaxSuppression_util';\n
let wasmFunc: (boxesId: number, scoresId: number, maxOutputSize: number, iouThreshold: number, scoreThreshold: number) => number;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(NonMaxSuppressionV3, 'number', ['number', 'number', 'number', 'number', 'number', 'number']);
}

function kernelFunc(args: {
  backend: BackendWasm,
  inputs: NonMaxSuppressionV3Inputs,
  attrs: NonMaxSuppressionV3Attrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {iouThreshold, maxOutputSize, scoreThreshold} = attrs;
  const {boxes, scores} = inputs;

  const boxesId = backend.dataIdMap.get(boxes.dataId).id;
  const scoresId = backend.dataIdMap.get(scores.dataId).id;

  const resOffset = wasmFunc(boxesId, scoresId, maxOutputSize, iouThreshold, scoreThreshold);

  const {pSelectedIndices, selectedSize, pSelectedScores, pValidOutputs} = parseResultStruct(backend, resOffset);

  // Since we are not using scores for V3, we have to delete it from the heap.
  backend.wasm._free(pSelectedScores);
  backend.wasm._free(pValidOutputs);

  const selectedIndicesTensor = backend.makeOutput([selectedSize], 'int32', pSelectedIndices);

  return selectedIndicesTensor;
}

export const nonMaxSuppressionV3Config: KernelConfig = {
  kernelName: NonMaxSuppressionV3,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: kernelFunc as {} as KernelFunc,
};

// Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6 2589
parseResultStruct(backend, resOffset);

// Since we are not using scores for V4, we have to delete it from the
heap.
backend.wasm._free(pSelectedScores);

const selectedIndicesTensor =
backend.makeOutput([selectedSize], 'int32', pSelectedIndices);

const validOutputsTensor =
backend.makeOutput([1], 'int32', pValidOutputs);

return [selectedIndicesTensor, validOutputsTensor];

export const nonMaxSuppressionV4Config: KernelConfig = {
  kernelName: NonMaxSuppressionV4,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: nonMaxSuppressionV4 as {} as KernelFunc,
} as KernelFunc;

export const nonMaxSuppressionV5Config: KernelConfig = {
  kernelName: NonMaxSuppressionV5,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: nonMaxSuppressionV5 as {} as KernelFunc,
} as KernelFunc;

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 */

import {KernelConfig, KernelFunc, NonMaxSuppressionV5, NonMaxSuppressionV5Attrs, NonMaxSuppressionV5Inputs, TensorInfo} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;

export const notEqualConfig: KernelConfig =
createBinaryKernelConfig(NotEqual, supportsFullBroadcast, 'bool');

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 */

import {KernelConfig, NotEqual} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;

export const notEqualConfig: KernelConfig =
createBinaryKernelConfig(NotEqual, supportsFullBroadcast, 'bool');
import {KernelConfig, KernelFunc, OneHot, OneHotAttrs, OneHotInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmOneHot: (
    indicesId: number, depth: number, onValue: number, offValue: number,
    outId: number) => void;

function setup(backend:
    BackendWasm) {
  wasmOneHot = backend.wasm.cwrap(OneHot, null /* void */, 
    ['number',  // indices_id
    'number',  // depth,
    'number',  // onValue
    'number',  // offValue
    'number'   // out_id
  ]);
}

function oneHot(
    args: {inputs: OneHotInputs, attrs: OneHotAttrs, backend: BackendWasm}) {
  const {inputs, backend, attrs} = args;
  const {indices} = inputs;
  const {depth, onValue, offValue} = attrs;

  const out = backend.makeOutput([...indices.shape, depth], 'int32');
  const outId = backend.dataIdMap.get(out.dataId).id;

  const indicesData = backend.dataIdMap.get(indices.dataId);
  const indicesId = indicesData.id;

  wasmOneHot(indicesId, depth, onValue, offValue, outId);

  return out;
}

export const oneHotConfig:
    KernelConfig = {
    kernelName: OneHot,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: oneHot as {} as KernelFunc,
};
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6  2592

```
import {KernelConfig, KernelFunc, PadV2, PadV2Attrs, PadV2Inputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {fill} from './Fill';

import {CppDType} from './types';

let wasmPadV2: (
    xId: number, xShapeBytes: Uint8Array, xShapeLength: number, xDtype:
    number, prePaddingsBytes: Uint8Array, postPaddingsBytes: Uint8Array, constantValue: number, outId:
    number) => void;

function setup(backend: BackendWasm) {
  wasmPadV2 = backend.wasm.cwrap(PadV2, null /* void */, 
    ['number',  // xId
     'array',   // x.shape
     'number',  // x.shape.length
     'number',  // x.dtype
     'array',   // pre-paddings
     'array',   // post-paddings
     'number',  // constantValue
     'number',  // outId
     ]);}

function pad(
    args: {inputs: PadV2Inputs, backend: BackendWasm, attrs: PadV2Attrs}) {
  const
  {inputs: {x}, backend, attrs: {paddings, constantValue}} = args;

  const outShape = paddings.map(
      (p, i) => p[0] /* beforePad */ + x.shape[i] + p[1] /* afterPad */);

  if (util.sizeFromShape(x.shape) === 0) {
    // Short-circuit the computation, since x doesn't have value, only
    // the shape is used to compute output shape to pad.
    return fill({
      backend,
      attrs: {shape: outShape, value: constantValue, dtype: x.dtype}
    });
  }

  const xId = backend.dataIdMap.get(x.dataId).id;
  const out = backend.makeOutput(outShape, x.dtype);
  const outTensorData = backend.dataIdMap.get(out.dataId);
  const outId = outTensorData.id;
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const prePaddingsFlat = paddings.map(padTuple => padTuple[0]);
  const postPaddingsFlat = paddings.map(padTuple => padTuple[1]);
  const prePaddingsBytes = new Uint8Array(new Int32Array(prePaddingsFlat).buffer);
  const postPaddingsBytes = new Uint8Array(new Int32Array(postPaddingsFlat).buffer);
  wasmPadV2(xId, xShapeBytes, x.shape.length,
    CppDType[x.dtype], prePaddingsBytes, postPaddingsBytes, constantValue, outId);
  return out;
}

export const padV2Config: KernelConfig = {
  kernelName: PadV2,
  backendName: 'wasm',
  kernelFunc: pad as {} as KernelFunc,
  setupFunc: setup
};
```

---

```
import {KernelConfig, Pow} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;
export const powConfig: KernelConfig =
  createBinaryKernelConfig(Pow, supportsFullBroadcast);
```

---

```
import {KernelConfig, KernelFunc, Prelu, PreluInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {cast} from './Cast';

let wasmPrelu: (xId: number,
```

---

```
*
```
```javascript
export const range = (args: {backend: BackendWasm, attrs: RangeAttrs}): TensorInfo => {
  const {backend, attrs} = args;
  const {start, stop, step, dtype} = attrs;
  const values = rangeImplCPU(start, stop, step, dtype);

  const out = backend.makeOutput([values.length], dtype);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.set(values);
  return out;
};

export const rangeConfig: KernelConfig = {
  kernelName: Range,
  backendName: 'wasm',
  kernelFunc: range as {} as KernelFunc
};
```

```
import { util } from '@tensorflow/tfjs-core';
export function rangeImpl(start, stop, step, dtype) {
    const sameStartStop = start === stop;
    const increasingRangeNegativeStep = start < stop && step < 0;
    const decreasingRangePositiveStep = stop < start && step > 0;

    if (sameStartStop || increasingRangeNegativeStep || decreasingRangePositiveStep) {
        return util.makeZerosTypedArray(0, dtype);
    }
    const numElements = Math.abs(Math.ceil((stop - start) / step));
    const values = util.makeZerosTypedArray(numElements, dtype);

    if (stop < start && step === 1) {
        // Auto adjust the step's sign if it hasn't been set
        // (or was set to 1)
        step = -1;
    }
    values[0] = start;
    for (let i = 1; i < values.length; i++) {
      values[i] = values[i - 1] + step;
    }
    return values;
}
```

```text
@@ -5,7 +5,7 @@
const backend =绸味BackendWasm;
```
GlzdHJpYnV0Z2VQb24gYW4gXCJBuYkJ1u1wIEJBU01tLFNuc3V0IjwUIjE1NTk5NzZ6NzQ0MjE0OTk5NzZmMDkyMTQ5NDY0OTk5NzZmMDkyMDFhNzY5MjQ5NjE5NTEwNj<i>**</i>

```
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 *
 *=============================================================================

*/

import {KernelConfig, RealDiv} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './binary_kernel';
export const realDivConfig: KernelConfig = createBinaryKernelConfig(RealDiv);

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 *
 *=============================================================================

*/

import {KernelConfig, Relu} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './binary_kernel';
export const reluConfig: KernelConfig = createUnaryKernelConfig(Relu);

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 *=============================================================================

*/

import {KernelConfig, Relu6} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './binary_kernel';
export const relu6Config: KernelConfig = createUnaryKernelConfig(Relu6);
```
import {KernelConfig, KernelFunc, ResizeBilinear, ResizeBilinearAttrs, ResizeBilinearInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {cast} from './Cast';

let wasmResizeBilinear: (xId: number, batch: number, oldHeight: number, oldWidth: number, numChannels: number, newHeight: number, newWidth: number, alignCorners: number, halfPixelCenters: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmResizeBilinear = backend.wasm.cwrap(ResizeBilinear, null /*void*/, ['number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number']);
}

function resizeBilinear(args: {backend: BackendWasm, inputs: ResizeBilinearInputs, attrs: ResizeBilinearAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;

  const {images} = inputs;
  const {alignCorners, halfPixelCenters, size} = attrs;
  const [newHeight, newWidth] = size;

  const [batch, oldHeight, oldWidth, numChannels] = images.shape;
  const outShape = [batch, newHeight, newWidth, numChannels];

  let xData = backend.dataIdMap.get(images.dataId);
  let castedData;
  if (xData.dtype !== 'float32') {
    castedData = cast({backend, inputs: {x: images}, attrs: {dtype: 'float32'}});
    xData = backend.dataIdMap.get(castedData.dataId);
  }

  const xId = xData.id;

  const out = backend.makeOutput(outShape, 'float32');
  if (util.sizeFromShape(images.shape) === 0) {
    return out;
  }

  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmResizeBilinear(xId, batch, oldHeight, oldWidth, numChannels, newHeight, newWidth, alignCorners ? 1 : 0, halfPixelCenters ? 1 : 0, outId);

  if (castedData != null) {
    backend.disposeData(castedData.dataId);
  }

  return out;
}

export const resizeBilinearConfig: KernelConfig = {
  kernelName: ResizeBilinear,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: resizeBilinear as {} as KernelFunc
};
outId));

  const reshaped = reshape({inputs: [x: out], attrs: [shape: x.shape], backend}):

 backend.disposeData(out.dataId); return reshaped;

export const reverseConfig: KernelConfig = {
  kernelName: Reverse,
  backendName: 'wasm',
  kernelFunc: reverse as {} as KernelFunc,
  setupFunc: setup,
};//** * @license
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const wasmRotate = wasm.wasm.cwrap(RotateWithOffset, null /* void */, ["number", // xId
  "number", // batch
  "number", // imageHeight
  "number", // numChannels
  "number", // radians
  "number", // centerX
  "number", // centerY
  "array",   // fillBytes
  "number", // fillLength
  "number", // outId
]);

export function rotateWithOffset(args: {
  inputs: RotateWithOffsetInputs,
  backend: BackendWasm,
  attrs: RotateWithOffsetAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {image} = inputs;
  const {radians, fillValue, center} = attrs;

  const out = backend.makeOutput(image.shape, image.dtype);
  const imageId = backend.dataIdMap.get(image.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;

  const [batch, imageHeight, imageWidth, numChannels] = image.shape;
  const [centerX, centerY] = backend.getImageCenter(center, imageHeight, imageWidth);
  const fillIsBlack = fillValue === 0;
  const fullOpacityValue = 255;
  const fillValues = typeof fillValue === 'number' ? [fillValue, fillValue, fillValue, fillIsBlack ? 0 : fullOpacityValue] : [...fillValue, fullOpacityValue];
  const fillBytes = new Uint8Array(new Int32Array(fillValues).buffer);

  wasmRotate(imageId, batch, imageHeight, imageWidth, numChannels, radians, centerX, centerY, fillBytes, fillValues.length, outId);

  return out;

export const roundConfig: KernelConfig = createUnaryKernelConfig(Round);


const fillBytes = Uint8Array, fillLength: number, outId: number) => void

function setup(backend: BackendWasm) {
  wasmRotate = backend.wasm.cwrap(RotateWithOffset, null /* void */, [
    'number',  // xId
    'number',  // batch
    'number',  // imageHeight
    'number',  // numChannels
    'number',  // radians
    'number',  // centerX
    'number',  // centerY
    'array',   // fillBytes
    'number', // fillLength
    'number', // outId
  ];
}

export function rotateWithOffset(args: {
  inputs: RotateWithOffsetInputs,
  backend: BackendWasm,
}:TensorInfo) {
  const {inputs, backend, attrs} = args;
  const {image} = inputs;
  const {radians, fillValue, center} = attrs;

  const outId = backend.makeOutput(image.shape, image.dtype);
  const imageId = backend.dataIdMap.get(image.dataId).id;

  const [batch, imageHeight, imageWidth, numChannels] = image.shape;
  const [centerX, centerY] = backend.getImageCenter(center, imageHeight, imageWidth);
  const fillIsBlack = fillValue === 0;
  const fullOpacityValue = 255;
  const fillValues = typeof fillValue === 'number' ? [fillValue, fillValue, fillValue, fillIsBlack ? 0 : fullOpacityValue] : [...fillValue, fullOpacityValue];
  const fillBytes = new Uint8Array(new Int32Array(fillValues).buffer);

  wasmRotate(imageId, batch, imageHeight, imageWidth, numChannels, radians, centerX, centerY, fillBytes, fillValues.length, outId);

  return out;

export const rotateWithOffsetConfig: KernelConfig = {
  kernelName: RotateWithOffset,
  backendName: 'wasm',
  kernelFunc: rotateWithOffset as {} as KernelFunc,
  setupFunc: setup
};

const fillBytes = Uint8Array, fillLength: number, outId: number) => void

function setup(backend: BackendWasm) {
  wasmRotate = backend.wasm.cwrap(RotateWithOffset, null /* void */, [
    'number',  // xId
    'number',  // batch
    'number',  // imageHeight
    'number',  // numChannels
    'number',  // radians
    'number',  // centerX
    'number',  // centerY
    'array',   // fillBytes
    'number', // fillLength
    'number', // outId
  ];
}

export function rotateWithOffset(args: {
  inputs: RotateWithOffsetInputs,
  backend: BackendWasm,
}:TensorInfo) {
  const {inputs, backend, attrs} = args;
  const {image} = inputs;
  const {radians, fillValue, center} = attrs;

  const outId = backend.makeOutput(image.shape, image.dtype);
  const imageId = backend.dataIdMap.get(image.dataId).id;

  const [batch, imageHeight, imageWidth, numChannels] = image.shape;
  const [centerX, centerY] = backend.getImageCenter(center, imageHeight, imageWidth);
  const fillIsBlack = fillValue === 0;
  const fullOpacityValue = 255;
  const fillValues = typeof fillValue === 'number' ? [fillValue, fillValue, fillValue, fillIsBlack ? 0 : fullOpacityValue] : [...fillValue, fullOpacityValue];
  const fillBytes = new Uint8Array(new Int32Array(fillValues).buffer);

  wasmRotate(imageId, batch, imageHeight, imageWidth, numChannels, radians, centerX, centerY, fillBytes, fillValues.length, outId);

  return out;

export const rotateWithOffsetConfig: KernelConfig = {
  kernelName: RotateWithOffset,
  backendName: 'wasm',
  kernelFunc: rotateWithOffset as {} as KernelFunc,
  setupFunc: setup
};

const fillBytes = Uint8Array, fillLength: number, outId: number) => void

function setup(backend: BackendWasm) {
  wasmRotate = backend.wasm.cwrap(RotateWithOffset, null /* void */, [
    'number',  // xId
    'number',  // batch
    'number',  // imageHeight
    'number',  // numChannels
    'number',  // radians
    'number',  // centerX
    'number',  // centerY
    'array',   // fillBytes
    'number', // fillLength
    'number', // outId
  ]);
```javascript
import {KernelConfig, Rsqrt} from '@tensorflow/tfjs-core';
import {createUnaryKernelConfig} from '../unary_kernel';

export const rsqrtConfig: KernelConfig = createUnaryKernelConfig(Rsqrt);
```

```javascript
import {KernelConfig, KernelFunc, scatter_util, ScatterNd, ScatterNdAttrs, ScatterNdInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmScatterNd: (indicesId: number, updatesId: number, dtype: CppDType, sliceRank: number, numUpdates: number, sliceSize: number, strides: Uint8Array, outputSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmScatterNd = backend.wasm.cwrap(ScatterNd, null /*void*/, [
    'number',  // indicesId
    'number',  // updatesId
    'number',  // dtype
    'number',  // sliceRank
    'number',  // numUpdates
    'number',  // sliceSize
    'array',   // strides
    'number'   // outputSize
  ]);
}

function scatterNd(args: {backend: BackendWasm, inputs: ScatterNdInputs, attrs: ScatterNdAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {indices, updates} = inputs;
  const {shape} = attrs;

  const out = backend.makeOutput(shape, updates.dtype);
  if (util.sizeFromShape(shape) === 0) {
    return out;
  }

  const {sliceRank, numUpdates, sliceSize, strides, outputSize} = scatter_util.calculateShapes(updates, indices, shape);

  const indicesData = backend.dataIdMap.get(indices.dataId);
  const indicesId = indicesData.id;

  const updatesData = backend.dataIdMap.get(updates.dataId);
  const updatesId = updatesData.id;

  const stridesBytes = new Uint8Array(new Int32Array(strides).buffer);

  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmScatterNd(indicesId, updatesId, CppDType[updates.dtype], sliceRank, numUpdates, sliceSize, stridesBytes, outputSize, outId);

  return out;
}

export const scatterNdConfig: KernelConfig = {
  kernelName: ScatterNd,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: scatterNd as {} as KernelFunc
};
```

```javascript
import {KernelConfig, KernelFunc, Select, SelectInputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmSelect: (conditionId: number, tId: number, eId: number, offset: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmSelect = backend.wasm.cwrap('SelectV2', null, [
    'number',  // conditionId
    'number',  // tId
    'number',  // eId
    'number',  // offset
    'number',  // outId
  ]);
}

function select(args: {inputs: SelectInputs, backend: BackendWasm}) {
  const {inputs, backend} = args;
  const {condition, t, e} = inputs;

  const conditionId = backend.dataIdMap.get(condition.dataId).id;
  const tId = backend.dataIdMap.get(t.dataId).id;
  const eId = backend.dataIdMap.get(e.dataId).id;

  const cRank = condition.shape.length;
  const tRank = t.shape.length;

  const offset = cRank === 0 || cRank > 1 || tRank === 1 ? 1 : 0;

  const out = backend.makeOutput(t.shape, t.dtype);

  wasmSelect(conditionId, tId, eId, offset, outId);

  return out;
}

export const selectConfig: KernelConfig = {
  kernelName: Select,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: select as {} as KernelFunc
};
```
import {KernelConfig, KernelFunc, Sigmoid, SigmoidInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmFunc: (xId: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(Sigmoid, null /* void */, ['number', 'number']);
}

function sigmoid(args: {backend: BackendWasm, inputs: SigmoidInputs}):
    TensorInfo {
  const {backend, inputs: {x}} = args;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const out = backend.dataIdMap.get(out.dataId).id;

  // Short-circuit zero-sized tensors.
  if (util.sizeFromShape(out.shape) === 0) {
    return out;
  }

  wasmFunc(xId, outId);
  return out;
}

export const sigmoidConfig: KernelConfig = {
  kernelName: 'Sigmoid',
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: sigmoid as {} as KernelFunc
};

---

import {KernelConfig, Sin} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const sinConfig: KernelConfig = createUnaryKernelConfig(Sin);

---

import {KernelConfig, KernelFunc, Softmax, SoftmaxAttrs, SoftmaxInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmFunc: (xId: number, outId: number, channels: number, batch: number) =>
    void;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(Softmax, null /* void */, ['number', 'number', 'number', 'number']);
}

function softmax(
    args: {backend: BackendWasm, inputs: SoftmaxInputs, attrs: SoftmaxAttrs}):
    TensorInfo {
  const {backend, inputs: {logits}, attrs: {dim}} = args;
  const xId = backend.dataIdMap.get(logits.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;
  const channelsId = backend.dataIdMap.get(channels.dataId).id;
  const const batch = util.sizeFromShape(logits.shape) / channels;

  // Short-circuit zero-sized tensors.
  if (util.sizeFromShape(out.shape) === 0) {
    return out;
  }

  wasmFunc(xId, outId, channelsId, batch);
  return out;
}

export const softmaxConfig: KernelConfig = {
  kernelName: 'Softmax',
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: softmax as {} as KernelFunc
};

---

import {KernelConfig, KernelFunc, Softmax, SoftmaxInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const softmaxConfig: KernelConfig = createUnaryKernelConfig(Softmax);

---

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import {backend_util, KernelConfig, KernelFunc, ReshapeAttrs, ReshapeInputs, SpaceToBatchND, SpaceToBatchNDAttrs, SpaceToBatchNDInputs, TensorInfo, TransposeAttrs, TransposeInputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {padV2Config} from './PadV2';
import {reshape} from './Reshape';
import {transpose} from './Transpose';

function spaceToBatchND(args: {
  inputs: SpaceToBatchNDInputs,
  backend: BackendWasm,
  attrs: SpaceToBatchNDAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {blockShape, paddings} = attrs;
  const prod = util.sizeFromShape(blockShape);

  const completePaddings: Array<[number, number]> = [[0, 0]];
  completePaddings.push(...(paddings as Array<[number, number]>));

  for (let i = 1 + blockShape.length; i < x.shape.length; ++i) {
    completePaddings.push([0, 0]);
  }

  const paddedX = padV2Config.kernelFunc({
    inputs: {x},
    backend, attrs: {paddings: completePaddings, constantValue: 0}
  }) as TensorInfo;

  const reshapedPaddedShape = backend_util.getReshaped(paddedX.shape, blockShape, prod, false);
  const permutedReshapedPaddedPermutation = backend_util.getPermuted(reshapedPaddedShape.length, blockShape.length, false);

  const flattenShape = backend_util.getReshapedPermuted(paddedX.shape, blockShape, prod, false);

  const reshapeInputs: ReshapeInputs = {x: paddedX};
  const reshapeAttrs: ReshapeAttrs = {shape: reshapedPaddedShape};
  const paddedXReshaped = reshape({inputs: reshapeInputs, backend, attrs: reshapeAttrs});

  const transposeInputs: TransposeInputs = {x: paddedXReshaped};
  const transposeAttrs: TransposeAttrs = {perm: permutedReshapedPaddedPermutation};
  const paddedXT = transpose({inputs: transposeInputs, backend, attrs: transposeAttrs});

  return paddedXT;
}

export const spaceToBatchNDConfig: KernelConfig = {
  kernelName: SpaceToBatchND,
  backendName: 'wasm',
  kernelFunc: spaceToBatchND as {} as KernelFunc
};

import {KernelConfig, KernelFunc, SplitV, SplitVAttrs, SplitVInputs, util} from '@tensorflow/tfjs-core';
import {backend_util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {slice} from './Slice';

export function splitV(args: {inputs: SplitVInputs, attrs: SplitVAttrs, backend: BackendWasm}) {
  const {inputs, attrs, backend} = args;
  const {x} = inputs;
  const {numOrSizeSplits, axis} = attrs;

  const $axis = util.parseAxisParam(axis, x.shape)[0];

  const splitSizes = backend_util.prepareSplitSize(x, numOrSizeSplits, $axis);
  const begin = new Array(x.shape.length).fill(0);

  const size = x.shape.slice();

  return splitSizes.map(s => {
    const xSliceSize = [...size];
    xSliceSize[$axis] = s;
    const xSlice = slice({inputs: {x}, attrs: {begin, size: xSliceSize}, backend});
    begin[$axis] += s;
    return xSlice;
  });
}

export const splitVConfig: KernelConfig = {
  kernelName: SplitV,
  backendName: 'wasm',
  kernelFunc: splitV as {} as KernelFunc
};

import {KernelConfig, KernelFunc, padV2, PadV2, PadV2Attrs, PadV2Inputs, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';

import {padV2Config} from './PadV2';
import {reshape} from './Reshape';
import {transpose} from './Transpose';

function padV2(args: {
  inputs: PadV2Inputs,
  backend: BackendWasm,
  attrs: PadV2Attrs
}) {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {padding, constantValue} = attrs;

  const prod = util.sizeFromShape(padding);

  const completePaddings: Array<[number, number]> = [[0, 0]];
  completePaddings.push(...(padding as Array<[number, number]>));

  for (let i = 1 + padding.length; i < x.shape.length; ++i) {
    completePaddings.push([0, 0]);
  }

  const paddedX = padV2Config.kernelFunc({
    inputs: {x},
    backend, attrs: {paddings: completePaddings, constantValue: 0}
  }) as TensorInfo;

  const reshapedPaddedShape = backend_util.getReshaped(paddedX.shape, padding, false);

  const permutedReshapedPaddedPermutation = backend_util.getPermuted(reshapedPaddedShape.length, padding.length, false);

  const flattenShape = backend_util.getReshapedPermuted(paddedX.shape, padding, false);

  const reshapeInputs: ReshapeInputs = {x: paddedX};
  const reshapeAttrs: ReshapeAttrs = {shape: reshapedPaddedShape};
  const paddedXReshaped = reshape({inputs: reshapeInputs, backend, attrs: reshapeAttrs});

  const transposeInputs: TransposeInputs = {x: paddedXReshaped};
  const transposeAttrs: TransposeAttrs = {perm: permutedReshapedPaddedPermutation};
  const paddedXT = transpose({inputs: transposeInputs, backend,
      attrs: transposeAttrs});

  return paddedXT;
}

export const padV2Config: KernelConfig = {
  kernelName: PadV2,
  backendName: 'wasm',
  kernelFunc: padV2 as {} as KernelFunc
};
import {KernelConfig, Sqrt} from '@tensorflow/tfjs-core';

export const sqrtConfig: KernelConfig = createUnaryKernelConfig(Sqrt);

import {KernelConfig, Square} from '@tensorflow/tfjs-core';

export const squareConfig: KernelConfig = createUnaryKernelConfig(Square);

import {KernelConfig, SquaredDifference} from '@tensorflow/tfjs-core';

export const squaredDifferenceConfig: KernelConfig = createBinaryKernelConfig(SquaredDifference, supportsFullBroadcast);

import {KernelConfig, KernelFunc, Step, StepAttrs, StepInputs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmStep: (xId: number, alpha: number, dtype: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmStep = backend.wasm.cwrap(Step, null /*void*/, [
    'number',  // x_id
    'number',  // alpha
    'number',  // dtype
    'number',  // out_id
  ]);}

function step(args: {backend: BackendWasm, inputs: StepInputs, attrs: StepAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {alpha} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;

  const out = backend.makeOutput(x.shape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmStep(xId, alpha, CppDType[x.dtype], outId);
  return out;
}

export const stepConfig: KernelConfig = {
  kernelName: Step,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: step as {} as KernelFunc
};
import {KernelConfig, KernelFunc, slice_util, StridedSlice, StridedSliceAttrs, StridedSliceInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {reshape} from './Reshape';
import {slice} from './Slice';

let wasmStridedSlice: (xId: number, xStridesBytes: Uint8Array, xRank: number, beginBytes: Uint8Array, endBytes: Uint8Array, stridesBytes: Uint8Array, outShapeBytes: Uint8Array, outStridesBytes: Uint8Array, outShapeLength: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmStridedSlice = backend.wasm.cwrap(StridedSlice, null /*void*/, [
    'number',  // xId
    'array',   // xStrides
    'number',  // xRank
    'array',   // begin
    'array',   // end
    'array',   // strides
    'array',   // outShape
    'array',   // outStrides
    'number',  // outShapeLength
    'number',  // outId
  ]);
}

export function stridedSlice(args: {
  backend: BackendWasm,
  inputs: StridedSliceInputs,
  attrs: StridedSliceAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;

  const {x} = inputs;

  const {
    begin,
    end,
    strides,
    beginMask,
    endMask,
    ellipsisMask,
    newAxisMask,
    shrinkAxisMask
  } = attrs;

  const {
    finalShapeSparse,
    finalShape,
    isIdentity,
    sliceDim0,
    isSimpleSlice,
    begin: $begin,
    end: $end,
    strides: $strides
  } =
      slice_util.sliceInfo(x.shape, begin, end, strides, beginMask, endMask, ellipsisMask,
                          newAxisMask, shrinkAxisMask);

  let result;

  if (isIdentity) {
    // Optimization #1, slice is a no-op plus reshape
    result = reshape({inputs: {x}, backend, attrs: {shape: finalShape}});
  } else if (sliceDim0 || isSimpleSlice) {
    // Optimization #2, slice is memory contiguous (only occurs in dim 0)
    util.assert(
        x.shape.length >= 1,
        () => `Input must have rank at least 1, got: ${x.shape.length}`);

    const size = slice_util.computeOutShape($begin, $end, $strides);
    // To tolerate begin[0] > end[0] (a 0-output slice), we min(begin, end).
    const sliced = slice({inputs: {x}, backend, attrs: {begin: $begin, size}});
    result =
        reshape({inputs: {x: sliced}, backend, attrs: {shape: finalShape}});
    backend.disposeData(sliced.dataId);
  } else {
    const out =
        backend.makeOutput(finalShapeSparse, 'float32');
    const xId = backend.dataIdMap.get(x.dataId).id;
    const xStridesBytes = new Uint8Array(new Int32Array(x.shape).buffer);
    const beginBytes = new Uint8Array(new Int32Array($begin).buffer);
    const endBytes = new Uint8Array(new Int32Array($end).buffer);
    const stridesBytes = new Uint8Array(new Int32Array($strides).buffer);
    const outputShapeBytes = new Uint8Array(new Int32Array(finalShapeSparse).buffer);
    const outId =
        backend.dataIdMap.get(out.dataId).id;
    const wasmStridedSlice = new Uint8Array(out.dataId);
    const result = reshape((inputs: {x: out}, backend, attrs: {shape: finalShape}));
    backend.disposeData(out.dataId);
    result =
        backend.stridedSlice(xId, xStridesBytes, x.shape.length, beginBytes, endBytes, stridesBytes, outputShapeBytes, outStridesBytes, finalShapeSparse.length, outId);
  }

  return result;
}

export const stridedSliceConfig: KernelConfig = {
  kernelName: StridedSlice,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: stridedSlice as {} as KernelFunc
};

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import {KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = true;

export const subConfig: KernelConfig =
    createBinaryKernelConfig(Sub, supportsFullBroadcast);

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import {backend_util, KernelConfig, KernelFunc, Sum, SumAttrs, SumInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

let wasmSum: (xId: number, reduceSize: number, dtype: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmSum = backend.wasm.cwrap(Sum, null /*void*/, [
    'number',  // input_id
    'number',  // reduce_size
    'number',  // dtype
    'number'] as any);  // output_id
}

function sum(args: {backend: BackendWasm, inputs: SumInputs, attrs: SumAttrs}):
    TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} =
  permuteAxesAndTranspose(x, axis, backend);

  let reductionAxes = axes;
  if (inputWasTransposed) {
    const outputId = backend.dataIdMap.get(output.dataId).id;
    if (outputId !== xId) {
      // transpose was
      // not a no-op. We will need to dispose of this
      // once we are done.
      input = output;
      inputId = outputId;
      reductionAxes = backend_util.getInnerMostAxes(
          reductionAxes.length,
          input.shape.length);
    }
  }

  backend_util.assertAxesAreInnerMostDims(
      'sum', reductionAxes,
      input.shape.length);
  }
  const outputId = backend_util.getInnerMostAxes(input.shape.length,
      input.shape.length);
  const outputShape = backend_util.computeOutAndReduceShapes(input.shape, reductionAxes);
  const output = backend_util.makeOutput(outputShape, input.dtype);
  if (util.sizeFromShape(input.shape) !== 0) {
    wasmSum(inputId, reduceSize, CppDType[input.dtype], outputId);
  }

  if (inputWasTransposed) {
    // dispose of
    // the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  if (keepDims) {
    // reshape
    const newShape = backend_util.expandShapeToKeepDim(output.shape, originalAxes);
    output.shape = output.shape;
  }

  return output;
}

export const sumConfig: KernelConfig = {
  kernelName: Sum,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: sum as {} as KernelFunc
};

import {KernelConfig, Tan} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const tanConfig: KernelConfig = createUnaryKernelConfig(Tan);

import {KernelConfig, Tanh} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const tanhConfig: KernelConfig = createUnaryKernelConfig(Tanh);
```javascript
import {KernelConfig, KernelFunc, Tile, TileAttrs, TileInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {CpDType} from './types';

let wasmTile: (
    xId: number, xShapeBytes: Uint8Array, xShapeLength: number,
    newShapeBytes: Uint8Array, newShapeLength: number,
    dtype: CpDType, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmTile = backend.wasm.cwrap(Tile, null /* void */, [
    'number', // x_id
    'array',   // x_shape
    'number',  // x_shape.length
    'array',   // new_shape
    'number',  // new_shape.length
    'number'   // out_id
  ]);}

function tile(
    args: {inputs: TileInputs, backend: BackendWasm, attrs: TileAttrs}) {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const {reps} = attrs;

  const newShape: number[] = new Array(x.shape.length);
  for (let i = 0; i < newShape.length; i++) {
    newShape[i] = x.shape[i] * reps[i];
  }
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const newShapeBytes = new Uint8Array(new Int32Array(newShape).buffer);

  const out = backend.makeOutput(new Shape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmTile(xId, xShapeBytes, x.shape.length, newShapeBytes, newShape.length,
    CpDType[out.dtype], outId);
  return out;
}

export const tileConfig: KernelConfig = {
  kernelName: Tile,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: tile as {} as KernelFunc
};

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 *
 *=============================================================================

*/

import {KernelConfig, KernelFunc, TensorInfo, TopK, TopKAttrs, TopKInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {CpDType} from './types';

let wasmTopK: (
    xId: number, xShapeBytes: Uint8Array, xShapeLength: number,
    xDtype: CpDType, k: number, sorted: boolean, outValuesId: number,
    outIndicesId: number) => void;

function setup(backend: BackendWasm) {
  wasmTopK = backend.wasm.cwrap(TopK, null /* void */, [
    'number', // xId
    'array',   // x_shape
    'number',  // x_shape.length
    'number',  // x.dtype
    'number',  // k
    'bool',    // sorted
    'number',  // outValuesId
    'number',  // outIndicesId
  ]);}

function topk(
    args: {inputs: TopKInputs, backend: BackendWasm, attrs: TopKAttrs}) {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {k, sorted} = attrs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const outputShape = x.shape.slice();
  outputShape[outputShape.length - 1] = k;
  const outValues = backend.makeOutput(outputShape, x.dtype);
  const outValuesId = backend.dataIdMap.get(outValues.dataId).id;
  const outIndices = backend.makeOutput(outputShape, 'int32');
  const outIndicesId = backend.dataIdMap.get(outIndices.dataId).id;
  wasmTopK(xId, xShapeBytes, x.shape.length, CpDType[x.dtype], k, sorted,
    outValuesId, outIndicesId);
  return [outValues, outIndices];
}

export const topKConfig: KernelConfig = {
  kernelName: TopK,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: topk as {} as KernelFunc
};

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 *
 *=============================================================================

*/

import {KernelConfig, KernelFunc, TensorInfo, Transform, TransformAttrs, TransformInputs, util} from
```
We explicitly import the modular kernels so they get registered in the global registry when we compile the
library. A modular build would replace// the contents of this file and import only the kernels that are
needed.\nimport {KernelConfig, registerKernel} from '@tensorflow/tfjs-core';\n\nimport {KernelConfig, registerKernel} from '@tensorflow/tfjs-core';

import {fusedMatMulConfig} from './kernels/_FusedMatMul';
import {absConfig} from './kernels/Abs';
import {addConfig} from './kernels/Add';
import {addNConfig} from './kernels/AddN';
import {allConfig} from './kernels/All';
import {anyConfig} from './kernels/Any';
import {argMaxConfig} from './kernels/ArgMax';
import {avgPoolConfig} from './kernels/AvgPool';
import {batchMatMulConfig} from './kernels/BatchMatMul';

import {batchToSpaceNDConfig} from './kernels/BatchToSpaceND';
import {castConfig} from './kernels/Cast';
import {ceilConfig} from './kernels/Ceil';
import {clipByValueConfig} from './kernels/ClipByValue';
import {concatConfig} from './kernels/Concat';
import {conv2DConfig} from './kernels/Conv2D';
import {conv2DBackpropInputConfig} from './kernels/Conv2DBackpropInput';
import {cosConfig} from './kernels/Cos';
import {coshConfig} from './kernels/Cosh';
import {cropAndResizeConfig} from './kernels/CropAndResize';

import {cumsumConfig} from './kernels/Cumsum';
import {depthToSpaceConfig} from './kernels/DepthToSpace';
import {depthwiseConv2dNativeConfig} from './kernels/DepthwiseConv2dNative';
import {eluConfig} from './kernels/Elu';
import {equalConfig} from './kernels/Equal';
import {expConfig} from './kernels/Exp';
import {expandDimsConfig} from './kernels/ExpandDims';
import {fillConfig} from './kernels/Fill';
import {flipLeftRightConfig} from './kernels/FlipLeftRight';
import {floorConfig} from './kernels/Floor';
import {floorDivConfig} from './kernels/FloorDiv';
import {fusedBatchNormConfig} from './kernels/FusedBatchNorm';
import {fusedConv2DConfig} from './kernels/FusedConv2D';
import {fusedDepthwiseConv2DConfig} from './kernels/FusedDepthwiseConv2D';
import {gatherNdConfig} from './kernels/GatherNd';
import {gatherV2Config} from './kernels/GatherV2';
import {greaterConfig} from './kernels/Greater';
import {greaterEqualConfig} from './kernels/GreaterEqual';
import {identityConfig} from './kernels/Identity';
import {leakyReluConfig} from './kernels/LeakyRelu';
import {lessConfig} from './kernels/Less';
import {lessEqualConfig} from './kernels/LessEqual';
import {logConfig} from './kernels/Log';
import {logicalAndConfig} from './kernels/LogicalAnd';
import {maxConfig} from './kernels/Max';
import {maximumConfig} from './kernels/Maximum';
import {meanConfig} from './kernels/Mean';
import {minConfig} from './kernels/Min';
import {minimumConfig} from './kernels/Minimum';
import {mirrorPadConfig} from './kernels/MirrorPad';
import {multiplyConfig} from './kernels/Multiply';
import {negConfig} from './kernels/Neg';
import {nonMaxSuppressionV3Config} from './kernels/NonMaxSuppressionV3';
import {nonMaxSuppressionV4Config} from './kernels/NonMaxSuppressionV4';
import {nonMaxSuppressionV5Config} from './kernels/NonMaxSuppressionV5';
import {oneHotConfig} from './kernels/OneHot';
import {onesLikeConfig} from './kernels/OnesLike';
import {packConfig} from './kernels/Pack';
import {padV2Config} from './kernels/PadV2';
import {powConfig} from './kernels/Pow';
import {preluConfig} from './kernels/Prelu';
import {prodConfig} from './kernels/Prod';
import {rangeConfig} from './kernels/Range';
import {realDivConfig} from './kernels/RealDiv';
import {reluConfig} from './kernels/Relu';
import {relu6Config} from './kernels/Relu6';
import {roundConfig} from './kernels/Round';
import {rsqrtConfig} from './kernels/Rsqrt';
import {scatterNdConfig} from './kernels/ScatterNd';
import {selectConfig} from './kernels/Select';
import {sigmoidConfig} from './kernels/Sigmoid';
import {sinConfig} from './kernels/Sin';
import {sliceConfig} from './kernels/Slice';
import {softmaxConfig} from './kernels/Softmax';
import {spaceToBatchNDConfig} from './kernels/SpaceToBatchND';
import {splitVConfig} from './kernels/SplitV';
import {sqrtConfig} from './kernels/Sqrt';
import {squareConfig} from './kernels/Square';
import {squaredDifferenceConfig} from './kernels/SquaredDifference';
import {stepConfig} from './kernels/Step';
import {stridedSliceConfig} from './kernels/StridedSlice';
import {subConfig} from './kernels/Sub';
import {sumConfig} from './kernels/Sum';
import {tanConfig} from './kernels/Tan';
import {tanhConfig} from './kernels/Tanh';
import {tanhConfig} from './kernels/Tanh';
import {KernelConfig, KernelFunc, TensorInfo, Unpack, UnpackAttrs, UnpackInputs} from '@tensorflow/tfjs-core';

const ENV = env();

/**
 * True if SIMD is supported.
 */

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*=============================================================================
*/

import {env} from '@tensorflow/tfjs-core';

const ENV = env();

/**
 * True if SIMD is supported.
 */

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*/

{tileConfig} from './kernels/Tile';

import {topKConfig} from './kernels/TopK';

import {transposeConfig} from './kernels/Transpose';

import {unpackConfig} from './kernels/Unpack';

import {zerosLikeConfig} from './kernels/ZerosLike';

// List all kernel configs here

const kernelConfigs: KernelConfig[] = [
  absConfig,
  addConfig,
  addNConfig,
  allConfig,
  anyConfig,
  argMaxConfig,
  avgPoolConfig,
  batchMatMulConfig,
  batchToSpaceNDCfg,
  castConfig,
  ceilConfig,
  clipByValueConfig,
  concatConfig,
  conv2DConfig,
  conv2DBackpropInputConfig,
  cosConfig,
  coshConfig,
  cropAndResizeConfig,
  cumsumConfig,
  depthToSpaceConfig,
  depthwiseConv2dNativeConfig,
  eluConfig,
  equalConfig,
  expConfig,
  expandDimsConfig,
  fillConfig,
  flipLeftRightConfig,
  floorConfig,
  floorDivConfig,
  fusedMatMulConfig,
  fusedBatchNormConfig,
  fusedConv2DConfig,
  fusedDepthwiseConv2DConfig,
  gatherNdConfig,
  gatherV2Config,
  greaterConfig,
  greaterEqualConfig,
  identityConfig,
  leakyReluConfig,
  lessConfig,
  lessEqualConfig,
  logConfig,
  logicalAndConfig,
  maximumConfig,
  maxPoolConfig,
  meanConfig,
  minConfig,
  minimumConfig,
  mirrorPadConfig,
  multiplyConfig,
  negConfig,
  nonMaxSuppressionV3Config,
  nonMaxSuppressionV4Config,
  nonMaxSuppressionV5Config,
  notEqualConfig,
  oneHotConfig,
  onesLikeConfig,
  packConfig,
  padV2Config,
  powConfig,
  preluConfig,
  prodConfig,
  rangeConfig,
  realDivConfig,
  reluConfig,
  relu6Config,
  reshapeConfig,
  resizeBilinearConfig,
  reverseConfig,
  rotateWithOffsetConfig,
  rsqrtConfig,
  roundConfig,
  scatterNdConfig,
  selectConfig,
  sigmoidConfig,
  sinConfig,
  sliceConfig,
  softmaxConfig,
  spaceToBatchNDCfg,
  splitVConfig,
  sqrtConfig,
  squareConfig,
  squaredDifferenceConfig,
  stepConfig,
  stridedSliceConfig,
  subConfig,
  sumConfig,
  tanConfig,
  tanhConfig,
  tileConfig,
  topKConfig,
  transformConfig,
  transposeConfig,
  unpackConfig,
  zerosLikeConfig];

for (const kernelConfig of kernelConfigs) {
  registerKernel(kernelConfig);
}
```javascript
// From: https://github.com/GoogleChromeLabs/wasm-feature-detect
ENV.registerFlag('WASM_HAS_SIMD_SUPPORT', async () => WebAssembly.validate(new Uint8Array([0, 97, 115, 109, 1, 0, 0, 1, 4, 1, 96, 0, 0, 3, 2, 1, 0, 10, 9, 1, 7, 0, 65, 0, 253, 15, 26, 11])));/*\n*/

/**
 * True if threads are supported.
 */
// From: https://github.com/GoogleChromeLabs/wasm-feature-detect
ENV.registerFlag('WASM_HAS_MULTITHREAD_SUPPORT', async () => {
  // TODO(annxingyuan): Enable node support once this is resolved:
  // https://github.com/GoogleChromeLabs/wasm-feature-detect
  if (ENV.get('IS_NODE')) {
    return false;
  }
  try {
    // Test for transferability of SABs (needed for Firefox)
    new MessageChannel().port1.postMessage(new SharedArrayBuffer(1));
    // This typed array is a WebAssembly program containing threaded
    // instructions.
    return WebAssembly.validate(new Uint8Array([0, 97, 115, 109, 1, 0, 0, 1, 4, 1, 96, 0, 0, 3, 2, 1, 0, 5, 4, 1, 3, 1, 1, 10, 11, 1, 9, 0, 65, 0, 254, 16, 2, 0, 26, 11]));
  } catch (e) {
    return false;
  }
});
```

```
var WasmBackendModuleThreadedSimd = (function() {
  if (typeof __filename !== 'undefined') _scriptDir = _scriptDir || __filename;
  return function(WasmBackendModuleThreadedSimd) {
    WasmBackendModuleThreadedSimd = WasmBackendModuleThreadedSimd || {};

    function GROWABLE_HEAP_I8(){if(wasmMemory.buffer!=buffer){updateGlobalBufferAndViews(wasmMemory.buffer)}
      return HEAP8}
    function GROWABLE_HEAP_U8(){if(wasmMemory.buffer!=buffer){updateGlobalBufferAndViews(wasmMemory.buffer)}
      return HEAPU8}
    function GROWABLE_HEAP_I32(){if(wasmMemory.buffer!=buffer){updateGlobalBufferAndViews(wasmMemory.buffer)}
      return HEAP32}
    function GROWABLE_HEAP_U32(){if(wasmMemory.buffer!=buffer){updateGlobalBufferAndViews(wasmMemory.buffer)}
      return HEAPU32}
    function GROWABLE_HEAP_F64(){if(wasmMemory.buffer!=buffer){updateGlobalBufferAndViews(wasmMemory.buffer)}
      return HEAPF64}
    var Module=typeof WasmBackendModuleThreadedSimd!=="undefined"?WasmBackendModuleThreadedSimd:{};
    var readyPromiseResolve,readyPromiseReject;
    Module['ready']=new Promise(function(resolve,reject){
      readyPromiseResolve=resolve;
      readyPromiseReject=reject;
    });
    var moduleOverrides={};
    for(key in Module){if(Module.hasOwnProperty(key)){moduleOverrides[key]=Module[key]}}
    var arguments_=[],thisProgram="./this.program";
    var quit_=function(status,toThrow){throw toThrow};
    var ENVIRONMENT_IS_WEB=false;
    var ENVIRONMENT_IS_WORKER=false;
    var ENVIRONMENT_IS_NODE=false;
    var ENVIRONMENT_IS_SHELL=false;
    ENVIRONMENT_IS_WEB=typeof window==="object";
    ENVIRONMENT_IS_WORKER=typeof importScripts==="function";
    ENVIRONMENT_IS_NODE=typeof process==="object"&&typeof process.versions==="object"&&typeof process.versions.node==="string";
    ENVIRONMENT_IS_SHELL=!ENVIRONMENT_IS_WEB&&!ENVIRONMENT_IS_NODE&&!ENVIRONMENT_IS_WORKER;
    var ENVIRONMENT_IS_PTHREAD=Module['ENVIRONMENT_IS_PTHREAD']||false;if(ENVIRONMENT_IS_PTHREAD)
      var buffer=Module['buffer'];
    var scriptDirectory="";
    function locateFile(path){
      if(Module['locateFile']){
        return Module['locateFile'](path,scriptDirectory);
      }
      return scriptDirectory+path;
    }
    function read_readAsync(path){
      read_binary(path);}
    function shell_read(path,binary){
      if(!nodeFS)nodeFS=require('fs');
      if(!nodePath)nodePath=require('path');
      if(!filename)n
```
"+wasmBinaryFile+"}catch(function() {return getBinary(wasmBinaryFile)})} else {if(readAsync) {return new Promise(function(resolve, reject) {readAsync(wasmBinaryFile, function(response) {resolve(new Uint8Array(response))}, reject)})} return Promise.resolve().then(function() {return getBinary(wasmBinaryFile)})} function createWasm() {var info = {"a": asmLibraryArg}; function receiveInstance(instance, module) {var exports = instance.exports; Module["asm"] = exports; wasmTable = Module["asm"]["Iv"]; wasmModule = module; if (ENVIRONMENT_IS_PTHREAD) {var numWorkersToLoad = PThread.unusedWorkers.length; PThread.unusedWorkers.forEach(function(w) { PThread.loadWasmModuleToWorker(w, function() { if (!--numWorkersToLoad) removeRunDependency("wasm-instantiate") }) }); } if (!ENVIRONMENT_IS_PTHREAD) { addRunDependency("wasm-instantiate") } function receiveInstantiatedSource(output) { receiveInstance(output["instance"], output["module"]) } function instantiateArrayBuffer(receiver) { return getBinaryPromise().then(function() { return new Promise(function(resolve, reject) { resolve(receiver) }) }) } function instantiateAsync() { if (!wasmBinary && typeof WebAssembly.instantiateStreaming == "function" && !isDataURI(wasmBinaryFile) && !isFileURI(wasmBinaryFile) && typeof fetch == "function") { return fetch(wasmBinaryFile, { credentials: "same-origin" }).then(function(response) { var result = WebAssembly.instantiateStreaming(response, info); return result.then(function(receiveInstantiatedSource) { return receiveInstantiatedSource }) }) } return instantiateArrayBuffer(receiver) } if (Module["instantiateWasm"]) { try { var exports = Module["instantiateWasm"](info, receiveInstance); return exports } catch(e) { throw(e) } } function initPthreadsJS() { PThread.initRuntime() } function callRuntimeCallbacks(callbacks) { while (callbacks.length > 0) { var callback = callbacks.shift(); if (typeof callback == "function") { callback(Module) continue } var func = callback.func; if (typeof func == "number") { if (callback.arg === undefined) { wasmTable.get(func) } else { wasmTable.get(func)(callback.arg) } } else if (typeof func == "undefined") { func(callback.arg === undefined) } return { } } function _emscripten_futex_wake(addr, count) { if (addr <= 0 || addr > GROWABLE_HEAP_I8().length || addr & 3 != 0 || count < 0) return; if (addr & 3 != 0) return; if (addr <= 0 || addr > GROWABLE_HEAP_I8().length || addr & 3 != 0 || count < 0) return; } function _emscripten_futex_wait(addr, count) { if (addr == 0 || addr > GROWABLE_HEAP_I8().length || addr & 3 == 0 || count > 0) return; if (addr & 3 != 0) return; if (addr <= 0 || addr > GROWABLE_HEAP_I8().length || addr & 3 == 0 || count > 0) return; } function asmNodeExports() { return { } } function _emscripten莫名其ระว่างเจำเข็มตัว หนึ่งในข้อเรียกเชื่อมต่อแล้วแพร่กระจายไปยังเธอที่ประเทศที่ดูเหมือนว่าจะเป็นอย่างไรเป็นอย่างไร
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```javascript
function killThread(pthread_ptr) { if (ENVIRONMENT_IS_PTHREAD) throw "Internal Error! killThread() can only ever be called from main application thread!"; if (!pthread_ptr) throw "Internal Error! Null pthread_ptr in killThread()"; GROWABLE_HEAP_U32()[pthread_ptr+12>>2]=0; var pthread=PTHread.pthreads[pthread_ptr];pthread.worker.terminate();PTHread.freeThreadData(pthread);PTHread.runningWorkers.splice(PTHread.runningWorkers.indexOf(pthread.worker),1);pthread.worker=undefined;function cancelThread(pthread_ptr) { if (ENVIRONMENT_IS_PTHREAD) throw "Internal Error! cancelThread() can only ever be called from main application thread!"; if (!pthread_ptr) throw "Internal Error! Null pthread_ptr in cancelThread()"; var pthread=PTHread.pthreads[pthread_ptr];if (pthread) { GROWABLE_HEAP_U32()[pthread_ptr+12>>2]=0; var worker=pthread.worker;worker.postMessage({"cmd":"cancel"})} function cleanupThread(pthread_ptr) { if (ENVIRONMENT_IS_PTHREAD) throw "Internal Error! cleanupThread() can only ever be called from main application thread!"; if (!pthread_ptr) throw "Internal Error! Null pthread_ptr in cleanupThread()"; var pthread=PTHread.pthreads[pthread_ptr];if (pthread) { GROWABLE_HEAP_U32()[pthread_ptr+12>>2]=0; var worker=pthread.worker;worker.postMessage({"cmd":"exit"})} var PThread={unusedWorkers:[],runningWorkers:[],initMainThreadBlock:function() { var pthreadPoolSize=8; for (var i=0;i<pthreadPoolSize;++i) { PThread.allocateUnusedWorker(); } },initRuntime:function() { var tb=_malloc(228); for (var i=0;i<228/4;++i) { GROWABLE_HEAP_U32()[tb/4+i]=0; } GROWABLE_HEAP_I32()[tb+12>>2]=tb; var headPtr=tb+152; GROWABLE_HEAP_I32()[headPtr>>2]=headPtr; var tlsMemory=_malloc(512); for (var i=0;i<128;++i) { GROWABLE_HEAP_U32()[tlsMemory/4+i]=0; } Atomics.store(GROWABLE_HEAP_U32(),tb+100>>2,tlsMemory); GROWABLE_HEAP_U32()[tlsMemory/4+i]=0; PThread.threads={}; },runExitHandlersAndDeinitThread:function(tb,exitCode){ var tb=_pthread_self(); if (tb) { PThread.runExitHandlersAndDeinitThread(tb,exitCode); if (ENVIRONMENT_IS_PTHREAD){postMessage({"cmd":"cancelDone"})} } function threadExit(threadInfoStruct) { var tlsMemory=GROWABLE_HEAP_I32()[threadInfoStruct+100>>2]; PThread.freeThreadInfoStruct(threadInfoStruct); PThread.freeThreadData(threadInfoStruct); } function threadCancel() { PThread.runExitHandlersAndDeinitThread(_pthread_self(),-1); postMessage({"cmd":"cancelDone"}) } function threadExitHandlers() { for (var i in PThread.threads) { var pthread=PThread.threads[i]; if (pthread&&pthread.worker) { PThread.freeThreadInfoStruct(pthread.worker); PThread.freeThreadData(pthread); } } function threadInfoStruct()} function threadInfoStruct(threadInfoStruct) { PThread.freeThreadData(threadInfoStruct); PThread.freeThreadInfoStruct(threadInfoStruct); } }
```

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if (ENVIRONMENT_IS_NODE) {_emscripten_get_now=function(){var t=process['v\"time\"'];return t[0]*1e3+t[1]/1e6}} else if (ENVIRONMENT_IS_PTHREAD) {_emscripten_get_now=function(){return performance.now()-Module['\"__performance_now_clock_drift\"']}} else if (typeof dateNow !== "undefined") {_emscripten_get_now=dateNow} else _emscripten_get_now=function(){return performance.now();} function setErrNo(value){GROWABLE_HEAP_I32()[___errno_location()>>2]=value;return value} function _atexit(func, arg){if (ENVIRONMENT_IS_PTHREAD) return} function _emscripten_proxy_to_main_thread_js(1, func, arg) { function __emscripten_notify_thread_queue(targetThreadId, mainThreadId) { if (targetThreadId == mainThreadId) {postMessage({"cmd":"processQueuedMainThreadWork\"})} else if (ENVIRONMENT_IS_PTHREAD) {postMessage({"targetThread":targetThreadId,"cmd":"processThreadQueue\"})} else {var pthread=PThread.pthreads[targetThreadId];var worker(pthread.&pthread.worker;if (worker) {return worker.postMessage({"cmd":"processThreadQueue\"})}} return 1} function _abort(){abort()} function _emscripten_asm_const_int(code, sigPtr, argbuf){var args=readAsmConstArgs(sigPtr, argbuf);return ASM_CONSTS[code].apply(null, args)} function _emscripten_conditional_set_current_thread_status(expectedStatus, newStatus) {} function _emscripten_futex_wait(addr, val, timeout) {if (addr<=0||addr>GROWABLE_HEAP_I8().length||addr&3!=0)return-28; if (!ENVIRONMENT_IS_WEB) { var ret=Atomics.wait(GROWABLE_HEAP_I32(),addr>>2,val,timeout);if (ret==="timed-out")return-73;if (ret==="not-equal")return-6;if (ret==="ok")return 0;throw"Atomics.wait returned an unexpected value \"\""} else if (Atomics.load(GROWABLE_HEAP_I32(), addr>>2) != val) {return-6} lastAddr=Atomics.exchange(GROWABLE_HEAP_I32(), __emscripten_main_thread_futex>>2, addr);while (1) { var tNow=performance.now(); if (tNow>tEnd) { lastAddr=Atomics.exchange(GROWABLE_HEAP_I32(), __emscripten_main_thread_futex>>2, 0); return-73} lastAddr=Atomics.exchange(GROWABLE HEAP_I32(), __emscripten_main_thread_futex>>2, 0); if (lastAddr == 0) {break} _emscripten_main_thread_process_queued_calls(); if (Atomics.load(GROWABLE_HEAP_I32(), addr>>2) != val) { return-6} lastAddr=Atomics.exchange(GROWABLE_HEAP_I32(), __emscripten_main_thread_futex>>2, addr); } return 0} function _emscripten_memcpy_big(dest, src, num) { GROWABLE HEAP_U8().copyWithin(dest, src, src+num)} function _emscripten_num_logical_cores() { if (ENVIRONMENT_IS_NODE) return require("os").cpus().length; return navigator["hardwareConcurrency"]} function _emscripten_proxy_to_main_thread_js(index, sync) { var numCallArgs=arguments.length-2; var stack=stackSave(); var serializedNumCallArgs=numCallArgs; var args=stackAlloc(serializedNumCallArgs*8); var b=args>>3; for (var i=0; i<numCallArgs; i++) { var arg=arguments[2+i]; GROWABLE HEAP_F64()[b+i]=arg} var isEmAsmConst=index<0; var func=!isEmAsmConst?proxiedFunctionTable[index]:ASM_CONSTS[-index-1]; var ret=_emscripten_run_in_main_runtime_thread_js(index, serializedNumCallArgs, args, sync); stackRestore(stack); return ret} function _emscripten_receive_on_main_thread_js_callArgs={} function _emscripten_receive_on_main_thread_js_callArgs=[]; var readAsmConstArgsArray=[]; function readAsmConstArgs(sigPtr, buf) {readAsmConstArgsArray.length=0; var ch;buf>>, 2;while (ch=GROWABLE HEAP_U8()|sigPtr++){var double=ch<105; if (double&buf&1) buf++;readAsmConstArgsArray.push(double?GROWABLE HEAP_F64()|buf++, 1):GROWABLE HEAP_I32()|buf++; buf return readAsmConstArgsArray} function _emscripten_receive_on_main_thread_js_callArgs={index, numCallArgs, args} _emscripten_receive_on_main_thread_js_callArgs.length=numCallArgs; var b=args>>, 3; for (var i=0; i<numCallArgs; i++) { _emscripten_receive_on_main_thread_js_callArgs[i]=GROWABLE HEAP_F64()|b+i} var isEmAsmConst=index<0; var func=!isEmAsmConst?proxiedFunctionTable[index]:ASM CONSTS[-index-1]; return func.apply(null, _emscripten_receive_on_main_thread_js_callArgs)} function _emscripten_get_heap_size() { return GROWABLE HEAP_U8().length} function
Open Source Used in Cisco Meeting Server (formerly Acano Server) 3.6  2616

emscripten_realloc_buffer(size){try{wasmMemory.grow(size-
buffer.byteLength+65535>>16);updateGlobalBufferAndViews(wasmMemory.buffer);return
1}catch(e){}}function _emscripten_resize_heap(requestedSize){var
oldSize=_emscripten_get_heap_size();if(requestedSize<=oldSize){return false}var
maxHeapSize=2147483648;if(requestedSize>maxHeapSize){return false}for(var
cutDown=1;cutDown<=4;cutDown*=2){var
overGrownHeapSize=oldSize*(1+.2/cutDown);overGrownHeapSize=Math.min(overGrownHeapSize,requestedSize +100663296);var
newSize=Math.min(maxHeapSize,alignUp(Math.max(requestedSize,overGrownHeapSize),65536));var
replacement=emscripten_realloc_buffer(newSize);if(replacement){return true}return false}var
JSEvents={},inEventHandler=0,removeAllEventListeners:function(){}for(var i=JSEvents.eventHandlers.length-
1;i>=0;--
i){JSEvents._removeHandler(i)}JSEvents.eventHandlers=[];JSEvents.deferredCalls=[]},registerRemoveEventListener:function(){if(JSEvents.removeEventListenersRegistered){__ATEXIT__.push(JSEvents.removeAllEventListeners);JSEvents.removeEventListenersRegistered=true}},deferredCalls:[],deferCall:function(targetFunction,precedence ,argsList){function arraysHaveEqualContent(arrA,arrB){if(arrA.length!=arrB.length)return false;for(var i in
arrA){if(arrA[i]!=arrB[i]){return false}return true}for(var i in JSEvents.deferredCalls){var
call=JSEvents.deferredCalls[i];if(call.targetFunction==targetFunction&&!arraysHaveEqualContent(call.argsList,prev
edCall.argsList))return JSEvents.deferredCalls.push({targetFunction:targetFunction,precedence:precedence,argsList:argsList});JSEvents.deferredCalls.sort(function(x,y){return
x.precedence<y.precedence});},removeDeferredCalls:function(targetFunction){for(var
i=0;i<JSEvents.deferredCalls.length;++)if(JSEvents.deferredCalls[i].targetFunction==targetFunction){JSEvents.d
eferredCalls.splice(i,1);--
i}canPerformEventHandlerRequests:function(){return
JSEvents.inEventHandler&&JSEvents.currentEventHandler.allowsDeferredCalls},runDeferredCalls:function(){if(J
SEvents.canPerformEventHandlerRequests())return JSEvents.deferredCalls.sort(function(x,y){return
x.precedence<y.precedence});},removeDeferredCalls:function(targetFunction){for(var
i=0;i<JSEvents.deferredCalls.length;++)if(JSEvents.deferredCalls[i].targetFunction==targetFunction){JSEvents.d
eferredCalls.splice(i,1);--
i}call=JSEvents.deferredCalls[i];if(call.targetFunction==targetFunction.&
&arraysHaveEqualContent(call.argsList,prev
edCall.argsList))return JSEvents.deferredCalls.push({targetFunction:targetFunction,precedence:precedence,argsList:argsList});JSEvents.deferredCalls.sort(function(x,y){return
x.precedence<y.precedence});},removeDeferredCalls:function(targetFunction){for(var
i=0;i<JSEvents.deferredCalls.length;++)if(JSEvents.deferredCalls[i].targetFunction==targetFunction){JSEvents.d
eferredCalls.splice(i,1);--
i}call=JSEvents.deferredCalls[i];if(call.targetFunction==targetFunction.&
&arraysHaveEqualContent(call.argsList,prev
edCall.argsList))return JSEvents.deferredCalls.push({targetFunction:targetFunction,precedence:precedence,argsList:argsList});JSEvents.de
ferredCalls.splice(i,1);--
i;call.targetFunction.apply(null,argsList)}},eventHandlers:[],removeAllHandlersOnTarget:function(target,eventTypeString){for(var
i=0;i<JSEvents.eventHandlers.length;++)if(JSEvents.eventHandlers[i].target==target&&(!eventTypeString||eventTypeString==JSE
vents.eventHandlers[i].eventTypeString)){JSEvents._removeHandler(i--
)}},_removeHandler:function(targetFunction){var
h=JSEvents.eventHandlers[i];h.target.removeEventListener(h.eventTypeString,h.eventListenerFunc,h.useCapture);J
SEvents.eventHandlers.splice(i,1)},registerOrRemoveHandler:function(eventHandler){var jsEventHandler=function
jsEventHandler(event){++JSEvents.inEventHandler;JSEvents.currentEventHandler=eventHandler;JSEvents.runDef
eredCalls();eventHandler.handlerFunc(event);JSEvents.runDeferredCalls();--
JSEvents.inEventHandler();if(eventHandler.callbackfunc)eventHandler.eventListenerFunc=jsEventHandler;eventH
andler.target.addEventListener(eventTypeString.jsEventHandler.eventTypeString.jsEventHandler.useCapture);JSEvents.e
ventHandlers.push(eventHandler);JSEvents.registerRemoveEventListener();}else{for(var
i=0;i<JSEvents.eventHandlers.length;++)if(JSEvents.eventHandlers[i].target==eventHandler.target&&JSEvent
seventHandlers[i].eventTypeString==eventTypeString){JSEvents._removeHandler(i--
)}},queueEventHandlerOnThread_iiii:function(targetThread,eventHandlerFunc,eventTypeId,eventData,userData)
{var stackTop=StackSave();var
varargs=stackAlloc(12);GROWABLE_HEAP_132([varargs])=eventTypeId;GROWABLE_HEAP_132([varargs] +4)=eventTypeData;GROWABLE_HEAP_132([varargs] +8)=userData;__emscripten_call_on_thread(0,targetThr
ead,637534208,eventHandlerFunc,eventData,varargs);stackRestore(stackTop);getTargetThreadForEventCallback:function(targetThread){switch(targetThread){case 1:return 0;case 2:return PThread.currentProxiedOperationCallerThread;default:return
targetThread} },getNodeNameForTarget:function(target){if(target.tagName){if(target.tagName":"\#window":"\#window";
if(target==screen)return"#screen";return

target&&target.nodeName?'target.nodeName":""},fullscreenEnabled:function(){return

document.fullscreenEnabled||document.webkitFullscreenEnabled}},function stringToUTF8(jsString){var

length=lengthBytesUTF8(jsString)+1;var cString=_malloc(length);stringToUTF8(jsString,cString,length);return

cString}function

_emscripten_set_offscreencanvas_size_on_target_thread_js(targetThread,targetCanvas,width,height){var

stackTop=stackSave();var varargs=stackAlloc(12);var

targetCanvasPtr=0;if(targetCanvas){targetCanvasPtr=stringToNewUTF8(targetCanvas)}GROWABLE_HEAP_I32(
)[varargs+8>>2]=targetCanvasPtr;GROWABLE_HEAP_I32([varargs+4>>2]=width;GROWABLE_HEAP_I32([var

args+8>>2]=height;__emscripten_call_on_thread(0,targetThread,657457152,0,targetCanvasPtr,varargs);stackResto

er(stackTop)}function

_emscripten_set_offscreencanvas_size_on_target_thread(targetThread,targetCanvas,width,height){targetCanvas=targetC

anvas?UTF8ToString(targetCanvas):"";__emscripten_set_offscreencanvas_size_on_target_thread_js(targetThrea

d,targetCanvas,width,height)}function maybeCStringToJsString(cString){return

cString>2?UTF8ToString(cString):cString}var specialHTMLTargets=[0,typeof

document!=="undefined"?document:0,typeof window!=="undefined"?window:0];function

findEventTarget(target){target=maybeCStringToJsString(target);var

domElement=specialHTMLTargets[target]||(typeof
document!=="undefined"?document.querySelector(target):undefined);return domElement}function

findCanvasEventTarget(target){return findEventTarget(target)}function

_emscripten_set_canvas_element_size_calling_thread(target,width,height){var

canvas=findCanvasEventTarget(target);if(!canvas)return-4;if(canvas.canvasSharedPtr){GROWABLE_HEAP_I32()

[canvas.canvasSharedPtr>>2]=width;GROWABLE_HEAP_I32([canvas.canvasSharedPtr+4>>2]=height;if(canvas.offscreenCanvas)[canvas.controlTransferredOffscreen][if

(canvas.offscreenCanvas)canvas=canvas.offscreenCanvas;var

autoResizeViewport=false;if(canvas.GLctxObject&canvas.GLctxObject.GLctx){var


if(canvas.canvasSharedPtr){var

targetThread=GROWABLE_HEAP_I32([canvas.canvasSharedPtr+8>>2];__emscripten_set_offscreencanvas_size_on_0

_target_thread(targetThread,target,width;height):return 1}else{return-4}return 0}function

_emscripten_set_canvas_element_size_main_thread(target,width,height){if(ENVIRONMENT_IS_PTHREAD)return

_emscripten_proxy_to_main_thread_js(2,1,target,width,height);return

_emscripten_set_canvas_element_size_calling_thread(target,width,height)}function

_emscripten_set_canvas_element_size(target,width,height){var

canvas=findCanvasEventTarget(target);if(canvas){return

_emscripten_set_canvas_element_size_calling_thread(target,width,height)}else{return

_emscripten_set_canvas_element_size_main_thread(target,width,height)}}function

_emscripten_set_current_thread_status(newStatus){}function

__webgl_enable_ANGLE_instanced_arrays(ctx){var

ext=ctx.getExtension("ANGLE_instanced_arrays");if(ext["vertexAttribDivisorANGLE"]["vertexAttribDivisor"]="function(index,divisor)[extendrawingArraysInstancedANGLE]="function(mode,first,count,primcou

nt)["drawArraysInstancedANGLE"][mode,first,count,primcount]+["drawElementsInstancedANGLE"][mode,count,type,indices,primcount]["drawElementsInstancedANGLE"][mode,count,type,indices,primcount][return

1]})function __webgl_enable_OES_vertex_array_object(ctx){var

ext=ctx.getExtension("OES_vertex_array_object");if(ext["createVertexArrayOES"]="function(){return

ext["createVertexArrayOES"]();};ctx["deleteVertexArrayOES"]="function(vao)[ext["deleteVertexArrayOES"](vao)];
var _RealDiv=Module['\_RealDiv\']=function(){return(_RealDiv=Module['\_RealDiv\']=Module['asm\'](['Ja\']).apply(null,arguments))};
var _Relu=Module['\_Relu\']=function(){return(_Relu=Module['\_Relu\']=Module['asm\'](['Ka\']).apply(null,arguments))};
var _Relu6=Module['\_Relu6\']=function(){return(_Relu6=Module['\_Relu6\']=Module['asm\'](['La\']).apply(null,arguments))};
var _ResizeBilinear=Module['\_ResizeBilinear\']=function(){return(_ResizeBilinear=Module['\_ResizeBilinear\']=Module['asm\'](['Ma\']).apply(null,arguments))};
var _Reverse=Module['\_Reverse\']=function(){return(_Reverse=Module['\_Reverse\']=Module['asm\'](['Na\']).apply(null,arguments))};
var _RotateWithOffset=Module['\_RotateWithOffset\']=function(){return(_RotateWithOffset=Module['\_RotateWithOffset\']=Module['asm\'](['Oa\']).apply(null,arguments))};
var _Round=Module['\_Round\']=function(){return(_Round=Module['\_Round\']=Module['asm\'](['Pa\']).apply(null,arguments))};
var _Rsqrt=Module['\_Rsqrt\']=function(){return(_Rsqrt=Module['\_Rsqrt\']=Module['asm\'](['Qa\']).apply(null,arguments))};
var _ScatterNd=Module['\_ScatterNd\']=function(){return(_ScatterNd=Module['\_ScatterNd\']=Module['asm\'](['Ra\']).apply(null,arguments))};
var _SelectV2=Module['\_SelectV2\']=function(){return(_SelectV2=Module['\_SelectV2\']=Module['asm\'](['Sa\']).apply(null,arguments))};
var _Sigmoid=Module['\_Sigmoid\']=function(){return(_Sigmoid=Module['\_Sigmoid\']=Module['asm\'](['Ta\']).apply(null,arguments))};
var _Sin=Module['\_Sin\']=function(){return(_Sin=Module['\_Sin\']=Module['asm\'](['Ua\']).apply(null,arguments))};
var _Softmax=Module['\_Softmax\']=function(){return(_Softmax=Module['\_Softmax\']=Module['asm\'](['Va\']).apply(null,arguments))};
var _Square=Module['\_Square\']=function(){return(_Square=Module['\_Square\']=Module['asm\'](['Xa\']).apply(null,arguments))};
var _SquaredDifference=Module['\_SquaredDifference\']=function(){return(_SquaredDifference=Module['\_SquaredDifference\']=Module['asm\'](['Ya\']).apply(null,arguments))};
var _Step=Module['\_Step\']=function(){return(_Step=Module['\_Step\']=Module['asm\'](['Za\']).apply(null,arguments))};
var _StridedSlice=Module['\_StridedSlice\']=function(){return(_StridedSlice=Module['\_StridedSlice\']=Module['asm\'](['\_a\']).apply(null,arguments))};
var _Sub=Module['\_Sub\']=function(){return(_Sub=Module['\_Sub\']=Module['asm\'](['\_b\']).apply(null,arguments))};
var _Sum=Module['\_Sum\']=function(){return(_Sum=Module['\_Sum\']=Module['asm\'](['ab\']).apply(null,arguments))};
var _Tan=Module['\_Tan\']=function(){return(_Tan=Module['\_Tan\']=Module['asm\'](['bb\']).apply(null,arguments))};
var _Tanh=Module['\_Tanh\']=function(){return(_Tanh=Module['\_Tanh\']=Module['asm\'](['cb\']).apply(null,arguments))};
var _Tile=Module['\_Tile\']=function(){return(_Tile=Module['\_Tile\']=Module['asm\'](['db\']).apply(null,arguments))};
var _TopK=Module['\_TopK\']=function(){return(_TopK=Module['\_TopK\']=Module['asm\'](['eb\']).apply(null,arguments))};
```javascript
function convertReturnValue(ret) { if (returnType === "string") return UTF8ToString(ret); if (returnType === "boolean") return Boolean(ret); return ret }

var func = getCFunc(ident); var cArgs = []; var stack = 0; if (args) { for (var i = 0; i < args.length; ++i) {
  var converter = toC[argTypes[i]]; if (converter) {
    stack = stackSave(); cArgs[i] = converter(args[i]);
  } else {
    cArgs[i] = args[i];
  }
}

var numArgs = argTypes.every(function (type) { return returnType === "number" });
var numericRet = returnType === "string" && numArgs && opts;

function TextDecoder() { return undefined; } new TextDecoder("utf8"); undefined; function

UTF8ArrayToString(heap, idx, maxBytesToRead) {
  var endIdx = idx + maxBytesToRead;
  var endPtr = idx;
  while (heap[endPtr] && !(endPtr >= endIdx)) {
    ++endPtr;
  }

  if (endPtr - idx > 16 && heap.subarray && UTF8Decoder)
    return UTF8Decoder.decode(heap.subarray(idx, endPtr));
  else {
    var str = "\" \" + cArgs[i] + "\" \"; if (stack === 0) stackSave();
    cArgs[i] = converter(args[i]);
  } else {
    cArgs[i] = args[i];
  }

  var ret = func.apply(null, cArgs); ret = convertReturnValue(ret);
  if (stack !== 0) stackRestore(stack);
  return ret } function

CWrap(ident, returnType, argTypes, opts) {
  argTypes = argTypes || []; var numericArgs = argTypes.every(function (type) { return type === "number" });
  var numericRet = returnType !== "string" && numericArgs && !opts;
  if (numericRet && numericArgs && !opts) {
    return getCFunc(ident);
  } return function () {
    return ccall(ident, returnType, argTypes, arguments, opts);
  } } function

UTF8ToString(str, maxBytesToWrite) {
  if (!maxBytesToWrite) return 0;
  var startIdx = outIdx;
  var endIdx = outIdx + maxBytesToWrite - 1;
  for (var i = 0; i < str.length; ++i) {
    var u = str.charCodeAt(i);
    if (u >= 55296 && u <= 57343) {
      var u1 = str.charCodeAt(++i);
      if ((u1 & 128) !== 0) {
        if (outIdx >= endIdx) break;
        heap[outIdx++] = 65536 | (u & 1023) << 10 | u1 & 1023;
      } else {
        if (u <= 2047) {
          if (outIdx + 1 >= endIdx) break;
          heap[outIdx++] = 192 | u >> 6;
          heap[outIdx++] = 128 | u & 63;
        } else if (u <= 65535) {
          if (outIdx + 2 >= endIdx) break;
          heap[outIdx++] = 224 | u >> 12;
          heap[outIdx++] = 128 | u >> 6 & 63;
          heap[outIdx++] = 128 | u & 63;
        } else {
          if (outIdx + 3 >= endIdx) break;
          heap[outIdx++] = 240 | u >> 18;
          heap[outIdx++] = 128 | u >> 12 & 63;
          heap[outIdx++] = 128 | u >> 6 & 63;
          heap[outIdx++] = 128 | u & 63;
        }
        heap[outIdx] = 0;
      }
    } else {
      if (outIdx >= endIdx) break;
      heap[outIdx++] = u;
    }
  }
  heap[outIdx] = 0;
  return outIdx - startIdx
} function

stringToUTF8Array(str, outPtr, maxBytesToWrite) {
  writeArrayToMemory(array, buffer); HEAP8.set(array, buffer)
  function

  function writeArrayToMemory(array, buffer) {
    HEAP8.set(array, buffer)
  } function

  function alignUp(x, multiple) {
    if (x % multiple > 0) { x += multiple - x % multiple } return x
  } function

  function updateGlobalBufferAndViews(buf) {
    buffer = buf;
    Module["HEAP8"] = HEAP8 = new Uint8Array(buf);
    Module["HEAP16"] = HEAP16 = new Uint16Array(buf);
    Module["HEAP32"] = HEAP32 = new Uint32Array(buf);
    Module["HEAPU8"] = HEAPU8 = new Uint8Array(buf);
    Module["HEAPU16"] = HEAPU16 = new Uint16Array(buf);
    Module["HEAPU32"] = HEAPU32 = new Uint32Array(buf);
    Module["HEAPF32"] = HEAPF32 = new Float32Array(buf);
    Module["HEAPF64"] = HEAPF64 = new Float64Array(buf);
  } function
```

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**Open Source Used in Cisco Meeting Server (formerly Acano Server) 3.6**

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Open Source Used in Cisco Meeting Server (formerly Acano Server) 3.6
var __Step=Module["_Step"] = function(){ return (__Step=Module["_Step"] = Module["asm"])["Ia"]}.apply(null,arguments)};var _StridedSlice=Module["_StridedSlice"] = function(){ return (_StridedSlice=Module["_StridedSlice"] = Module["asm"])["Ja"]}.apply(null,arguments)};var _Sub=Module["_Sub"] = function(){ return (_Sub=Module["_Sub"] = Module["asm"])["Ka"]}.apply(null,arguments)};var _Sum=Module["_Sum"] = function(){ return (_Sum=Module["_Sum"] = Module["asm"])["La"]}.apply(null,arguments)};var _Tan=Module["_Tan"] = function(){ return (_Tan=Module["_Tan"] = Module["asm"])["Ma"]}.apply(null,arguments)};var _Tanh=Module["_Tanh"] = function(){ return (_Tanh=Module["_Tanh"] = Module["asm"])["Na"]}.apply(null,arguments)};var _Tile=Module["_Tile"] = function(){ return (_Tile=Module["_Tile"] = Module["asm"])["Oa"]}.apply(null,arguments)};var _TopK=Module["_TopK"] = function(){ return (_TopK=Module["_TopK"] = Module["asm"])["Pa"]}.apply(null,arguments)};var _Transform=Module["_Transform"] = function(){ return (_Transform=Module["_Transform"] = Module["asm"])["Qa"]}.apply(null,arguments)};var _Transpose=Module["_Transpose"] = function(){ return (_Transpose=Module["_Transpose"] = Module["asm"])["Ra"]}.apply(null,arguments)};var __FusedMatMul=Module["__FusedMatMul"] = function(){ return (__FusedMatMul=Module["__FusedMatMul"] = Module["asm"])["Sa"]}.apply(null,arguments)};var _malloc=Module["_malloc"] = function(){ return (_malloc=Module["_malloc"] = Module["asm"])["Ta"]}.apply(null,arguments)};var _free=Module["_free"] = function(){ return (_free=Module["_free"] = Module["asm"])["Ua"]}.apply(null,arguments)};var ___errno_location=Module["___errno_location"] = function(){ return(___errno_location=Module["___errno_location"] = Module["asm"])["Va"]}.apply(null,arguments)};var stackSave=Module["stackSave"] = function(){ return(stackSave=Module["stackSave"] = Module["asm"])["Wa"]}.apply(null,arguments)};var stackRestore=Module["stackRestore"] = function(){ return(stackRestore=Module["stackRestore"] = Module["asm"])["Xa"]}.apply(null,arguments)};var stackAlloc=Module["stackAlloc"] = function(){ return(stackAlloc=Module["stackAlloc"] = Module["asm"])["Ya"]}.apply(null,arguments)};var runCaller() { if (!calledRun) return; dependenciesFulfilled = function() { if (done) return; runCaller(); } runCaller(); run(); } module.exports = WasmBackendModule;
import './flags_wasm';

import {backend_util, BackendTimingInfo, DataStorage, DataType, deprecationWarn,
    engine, env, KernelBackend, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasmModule,
    WasmFactoryConfig} from '../wasm-out/tfjs-backend-wasm';
import {BackendWasmThreadedSimdModule} from '../wasm-out/tfjs-backend-wasm-threaded-simd';
import wasmFactoryThreadedSimd from '../wasm-out/tfjs-backend-wasm-threaded-simd.worker.js';
import wasmFactory from '../wasm-out/tfjs-backend-wasm.js';
// @ts-ignore
import {wasmWorkerContents} from '../wasm-out/tfjs-backend-wasm-threaded-simd.worker.js';

interface TensorData {
  id: number;
  memoryOffset: number;
  shape: number[];
  dtype: DataType;
  refCount: number;
  /** Only used for string tensors, storing encoded bytes. */
  stringBytes?: Uint8Array[];
}

export type DataId = object;  // object instead of {} to force non-primitive.

export class BackendWasm extends KernelBackend {
  // 0 is reserved for null data ids.
  private dataIdNextNumber = 1;
  dataIdMap:
      DataStorage<TensorData>;

  constructor(public wasm:
      BackendWasmModule|BackendWasmThreadedSimdModule) {
    super();
    this.wasm.tfjs.initWithThreadsCount(threadsCount);
    actualThreadsCount = this.wasm.tfjs.getThreadsCount();
    this.dataIdMap = new DataStorage(this, engine());
  }

  write(values: backend_util.BackendValues, shape: number[], dtype: DataType):
      DataId {
    const dataId = {id: this.dataIdNextNumber++};
    this.move(dataId, values, shape, dtype, 1);
    return dataId;
  }

  numDataIds(): number {
    return this.dataIdMap.numDataIds();
  }

  async time(f: () => void): Promise<BackendTimingInfo> {
    const start =
        util.now();
    f();
    const kernelMs = util.now() - start;
    return {kernelMs};
  }

  move(
      dataId:
          DataId, values: backend_util.BackendValues, shape: number[],
      dtype: DataType, refCount: number): void {
    const id = this.dataIdNextNumber++;
    if (dtype === 'string') {
      const stringBytes = values as Uint8Array[];
      this.dataIdMap.set(
          dataId,
          {id, stringBytes, shape, dtype, memoryOffset: null, refCount});
      return;
    }

    const size = util.sizeFromShape(shape);
    const numBytes = size *
        util.bytesPerElement(dtype);
    const memoryOffset = this.wasm._malloc(numBytes);
    this.dataIdMap.set(dataId, {id, memoryOffset, shape, dtype, refCount});
    if (values != null) {
      this.wasm.HEAPU8.set(
          new Uint8Array((values as backend_util.TypedArray).buffer,
              (values as backend_util.TypedArray).byteOffset, numBytes),
              memoryOffset);
    }
  }

  async read(dataId: DataId): Promise<backend_util.BackendValues> {
    return this.readSync(dataId);
  }

  readSync(dataId: DataId): backend_util.BackendValues {
    const {memoryOffset,
        dtype, shape, stringBytes} = this.dataIdMap.get(dataId);
    if (dtype === 'string') {
      return stringBytes;
    }
    const bytes = this.wasm.HEAPU8.slice(
        memoryOffset, memoryOffset +
        util.sizeFromShape(shape) * util.bytesPerElement(dtype));
    return typedArrayFromBuffer(bytes.buffer, dtype);
  }

  /**
   * Dispose the memory if the dataId has 0 refCount. Return true if the memory
   * is released, false otherwise.
   * @param dataId
   * @param force Optional, remove the data regardless of refCount
   */
  disposeData(dataId: DataId, force = false): boolean {
    if (this.dataIdMap.has(dataId)) {
      const data = this.dataIdMap.get(dataId);
      if (!force && data.refCount > 0) {
        return false;
      }
      return this.dataIdMap.delete(dataId);
    }
    return true;
  }

  /**
   * Return refCount of a `TensorData`. */
  refCount(dataId: DataId): number {
    if (this.dataIdMap.has(dataId)) {
      return dataId.refCount;
    }
    return 0;
  }

  incRef(dataId: DataId) {
    const data = this.dataIdMap.get(dataId);
    if (data != null) {
      data.refCount++;
    }
  }

  floatPrecision():
      32 {
    return 32;
  }

  // Returns the memory offset of a tensor. Useful for debugging and unit testing.
}
getMemoryOffset(dataId: DataId): number {
    return this.dataIdMap.get(dataId).memoryOffset;
  }

dispose() {
    this.wasm.tfjs.dispose();
    if (this.wasm.PThread) {
      this.wasm.PThread.terminateAllThreads();
    }
    this.wasm = null;
    this.memory() {
      return [false];
    }
  }

memory() {
    return {unreliable: false};
  }

makeOutput(shape: number[], dtype: DataType, memoryOffset?: number) {
    let dataId: {};
    if (memoryOffset === null) {
      dataId = this.write(null, {values: shape, shape, dtype});
    } else {
      const id = this.dataIdNextNumber++;
      dataId = {id};
      this.dataIdMap.set(dataId, {id, memoryOffset, shape, dtype, refCount: 1});
      this.wasm.HEAPU8.buffer construed = this.buffer;
      this.wasm.tfjs.registerTensor(id, size, memoryOffset);
    }
    return {dataId, shape, dtype};
  }

memoryArrayFromHeap({shape, dtype, dataId}: TensorInfo): backend_util.TypedArray {
    const buffer = this.wasm.HEAPU8.buffer;
    const memoryOffset = this.dataIdMap.get(dataId).construct.size;
    switch (dtype) {
      case 'float32':
        return new Float32Array(buffer, memoryOffset, size);
      case 'int32':
        return new Int32Array(buffer, memoryOffset, size);
      case 'bool':
        return new Uint8Array(buffer, memoryOffset, size);
      default:
        throw new Error(`Unknown dtype ${dtype}`);
    }
  }

createInstantiateWasmFunc(path: string) {
  // this will be replace by rollup plugin pathWechatWebAssembly in
  // minprogram's output.
  // tslint:disable-next-line:no-any
  return (imports: any, callback: any) => {
    util.fetch(path, {credentials: 'same-origin'}).then((response) => {
      if (!response['ok']) {
        imports.env.a(`failed to load wasm binary file at '${path}'`);
      }
      response.arrayBuffer().then(binary => {
        WebAssembly.instantiate(binary, imports).then(output => {
          callback(output.instance, output.module);
        });
      });
    });
    return {};
  };

getPathToWasmBinary(
    simdSupported: boolean, threadsSupported: boolean,
    wasmModuleFolder: string) {
  if (wasmPath != null) {
    return wasmPath;
  }

  let path: WasmBinaryName = 'tfjs-backend-wasm.wasm';
  if (simdSupported && threadsSupported) {
    path = 'tfjs-backend-wasm-threaded-simd.wasm';
  } else if (simdSupported) {
    path = 'tfjs-backend-wasm-simd.wasm';
  }
  if (wasmFileMap != null) {
    return wasmFileMap[path] || null;
  }
  path = wasmFileMap[path] || null;
  this.wasmModuleFolder = null;
  this.modulePath = null;
  return new Uint8Array(buffer, memoryOffset, size);

  if (customFetch) {
    factoryConfig.instantiateWasm =
      createInstantiateWasmFunc(getPathToWasmBinary(
          simdSupported, threadsSupported as boolean, threadsSupported as boolean,
          wasmPathPrefix != null ? wasmPathPrefix : prefix));
    wasmWorkerContents = null;
  }

  let initialized = false;

factoryConfig.onAbort = () => {
    // Emscripten already called console.warn so no need to double log
    if (initialized) {
        return;
    }
    if (initAborted) {
        // Emscripten calls `onAbort` twice, resulting in double error messages.
        return;
    }
    initAborted = true;
    const rejectMsg = `Make sure the server can serve the `.wasm` file relative to the `.bundle.js` file. For more details see https://github.com/tensorflow/tfjs/blob/master/tfjs-backend-wasm/README.md#using-bundlers`;

    let wasm: Promise<BackendWasmModule> = null;
    // If `wasmPath` has been defined we must initialize the vanilla module.
    if (threadsSupported && simdSupported && wasmPath == null) {
        factoryConfig.mainScriptUrlOrBlob = new Blob([`var WasmBackendModuleThreadedSimd = ` + wasmFactoryThreadedSimd.toString()]);
        wasm = wasmFactoryThreadedSimd(factoryConfig);
    } else {
        // The wasmFactory works for both vanilla and SIMD binaries.
        wasm = wasmFactory(factoryConfig);
    }

    // The WASM module has been successfully created by the factory.
    wasm.then((module) => {
        initialized = true;
        initAborted = false;

        const voidReturnType: string = null;
        module.tfjs = {
            init: module.cwrap('init', null, ['number']),
            initWithThreadsCount: module.cwrap('init_with_threads_count', null, ['number']),
            getThreadsCount: module.cwrap('get_threads_count', 'number', []),
            registerTensor: module.cwrap('register_tensor', null, ['number', 'number', 'number']),
            disposeData: module.cwrap('dispose_data', voidReturnType, ['number']),
            dispose: module.cwrap('dispose', voidReturnType, []),
        };

        resolve({wasm: module});
    });
};

function typedArrayFromBuffer(buffer: ArrayBuffer, dtype: DataType): backend_util.TypedArray {
    switch (dtype) {
        case 'float32':
            return new Float32Array(buffer);
        case 'int32':
            return new Int32Array(buffer);
        case 'bool':
            return new Uint8Array(buffer);
        default:
            throw new Error(`Unknown dtype ${dtype}`);
    }
}

const wasmBinaryNames = ['tfjs-backend-wasm.wasm', 'tfjs-backend-wasm-simd.wasm', 'tfjs-backend-wasm-threaded-simd.wasm'] as const;
type WasmBinaryName = typeof wasmBinaryNames[number];

let wasmPath: string = null;
let wasmPathPrefix: string = null;
let wasmFileMap: {[key in WasmBinaryName]?: string} = {};
let initAborted = false;
let customFetch = false;

/**
 * @deprecated Use `setWasmPaths` instead.
 * Sets the path to the `.wasm` file which will be fetched when the wasm
 * backend is initialized. See
 */
export function setWasmPath(path: string, usePlatformFetch = false): void {
    deprecationWarn(`setWasmPath has been deprecated in favor of setWasmPaths and will be removed in a future release.`);
    if (initAborted) {
        throw new Error(`The WASM backend was already initialized. Make sure you call ` + `+n setWasmPath()` before you call `tf.setBackend()` or `tf.ready()``);
    }
    wasmPath = path;
    customFetch = usePlatformFetch;
}

/**
 * Configures the locations of the WASM binaries.
 * ```js
 * setWasmPaths({
 *  'tfjs-backend-wasm.wasm': 'renamed.wasm',
 *  'tfjs-backend-wasm-simd.wasm': 'renamed-simd.wasm',
 *  'tfjs-backend-wasm-threaded-simd.wasm': 'renamed-threaded-simd.wasm'
 * });
 * ```
 *
 * @param prefixOrFileMap This can be either a string or object:
 *  - (string) The path to the directory
 *     where the WASM binaries are located.
 *  - (object) Mapping from names of WASM binaries to custom full paths specifying the locations of those binaries. This is useful if you use WASM binaries which are not all located in the same directory, or if your
 *     WASM binaries have been renamed
 *
 * @export
 * @param platformFetch optional boolean to use platform fetch to download the wasm file, default to false
 */
export function setWasmPaths(prefixOrFileMap: string|{[key in WasmBinaryName]?: string}, usePlatformFetch = false): void {
    if (initAborted) {
        throw new Error(`The WASM backend was already initialized. Make sure you call ` + `+n setWasmPaths()` before you call `tf.setBackend()` or `tf.ready()``);
    }
    if (prefixOrFileMap instanceof Function) {
        return prefixOrFileMap;
    }
    if (prefixOrFileMap instanceof String) {
        wasmPath = prefixOrFileMap;
    } else {
        for (let key in prefixOrFileMap) {
            wasmFileMap[key] = prefixOrFileMap[key];
        }
    }
    if (usePlatformFetch) {
        // Use platform fetch to download the wasm file.
    } else {
        // Use custom fetch.
    }
}
Used in unit tests. */export function resetWasmPath(): void {
  wasmPath = null;
  wasmPathPrefix = null;
  wasmFileMap = {};
  customFetch = false;
  initAborted = false;
  unlet threadsCount = -1;
  unlet actualThreadsCount = -1;
  *\n  * Sets the number of threads that will be used by XNNPACK to create * threadpool (default to the number of logical CPU cores).
  *\n  * This must be called before calling 'tf.setBackend('wasm').'
  *\n  * Sets the actual threads count that is used by XNNPACK.
  *\n  * It is set after the backend is initialized.
  */export function setThreadsCount(numThreads: number) {
  threadsCount = numThreads;
}

/**
 * Gets the actual threads count that is used by XNNPACK.
 * It is set after the backend is initialized.
 */
export function getThreadsCount(): number {
  if (actualThreadsCount === -1) {
    throw new Error(`WASM backend not initialized.`);
  }
  return actualThreadsCount;
}

let threadsCount = -1;
let actualThreadsCount = -1;

/**
 * Sets the number of threads that will be used by XNNPACK to create
 * threadpool (default to the number of logical CPU cores).
 * This must be called before calling 'tf.setBackend('wasm').'
 *\n * Sets the actual threads count that is used by XNNPACK.
 *\n * It is set after the backend is initialized.
 */
export function resetWasmPath(): void {
  wasmPath = null;
  wasmPathPrefix = null;
  wasmFileMap = {};
  customFetch = false;
  initAborted = false;
  unlet threadsCount = -1;
  unlet actualThreadsCount = -1;
  *\n  * Sets the number of threads that will be used by XNNPACK to create
 * threadpool (default to the number of logical CPU cores).
 *\n  * This must be called before calling 'tf.setBackend('wasm').'
 *\n  * Sets the actual threads count that is used by XNNPACK.
 *\n  * It is set after the backend is initialized.
 */
export function setThreadsCount(numThreads: number) {
  threadsCount = numThreads;
}

/**
 * Gets the actual threads count that is used by XNNPACK.
 * It is set after the backend is initialized.
 */
export function getThreadsCount(): number {
  if (actualThreadsCount === -1) {
    throw new Error(`WASM backend not initialized.`);
  }
  return actualThreadsCount;
}

let threadsCount = -1;
let actualThreadsCount = -1;

/**
 * Sets the number of threads that will be used by XNNPACK to create
 * threadpool (default to the number of logical CPU cores).
 * This must be called before calling 'tf.setBackend('wasm').'
 *\n * Sets the actual threads count that is used by XNNPACK.
 *\n * It is set after the backend is initialized.
 */
export function resetWasmPath(): void {
  wasmPath = null;
  wasmPathPrefix = null;
  wasmFileMap = {};
  customFetch = false;
  initAborted = false;
  unlet threadsCount = -1;
  unlet actualThreadsCount = -1;
  *\n  * Sets the number of threads that will be used by XNNPACK to create
 * threadpool (default to the number of logical CPU cores).
 *\n  * This must be called before calling 'tf.setBackend('wasm').'
 *\n  * Sets the actual threads count that is used by XNNPACK.
 *\n  * It is set after the backend is initialized.
 */
export function setThreadsCount(numThreads: number) {
  threadsCount = numThreads;
}
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* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm-dist/tf-backend-wasm.fesm.min.js.map

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```javascript

[[null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null][null]`
BackendWasm, inputs: MaxInputs, attrs: MaxAttrs]:

TensorInfo {
  const {backend, inputs, attrs} = args;
  const {reductionIndices: axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    input = transposed;
    inputId = transposedId;
  }

  const inputRank = input.shape.length;
  backend_util.assertAxesAreInnerMostDims('max', axes, inputRank);

  const [outShape, reduceShape] =
      backend_util.computeOutAndReduceShapes(input.shape, axes);

  const reduceSize = util.sizeFromShape(reduceShape);

  const out = backend.makeOutput(outShape, x.dtype);
  if (reduceSize !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmMax(inputId, CppDType[x.dtype], reduceSize, outId);
  }

  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  if (keepDims) {
    // reshape
    const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
    out.shape = newShape;
  }

  return out;
}

export const maxConfig: KernelConfig = {
  kernelName: Max,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: max as {} as KernelFunc
};

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Max.js.map
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import {AvgPool, AvgPoolAttrs, AvgPoolInputs, backend_util, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmAvgPool: (xId: number, batchSize: number, inputHeight: number, inputWidth: number, filterHeight: number, filterWidth: number, padTop: number, padBottom: number, padLeft: number, strideHeight: number, strideWidth: number, channels: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmAvgPool = backend.wasm.cwrap(AvgPool, null /* void */, [  // xId
    'number',  // batchSize
    'number',  // inputHeight
    'number',  // inputWidth
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // padTop
    'number',  // padBottom
    'number',  // padLeft
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // channels
    'number' // outId
  ]);  // xId
}

function avgPool(args: {inputs: AvgPoolInputs, backend: BackendWasm, attrs: AvgPoolAttrs}) {
  const {inputs, attrs, backend} = args;

  const x = inputs.x as Tensor4D;
  const xId = backend.dataIdMap.get(x.dataId).id;

  const {filterSize, strides, pad, dimRoundingMode} = attrs;
  const convInfo = backend_util.computePool2DInfo(x.shape, filterSize, strides, 1 /* dilations */, pad, dimRoundingMode);

  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const padRight = convInfo.padInfo.right;
  const padLeft = convInfo.padInfo.left;
  const strideHeight = convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;
  const channels = convInfo.channels;

  if (convInfo.dilationWidth !== 1 || convInfo.dilationHeight !== 1) {
    throw new Error(`wasm backend does not support dilation=[${convInfo.dilationHeight}, ${convInfo.dilationWidth}].`);
  }

  const out = backend.makeOutput(convInfo.outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmAvgPool(xId, x.shape[0], x.shape[1], x.shape[2], filterHeight, filterWidth, padTop, padBottom, padRight, padLeft, strideHeight, strideWidth, channels, outId);
  return out;
}

export const avgPoolConfig: KernelConfig = {
  kernelName: AvgPool,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: avgPool as {} as KernelFunc
};
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By: [insert signature]

For: [insert name]

parsedAxis = util.parseAxisParam(axis, x.shape)[0];
const indicesVals = backend.readSync(indices.dataId) as TypedArray;
const axisDim = x.shape[parsedAxis];
for (let i = 0; i < indicesVals.length; ++i) {
  const index = indicesVals[i];
  util.assert(index <= axisDim - 1 && index >= 0, () =>
    `GatherV2: the index value ${index} is not in [0, ${axisDim - 1}]`);
}
const shapeInfo = backend_util.segment_util.collectGatherOpShapeInfo(x as Tensor, indices as Tensor, parsedAxis, batchDims);
const flattenX = reshape(x as Tensor, flattenOpShape = {shape: [x.shape[0], x.shape[1] / x.shape[0], x.shape[2], x.shape[3]], outShape: [x.shape[0], x.shape[1] / x.shape[0], x.shape[2], x.shape[3]]}, backend);
const indicesSize = util.sizeFromShape(indices.shape);
const flattenIndex = reshape(indices as Tensor, flattenOpShape = {shape: [indices.shape[0], indices.shape[1], indices.shape[2], indices.shape[3]], outShape: [indices.shape[0], indices.shape[1], indices.shape[2], indices.shape[3]]}, backend);
const flattenOutputShape = [shapeInfo.batchSize, shapeInfo.outerSize, shapeInfo.dimSize, shapeInfo.sliceSize];
const out = backend.makeOutput(flattenOutputShape, x.dtype);
if (util.sizeFromShape(x.shape) === 0) {
  return out;
}
  const stridesSize = flattenX.shape.length - 1;

  const xData = backend.dataIdMap.get(flattenX.dataId);
  const xId = xData.id;
  const indicesData = backend.dataIdMap.get(flattenIndex.dataId);
  const indicesId = indicesData.id;
  const outId = backend.dataIdMap.get(out.dataId);
  const xStridesBytes = new Uint8Array(new Int32Array(util.computeStrides(flattenX.shape)).buffer);
  const outStridesBytes = new Uint8Array(new Int32Array(util.computeStrides(flattenOutputShape)).buffer);
  wasmGather(xId, CppDType[x.dtype], xStridesBytes, stridesSize, indicesId, shapeInfo.batchSize, outStridesBytes, outId);

  backend.disposeData(flattenX.dataId);
  backend.disposeData(flattenIndex.dataId);

  out.shape = shapeInfo.outputShape;
  return out;
};

export const gatherV2Config: KernelConfig = {
  kernelName: GatherV2,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: gatherV2 as {} as KernelFunc
};

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* limitations under the License.
*/
/**
* @deprecated Use `setWasmPaths` instead.
* Sets the path to the `.wasm` file which will be fetched when the wasm
* backend is initialized. See
* https://github.com/tensorflow/tfjs/blob/master/tfjs-backend-wasm/README.md#using-bundlers
for more details.

* @param path wasm file path or url
* @param usePlatformFetch optional boolean to use platform fetch to download
  * the wasm file, default to false.
* 
* @doc {heading: 'Environment', namespace: 'wasm'}
*/

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/tfjs-backend-wasm.fesm.js

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 */

import {AddN, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmFunc:
    (inputIds:
      Uint8Array, inputIdsLen: number, dtype: number, outId: number) =>
        void;

function setupFunc(backend:
    BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(AddN, null /* void */, 
    [ 'array', // input_ids
      'number',  // input_ids.length
      'number',  // dtype
      'number',  // out_id
    ]);}

function addn(args:
    {inputs: TensorInfo[], backend: BackendWasm}) {
  const {inputs, backend} = args;
  const out = backend.makeOutput(inputs[0].shape, inputs[0].dtype);

  if (util.sizeFromShape(out.shape) === 0) {
    return out;
  }

  const inputIds = inputs.map(x => util.dataIdMap.get(x.dataId).id);
  const inputIdsBytes = new Uint8Array(new Int32Array(inputIds).buffer);
  const outId = util.dataIdMap.get(out.dataId).id;
  wasmFunc(inputIdsBytes, inputIds.length, CppDType[out.dtype], outId);
}

export const addNConfig: KernelConfig = {
  kernelName: AddN,
  backendName: 'wasm',
  setupFunc,
  kernelFunc: addn as {} as KernelFunc,
};

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```json
```

```
import {KernelConfig, Maximum} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = false;
export const maximumConfig: KernelConfig =
  createBinaryKernelConfig(Maximum, supportsFullBroadcast);
```

```
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 */

```

```
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 * You may

```
import {KernelConfig, KernelFunc, TensorInfo, TopK, TopKAttrs, TopKInputs} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {CppDType} from './types';

let wasmTopK:
    (xId: number, xShapeBytes: Uint8Array, xShapeLength: number,
    xDtype: CppDType, k: number, sorted: boolean, outValuesId: number,
    outIndicesId: number) => void;

function setup(backend: BackendWasm) {
  wasmTopK = backend.wasm.cwrap(TopK, null /* void */, 
    ['number',  // xId
     'array',   // x.shape
     'number',  // x.shape.length
     'number',  // x.dtype
     'number',  // k
     'bool',    // sorted
     'number',  // outValuesId
     'number',  // outIndicesId
    ]);\n}\n
export const topk:
    (args: {inputs: TopKInputs, backend: BackendWasm,
    attrs: TopKAttrs}) =>
        TensorInfo|[] | TensorInfo = ({inputs, backend, attrs}) => {
          const {x} = inputs;
          const {k, sorted} = attrs;

          const xId = backend.dataIdMap.get(x.dataId).id;
          const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
          const outputShape = x.shape.slice();
          outputShape[outputShape.length - 1] = k;
          const outValues = backend.makeOutput(outputShape, x.dtype);
          const outValuesId = backend.dataIdMap.get(outValues.dataId).id;
          const outIndices = backend.makeOutput(outputShape, 'int32');
          const outIndicesId = backend.dataIdMap.get(outIndices.dataId).id;
          \n        wasmTopK(xId, xShapeBytes, x.shape.length, CppDType[x.dtype], k, sorted,
        outValuesId, outIndicesId);

          return [outValues, outIndices];

    };
```typescript
import {KernelConfig, KernelFunc, OneHot, OneHotAttrs, OneHotInputs} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';

let wasmOneHot: (
    indicesId: number, depth: number, onValue: number, offValue: number,
    outId: number) => void;

function setup(backend: BackendWasm) {
  wasmOneHot = backend.wasm.cwrap(OneHot, null /* void */, [
    'number',  // indices_id
    'number',  // depth,
    'number',  // onValue
    'number',  // offValue
    'number'   // out_id
  ];
}

function oneHot(
    args: {inputs: OneHotInputs, attrs: OneHotAttrs, backend: BackendWasm}) {
  const {inputs, backend, attrs} = args;
  const {indices} = inputs;
  const {depth, onValue, offValue} = attrs;

  const out = backend.makeOutput([...indices.shape, depth], 'int32');
  const outId = backend.dataIdMap.get(out.dataId).id;

  const indicesData = backend.dataIdMap.get(indices.dataId);
  const indicesId = indicesData.id;

  wasmOneHot(indicesId, depth, onValue, offValue, outId);

  return out;
}

export const oneHotConfig: KernelConfig = {
  kernelName: OneHot,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: oneHot as {} as KernelFunc,
};
```
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import {backend_util, KernelConfig, KernelFunc, ReshapeAttrs, ReshapeInputs, SpaceToBatchND, SpaceToBatchNDAttrs, SpaceToBatchNDInputs, TensorInfo, TransposeAttrs, TransposeInputs, util} from '@tensorflow/tfjs-core';

import {PadV2Config} from './PadV2';
import {reshape} from './Reshape';
import {transpose} from './Transpose';

function spaceToBatchND(args: {
  inputs: SpaceToBatchNDInputs,
  backend: BackendWasm,
  attrs: SpaceToBatchNDAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {blockShape, paddings} = attrs;
  const const prod = util.sizeFromShape(blockShape);
  const completePaddings: Array<[number, number]> = [[0, 0]];
  completePaddings.push(...(paddings as Array<[number, number]>));
  for (let i = 1 + blockShape.length; i < x.shape.length; ++i) {
    completePaddings.push([0, 0]);
  }
  const paddedX = padV2Config.kernelFunc({
    inputs: {x},
    backend, attrs: {paddings: completePaddings, constantValue: 0}
  }) as TensorInfo;
  const reshapedPaddedShape = backend_util.getReshaped(paddedX.shape, blockShape, prod, false);
  const permutedReshapedPaddedPermutation = backend_util.getPermuted(reshapedPaddedShape.length, blockShape.length, false);
  const const flattenShape = backend_util.getReshapedPermutated(paddedX.shape, blockShape, prod, false);
  const reshapeInputs: ReshapeInputs = {x: paddedX};
  const reshapeAttrs: ReshapeAttrs = {shape: reshapedPaddedShape};
  const paddedXReshaped = reshape({inputs: reshapeInputs, backend, attrs: reshapeAttrs});
  const transposeInputs: TransposeInputs = {x: paddedXReshaped};
  const transposeAttrs: TransposeAttrs = {perm: permutedReshapedPaddedPermutation};
  const paddedXT = transpose({inputs: transposeInputs, backend, attrs: transposeAttrs});
  const resultReshapeInputs: ReshapeInputs = {x: paddedXT};
  const resultReshapeAttrs: ReshapeAttrs = {shape: flattenShape};
  const result = reshape({inputs: resultReshapeInputs, backend, attrs: resultReshapeAttrs});
  backend.disposeData(paddedX.dataId);
  backend.disposeData(paddedXT.dataId);
  return result;
}

export const spaceToBatchNDConfig: KernelConfig = {
  kernelName: SpaceToBatchND,
  backendName: 'wasm',
  kernelFunc: spaceToBatchND as {} as KernelFunc
};
import {KernelConfig, NotEqual} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;
export const notEqualConfig: KernelConfig =
createBinaryKernelConfig(NotEqual, supportsFullBroadcast, 'bool');
newWidth
  'number', // alignCorners
  'number', // halfPixelCenters
  'number' // outId
})

function

resizeBilinear(args: {
  backend: BackendWasm,
  inputs: ResizeBilinearInputs,
  attrs: ResizeBilinearAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;

  const {images} = inputs;
  const {alignCorners, halfPixelCenters, size} = attrs;
  const {batch, oldHeight, oldWidth, numChannels} = images.shape;
  const outShape = [batch, newHeight, newWidth, numChannels];

  let xData = backend.dataIdMap.get(images.dataId);
  let castedData = null;

  if (xData.dtype !== 'float32') {
    castedData = cast({backend, inputs: {x: images}, attrs: {dtype: 'float32'}});
    xData = backend.dataIdMap.get(castedData.dataId);
  }

  const xId = xData.id;

  const out = backend.makeOutput(outShape, 'float32');
  if (util.sizeFromShape(images.shape) === 0) {
    return out;
  }

  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmResizeBilinear(xId, batch, oldHeight, oldWidth, numChannels, newHeight, newWidth,
                  alignCorners ? 1 : 0, halfPixelCenters ? 1 : 0, outId);

  if (castedData != null) {
    backend.disposeData(castedData.dataId);
  }

  return out;
}

export const

resizeBilinearConfig: KernelConfig = {
  kernelName: ResizeBilinear,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: resizeBilinear as {} as KernelFunc
};
import {backend_util, KernelConfig, KernelFunc, MaxPool, MaxPoolInputs, Tensor4D, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmMaxPool: (
    xId: number, batchSize: number, inputHeight: number, inputWidth: number,
    filterHeight: number, filterWidth: number, padTop: number, padRight: number,
    padBottom: number, padLeft: number, dilationHeight: number, dilationWidth: number,
    strideHeight: number, strideWidth: number, inputChannels: number, outputChannels: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmMaxPool = backend.wasm.cwrap(MaxPool, null /* void */, [
    'number',  // xId
    'number',  // batchSize
    'number',  // inputHeight
    'number',  // inputWidth
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // padTop
    'number',  // padRight
    'number',  // padBottom
    'number',  // padLeft
    'number',  // dilationHeight
    'number',  // dilationWidth
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // inputChannels
    'number',  // outputChannels
    'number',  // outId
  ]);)

function maxPool(
    args: {
      inputs: MaxPoolInputs,
      backend: BackendWasm,
      attrs: MaxPoolAttrs
    }) {
  const {inputs, backend, attrs} = args;

  const x = inputs.x as Tensor4D;
  const xId = backend.dataIdMap.get(x.dataId).id;

  // TF API supports int32 input. CPU and WebGL backend also support int32
  // input. WASM backend doesn't support it
  //
  // Add the following assertion only for the WASM backend instead of at core op
  // level. TF adds support for int32 input at util.assert(x.dtype === 'float32')
  util.assert(x.dtype === 'float32', () =>
      `Error in MaxPool: only float32 input is supported. Got ${x.dtype}.`);

  const {filterSize, strides, pad, dimRoundingMode} = attrs;
  const convInfo = backend_util.computePool2DInfo(
      x.shape, filterSize, strides, 1 /* dilations */, pad, dimRoundingMode);

  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const padTop = convInfo.padTop;
  const padRight = convInfo.padRight;
  const padBottom = convInfo.padBottom;
  const padLeft = convInfo.padLeft;
  const dilationHeight = convInfo.dilationHeight;
  const dilationWidth = convInfo.dilationWidth;
  const strideHeight = convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;
  const inputChannels = convInfo.inChannels;
  const outputChannels = convInfo.outChannels;

  if (inputChannels !== outputChannels) {
    throw new Error(`wasm backend does not support dataFormat: '${inputChannels}'. Please use '${outputChannels}'.`);
  }

  const out = backend.makeOutput(convInfo.outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmMaxPool(xId, x.shape[0], x.shape[1], x.shape[2], filterHeight, filterWidth, padTop, padRight, padBottom, padLeft, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, outId);
  return out;
}

export const maxPoolConfig: KernelConfig = {
  kernelName: MaxPool,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: maxPool
};
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 *
 *=============================================================================
 */

import {KernelConfig, KernelFunc, Reshape, ReshapeAttrs, ReshapeInputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function reshape(
    args: {inputs: ReshapeInputs, attrs: ReshapeAttrs, backend: BackendWasm}) {
  const {inputs, attrs} = args;
  const {x} = inputs;
  const {shape} = attrs;

  const xSize = util.sizeFromShape(x.shape);
  const $shape = util.inferFromImplicitShape(shape, xSize);

  util.assert(
      xSize === util.sizeFromShape($shape),
      () =>
          `new shape: ${$shape}, old shape: ${x.shape}. New shape and old shape must have the same number of elements.`);

  // Backend needs to track refCount for the dataId for reshape op
  args.backend.incRef(x.dataId);

  return {dataId: x.dataId, shape: $shape, dtype: x.dtype};
}

export const reshapeConfig: KernelConfig = {
    kernelName: Reshape,
    backendName: 'wasm',
    kernelFunc: reshape as {} as KernelFunc
};
```javascript
import {KernelConfig, KernelFunc, RotateWithOffset, RotateWithOffsetAttrs, RotateWithOffsetInputs, TensorInfo} from '@tensorflow/tfjs-core';
import {backend_util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmRotate: (xId: number, batch: number, imageHeight: number, imageWidth: number, numChannels: number, radians: number, centerX: number, centerY: number, fillBytes: Uint8Array, fillLength: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmRotate = backend.wasm.cwrap(RotateWithOffset, null /* void */, ['number', // xId
    'number',  // batch
    'number',  // imageHeight
    'number',  // imageWidth
    'number',  // numChannels
    'number',  // radians
    'number',  // centerX
    'number',  // centerY
    'array',   // fillBytes
    'number',  // fillLength
    'number',  // outId
  ]);}

export function rotateWithOffset(args: {inputs: RotateWithOffsetInputs, backend: BackendWasm, attrs: RotateWithOffsetAttrs}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {image} = inputs;
  const {radians, fillValue, center} = attrs;

  const out = backend.makeOutput(image.shape, image.dtype);
  const imageId = backend.dataIdMap.get(image.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;

  const [batch, imageHeight, imageWidth, numChannels] = image.shape;
  const [centerX, centerY] = backend_util.getImageCenter(center, imageHeight, imageWidth);
  const fillIsBlack = fillValue === 0;
  const fullOpacityValue = 255;

  const fillValues = typeof fillValue === 'number' ? [fillValue, fillValue, fillValue, fillIsBlack ? 0 : fullOpacityValue] : [...fillValue, fullOpacityValue];
  const fillBytes = new Uint8Array(new Int32Array(fillValues).buffer);

  wasmRotate(imageId, batch, imageHeight, imageWidth, numChannels, radians, centerX, centerY, fillBytes, fillValues.length, outId);
  return out;
}

export const rotateWithOffsetConfig: KernelConfig = {
  kernelName: RotateWithOffset,
  backendName: 'wasm',
  kernelFunc: rotateWithOffset as {} as KernelFunc,
  setupFunc: setup
};
```

---

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---

The source file contains code related to the `rotateWithOffset` function which is part of the TensorFlow.js library. This function is used for rotating images with offset, and it takes inputs such as image data, radians for rotation, and fill value for the area outside the rotated image. The function is implemented in a WebAssembly module for efficient execution in a browser environment. The code snippet demonstrates how to setup and use the `rotateWithOffset` function by providing inputs and obtaining output tensors. The `setup` function initializes the WebAssembly module with necessary parameters, and the `rotateWithOffset` function performs the actual image rotation with offset using the WebAssembly module.

---

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---

```javascript
import {backend_util, KernelConfig, KernelFunc, Mean, MeanAttrs, MeanInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {cast} from './Cast';

import {permuteAxesAndTranspose} from './kernel_utils';

let wasmMean: (xId: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmMean = backend.wasm.cwrap(Mean, null /*void*/, ['number, number, number']);
}

export function mean(
    args:
    {backend: BackendWasm, inputs: MeanInputs, attrs: MeanAttrs}):
    TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);

  let reductionAxes = axes;
  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose of this
      // once we are done.
      input = transposed;
      inputId = transposedId;
    }
  }

  backend_util.assertAxesAreInnerMostDims(
      'mean',
      ...
```
const [outShape, reduceShape] =
backend_util.computeOutAndReduceShapes(input.shape, reductionAxes);
const reduceSize =
util.sizeFromShape(reduceShape);
let castedInput = input;
if (input.dtype !== 'float32') {
  castedInput =
cast({backend, inputs: {x: input}, attrs: {dtype: 'float32'}});
  inputId =
backend.dataIdMap.get(castedInput.dataId).id;
}

const outId =
backend.dataIdMap.get(out.dataId).id;
if (util.sizeFromShape(input.shape) !== 0) {
  wasmMean(inputId, reduceSize, outId);
}

if (inputWasTransposed) {
  // dispose of the transposed tensor.
  backend.disposeData(transposed.dataId);
}

if (keepDims) {
  // reshape
  const newShape =
backend_util.expandShapeToKeepDim(out.shape, originalAxes);
  out.shape = newShape;
}

if (input.dtype

export const meanConfig:
KernelConfig = {
  kernelName: Mean,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: mean as {}
} as KernelFunc;
```typescript
// This enum must align with the enum defined in cc/backend.h
export enum CppDType {
  float32 = 0,
  int32 = 1,
  bool = 2,
  string = 3,
  complex64 = 4
}

// Must match enum in cc/fusable_activations.h
export enum FusableActivation {
  linear = 0,
  relu = 1,
  relu6 = 2,
  prelu = 3,
  leakyrelu = 4,
  sigmoid = 5,
  elu = 6
}

import {_FusedMatMul, _FusedMatMulAttrs, _FusedMatMulInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {FusableActivation} from './types';

let wasmFusedMatMul:
    (aId: number, aShape: Uint8Array, aShapeSize: number, bId: number, bShape: Uint8Array, bShapeSize: number, transposeA: boolean, transposeB: boolean, activation: number, biasId: number, preluActivationWeightsId: number, leakyreluAlpha: number, outId: number) =>
     void;

function setup(backend: BackendWasm) {
  wasmFusedMatMul = backend.wasm.cwrap(_FusedMatMul, null /* void */, 
    ['number',  // a_id
    'array',   // a_shape
    'number',  // a_shape.length
    'number',  // b_id
    'array',   // b_shape
    'array',   // b_shape.length
    'number',  // transpose_a
    'number',  // transpose_b
    'number',  // activation
    'number',  // biasId
    'number',  // preluActivationWeightsId
    'number',  // leakyreluAlpha
    'number'   // out_id
  ]);
}

function fusedBatchMatMul(args: {
  inputs: _FusedMatMulInputs,
  backend: BackendWasm,
  attrs: _FusedMatMulAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {a, b, bias, preluActivationWeights} = inputs;

  if (a.dtype !== 'float32' || b.dtype !== 'float32') {
    throw new Error(
        `_FusedMatMul for non non-float32 tensors not yet supported.`);
  }

  const {transposeA, transposeB, activation, leakyreluAlpha} = attrs;
  const aId = backend.dataIdMap.get(a.dataId).id;
  const bId = backend.dataIdMap.get(b.dataId).id;

  let biasId = 0;
  if (bias != null) {
    const biasData = backend.dataIdMap.get(bias.dataId);
    if (biasData.shape.length !== 1) {
      throw new Error(
          `_FusedMatMul only supports rank-1 bias but got ` +
          `rank ${biasData.shape.length}.`);
    }
    biasId = biasData.id;
  }
  const preluActivationWeightsId = preluActivationWeights == null ? 0 : backend.dataIdMap.get(bias.dataId).id;
  const leakyreluAlphaId = leakyreluAlpha || 0;
  const fusedActivation = FusableActivation[activation as {} as keyof typeof FusableActivation];

  const batchSize = a.shape[0];
  const outId = backend.dataIdMap.get(outId.dataId).id;
  const fusedActivationId = backend.dataIdMap.get(fusedActivation.dataId.dataId).id;

  const fusedMatMulConfig: KernelConfig = {
    kernelName: _FusedMatMul,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: fusedBatchMatMul as {} as KernelFunc
  };
```

import {DataType, KernelConfig, TensorInfo, UnaryInputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

export function createUnaryKernelConfig(
    kernelName: string, outType?: DataType): KernelConfig {
  let wasmFunc: (xId: number, dtype: number, outId: number) => void;

  function setupFunc(backend: BackendWasm): void {
    wasmFunc = backend.wasm.cwrap(kernelName, null /* void */, 
      ['number',  // x_id
       'number',  // dtype
       'number',  // out_id
    ]);
  }

  function kernelFunc(args: {backend: BackendWasm, inputs: UnaryInputs}):
      TensorInfo {
    const {backend, inputs: {x}} = args;
    const xId = backend.dataIdMap.get(x.dataId).id;
    const out = backend.makeOutput(x.shape, outType || x.dtype);
    const outId = backend.dataIdMap.get(out.dataId).id;

    // Short-circuit zero-sized tensors.
    if (util.sizeFromShape(out.shape) === 0) {
      return out;
    }

    wasmFunc(xId, CppDType[x.dtype], outId);
    return out;
  }

  return {kernelName, backendName: 'wasm',
    setupFunc, kernelFunc};
}

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 */

import {Abs, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const absConfig: KernelConfig = createUnaryKernelConfig(Abs);

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 */

import {backend_util, BinaryInputs, DataType, KernelConfig, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

export function createBinaryKernelConfig(
    kernelName: string, supportsFullBroadcast: boolean, dtype?: DataType): KernelConfig {
  let wasmFunc:
      (aId: number, aShape: Uint8Array, aShapeLen: number, bId: number, bShape: Uint8Array, bShapeLen: number, dtype: number, outId: number, outputType: number) => void;

  function setupFunc(backend: BackendWasm): void {
    wasmFunc = backend.wasm.cwrap(kernelName, null /* void */, 
      ['number',  // a_id
       'array',   // a_shape
       'number',  // a_shape.length
       'number',  // b_id
       'array',   // b_shape
       'number',  // b_shape.length
       'number',  // dtype
       'number',  // out_id
       'number',  // outputType
    ]);
  }

  function kernelFunc(args: {backend: BackendWasm, inputs: BinaryInputs}):
      TensorInfo {
    const {backend, inputs} = args;
    const {a, b} = inputs;
    const aId = backend.dataIdMap.get(a.dataId).id;
    const bId = backend.dataIdMap.get(b.dataId).id;
    const outId = backend.dataIdMap.get(outputId).id;
    const outputType = dtype != null ? dtype : a.dtype;
    const newShape = backend.makeBroadcastShape(a.shape, b.shape);
    const out = backend.makeOutput(newShape, outputType);

    // Short-circuit zero-sized tensors.
    if (util.sizeFromShape(newShape) === 0) {
      return out;
    }

    wasmFunc(aId, a.shape, a.shape.length, bId, b.shape, b.shape.length, outputType, outId, outputType);
    return out;
  }

  return {kernelName, backendName: 'wasm',
    setupFunc, kernelFunc};
}
new Uint8Array(new Int32Array(b.shape).buffer);

const outId = backend.dataIdMap.get(out.dataId).id;

const kernelFunc = (i) => wasmFunc(n =>
    const aShapeBytes = a.shape.length,
bShapeBytes = b.shape.length,
    CppDType[a.dtype], outId);

  // Currently only some float operations support full broadcast.
  if (supportsFullBroadcast && a.dtype === 'float32') {
    backend.BroadcastDims = broadcast_util.getBroadcastDims(b.shape, newShape);
    const aBroadcastDims = backend_util.getBroadcastDims(a.shape, newShape);
    const bBroadcastDims = broadcast_util.getBroadcastDims(b.shape, newShape);
    const loopsOverAllOfA = aBroadcastDims.every((v, i) => v === i);
    const loopsOverAllOfB = bBroadcastDims.every((v, i) => v === i);
    if (loopsOverAllOfA && loopsOverAllOfB) {
      kernelFunc();
      return out;
    } else {
      throw new Error(`Broadcasting along outer dims is not supported for ${a.dtype} ${kernelName}.`);
    }
  }

  return {kernelName, backendName: 'wasm', setupFunc, kernelFunc};

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 */

import {Identity, IdentityInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

const hasSupportForFullBroadcast = true;

export const addConfig: KernelConfig = createBinaryKernelConfig(Add, hasSupportForFullBroadcast);

function setupFunc(backend: BackendWasm): void {
  backend.wasm.cwrap(Add, null /* void */, [
    'array',  // input_ids
    'number',  // input_ids.length
    'number',  // dtype
    'number'  // out_id
  ])(inputIds, number, outId);
  wasmFunc = backend.wasm.cwrap(Add, null /* void */, [
    'array',  // input_ids
    'number',  // input_ids.length
    'number',  // dtype
    'number',  // out_id
  ])(inputIds, number, outId);
}

function addn(args: {inputs: TensorInfo[], backend: BackendWasm}) {
  const {inputs, backend} = args;
  const out = backend.makeOutput(inputs[0].shape, inputs[0].dtype);

  if (util.sizeFromShape(out.shape) === 0) {
    return out;
  }

  const inputIds = inputs.map(x => backend.dataIdMap.get(x.dataId).id);
  wasmFunc(inputIds.length, CppDType[out.dtype] as {backend: BackendWasm}), void);  // Short-circuit zero-sized tensors.
  if (util.sizeFromShape(out.shape) === 0) {
    return out;
  }

  const inputIdsBytes = new Uint8Array(new Int32Array(inputIds).buffer);
  wasmFunc(inputIdsBytes, backend.dataIdMap.get(out.dataId).id);
}

export const addNConfig: KernelConfig = {
  kernelName: AddN,
  backendName: 'wasm',
  setupFunc, kernelFunc: addn as {} as KernelFunc,
};

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 * limitations under the License.
 */

import {Identity, IdentityInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

const hasSupportForFullBroadcast = true;

export const addConfig: KernelConfig = createBinaryKernelConfig(Add, hasSupportForFullBroadcast);

function setupFunc(backend: BackendWasm): void {
  backend.wasm.cwrap(Add, null /* void */, [
    'array',  // input_ids
    'number',  // input_ids.length
    'number',  // dtype
    'number'  // out_id
  ])(inputIds, number, outId);
  wasmFunc = backend.wasm.cwrap(Add, null /* void */, [
    'array',  // input_ids
    'number',  // input_ids.length
    'number',  // dtype
    'number'  // out_id
  ])(inputIds, number, outId);
}

function addn(args: {inputs: TensorInfo[], backend: BackendWasm}) {
  const {inputs, backend} = args;
  const out = backend.makeOutput(inputs[0].shape, inputs[0].dtype);

  if (util.sizeFromShape(out.shape) === 0) {
    return out;
  }

  const inputIds = inputs.map(x =>
    backend.dataIdMap.get(x.dataId).id);
  wasmFunc(inputIdsBytes, backend.dataIdMap.get(out.dataId).id);
}

export const addNConfig: KernelConfig = {
  kernelName: AddN,
  backendName: 'wasm',
  setupFunc, kernelFunc: addn as {} as KernelFunc,
};
`../backend_wasm`; import {transpose} from './Transpose';

```typescript
/**
 * Compute permutation axes and do a transpose if necessary.
 *
 * Used by reduction ops.
 * @param x input TensorInfo
 * @param x axis reduction axes
 * @param backend wasm backend instance
 */

export function permuteAxesAndTranspose(x: TensorInfo, axis: number[], backend: BackendWasm): { transposed: TensorInfo; axes: number[]; inputWasTransposed: boolean } {
  const xShape = x.shape;
  const xRank = x.shape.length;
  const originalAxes = util.parseAxisParam(axis, xShape);
  let axes = originalAxes;
  const permutedAxes = backend_util.getAxesPermutation(axes, xRank);
  let xTransposed = null;
  let inputWasTransposed = false;
  if (permutedAxes != null) {
    const newShape = new Array(xRank);
    for (let i = 0; i < newShape.length; i++) {
      newShape[i] = xShape[permutedAxes[i]];
    }
    axes = backend_util.getInnerMostAxes(axes.length, xRank);
    xTransposed = transpose({ inputs: [x], attrs: { perm: permutedAxes }, backend });
    const xId = backend.dataIdMap.get(x.dataId).id;
    const transposedId = backend.dataIdMap.get(xTransposed.dataId).id;
    if (transposedId !== xId) {
      inputWasTransposed = true;
    }
  }

  return { transposed: xTransposed, originalAxes, axes, inputWasTransposed };}
```

---

```
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 * limitations under the License.
 *
 *=============================================================================
 */

import {All, AllAttrs, AllInputs, backend_util, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';

let wasmAll: (xId: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmAll = backend.wasm.cwrap(All, null /*void*/, ['number, number, number']);
}

function all(args: {backend: BackendWasm, inputs: AllInputs, attrs: AllAttrs}):
  TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);
  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    inputId = transposedId;
    let inputId = xId;
    let input = x;
  }

  const inputRank = input.shape.length;
  backend_util.assertAxesAreInnerMostDims('all', x, inputRank);
  const outputId = backend.dataIdMap.get(transposed.dataId).id;
  const outputId = transposedId;
  const inputRank = input.shape.length;
  const outputId = backend.dataIdMap.get(transposed.dataId).id;
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  const
```
{permuteAxesAndTranspose} from './kernel_utils';

let wasmAny = backend.wasm.cwrap(Any, null /*void*/,["number", "number", "number"]);

TensorInfo TensorInfo(const Backend, const Inputs, const Attrs) {
  const [x] = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let input = xId;
  let input = x;

  if (transposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    const input = transposed;
    const inputId = transposedId;
  }

  const inputRank = input.shape.length;

  backend.assertAxesAreInnerMostDims("any", inputRank);

  const [outShape, reduceShape] = backend_util.computeOutAndReduceShapes(input.shape, axes);
  const reduceSize = util.sizeFromShape(reduceShape);
  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmAny(inputId, reduceSize, outId);
}

export const anyConfig: KernelConfig = {
  kernelName: Any,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: any as {} as KernelFunc
};

import {ArgMax, ArgMaxAttrs, ArgMaxInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

let wasmFunc = backend.wasm.cwrap(ArgMax, null /* void */, [
  'number', // x_id
  'number', // dtype
  'number', // outer_size
  'number', // inner_size
  'number'   // out_id
]);

function argmax(args: {inputs: ArgMaxInputs, backend: BackendWasm, attrs: ArgMaxAttrs}) {
  const {backend, inputs, attrs} = args;
  const {axis} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let input = x;
  let inputId = xId;

  const {transposed, axes, inputWasTransposed} = permuteAxesAndTranspose(x, axis, backend);

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    const input = transposed;
    const inputId = transposedId;
  }

  const outerShape = input.shape.length;

  backend.assertAxesAreInnerMostDims("argmax", outerShape);

  const outerSize = util.sizeFromShape(outerShape);
  const innerSize = util.sizeFromShape(axes[0]);
  const outId = backend.dataIdMap.get(out.dataId).id;
  const outerSize = util.sizeFromShape(outerShape);
  const innerSize = util.sizeFromShape(axes[0]);
  const wasmFunc = backend.wasm.cwrap(ArgMax, null /*void*/,["number", "number", "number", "number", "number"]);
  wasmFunc(backend.dataIdMap.get(x.dataId).id, outerSize, inputWasTransposed ? 1 : 0, reduceSize, outId);

  if (inputWasTransposed) {
    backend.disposeData(transposed.dataId);
  }

  return output;
}

export const argMaxConfig: KernelConfig = {
  kernelName: ArgMax,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: argmax as {} as KernelFunc
};
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import {AvgPool, AvgPoolAttrs, AvgPoolInputs, backend_util, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';

```

import {BackendWasm} from '../backend_wasm';

let wasmAvgPool: (
    xId: number, batchSize: number, inputHeight: number, inputWidth: number, filterHeight: number, filterWidth: number, padTop: number, padBottom: number, padLeft: number, padRight: number, strideHeight: number, strideWidth: number, channels: number, outId: number) => void;

function setup(backend: BackendWasm) {
    wasmAvgPool = backend.wasm.cwrap(AvgPool, null /* void */, [
        'number',  // xId
        'number',  // batchSize
        'number',  // inputHeight
        'number',  // inputWidth
        'number',  // filterHeight
        'number',  // filterWidth
        'number',  // padTop
        'number',  // padBottom
        'number',  // padLeft
        'number',  // padRight
        'number',  // strideHeight
        'number',  // strideWidth
        'number',  // channels
        'number',  // outId
    ]);

    function avgPool(
        args: {inputs: AvgPoolInputs, backend: BackendWasm, attrs: AvgPoolAttrs}) {
        const {inputs, backend} = args;
        const x = inputs.x as Tensor4D;
        const xId = backend.dataIdMap.get(x.dataId).id;

        const {filterSize, strides, pad, dimRoundingMode} = attrs;
        const convInfo = backend_util.computePool2DInfo(
            x.shape, filterSize, strides, 1 /* dilations */, pad, dimRoundingMode);

        const filterHeight = convInfo.filterHeight;
        const filterWidth = convInfo.filterWidth;
        const strideHeight = convInfo.strideHeight;
        const strideWidth = convInfo.strideWidth;
        const channels = convInfo.inChannels;

        if (convInfo.dataFormat !== 'channelsLast') {
            throw new Error('
        'wasm backend does not support dataFormat: ' + 
            convInfo.dataFormat + '. Please use ' + 'channelsLast'.);
        }

        if (convInfo.dilationWidth !== 1 || convInfo.dilationHeight !== 1) {
            throw new Error(
                'wasm backend only supports average pooling with dilation = [1, 1], ' +
                convInfo.dilationHeight + 1) 1 'convInfo.dilationHeight != 1) {
        'throw new Error('wasm backend only supports average pooling with dilation = [1, 1], ' +
            convInfo.dilationWidth + 1) 1 'convInfo.dilationWidth != 1) {

        const out = backend.makeOutput(convInfo.outShape, 'float32');
        const outId = backend.dataIdMap.get(out.dataId).id;
        wasmAvgPool(
            xId, x.shape[0], x.shape[1], x.shape[2],
            filterHeight, filterWidth,
            padTop, padBottom, padLeft, padRight, strideHeight, strideWidth,
            channels, outId);
        return out;
    }

    export const avgPoolConfig: KernelConfig = {
        kernelName: AvgPool,
        backendName: 'wasm',
        setupFunc: setup,
        kernelFunc: avgPool as {} as KernelFunc
    };

    export function reshape(
        args: {inputs: ReshapeInputs, attrs: ReshapeAttrs, backend: BackendWasm}) {
        const {inputs, attrs} = args;
        const {x} = inputs;
        const {shape} = attrs;

        const xSize = util.sizeFromShape(x.shape);
        const $shape = util.inferFromImplicitShape(shape, xSize);

        util.assert(
            xSize === util.sizeFromShape($shape),
            () =>
                `new shape: ${$shape}, old shape: ${x.shape}. New shape and old ` +
                `shape must have the same number of elements.`);

        // Backend needs to track refCount for the dataId for reshape op
        args.backend.incRef(x.dataId);

        const outId = backend.dataIdMap.get(out.dataId).id;
        const out = backend.makeOutput(out.shape, x.dtype);
        outId = backend.dataIdMap.get(out.dataId).id;
        outId = backend.makeOutput(out.shape, x.dtype);

        return {dataId: x.dataId, shape: $shape, dtype: x.dtype};
    }

    export const reshapeConfig: KernelConfig = {
        kernelName: Reshape,
        backendName: 'wasm',
        setupFunc: setup,
        kernelFunc: reshape as {} as KernelFunc
    };

    export function inferFromImplicitShape(shape, xSize):
    xSize == util.sizeFromShape($shape),
    (new shape: $shape, old shape: $x.shape).
    New shape and old ' + $shape must have the same number of elements.';)

    // Backend needs to track refCount for the dataId for reshape op
    args.backend.incRef(x.dataId);
    const outId = backend.dataIdMap.get(out.dataId).id;
    const out = backend.makeOutput(out.shape, x.dtype);
    outId = backend.dataIdMap.get(out.dataId).id;
    outId = backend.makeOutput(out.shape, x.dtype);

    return {dataId: x.dataId, shape: $shape, dtype: x.dtype};
```

```
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=============================================================================

```
import {BatchMatMul, BatchMatMulAttrs, BatchMatMulInputs, KernelConfig, KernelFunc, util} from
  '@tensorflow/tfjs-core';

import {reshape} from
  './Reshape';

let wasmBatchMatMul: (n: number, aShape: Uint8Array, aShapeSize: number, bld: number, n:
  bShape: Uint8Array, bShapeSize: number, transposeA: boolean, n:
  transposeB: boolean, outId: number) =>
  void;\n
function setup(backend: BackendWasm) {
  wasmBatchMatMul = backend.wasm.cwrap(BatchMatMul,
null /* void */, [n, number, // a_id
                        aShape, // a_array,
                        aShapeSize, // a_shapeLength
                        bld, number, // b_id
                        bShape, // b_array,
                        bShapeSize, // b_shapeLength
                        transposeB, // transpose_b
                        outId] );\n}

function batchMatMul(args: {
  inputs: BatchMatMulInputs,
  backend: BackendWasm,
  attrs: BatchMatMulAttrs
}) {
  const {inputs, backend, attrs} = args;

  const {a, b} = inputs;

  const {transposeA, transposeB} = attrs;

  if (a.dtype !== 'float32' || b.dtype !== 'float32') {
    throw new Error(`BatchMatMul for non-float32 tensors not yet supported.`);
  }

  const aRank = a.shape.length; const
  bRank = b.shape.length; const
  innerShapeA = transposeA ? a.shape[aRank - 2] : a.shape[aRank - 1]; const
  innerShapeB = transposeB ? b.shape[bRank - 2] : b.shape[bRank - 1];

  const outerDimsA = a.shape.slice(0, -2); const
  outerDimsB = b.shape.slice(0, -2);

  const batchDimA = util.sizeFromShape(outerDimsA); const
  const batchDimB = util.sizeFromShape(outerDimsB);

  const batchDimsCompatible =
      batchDimA === batchDimB || batchDimA === 1 || batchDimB === 1;

  util.assert(
      aRank >= 2 && bRank >= 2 && batchDimsCompatible,
      () => `Error in matMul: the input
          batch dimensions must either be the ` +
          `same or at least one input batch dimension must be 1. Got input
          batch dimensions of (${a.shape}) and (${b.shape}).`);

  const a3dShape = transposeA ?
      [batchDimA, innerShapeA, outerShapeA] :
      [batchDimA, outerShapeA, innerShapeA];

  const b3dShape = transposeB ?
      [batchDimB, outerShapeB, innerShapeB] :
      [batchDimB, innerShapeB, outerShapeB];

  const a3dId = backend.dataIdMap.get(a3dShape.dataId).id;
  const b3dId = backend.dataIdMap.get(b3dShape.dataId).id;

  const out = backend.makeOutput([batchDimB, outerShapeB, innerShapeB]);

  backend.disposeData(a3d.dataId);
  backend.disposeData(b3d.dataId);

  out.shape = a3dShape; return out;
```
```
```javascript
import { backend_util, util } from '@tensorflow/tfjs-core';

export function concatImpl(inputs, outShape, dtype, simplyConcat) {
    const outVals = util.getArrayFromDType(dtype, util.sizeFromShape(outShape));
    if (simplyConcat && dtype !== 'string') {
        // Use built-in TypedArray.set() method for speed.
        let offset = 0;
        inputs.forEach(input => {
            const size = util.sizeFromShape(input.shape);
            outVals.set(input.vals, offset);
            offset += size;
        });
    } else {
        let colOffset = 0;
        inputs.forEach(input => {
            const decodedData = dtype === 'string' ? backend_util.fromUint8ToStringArray(input.vals) : input.vals;
            let tIdx = 0;
            for (let row = 0; row < input.shape[0]; ++row) {
                const resIdx = row * outShape[1] + colOffset;
                for (let col = 0; col < input.shape[1]; ++col) {
                    outVals[resIdx + col] = decodedData[tIdx++];
                }
                colOffset += input.shape[1];
            }
        });
    }
    return outVals;
}
```

import { util } from '@tensorflow/tfjs-core';
export function rangeImpl(start, stop, step, dtype) {
    const sameStartStop = start === stop;
    const increasingRangeNegativeStep = start < stop && step < 0;
    const decreasingRangePositiveStep = stop < start && step > 0;
    if (sameStartStop || increasingRangeNegativeStep ||
        decreasingRangePositiveStep) {
        return util.makeZerosTypedArray(0, dtype);
    }
    const numElements = Math.abs(Math.ceil((stop - start) / step));
    const values = util.makeZerosTypedArray(numElements, dtype);
    if (stop < start && step === 1) {
        // Auto adjust the step's sign if it hasn't been set
        // (or was set to 1)
        step = -1;
    }
    values[0] = start;
    for (let i = 1; i < values.length; i++) {
        values[i] = values[i - 1] + step;
    }
    return values;
}
import { backend_util, buffer, Slice, slice_util, util } from '@tensorflow/tfjs-core';
import { assertNotComplex } from '../cpu_util';
export function sliceImpl(vals, begin, size, shape, dtype) {
    const isContinous = slice_util.isSliceContinous(shape, begin, size);
    const length = util.sizeFromShape(size);
    const xStrides = util.computeStrides(shape);
    if (isContinous) {
        const flatOffset = slice_util.computeFlatOffset(begin, xStrides);
        if (dtype === 'string') {
            return vals.slice(flatOffset, flatOffset + length);
        }
        return vals.subarray(flatOffset, flatOffset + length);
    }
    const decodedData = dtype === 'string' ?
        backend_util.fromUint8ToStringArray(vals) :
        vals;
    const inBuf = buffer(shape, dtype, decodedData);
    const outBuf = buffer(size, dtype);
    for (let i = 0; i < outBuf.size; ++i) {
        const outLoc = outBuf.indexToLoc(i);
        const inLoc = outLoc.map((idx, j) => idx + begin[j]);
        // TODO(ivanp): move constructor to shared
        const inData = inBuf.getSlice(inLoc);
        outBuf.set(inLoc, inData);
    }
    return outBuf;
}
outBuf.set(inBuf.get(...inLoc), ...outLoc);\n} \nif (dtype === 'string') { \n return backend_util.fromStringArrayToUint8(outBuf.values);\n} \nreturn outBuf.values;\n} export function slice(args) {\n    const { inputs, backend, attrs } = args;\n    const { x } = inputs;\n    const { begin, size } = attrs;\n    assertNotComplex(x, 'slice');\n    const [$_begin, $_size] = slice_util.parseSliceParams(x, begin, size);\n    slice_util.assertParamsValid(x, $_begin, $_size);\n    const vals = backend.data.get(x.dataId).values;\n    const outVals = sliceImpl(vals, $_begin, $_size, x.shape, x.dtype);\n    return backend.makeTensorInfo($_size, x.dtype, outVals);\n} export const sliceConfig = {
    kernelName: Slice,
    backendName: 'cpu',
    kernelFunc: slice
};

sourceMappingURL=data:application/json;base64,eyJ2ZXJzaW9uIjozLCJmaWxlIjoiU2xpY2UuanMiLCJzb3VyY2VSb290IjoiIiwic291cmNlcyI6WyIuLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi
import {backend_util, KernelConfig, Slice, slice_util, SliceInputs, TypedArray, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {sliceImplCPU} from '../kernel_utils/shared';

export function slice(
    args: {inputs: SliceInputs, attrs: SliceAttrs, backend: BackendWasm}) {
  const {inputs: {x}, attrs: {begin, size}, backend} = args;

  const [begin_, size_] = slice_util.parseSliceParams(x, begin, size);
  const isContinuous = slice_util.isSliceContinous(x.shape, begin_, size_);
  const xVals = backend.readFileSync(x.dataId);
  const out = backend.makeOutput(size_, x.dtype);
  const xStrides = util.computeStrides(x.shape);
  const outData = backend.dataIdMap.get(out.dataId);

  if (isContinuous)
  {  
    const flatOffset = slice_util.computeFlatOffset(begin_, xStrides);

    if (x.dtype === 'string') {
      outData.stringBytes =
        (xVals as Uint8Array[])
            .slice(flatOffset, flatOffset + util.sizeFromShape(size_));
    } else {
      const outVals = backend.typedArrayFromHeap(out);
      outVals.set(
        (xVals as TypedArray)
            .subarray(flatOffset, flatOffset + util.sizeFromShape(size_)));
    }

    return out;
  }

  if (x.dtype === 'string') {
    const res =
      sliceImplCPU(xVals, begin, size, x.shape, x.dtype);
    outData.stringBytes = res as Uint8Array[];
    return out;
  }

  const outVals = backend.typedArrayFromHeap(out);
  const rank = x.shape.length;
  if (rank === 2)
  {  
    slice2d(
        xVals as TypedArray, xStrides[0], outVals, begin as [number, number],
        size as [number, number]): void {
            outVals.set(xVals.subarray(xOffset, xOffset + size[1]), outOffset);
        outOffset += size[1];
    }
  } else if (rank === 3) {
    slice3d(
        xVals as TypedArray, xStrides[0], xStrides[1], outVals,
        begin as [number, number, number], size as [number, number, number]): void {
            outVals.set(xVals.subarray(xOffset, xOffset + size[2]), outOffset);
        outOffset += size[2];
    }
  } else if (rank === 4) {
    slice4d(
        xVals as TypedArray, xStrides[0], xStrides[1], xStrides[2], outVals,
        begin as [number, number, number, number], size as [number, number, number, number]): void {
            outVals.set(xVals.subarray(xOffset, xOffset + size[3]), outOffset);
        outOffset += size[3];
    }
  } else {
    const res =
      sliceImplCPU(xVals, begin, size, x.dtype) as TypedArray;
    outVals.set(res);
  }

  return out;
}

function slice2d(
    xVals: backend_util.TypedArray, xStride: number,
    outVals: backend_util.TypedArray, begin: [number, number],
    size: [number, number]): void {
    let outOffset = 0;
    const beginI = begin[0];
    const beginJ = begin[1];
    const endI = beginI + size[0];
    const endJ = beginJ + size[1];
    for (let i = beginI; i < endI; i++)
    {  
        const xOffset = i * xStride + beginJ;
        outVals.set(xVals.subarray(xOffset, xOffset + size[1]), outOffset);
        outOffset += size[1];
    }
  }

function slice3d(
    xVals: backend_util.TypedArray, xStrides1: number,
    xStrides2: number,
    outVals: backend_util.TypedArray, begin: [number, number, number],
    size: [number, number, number]): void {
    let outOffset = 0;
    const beginI = begin[0];
    const beginJ = begin[1];
    const beginK = begin[2];
    const endI = beginI + size[0];
    const endJ = beginJ + size[1];
    const endK = beginK + size[2];
    for (let i = beginI; i < endI; i++)
    {  
        for (let j = beginJ; j < endJ; j++)
        {  
            const xOffset = i * xStrides1 + j * xStrides2 + beginK;
            outVals.set(xVals.subarray(xOffset, xOffset + size2), outOffset);
            outOffset += size2;
        }
    }
  }

function slice4d(
    xVals: backend_util.TypedArray, xStrides1: number,
    xStrides2: number,
    xStrides3: number,
    outVals: backend_util.TypedArray, begin: [number, number, number, number],
    size: [number, number, number, number]): void {
    let outOffset = 0;
    const beginI = begin[0];
    const beginJ = begin[1];
    const beginK = begin[2];
    const endI = beginI + size[0];
    const endJ = beginJ + size[1];
    const endK = beginK + size[2];
    for (let i = beginI; i < endI; i++)
    {  
        for (let j = beginJ; j < endJ; j++)
        {  
            for (let k = beginK; k < endK; k++)
            {  
                const xOffset = i * xStrides1 + j * xStrides2 + k * xStrides3 + beginL;
                outVals.set(xVals.subarray(xOffset, xOffset + size3), outOffset);
                outOffset += size3;
            }
        }
    }
  }
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---

```ts
import {backend_util, BatchToSpaceND, BatchToSpaceNDAttrs, BatchToSpaceNDInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';
import {reshape} from './Reshape';
import {slice} from './Slice';
import {transpose} from './Transpose';

function batchToSpaceND(args: {
  inputs: BatchToSpaceNDInputs,
  backend: BackendWasm,
  attrs: BatchToSpaceNDAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {blockShape, crops} = attrs;
  const prod = blockShape.reduce((a, b) => a * b);
  const reshaped = backend_util.getReshaped(x.shape, blockShape, prod);
  const permuted = backend_util.getPermuted(reshaped.length, blockShape.length);
  const reshapedPermuted = backend_util.getReshapedPermuted(x.shape, blockShape.prod);
  const xReshaped = reshape({inputs: {x}, backend, attrs: {shape: reshaped}});
  const xTransposed = transpose({inputs: {x: xReshaped}, backend, attrs: {perm: permuted}});
  const xTransposedReshaped = reshape({inputs: {x: xTransposed}, backend, attrs: {shape: reshapedPermuted}});
  const result = slice({
    inputs: {x: xTransposedReshaped},
    backend,
    attrs: {begin: crops, size: blockShape.length}
  });

  backend.disposeData(xReshaped.dataId);
  backend.disposeData(xTransposed.dataId);
  backend.disposeData(xReshaped.dataId);

  return result;
}
```

---

```ts
import {Cast, CastAttrs, CastInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

function cast(args: {inputs: CastInputs, attrs: CastAttrs, backend: BackendWasm}): TensorInfo {
  const {inputs: {x}, attrs: {dtype}, backend} = args;
  const out = backend.makeOutput(x.shape, dtype);
  const inVals = backend.typedArrayFromHeap(x);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.set(inVals);

  return out;
}
```

---

```ts
import {KernelConfig, Ceil} from '@tensorflow/tfjs-core';

const ceilConfig: KernelConfig = createUnaryKernelConfig(Ceil);
```

---

```ts
import {Cast, CastAttrs, CastInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';
import {TensorInfo} from '@tensorflow/tfjs-core';

function cast(args: {inputs: CastInputs, attrs: CastAttrs, backend: BackendWasm}): TensorInfo {
  const {inputs: {x}, attrs: {dtype}, backend} = args;
  const out = backend.makeOutput(x.shape, dtype);
  const inVals = backend.typedArrayFromHeap(x);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.set(inVals);

  return out;
}
```
import {ClipByValue, ClipByValueAttrs, ClipByValueInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmClip: (xId: number, min: number, max: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmClip = backend.wasm.cwrap(ClipByValue, null /* void */, [
    'number',  // x_id
    'number',  // min
    'number',  // max
    'number'   // out_id
  ]);}

function clip(args: {
  inputs: ClipByValueInputs,
  backend: BackendWasm,
  attrs: ClipByValueAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {clipValueMin, clipValueMax} = attrs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const out = backend.makeOutput(x.shape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmClip(xId, clipValueMin, clipValueMax, outId);
  return out;
}

export const clipByValueConfig: KernelConfig = {
  kernelName: ClipByValue,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: clip as {} as KernelFunc
};
0;\n  const innerDims = $inputs.map(input => {
    const innerDim = util.sizeFromShape(input.shape.slice(axis));
    sumInnerDims += innerDim;\n  });\n  const inVals = $inputs.flatMap(input =>
    backendtypedArrayFromHeap(input));\n  const outVals = backendtypedArrayFromHeap(out);\n  for (let b = 0; b < batchDim; b++) {
    let inOffset = b * sumInnerDims;\n    for (let i = 0; i < inVals.length; i++) {
      const innerDim = innerDims[i];\n      const inOffset = b * innerDim;\n      const vals = inVals[i].subarray(inOffset, inOffset + innerDim);\n      outVals.set(vals, outOffset);\n      outOffset += innerDim;\n    }
  }
  return out;
}

export const concatConfig: KernelConfig = {
  kernelName: Concat,
  backendName: 'wasm',
  kernelFunc: concat as {} as KernelFunc,
};

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 */

import {backend_util, Conv2D, Conv2DAttrs, Conv2DInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';

let wasmConv2d: (xId: number, batchSize: number, inputHeight: number, inputWidth: number, filterId: number, filterHeight: number, filterWidth: number, padTop: number, padRight: number, padBottom: number, padLeft: number, isSamePad: number, dilationHeight: number, dilationWidth: number, strideHeight: number, strideWidth: number, inputChannels: number, outputChannels: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmConv2d = backend.wasm.cwrap(Conv2D, null /* void */, 
    'number',  // xId
    'number',  // batchSize
    'number',  // inputHeight
    'number',  // inputWidth
    'number',  // filterId
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // padTop
    'number',  // padRight
    'number',  // padBottom
    'number',  // padLeft
    'number',  // isSamePad
    'number',  // dilationHeight
    'number',  // dilationWidth
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // inputChannels
    'number',  // outputChannels
    'number',  // outId
  );
}

function conv2d(args: {inputs: Conv2DInputs, backend: BackendWasm, attrs: Conv2DAttrs}) {
  const {inputs, backend, attrs} = args;
  const {x, filter} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const filterId = backend.dataIdMap.get(filter.dataId).id;

  const {strides, dilations, pad, dimRoundingMode, dataFormat} = attrs;
  const $dataFormat = backend_util.convertConv2DDataFormat(dataFormat);
  const convInfo = backend_util.computeConv2DInfo((x as Tensor4D).shape, (filter as Tensor4D).shape, strides, dilations, pad, dimRoundingMode, false, $dataFormat);
  const out = backend.makeOutput(convInfo.outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const padTop = convInfo.padTop.top;
  const padRight = convInfo.padRight.right;
  const padBottom = convInfo.padBottom.bottom;
  const padLeft = convInfo.padLeft.left;
  const dilationHeight = convInfo.dilationHeight;
  const dilationWidth = convInfo.dilationWidth;
  const strideHeight = convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;

  if (convInfo.dataFormat !== 'channelsLast') {
    throw new Error(`wasm backend Conv2D does not support dataFormat: '${convInfo.dataFormat}'. Please use 'channelsLast'.`);
  }
  wasmConv2d(xId, x.shape[0], x.shape[1], x.shape[2], filterId, filterHeight, filterWidth, padTop, padRight, padBottom, padLeft, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, outId);
  return out;
}

export const conv2DConfig: KernelConfig = {
  kernelName: Conv2D,
  backendName: 'wasm',
  kernelFunc: conv2d as {} as KernelFunc,
};

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 */

import {backend_util, Conv2D, Conv2DAttrs, Conv2DInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';

let wasmConv2d: (xId: number, batchSize: number, inputHeight: number, inputWidth: number, filterId: number, filterHeight: number, filterWidth: number, padTop: number, padRight: number, padBottom: number, padLeft: number, isSamePad: number, dilationHeight: number, dilationWidth: number, strideHeight: number, strideWidth: number, inputChannels: number, outputChannels: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmConv2d = backend.wasm.cwrap(Conv2D, null /* void */, 
    'number',  // xId
    'number',  // batchSize
    'number',  // inputHeight
    'number',  // inputWidth
    'number',  // filterId
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // padTop
    'number',  // padRight
    'number',  // padBottom
    'number',  // padLeft
    'number',  // isSamePad
    'number',  // dilationHeight
    'number',  // dilationWidth
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // inputChannels
    'number',  // outputChannels
    'number',  // outId
  );
}

function conv2d(args: {inputs: Conv2DInputs, backend: BackendWasm, attrs: Conv2DAttrs}) {
  const {inputs, backend, attrs} = args;
  const {x, filter} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const filterId = backend.dataIdMap.get(filter.dataId).id;

  const {strides, dilations, pad, dimRoundingMode, dataFormat} = attrs;
  const $dataFormat = backend_util.convertConv2DDataFormat(dataFormat);
  const convInfo = backend_util.computeConv2DInfo((x as Tensor4D).shape, (filter as Tensor4D).shape, strides, dilations, pad, dimRoundingMode, false, $dataFormat);
  const out = backend.makeOutput(convInfo.outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const padTop = convInfo.padTop.top;
  const padRight = convInfo.padRight.right;
  const padBottom = convInfo.padBottom.bottom;
  const padLeft = convInfo.padLeft.left;
  const dilationHeight = convInfo.dilationHeight;
  const dilationWidth = convInfo.dilationWidth;
  const strideHeight = convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;

  if (convInfo.dataFormat !== 'channelsLast') {
    throw new Error(`wasm backend Conv2D does not support dataFormat: '${convInfo.dataFormat}'. Please use 'channelsLast'.`);
  }
  wasmConv2d(xId, x.shape[0], x.shape[1], x.shape[2], filterId, filterHeight, filterWidth, padTop, padRight, padBottom, padLeft, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, outId);
  return out;
}

export const conv2DConfig: KernelConfig = {
  kernelName: Conv2D,
  backendName: 'wasm',
  kernelFunc: conv2d as {} as KernelFunc,
};

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 */
import {backend_util, Conv2DBackpropInput, Conv2DBackpropInputAttrs, Conv2DBackpropInputInputs, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmConv2DBackpropInput: (
    dyId: number, filterId: number, batchSize: number,
    filterHeight: number, filterWidth: number, inHeight: number, inWidth: number, inChannels: number,
    outHeight: number, outWidth: number, outChannels: number,
    strideHeight: number, strideWidth: number, topPad: number, leftPad: number,
    ffltS0: number, ffltS1: number, ffltS2: number, xBatchStride: number,
    xRowStride: number, xColStride: number,
    yBatchStride: number, yRowStride: number, yColStride: number,
    yChannelStride: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmConv2DBackpropInput = backend.wasm.cwrap(Conv2DBackpropInput, null, [
    'number',  // dyId
    'number',  // filterId
    'number',  // batchSize
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // inHeight
    'number',  // inWidth
    'number',  // inChannels
    'number',  // outHeight
    'number',  // outWidth
    'number',  // outChannels
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // topPad
    'number',  // leftPad
    'number',  // ffltS0
    'number',  // ffltS1
    'number',  // ffltS2
    'number',  // xBatchStride
    'number',  // xRowStride
    'number',  // xColStride
    'number',  // yBatchStride
    'number',  // yRowStride
    'number',  // yColStride
    'number',  // yChannelStride
    'number',  // outId
  
  ]);}

function conv2DBackpropInput(args: {
  backend: BackendWasm,
  inputs: Conv2DBackpropInputInputs,
  attrs: Conv2DBackpropInputAttrs
}): TensorInfo {

  const {backend, inputs, attrs} = args;
  const {dy, filter} = inputs;
  const {strides, pad, dataFormat,
      dimRoundingMode, inputShape} = attrs;

  const dilations = 1;

  const $dataFormat = backend_util.convertConv2DDataFormat(dataFormat);
  const convInfo = backend_util.computeConv2DInfo(
      inputShape, filter.shape as [number, number, number, number], strides,
      dilations, pad, dimRoundingMode,
      false /* depthwise */, $dataFormat);
  const {
    batchSize,
    filterHeight,
    filterWidth,
    inChannels,
    inHeight,
    inWidth,
    outChannels,
    outHeight,
    outWidth,
    strideHeight,
    strideWidth
  } = convInfo;

  const topPad = filterHeight - 1 - convInfo.padInfo.top;
  const leftPad = filterWidth - 1 - convInfo.padInfo.left;
  const isChannelsLast = convInfo.dataFormat === 'channelsLast';
  const dxStrides = util.computeStrides(convInfo.inShape);
  const dyStrides = util.computeStrides(dy.shape);
  const [fltS0, ffltS1, ffltS2] = util.computeStrides(filter.shape);
  const xBatchStride = dxStrides[0];
  const xRowStride = isChannelsLast ? dxStrides[1] : dxStrides[2];
  const xColStride = isChannelsLast ? dxStrides[2] : dxStrides[1];
  const xChannelStride = isChannelsLast ? 1 : dxStrides[1];
  const yBatchStride = dyStrides[0];
  const yRowStride = isChannelsLast ? dyStrides[1] : dyStrides[2];
  const yColStride = isChannelsLast ? dyStrides[2] : dyStrides[1];
  const yChannelStride = isChannelsLast ? 1 : dyStrides[1];
  const outId = backend.makeOutput(convInfo.inShape, 'float32');
  const outId = backend.dataIdMap.get(out.datId);
  const dyId = backend.dataIdMap.get(dy.datId);
  const filterId = backend.dataIdMap.get(filter.datId);

  wasmConv2DBackpropInput(
      dyId, filterId, batchSize, filterHeight, filterWidth, inHeight, inWidth,
      inChannels, outHeight, outWidth, outChannels, strideHeight, strideWidth,
      topPad, leftPad, ffltS0, ffltS1, ffltS2, xBatchStride, xRowStride, xColStride, xChannelStride, yBatchStride, yRowStride, yColStride,
      yChannelStride, outId);

  return out;
}

export const conv2DBackpropInputConfig: KernelConfig = {
    kernelName: Conv2DBackpropInput,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: conv2DBackpropInput as {} as KernelFunc
};
*/

import {Cos, KernelConfig} from '@tensorflow/tfjs-core';

export const cosConfig: KernelConfig = createUnaryKernelConfig(Cos);

*/

import {Cosh, KernelConfig} from '@tensorflow/tfjs-core';

export const coshConfig: KernelConfig = createUnaryKernelConfig(Cosh);

*/

import {CropAndResize, CropAndResizeAttrs, CropAndResizeInputs, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';

enum InterpolationMethod {
  bilinear = 0,
  nearest = 1
}

let wasmCropAndResize: (imagesId: number, boxesId: number, boxIndId: number, numBoxes: number,
 imagesShape: Uint8Array, cropHeight: number, cropWidth: number, method: number,
 extrapolationValue: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmCropAndResize = backend.wasm.cwrap(CropAndResize, null /*void*/, [
    'number',  // imagesId
    'number',  // boxesId
    'number',  // boxIndId
    'number',  // numBoxes
    'array',   // images shape
    'number',  // cropHeight
    'number',  // cropWidth
    'number',  // method
    'number',  // extrapolation value
    'number'  // out id
  ]);
}

function cropAndResize(args: {
  backend: BackendWasm,
  inputs: CropAndResizeInputs,
  attrs: CropAndResizeAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {method, extrapolationValue, cropSize} = attrs;
  const {image, boxes, boxInd} = inputs;

  const numBoxes = boxes.shape[0];
  const [cropHeight, cropWidth] = cropSize as [number, number];

  let imagesData = backend.dataIdMap.get(image.dataId);
  let castedData;
  if (image.dtype !== 'float32') {
    castedData = cast({backend, inputs: {x: image}, attrs: {dtype: 'float32'}});
    imagesData = backend.dataIdMap.get(castedData.dataId);
  }

  const imagesId = imagesData.id;
  const boxesId = backend.dataIdMap.get(boxes.dataId).id;
  const boxIndId = backend.dataIdMap.get(boxInd.dataId).id;

  const out = backend.makeOutput(cropSize[0], 'float32');

  const imagesShapeBytes = new Uint8Array(new Int32Array(image.shape).buffer);
  wasmCropAndResize(imagesId, boxesId, boxIndId, numBoxes,
    imagesShape, cropHeight, cropWidth, method, number,
    extrapolationValue, outId);

  if (castedData != null) {
    backend.disposeData(castedData.dataId);
  }

  return out;
}

export const cropAndResizeConfig: KernelConfig = {
  kernelName: CropAndResize,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: cropAndResize as {} as KernelFunc
};
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* 
=============================================================================

*/

import {backend_util, KernelConfig, KernelFunc, Cumsum, CumsumAttrs, CumsumInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

import {transpose} from './Transpose';

let wasmCumsum: (xId: number, exclusive: number, reverse: number,
                 finalDim: number, outId: number, dtype: CppDType) => void;

function setup(backend: BackendWasm) {
  wasmCumsum = backend.wasm.cwrap(Cumsum, null /* void */, 
    ['number', // x_id
     'number', // exclusive
     'number', // reverse
     'number', // final_dim
     'number', // out_id
     'number'  // dtype
    ]); 
}

export function cumsum(
  args: {inputs: CumsumInputs, backend: BackendWasm, attrs: CumsumAttrs}):
  TensorInfo {
    const {inputs, backend, attrs} = args;
    const {x} = inputs;
    const {axis, exclusive, reverse} = attrs;

    const xRank = x.shape.length;

    util.assert(x.dtype === 'float32' || x.dtype ===
        'int32',
      () => `cumsum does not support ${x.dtype} tensors in the WASM backend`);
      // permute required axis to inner most axis
    const permutation = backend_util.getAxesPermutation([axis], xRank);
    let permutedX = x;
    if (permutation !== null) {
      permutedX = transpose({inputs: {x}, attrs: {perm: permutation}, backend});
    }

    const permutedAxis = backend_util.getInnerMostAxes(1, xRank)[0];
    backend_util.assertAxesAreInnerMostDims('cumsum', [permutedAxis], xRank);

    const permutedOut = backend.makeOutput(permutedX.shape, permutedX.dtype);
    const finalDim = permutedX.shape[permutedAxis];

    const permutedXId = backend.dataIdMap.get(permutedX.dataId).id;
    const permutedOutId = backend.dataIdMap.get(permutedOut.dataId).id;
    wasmCumsum(permutedXId, exclusive ? 1 : 0, reverse ? 1 : 0,
                 finalDim,
                 permutedOutId, CppDType[x.dtype]);

    // transpose data back if permuted
    let out = permutedOut;
    if (permutation !== null) {
      const undoPermutation = backend_util.getUndoAxesPermutation(permutation);
      out = transpose(
        {inputs: {x: permutedOut}, attrs: {perm: undoPermutation}, backend});
      backend.disposeData(permutedX.dataId);
      backend.disposeData(permutedOut.dataId);
    }
    return out;
}

export const cumsumConfig: KernelConfig ={
  kernelName: Cumsum,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: cumsum as {} as KernelFunc
};

import {DepthToSpace, DepthToSpaceAttrs, DepthToSpaceInputs, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmDepthToSpace:
  (xId: number, blockSize: number, channelsLast: number, xStrides: Uint8Array,
  xStridesLength: number,
  outputShape: Uint8Array, outputStrides: Uint8Array,
  outSize: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmDepthToSpace = backend.wasm.cwrap(DepthToSpace, null /*void*/, 
    ['number', // xId
     'number', // blockSize
     'number', // channelsLast
     'array',   // xStrides
     'number',  // xStridesLength
     'array',   // outputShape
     'array',   // outputStrides
     'number',  // outSize
     'number',  // outId
    ]); 
}

export function depthToSpace(args: {
  backend: BackendWasm,
  inputs: DepthToSpaceInputs,
  attrs: DepthToSpaceAttrs}):
  TensorInfo {
    const {backend, inputs, attrs} = args;
    const {x} = inputs;
    const {blockSize, dataFormat} = attrs;
    const batchSize = x.shape[0];
    const inputHeight = (dataFormat === 'NHWC') ? x.shape[1] : x.shape[2];
    const inputWidth = (dataFormat === 'NHWC') ? x.shape[2] : x.shape[3];
    const inputDepth = (dataFormat === 'NHWC') ? x.shape[3] : x.shape[1];
    const

outputHeight = inputHeight * blockSize; 
const outputWidth = inputWidth * blockSize; 
const outputDepth = 
inputDepth / (blockSize * blockSize); 
const outputShape = (dataFormat === 'NHWC') ? 
[batchSize, outputHeight, outputWidth, outputDepth] : 
[batchSize, outputDepth, outputHeight, outputWidth]; 
const out = backend.makeOutput(outputShape, 'float32'); 
const xData = backend.dataIdMap.get(x.dataId); 
const xId = xData.id; 
const xStridesBytes = new Uint8Array(xData.stride.buffer); 
const outputShapeBytes = new Uint8Array(outputShape); 
const outStridesBytes = new Uint8Array(outputShape); 
const outId = backend.dataIdMap.get(out.dataId).id; 
const channelsLast = dataFormat === 'NHWC' ? 1 : 0; 
const wasmDepthToSpace
(xId, blockSize, channelsLast, xStridesBytes, x.shape.length - 1, 
outputShapeBytes, outStridesBytes, outputShape.length, outId); 
export const depthToSpaceConfig:

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 */

import {backend_util, DepthwiseConv2dNative, DepthwiseConv2dNativeAttrs, 
DepthwiseConv2dNativeInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core'; 
import {BackendWasm} from '../backend_wasm'; 
let wasmDepthwiseConv2d: (
xId: number, batchSize: number,
inputHeight: number, inputWidth: number,
filterId: number, filterHeight: number, filterWidth: number, padTop: number,
padRight: number, padBottom: number, isSamePad: number, dilationHeight: number, 
dilationWidth: number, strideHeight: number, strideWidth: number, inputChannels: number, 
outputChannels: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmDepthwiseConv2d = 
    backend.wasm.cwrap(DepthwiseConv2dNative, null /* void */, [
      'number',  // xId
      'number',  // batchSize
      'number',  // inputHeight
      'number',  // inputWidth
      'number',  // filterId
      'number',  // filterHeight
      'number',  // filterWidth
      'number',  // padTop
      'number',  // padRight
      'number',  // padBottom
      'number',  // isSamePad
      'number',  // dilationHeight
      'number',  // dilationWidth
      'number',  // strideHeight
      'number',  // strideWidth
      'number',  // inputChannels
      'number',  // outputChannels
      'number',  // outId
    ]); 
}

function depthwiseConv2d(args: {
  inputs: DepthwiseConv2dNativeInputs,
  backend: BackendWasm,
  attrs: DepthwiseConv2dNativeAttrs
}) {
  const {inputs, backend, attrs} = args; 
  const {x, filter} = inputs; 
  const xId = backend.dataIdMap.get(x.dataId).id; 
  const filterId = backend.dataIdMap.get(filter.dataId).id; 
  const strides, dilations, pad, dimRoundingMode = attrs; 
  const convInfo = backend_util.computeConv2DInfo(
    x as Tensor4D), shape, (filter as Tensor4D), shape, 
  strides, 
  $(dilations as number | [number, number]), pad, dimRoundingMode, 
  true /* depthwise */); 

  if (convInfo.dataFormat !== 'channelsLast') {
    throw new Error(`wasm backend DepthwiseConv2dNative does not support dataFormat: 
      [{convInfo.dataFormat}]. Please use 'channelsLast'.`); 
  }

  const filterHeight = convInfo.filterHeight; 
  const filterWidth = convInfo.filterWidth; 
  const padTop = convInfo.padInfo.top; 
  const padBottom = convInfo.padInfo.bottom; 
  const padLeft = convInfo.padInfo.left; 
  const dilationHeight = convInfo.dilationHeight; 
  const dilationWidth = convInfo.dilationWidth; 
  const strideHeight = convInfo.strideHeight; 
  const strideWidth = convInfo.strideWidth; 
  const inputChannels = convInfo.inChannels; 
  const outputChannels = convInfo.outChannels; 
  const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0; 
  if (convInfo.dataFormat !== 'channelsLast') {
    throw new Error(`wasm backend DepthwiseConv2dNative does not support dataFormat: 
      ['{convInfo.dataFormat}'. Please use 'channelsLast'].`); 
  }

  const out = 
    backend.makeOutput(convInfo.outShape, 'float32'); 
  const outId = backend.dataIdMap.get(out.dataId).id; 
  const wasmDepthwiseConv2d
    (xId, 
    x.shape[0], x.shape[1], x.shape[2], 
    filterId, filterHeight, 
    filterWidth, 
    strideHeight, strideWidth, 
    inputChannels, 
    outputChannels, 
    outId) => void;
}
padTop, padRight, padBottom, padLeft, isSamePad,
  
  dilationHeight, dilationWidth, strideHeight, strideWidth,
  inputChannels, outputChannels, outId); return out;

export const depthwiseConv2dNativeConfig:
  KernelConfig = {
    kernelName: DepthwiseConv2dNative,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: depthwiseConv2d as {} as KernelFunc
  };

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 *
=============================================================================

*/
import {Elu, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const eluConfig: KernelConfig = createUnaryKernelConfig(Elu);

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 *
=============================================================================

*/
import {Equal, KernelConfig} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

export const equalConfig: KernelConfig = createBinaryKernelConfig(Equal);

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=============================================================================

*/

import {ExpandDims, ExpandDimsAttrs, ExpandDimsInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {reshape} from './Reshape';

export function expandDims(args: {
  inputs: ExpandDimsInputs,
  attrs: ExpandDimsAttrs,
  backend: BackendWasm
}) {
  const {inputs, attrs, backend} = args;
  const {input} = inputs;
  const {dim} = attrs;

  const inputRank = input.shape.length;
  const newShape = input.shape.slice();
  let $dim = dim;
  if (dim < 0) {
    // Negative value is counted from the tail of rank.
    utils.assert(
        -(inputRank + 1) <= dim,
        () => `Axis must be in the interval \([-($inputRank + 1), $inputRank]\)`);
    $dim = inputRank + dim + 1;
  }

  newShape.splice($dim, 0, 1);

  return reshape({inputs: {x: input}, backend, attrs: {shape: newShape}});
}

export const expandDimsConfig: KernelConfig = {
  kernelName: ExpandDims,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: expandDims as {} as KernelFunc
};
backendName: 'wasm',
kernelFunc: expandDims as {} as KernelFunc,

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 */

import {KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';
import {FlipLeftRight, FlipLeftRightInputs, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';

export const floorConfig: KernelConfig = createUnaryKernelConfig(Floor);

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 */

import {Floor, KernelConfig} from '@tensorflow/tfjs-core';

export const floorConfig: KernelConfig = createUnaryKernelConfig(Floor);

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import {Floor, KernelConfig} from '@tensorflow/tfjs-core';

export const floorConfig: KernelConfig = createUnaryKernelConfig(Floor);

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*
***********************************************************************

*/

import {FloorDiv, KernelConfig} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;

export const floorDivConfig: KernelConfig =
createBinaryKernelConfig(FloorDiv, supportsFullBroadcast);

import {FusedBatchNorm, FusedBatchNormAttrs, FusedBatchNormInputs, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmBatchNorm: (
    xId: number, meanId: number, varianceId: number, offsetId: number,
    scaleId: number, varianceEpsilon: number, outId: number) => void;

function setup(backend: BackendWasm): void {
    wasmBatchNorm = backend.wasm.cwrap(
        FusedBatchNorm, null /* void */,
        ['number', 'number', 'number', 'number', 'number',
        'number', 'number', 'number', 'number']);
}

function fusedBatchNorm(args: {
  backend: BackendWasm,
  inputs: FusedBatchNormInputs,
  attrs: FusedBatchNormAttrs
}): TensorInfo {
    const {backend, inputs, attrs} = args;
    const {varianceEpsilon} = attrs;
    const {x, mean, variance, offset, scale} = inputs;
    const xId = backend.dataIdMap.get(x.dataId).id;
    const meanId = backend.dataIdMap.get(mean.dataId).id;
    const varianceId = backend.dataIdMap.get(variance.dataId).id;
    const offsetId = offset != null ? backend.dataIdMap.get(offset.dataId).id : 0;
    const scaleId = scale != null ? backend.dataIdMap.get(scale.dataId).id : 0;

    const out = backend.makeOutput(x.shape, x.dtype);
    // Short-circuit zero-sized tensors.
    if (util.sizeFromShape(x.shape) === 0) {
        return out;
    }

    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmBatchNorm(
        xId, meanId, varianceId, offsetId, scaleId,
        varianceEpsilon, outId);
    return out;
}

export const fusedBatchNormConfig: KernelConfig = {
    kernelName: FusedBatchNorm,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: fusedBatchNorm as {} as KernelFunc
};

import {FusedConv2D, FusedConv2DAttrs, FusedConv2DInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {FusableActivation} from './types';

let wasmFusedConv2d:
    (xId: number, batchSize: number, inputHeight: number, inputWidth: number,
     filterId: number, filterHeight: number, filterWidth: number,
     biasId: number, padTop: number, padRight: number, padBottom: number,
     dilationHeight: number, dilationWidth: number, strideHeight: number, strideWidth: number,
     inputChannels: number, outputChannels: number, activation: number, preluActivationWeightsId: number, leakyreluAlpha: number, outId: number) => void;

function setup(backend: BackendWasm) {
    wasmFusedConv2d = backend.wasm.cwrap(FusedConv2D, null /* void */,
      ['number', 'number', 'number', 'number', 'number',
      'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number'],
      ['number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number']);
}

function fusedConv2d(args: {
  backend: BackendWasm,
  inputs: FusedConv2DInputs,
  attrs: FusedConv2DAttrs
}): Tensor4D {
    const {backend, inputs, attrs} = args;
    const {padTop, padRight, padBottom, dilationHeight, dilationWidth, strideHeight, strideWidth} = inputs;
    const {x, batchSize, inputHeight, inputWidth, filterHeight, filterWidth, biasId, leakyreluAlpha} = inputs;
    const {xId, inputChannels, outputChannels, activation} = inputs;
    const out = backend.makeOutput(x.shape, x.dtype);
    // Short-circuit zero-sized tensors.
    if (util.sizeFromShape(x.shape) === 0) {
        return out;
    }

    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmFusedConv2d(
        xId, inputHeight, inputWidth, filterHeight, filterWidth, biasId, leakyreluAlpha, outId);
    return out;
}

export const fusedConv2dConfig: KernelConfig = {
    kernelName: FusedConv2D,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: fusedConv2d as {} as KernelFunc
};

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*/

import {backend_util, FusedConv2D, FusedConv2DAttrs, FusedConv2DInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {FusableActivation} from './types';

let wasmFusedConv2d:
    (xId: number, batchSize: number, inputHeight: number, inputWidth: number,
     filterId: number, filterHeight: number, filterWidth: number,
     biasId: number, padTop: number, padRight: number, padBottom: number,
     dilationHeight: number, dilationWidth: number, strideHeight: number, strideWidth: number,
     inputChannels: number, outputChannels: number, activation: number, preluActivationWeightsId: number, leakyreluAlpha: number, outId: number) => void;

function setup(backend: BackendWasm) {
    wasmFusedConv2d = backend.wasm.cwrap(FusedConv2D, null /* void */,
      ['number', 'number', 'number', 'number', 'number',
      'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number'],
      ['number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number']);
}

function fusedConv2d(args: {
  backend: BackendWasm,
  inputs: FusedConv2DInputs,
  attrs: FusedConv2DAttrs
}): Tensor4D {
    const {backend, inputs, attrs} = args;
    const {padTop, padRight, padBottom, dilationHeight, dilationWidth, strideHeight, strideWidth} = inputs;
    const {x, batchSize, inputHeight, inputWidth, filterHeight, filterWidth, biasId, leakyreluAlpha} = inputs;
    const {xId, inputChannels, outputChannels, activation} = inputs;
    const out = backend.makeOutput(x.shape, x.dtype);
    // Short-circuit zero-sized tensors.
    if (util.sizeFromShape(x.shape) === 0) {
        return out;
    }

    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmFusedConv2d(
        xId, inputHeight, inputWidth, filterHeight, filterWidth, biasId, leakyreluAlpha, outId);
    return out;
}

export const fusedConv2dConfig: KernelConfig = {
    kernelName: FusedConv2D,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: fusedConv2d as {} as KernelFunc
};
import {backend_util, FusedDepthwiseConv2D, FusedDepthwiseConv2DAttrs, FusedDepthwiseConv2DInputs, KernelConfig, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {FusableActivation} from './types';

let wasmFusedDepthwiseConv2d:
    (xId: number, batchSize: number, inputHeight: number, inputWidth: number, filterId: number, filterHeight: number, filterWidth: number, biasId: number, padTop: number, padRight: number, padBottom: number, padLeft: number, isSamePad: number, dilationHeight: number, strideHeight: number, strideWidth: number, inputChannels: number, outputChannels: number, activation: number, preluActivationWeightsId: number, leakyreluAlpha: number, outId: number) =>

function setup(backend: BackendWasm) {
  wasmFusedDepthwiseConv2d =
      backend.wasm.cwrap(FusedDepthwiseConv2D, null /* void */, [
  'number', // xId
  'number', // batchSize
  'number', // inputHeight
  'number', // inputWidth
  'number', // filterId
  'number', // filterHeight
  'number', // filterWidth
  'number', // biasId
  'number', // padTop
  'number', // padRight
  'number', // padBottom
  'number', // padLeft
  'number', // batchSize
  'number', // inputHeight
  'number', // inputWidth
  'number', // filterId
  'number', // filterHeight
  'number', // filterWidth
  'number', // biasId
  'number', // padTop
  'number', // padRight
  'number', // padBottom
  'number', // padLeft
  'number', // isSamePad
  'number', // dilationHeight
  'number', // dilationWidth
  'number', // strideHeight
  'number', // strideWidth
  'number', // inputChannels
  'number', // outputChannels
  'number', // activation
  'number', // preluActivationWeightsId
  'number', // leakyreluAlpha
  'number', // outId
]);
}

function fusedDepthwiseConv2d(args: {
  inputs: FusedDepthwiseConv2DInputs,
  backend: BackendWasm,
  attrs: FusedDepthwiseConv2DAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {x, filter, bias, preluActivationWeights} = inputs;
  const {strides, padded, dilations, batchSize, dataFormat, dimRoundingMode, activation, leakyreluAlpha} = attrs;
  const convInfo =
      backend_util.computeConv2DInfo(
      (x as Tensor4D).shape, (filter as Tensor4D).shape, strides, dilations, batchSize, dimRoundingMode, true /* depthwise */);  
  if (fusedActivation === null) {
    throw new Error(
        'FusedActivation not supported for FusedDepthwiseConv2D');
  }
  const xId = backend.dataIdMap.get(x.dataId).id;
  const filterId = backend.dataIdMap.get(filter.dataId).id;
  const outputChannels = convInfo.outChannels;
  const biasId = 0;
  if (bias != null) {
    const biasData = backend.dataIdMap.get(bias.dataId);
    if (biasData.shape.length !== 1) {
      throw new Error(
          'FusedDepthwiseConv2D only supports rank-1 bias but got `command` rank $biasData.shape.length,`');
    }
    if (biasData.shape[0] !== outputChannels) {
      throw new Error(
          'FusedDepthwiseConv2D bias shape $biasData.shape does not match the number of output channels outputChannels');
    }
    const biasId = biasData.id;
  }
  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const padTop = convInfo.padInfo.top;
  const padRight = convInfo.padInfo.right;
  const padBottom = convInfo.padInfo.bottom;
  const padLeft = convInfo.padInfo.left;
  const dilationHeight = convInfo.dilationHeight;
  const dilationWidth = convInfo.dilationWidth;
  const strides = convInfo.strideHeight;
  const strides = convInfo.strideWidth;
  const inputChannels = convInfo.inChannels;
  const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;
  const batchSize = convInfo.batchSize;
  const inHeight = convInfo.inHeight;
  const inWidth = convInfo.inWidth;
  if (dataFormat !== 'NHWC') {
    throw new Error(
        'FusedDepthwiseConv2D only supports format NHWC but got format $dataFormat');
  }
  const out = backend.makeOutput(convInfo.outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  const preluActivationWeightsId = preluActivationWeights == null ? 0 : backend.dataIdMap.get(preluActivationWeights.dataId).id;
  wasmFusedDepthwiseConv2d(
      xId, batchSize,
      inHeight, inWidth, filterId, filterHeight, filterWidth,
      biasId, padTop, padRight, padBottom, padLeft,
      isSamePad, dilationHeight, dilationWidth, stridesHeight, stridesWidth, inputChannels, outputChannels,
      fusedActivation, preluActivationWeightsId, leakyreluAlpha, 0, outId);
  return out;
}

export const fusedDepthwiseConv2DConfig: KernelConfig = {
  kernelName: FusedDepthwiseConv2D,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: fusedDepthwiseConv2d as {} as KernelFunc,
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};
```javascript
wasmGatherNd: (\n    xId: number, dtype: CppDType, indicesId: number, numSlices: number, 
    sliceRank: number, sliceSize: number, strides: Uint8Array, outId: number) =>
    void;

function setup(backend: BackendWasm): void {
  wasmGatherNd = backend.wasm.cwrap(GatherNd, null /*void*/, [ 
    'number',  // xId
    'number',  // dtype
    'number',  // indicesId
    'number',  // numSlices
    'number',  // sliceRank
    'number',  // sliceSize
    'array',   // strides
    'number'   // outId
  ]);}

function gatherNd(args: {backend: BackendWasm, 
    inputs: GatherNdInputs}): 
    TensorInfo {
  const {backend, inputs} = args;
  const {params, indices} = inputs;
  const [resultShape, numSlices, sliceSize, strides] =
      gather_util.prepareAndValidate(params, indices);
  const out = backend.makeOutput(resultShape, params.dtype);
  if (numSlices === 0) {
    return out;
  }
  const indicesShape = indices.shape;
  const sliceRank = indicesShape[indicesShape.length - 1];
  const xData = backend.dataIdMap.get(params.dataId);
  const xId = xData.id;
  const indicesData = backend.dataIdMap.get(indices.dataId);
  const indicesId = indicesData.id;
  const stridesBytes = new Uint8Array(new Int32Array(strides).buffer);
  const outId = backend.dataIdMap.get(out.dataId).
  wasmGatherNd(xId, CppDType[params.dtype], indicesId, numSlices, sliceSize, strides,
      outId);
  return out;
}

export const gatherNdConfig: KernelConfig = {
  kernelName: GatherNd,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: gatherNd
};
```
```javascript
Int32Array(util.computeStrides(flattenOutputShape)).buffer);//

wasmGather(
  xId, CppDType[x.dtype], xStridesBytes, stridesSize, indicesId, shapeInfo.batchSize, outStridesBytes, outId);

backend.disposeData(flattenOutputShape); return out;

// reshape
out.shape = shapeInfo.outputShape;
return out;
}

export const gatherV2Config: KernelConfig = {
  kernelName: GatherV2,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: gatherV2 as {} as KernelFunc
};

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 */

import {Greater, KernelConfig} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;
export const greaterConfig: KernelConfig =
  createBinaryKernelConfig(Greater, supportsFullBroadcast, 'bool');

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 */

import {KernelConfig, KernelFunc, LeakyRelu, LeakyReluAttrs, LeakyReluInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmFunc: (
    xId: number, dtype: number, leakyreluAlpha: number, outId: number) =>
    void;

function setupFunc(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(LeakyRelu,
    null /* void */,
    ['number',  // x_id
     'number',  // dtype
     'number',  // leakyrelu_alpha
     'number'])
    .call(backend.dataIdMap.get(xId).id,
      CppDType[dtype],
      leakyreluAlpha, backend.dataIdMap.get(outId).id);
}

export function leakyRelu(
    inputs: LeakyReluInputs,
    attrs: LeakyReluAttrs,
    backend: BackendWasm): TensorInfo {
  const {inputs: {x}, attrs: {alpha}, backend} = inputs;

  const xId = backend.dataIdMap.get(x.dataId).id;
  const outId = backend.dataIdMap.get(outId).id;
  const x = backend.getData(xId, CppDType[x.dtype], alpha, outId);
  const out = backend.getData(outId, CppDType[out.dtype], alpha, outId);

  const xshape = backend.computeShape(x.shape);
  const outshape = backend.computeShape(out.shape);

  const xstrides = backend.computeStrides(xshape);
  const outstrides = backend.computeStrides(outshape);

  const xbuffer = backend.getDataBuffer(xId);
  const outbuffer = backend.getDataBuffer(outId);

  // Gather x into out
  // TODO: This could be optimized
  const xbufferSize = xbuffer.length;
  const outbufferSize = outbuffer.length;

  const xbufferData = new Uint8Array(xbufferSize);
  const outbufferData = new Uint8Array(outbufferSize);

  // Copy x buffer to xbufferData
  for (let i = 0; i < xbufferSize; i++) {
    xbufferData[i] = xbuffer[i];
  }

  // Copy out buffer to outbufferData
  for (let i = 0; i < outbufferSize; i++) {
    outbufferData[i] = outbuffer[i];
  }

  // Gather x buffer to out buffer
  wasmFunc(xId, CppDType[x.dtype], leakyreluAlpha, outId);

  // Copy out buffer back to out
  for (let i = 0; i < outbufferSize; i++) {
    outbuffer[i] = outbufferData[i];
  }

  return out;
}

export const leakyReluConfig: KernelConfig = {
  kernelName: LeakyRelu,
  backendName: 'wasm',
  setupFunc,
  kernelFunc: leakyRelu as {} as KernelFunc
};
```

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============================================================================

*/

import { KernelConfig, Less } from '@tensorflow/tfjs-core';

import { createBinaryKernelConfig } from './binary_kernel';

const supportsFullBroadcast = false;

export const lessConfig: KernelConfig = createBinaryKernelConfig(Less, supportsFullBroadcast, 'bool');

export const lessConfig_2: KernelConfig = createBinaryKernelConfig(Less, supportsFullBroadcast, 'bool');

*/

import { KernelConfig, LessEqual } from '@tensorflow/tfjs-core';

import { createBinaryKernelConfig } from './binary_kernel';

const supportsFullBroadcast = false;

export const lessEqualConfig: KernelConfig = createBinaryKernelConfig(LessEqual, supportsFullBroadcast, 'bool');

*/

import { KernelConfig, Log } from '@tensorflow/tfjs-core';

import { createUnaryKernelConfig } from './unary_kernel';

export const logConfig: KernelConfig = createUnaryKernelConfig(Log);

*/

import { KernelConfig, LogicalAnd } from '@tensorflow/tfjs-core';

import { createBinaryKernelConfig } from './binary_kernel';

const supportsFullBroadcast = false;

export const logicalAndConfig: KernelConfig = createBinaryKernelConfig(LogicalAnd, supportsFullBroadcast, 'bool');

*/

import {backend_util, KernelConfig, KernelFunc, Max, MaxAttrs, MaxInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import { BackendWasm } from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

let wasmMax: (xId: number, dtype: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmMax = backend.wasm.cwrap(Max, null /*void*/, 
    ['number',  // x_id
     'number',  // dtype
     'number',  // reduce_size
     'number',  // out_id
  ]);}

function max(args: {backend: BackendWasm, xId: number, dtype: number, reduceSize: number, outId: number}) {
  wasmMax(args.xId, args.dtype, args.reduceSize, args.outId);
}
BackendWasm, inputs: MaxInputs, attrs: MaxAttrs}}; 

    TensorInfo {
      const {backend, inputs, attrs} = args; 
      const {reductionIndices: axis, keepDims} = attrs; 
      const {x} = inputs; 
      const xId = backend.dataIdMap.get(x.dataId).id; 
      const transposedId = backend.dataIdMap.get(transposed.dataId).id; 
      const inputId = transposedId; 
    };

    const {inputRank: shapeLength} = x.shape; 
    backend_util.assertAxesAreInnerMostDims('max', axes, inputRank);

    const outShape = backend_util.expandShapeToKeepDim(x.shape, originalAxes); 
    const inputWasTransposed = 
        permuteAxesAndTranspose(x, axis, backend);

    let inputId = transposedId;
    let input = transposed;
    let reduceSize = 0;

    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmMax(inputId, CppDType[x.dtype], reduceSize, outId, outId);

    if (inputWasTransposed) {
        input = transposed;
        inputId = transposedId;
    }

    return out;
}

export const maxConfig: KernelConfig = {
    kernelName: Max,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: max as {} as KernelFunc
};
const { filterSize, strides, pad, dimRoundingMode } = attrs;
const convInfo = backend_util.computePool2DInfo(x.shape, filterSize, strides, 1 /* dilations */, pad, dimRoundingMode);
const filterHeight = convInfo.filterHeight;
const filterWidth = convInfo.filterWidth;
const padTop = convInfo.padInfo.top;
const padRight = convInfo.padInfo.right;
const padBottom = convInfo.padInfo.bottom;
const padLeft = convInfo.padInfo.left;
const dilationHeight = convInfo.dilationHeight;
const dilationWidth = convInfo.dilationWidth;
const strideHeight = convInfo.strideHeight;
const strideWidth = convInfo.strideWidth;
const inputChannels = convInfo.inChannels;
const outputChannels = convInfo.outChannels;
if (convInfo.dataFormat !== 'channelsLast') throw new Error('wasm backend does not support dataFormat: ' + '
  $\{convInfo.dataFormat\}.
Please use 'channelsLast'.
}

const out = backend.makeOutput(convInfo.outShape, 'float32');
const outId = backend.dataIdMap.get(out.dataId).id;

wasmMaxPool(
    xId, x.shape[0], x.shape[1], x.shape[2],
    filterHeight, filterWidth, 
    padTop, padRight, padBottom, padLeft, dilationHeight, dilationWidth,
    strideHeight, strideWidth, inputChannels, outputChannels, outId);
return out;
}

export const maxPoolConfig: KernelConfig = {
  kernelName: MaxPool,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: maxPool
};

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 */

import {backend_util, KernelConfig, KernelFunc, Mean, MeanAttrs, MeanInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {cast} from './Cast';

import {permuteAxesAndTranspose} from './kernel_utils';

let wasmMean: (xId: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmMean = backend.wasm.cwrap(Mean, null /*void*/, ['number, number, number']);
}

export function mean(
    args: {
      backend: BackendWasm,
      inputs: MeanInputs,
      attrs: MeanAttrs
    }): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;
  const {transposed, axes, originalAxes, inputWasTransposed} = permuteAxesAndTranspose(x, axis, backend);
  let reductionAxes = axes;
  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose of this
      // once we are done.
      input = transposed;
      inputId = transposedId;
      reductionAxes = backend_util.getInnerMostAxes(inputAxes.length, input.shape.length);
    }
  }
  backend_util.assertAxesAreInnerMostDims('mean', reductionAxes, input.shape.length);
  const [outShape, reduceShape] = backend_util.computeOutAndReduceShapes(input.shape, reductionAxes);
  const reduceSize = util.sizeFromShape(reduceShape);
  let castedInput = input;
  if (input.dtype !== 'float32') castedInput = cast({backend, inputs: {x: input}, attrs: {dtype: 'float32'}});
  const outId = backend.dataIdMap.get(castedInput.dataId).id;
  const out = backend.makeOutput(outShape, 'float32');
  if (util.sizeFromShape(input.shape) !== 0) wasmMean(inputId, reduceSize, outId);
  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
    // reshape const newShape = backend_util.expandShapeToKeepDim(outShape, 'float32');
    if (util.sizeFromShape(input.shape) !== 0) wasmMean(inputId, reduceSize, outId);
    if (input.dtype !== 'float32') backend.disposeData(castedInput.dataId);
    backend.disposeData(transposed.dataId);
    if (keepDims) {
      // reshape const newShape = backend_util.expandShapeToKeepDim(outShape, originalAxes);
      out.shape = newShape;
    }
    if (input.dtype !== 'float32') backend.disposeData(castedInput.dataId);
    return out;
  }
  return tensor; unsetFunc: setup, backendUtil: mean as {} as KernelFunc
};

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=============================================================================

*/

import {backend_util, KernelConfig, KernelFunc, Min, MinAttrs, MinInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

let wasmMin: (xId: number, dtype: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmMin = backend.wasm.cwrap(Min, null /*void*/, [
    'number',  // x_id
    'number',  // dtype
    'number',  // reduce_size
    'number',  // out_id
  ]);}

function min(args: {backend: BackendWasm, inputs: MinInputs, attrs: MinAttrs}):
    TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} =
permuteAxesAndTranspose(x, axis, backend);

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose of this.
      // once we are done.
      input = transposed;
      inputId = transposedId;
    }
  }

  const inputRank = input.shape.length;

  backend_util.assertAxesAreInnerMostDims('min', axes, inputRank);
  const [outShape, reduceShape] =
      backend_util.computeOutAndReduceShapes(input.shape, axes);
  const reduceSize = util.sizeFromShape(reduceShape);
  const outId = backend_util.computeOutShapeAndReduceShapeToInputShape(x, dtype);

  const out = backend.makeOutput(outShape, input.dtype);
  if (util.sizeFromShape(input.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmMin(inputId, CppDType[x.dtype], reduceSize, outId);
  }

  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  if (keepDims) {
    // reshape
    const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
    out.shape = newShape;
  }

  return out;
}

export const minConfig: KernelConfig = {
  kernelName: Min,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: min as {} as KernelFunc
};

import {KernelConfig, Minimum} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;
export const minimumConfig: KernelConfig =
createBinaryKernelConfig(Minimum, supportsFullBroadcast);

import {KernelConfig, MirrorPad, MirrorPadAttrs, MirrorPadInputs} from '@tensorflow/tfjs-core';

const supportsFullBroadcast = false;
export const mirrorPadConfig: KernelConfig =
createBinaryKernelConfig(MirrorPad, supportsFullBroadcast);
enum in MirrorPad.cc
enum MirrorPaddingMode { reflect = 0, symmetric = 1 }

let wasmMirrorPad: (xId: number, xShapeBytes: Uint8Array, xShapeLength: number, xDtype: number, prePaddingsBytes: Uint8Array, postPaddingsBytes: Uint8Array, mode: number, outId: number) => void; // function

function setup(backend: BackendWasm) {
  wasmMirrorPad = backend.wasm.cwrap(MirrorPad, null /* void */, [
    'number', // xId
    'array', // x.shape
    'number', // x.shape.length
    'number', // x.dtype
    'array', // pre-paddings
    'array', // post-paddings
    'number', // mode
    'number', // outId
  ]); // function

function mirrorPad(args: {
  inputs: MirrorPadInputs,
  backend: BackendWasm,
  attrs: MirrorPadAttrs
}) {
  const {inputs: {x}, backend, attrs: {paddings, mode}} = args;

  const outShape = paddings.map((p, i) => p[0] + x.shape[i] + p[1] - x.shape.length);
  const xId = backend.dataIdMap.get(x.dataId).id;
  const out = backend.makeOutput(outShape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;

  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const prePaddingsBytes = new Uint8Array(new Int32Array(paddings.map(padTuple => padTuple[0]).buffer));
  const postPaddingsBytes = new Uint8Array(new Int32Array(paddings.map(padTuple => padTuple[1]).buffer));

  wasmMirrorPad(
    xId, xShapeBytes, x.shape.length, CppDType[x.dtype], prePaddingsBytes, postPaddingsBytes, MirrorPaddingMode[mode], outId);
  return out;
}

export const mirrorPadConfig: KernelConfig = {
  kernelName: MirrorPad,
  backendName: 'wasm',
  kernelFunc: mirrorPad as {} as KernelFunc,
  setupFunc: setup
};

import {KernelConfig, Multiply} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = true;
export const multiplyConfig: KernelConfig = createBinaryKernelConfig(Multiply, supportsFullBroadcast);

import {KernelConfig, Neg} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const negConfig: KernelConfig = createUnaryKernelConfig(Neg);

import {BackendWasm} from '../backend_wasm';

interface Result {
  pSelectedIndices: number;
  selectedSize: number;
  pSelectedScores: number;
  pValidOutputs: number;
}

export function parseResultStruct(
    backend: BackendWasm, resOffset:
) { /* function */
const result = new Int32Array(backend.wasm.HEAPU8.buffer, resOffset, 4);

const pSelectedIndices = result[0];
const constSelectedSize = result[1];
const pSelectedScores = result[2];
const pValidOutputs = result[3];

// Since the result was allocated on the heap, we have to delete it.
backend.wasm._free(resOffset);

return {pSelectedIndices, constSelectedSize, pSelectedScores, pValidOutputs};
}

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 */

import {KernelConfig, KernelFunc, NonMaxSuppressionV3, NonMaxSuppressionV3Attrs, NonMaxSuppressionV3Inputs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {parseResultStruct} from './NonMaxSuppression_util';

let wasmFunc: (boxesId: number, scoresId: number, maxOutputSize: number, iouThreshold: number, scoreThreshold: number) => number;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(NonMaxSuppressionV3, 'number', ['number', 'number', 'number', 'number', 'number'], []);
}

function kernelFunc(args: {
  backend: BackendWasm,
  inputs: NonMaxSuppressionV3Inputs,
  attrs: NonMaxSuppressionV3Attrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {iouThreshold, maxOutputSize, scoreThreshold} = attrs;
  const {boxes, scores} = inputs;

  const boxesId = backend.dataIdMap.get(boxes.dataId).id;
  const scoresId = backend.dataIdMap.get(scores.dataId).id;

  const resOffset = wasmFunc(boxesId, scoresId, maxOutputSize, iouThreshold, scoreThreshold);

  const {pSelectedIndices, selectedSize, pSelectedScores, pValidOutputs} = parseResultStruct(backend, resOffset);

  // Since we are not using scores for V3, we have to delete it from the heap.
  backend.wasm._free(pSelectedScores);
  backend.wasm._free(pValidOutputs);

  const selectedIndicesTensor = backend.makeOutput([selectedSize], 'int32', pSelectedIndices);

  return selectedIndicesTensor;
}

export const nonMaxSuppressionV3Config: KernelConfig = {
  kernelName: NonMaxSuppressionV3,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: wasmFunc as {} as KernelFunc,
};

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 */

import {KernelConfig, KernelFunc, NonMaxSuppressionV4, NonMaxSuppressionV4Attrs, NonMaxSuppressionV4Inputs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {parseResultStruct} from './NonMaxSuppression_util';

let wasmFunc: (boxesId: number, scoresId: number, maxOutputSize: number, iouThreshold: number, scoreThreshold: number, padToMaxOutputSize: boolean) => number;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(NonMaxSuppressionV4, 'number', ['number', 'number', 'number', 'number', 'number', 'bool'], []);
}

function kernelFunc(args: {
  backend: BackendWasm,
  inputs: NonMaxSuppressionV4Inputs,
  attrs: NonMaxSuppressionV4Attrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {iouThreshold, maxOutputSize, scoreThreshold, padToMaxOutputSize} = attrs;

  return {/* ... */};
}
 padToMaxOutputSize} =
      attrs;
  const {boxes, scores} = inputs;
  const boxesId =
      backend.dataIdMap.get(boxes.dataId).id;
  const scoresId = backend.dataIdMap.get(scores.dataId).id;
  const resOffset = wasmFunc(
      boxesId, scoresId, maxOutputSize, iouThreshold, scoreThreshold,
      padToMaxOutputSize);
  const {SelectedIndices, selectedSize, pSelectedScores, pValidOutputs} =
      parseResultStruct(backend, resOffset); // Since we are not using scores for V4, we have to delete it from the heap.
  backend.wasm._free(pSelectedScores);
  const selectedIndicesTensor =
      backend.makeOutput([selectedSize], 'int32', pSelectedIndices);
  const validOutputsTensor =
      backend.makeOutput([], 'int32', pValidOutputs);
  return [selectedIndicesTensor, validOutputsTensor];
}

export const nonMaxSuppressionV4Config: KernelConfig = {
  kernelName: NonMaxSuppressionV4,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: nonMaxSuppressionV4 as {} as KernelFunc,
};

import {KernelConfig, KernelFunc, NonMaxSuppressionV5, NonMaxSuppressionV5Attrs,
  NonMaxSuppressionV5Inputs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {parseResultStruct} from './NonMaxSuppression_util';

let wasmFunc:
      NonMaxSuppressionV5,
  backend: BackendWasm,
  inputs: NonMaxSuppressionV5Inputs,
  attrs: NonMaxSuppressionV5Attrs
): TensorInfo[] {
  const {backend, inputs, attrs} = args;
  const {iouThreshold, maxOutputSize, scoreThreshold, softNmsSigma} = attrs;
  const {boxes, scores} = inputs;
  const boxesId = backend.dataIdMap.get(boxes.dataId).id;
  const scoresId = backend.dataIdMap.get(scores.dataId).id;
  const resOffset = wasmFunc(
      boxesId, scoresId, maxOutputSize, iouThreshold, scoreThreshold,
      softNmsSigma);
  const {pSelectedIndices, selectedSize, pSelectedScores, pValidOutputs} =
      parseResultStruct(backend, resOffset); // Since we are not using validOutputs for V5, we have to delete it from the heap.
  backend.wasm._free(pValidOutputs);
  const selectedIndicesTensor =
      backend.makeOutput([selectedSize], 'int32', pSelectedIndices);
  const selectedScoresTensor =
      backend.makeOutput([selectedSize], 'int32', pSelectedScores);
  return [selectedIndicesTensor, selectedScoresTensor];
}

export const nonMaxSuppressionV5Config: KernelConfig = {
  kernelName: NonMaxSuppressionV5,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: nonMaxSuppressionV5 as {} as KernelFunc,
};

import {KernelConfig, NotEqual} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = false;
export const notEqualConfig: KernelConfig =
  createBinaryKernelConfig(NotEqual, supportsFullBroadcast, 'bool');
import {KernelConfig, KernelFunc, OneHot, OneHotAttrs, OneHotInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmOneHot: (
    indicesId: number, depth: number, onValue: number, offValue: number,
    outId: number) => void;

function setup(backend: BackendWasm) {
  wasmOneHot = backend.wasm.cwrap(OneHot, null /* void */, 
    ['number',  // indices_id
     'number',  // depth,
     'number',  // onValue
     'number',  // offValue
     'number'   // out_id
  ]);
}

function oneHot(
    args: {inputs: OneHotInputs, attrs: OneHotAttrs, backend: BackendWasm}) {
  const {inputs, backend, attrs} = args;
  const {indices} = inputs;
  const {depth, onValue, offValue} = attrs;

  const out = backend.makeOutput([...indices.shape, depth], 'int32');
  const outId = backend.dataIdMap.get(out.dataId).id;

  const indicesData = backend.dataIdMap.get(indices.dataId);
  const indicesId = indicesData.id;

  wasmOneHot(indicesId, depth, onValue, offValue, outId);

  return out;
}

export const oneHotConfig: KernelConfig = {
  kernelName: OneHot,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: oneHot as {} as KernelFunc,
};

import {KernelConfig, KernelFunc, OnesLike, OnesLikeInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

function onesLike(args: {inputs: OnesLikeInputs, backend: BackendWasm}) {
  const {inputs: {x}, backend} = args;
  const out = backend.makeOutput(x.shape, x.dtype);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.fill(1);
  return out;
}

export const onesLikeConfig: KernelConfig = {
  kernelName: OnesLike,
  backendName: 'wasm',
  kernelFunc: onesLike as {} as KernelFunc,
};

import {KernelConfig, KernelFunc, Pack, PackAttrs, PackInputs, TensorInfo, util} from '@tensorflow/tfjs-core';
import {Concat} from './Concat';
import {ExpandDims} from './ExpandDims';

export function pack(
    args: {inputs: PackInputs, backend: BackendWasm, attrs: PackAttrs}):
    TensorInfo {
  const {inputs, backend, attrs} = args;
  const {axis} = attrs;

  if (inputs.length === 1) {
    return ExpandDims(
        {inputs: {input: inputs[0]}, backend, attrs: {dim: axis}});
  }

  const shape = inputs[0].shape;
  const dtype = inputs[0].dtype;

  inputs.forEach(t => {
    util.assertShapesMatch(
        shape, t.shape,
        'All tensors passed to stack must have matching shapes');
    util.assert(
        dtype === t.dtype,
        () => 'All tensors passed to stack must have matching dtypes');
  });

  const intermediateTensorInfos: TensorInfo[] = [];
  const expandedTensors = inputs.map(t => {
    return ExpandDims(
        {inputs: [t], backend, attrs: {dim: axis}});
  });

  return Concat(
    {inputs: expandedTensors, backend, attrs: {axis}})
  .constrainShape(shape, expandedTensors[0].shape);
}

export const packConfig: KernelConfig = {
  kernelName: Pack,
  backendName: 'wasm',
  kernelFunc: pack as {} as KernelFunc,
};
expandedT = \( \text{expandDims}(\text{inputs: [input: t], backend, attrs: [dim: axis]}) \);\n
 intermediateTensorInfos.push(expandedT);\n\n return expandedT;\n\n });\n\n const result = \( \text{concat}(\text{inputs: expandedTensors, backend, attrs: [axis]}) \);\n\n intermediateTensorInfos.forEach(t =>
    \( \text{backend.disposeData(t.dataId)} \));
\n\n\n
export const packConfig: KernelConfig = {
  kernelName: 'Pack',
  backendName: 'wasm',
  kernelFunc: pack as {} as KernelFunc
};

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 *=============================================================================

import {KernelConfig, KernelFunc, PadV2, PadV2Attrs, PadV2Inputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {fill} from './Fill';

import {CppDType} from './types';

let wasmPadV2: (xId: number, xShapeBytes: Uint8Array, xShapeLength: number, xDtype: number, prePaddingsBytes: Uint8Array, postPaddingsBytes: Uint8Array, constantValue: number, outId: number) => void;\n\nfunction setup(backend: BackendWasm) {
  wasmPadV2 = backend.wasm.cwrap(PadV2, null /* void */, [
    'number',  // xId
    'array',   // x.shape
    'number',  // x.shape.length
    'number',  // x.dtype
    'array',   // pre-paddings
    'array',   // post-paddings
    'number',  // constantValue
    'number',  // outId
  ]);\n}

function pad(
    args: {inputs: PadV2Inputs, backend: BackendWasm, attrs: PadV2Attrs}) {
  const {inputs: {x}, backend, attrs: {paddings, constantValue}} = args;

  const outShape = paddings.map((p, i) => p[0] /* beforePad */ + x.shape[i] + p[1] /* afterPad */);\n  if (util.sizeFromShape(x.shape) === 0) {\n    // Short-circuit the computation, since x doesn't have value, only\n    // the shape is used to compute output shape to pad.\n    return fill({\n      backend,\n      attrs: {shape: outShape, value: constantValue, dtype: x.dtype}\n    });\n  }

  const xId = backend.dataIdMap.get(x.dataId).id;
  const out = backend.makeOutput(outShape, x.dtype);
  const outTensorData = backend.dataIdMap.get(out.dataId);
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const prePaddingsFlat = paddings.map((padTuple) => padTuple[0]);
  const postPaddingsFlat = paddings.map((padTuple) => padTuple[1]);

  \n  wasmPadV2(xId, xShapeBytes, x.shape.length, CppDType[x.dtype], prePaddingsFlat, \n    postPaddingsFlat, constantValue, outId);
  return out;
\n\n\nexport const padV2Config: KernelConfig = {
  kernelName: PadV2,
  backendName: 'wasm',
  kernelFunc: pad as {} as KernelFunc,
  setupFunc: setup\n};

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 *=============================================================================

import {KernelConfig, Pow} from '@tensorflow/tfjs-core';

const supportsFullBroadcast = false;
export const powConfig: KernelConfig =
  createBinaryKernelConfig(Pow, supportsFullBroadcast);

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import {KernelConfig, KernelFunc, Prelu, PreluInputs} from '@tensorflow/tfjs-core';

import {backend_util, KernelConfig, KernelFunc, Prod, ProdAttrs, ProdImports, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from '../kernel_utils';

import {CppDType} from './types';

let wasmPrelu: (xId: number, weightsId: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmPrelu = backend.wasm.cwrap(Prelu, null /* void */, [ '
    'number', 'x_id' 'number', 'weights_id' 'number' 'out_id' 'number' ],
    '
    function prelu(args: {inputs: PreluInputs, backend: BackendWasm}) {
      const [inputs, backend] = args;
      const {x, alpha} = inputs;
      const xId = backend.dataIdMap.get(x.dataId).id;
      const weightsId = backend.dataIdMap.get(alpha.dataId).id;
      let inputId = xId;
      const input = x;
      const xId = cast({backend, inputs: {x}, attrs: {dtype: 'float32'}});
      inputId = backend.dataIdMap.get(castedInput.dataId).id;
      const out = backend.makeOutput(x.shape, 'float32');
      const outId = backend.dataIdMap.get(out.dataId).id;
      wasmPrelu(inputId, weightsId, outId);
      if (input.dtype != 'float32') {
        backend.disposeData(castedInput.dataId);
        return out;
      }
      return out;
    }
  }

  export const preluConfig: KernelConfig = {
    kernelName: Prelu,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: prelu as {} as KernelFunc
  };

  let wasmProd: (xId: number, reduceSize: number, dtype: number, outId: number) => void;

  function setup(backend: BackendWasm): void {
    wasmProd = backend.wasm.cwrap(Prod, null /* void */, ['number', 'number', 'number', 'number']);
  }

  function prod(args: {
    backend: BackendWasm,
    inputs: ProdImports,
    attrs: ProdAttrs
  }): TensorInfo {
    const {backend, inputs, attrs} = args;
    const {axis, keepDims} = attrs;
    const {x} = inputs;
    const xId = backend.dataIdMap.get(x.dataId).id;
    let inputId = xId;
    let input = x;
    const {transposed, axes, originalAxes, inputWasTransposed} =
        permuteAxesAndTranspose(x, axis, backend);
    let reductionAxes = axes;
    if (inputWasTransposed) {
      const transposedId = backend.dataIdMap.get(transposed.dataId).id;
      if (transposedId == xId) {
        // transpose was not a no-op. We
        // will need to dispose of this
        // once we are done.
        input = transposed;
        inputId = transposedId;
        reductionAxes = backend_util.getInnerMostAxes(reductionAxes.length, input.shape.length);
      }
      backend.disposeData(transposedId);
    }
    const out = backend.makeOutput(out.shape, input.dtype);
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmProd(inputId, reduceSize, CppDType[out.dtype], outId);
    if (util.sizeFromShape(input.shape) != 0) {
      const outId = backend.dataIdMap.get(out.dataId).id;
      wasmProd(inputId, reduceSize, CppDType[out.dtype], outId);
    }
    return out;
  }

  export const prodConfig: KernelConfig = {
    kernelName: Prod,
    backendName: 'wasm',
    setupFunc: prod as {} as KernelFunc
  };

let wasmResizeBilinear: (
    xId: number, batch: number, oldHeight: number, oldWidth: number,
    numChannels: number, newHeight: number, newWidth: number, align_corners: number, halfPixelCenters: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmResizeBilinear = backend.wasm.cwrap(ResizeBilinear, null /*void*/, [ 'number', // xId
    'number', // batch
    'number', // oldHeight
    'number', // oldWidth
    'number', // numChannels
    'number', // newHeight
    'number', // newWidth
    'number', // align_corners
    'number', // half_pixel_centers
    'number', // outId
  ]);}

function resizeBilinear(args: {
  backend: BackendWasm,
  inputs: ResizeBilinearInputs,
  attrs: ResizeBilinearAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;

  const {images} = inputs;
  const {alignCorners, halfPixelCenters, size} = attrs;
  const [newHeight, newWidth] = size;

  const [batch, oldHeight, oldWidth, numChannels] = images.shape; // const outShape = [batch, newHeight, newWidth, numChannels];
  const let xData = backend.dataIdMap.get(images.dataId);
  if (xData.dtype !== 'float32') {
    const castedData = cast([backend, inputs: {x: images}], attrs: {dtype: 'float32'});
    xData = backend.dataIdMap.get(castedData.dataId);
  }
  const xId = xData.id;

  const out = backend.makeOutput(outShape, 'float32');
  if (util.sizeFromShape(images.shape) === 0) {
    return out;
  }

  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmResizeBilinear(
      xId, batch, oldHeight,
      oldWidth, numChannels, newHeight, newWidth,
      alignCorners ? 1 : 0, halfPixelCenters ? 1 : 0, outId);

  if (castedData != null) {
    backend.disposeData(castedData.dataId);
  }

  return out;
}

export const resizeBilinearConfig: KernelConfig = {
  kernelName: ResizeBilinear,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: resizeBilinear as {} as KernelFunc
};

let wasmReverse: (
    xId: number, axes: Uint8Array,
    axesLength: number, outShape: Uint8Array,
    outShapeLength: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmReverse = backend.wasm.cwrap(Reverse, null, [
    'number',  // xId
    'array',   // axes
    'number',  // axes_length
    'array',   // out_shape
    'number',  // out_shape_length
    'number'   // outId
  ]);}

export function reverse(
    args: {inputs: ReverseInputs, backend: BackendWasm, attrs: ReverseAttrs}):
    TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {dims} = attrs;

  const axes = util.parseAxisParam(dims, x.shape);

  if (x.shape.length === 0) {
    return identity({inputs: {x}, backend});
  }

  const out = backend.makeOutput(x.shape, x.dtype);
  const xId = backend.dataIdMap.get(x.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;
  const axesBytes = new Uint8Array(axes.buffer);
  const outShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);

  wasmReverse(xId, axesBytes, axes.length, outShapeBytes, x.shape.length, outId);
  const reshaped = reshape({inputs: {x: out}, attrs: {shape: x.shape}, backend});

  backend.disposeData(out.dataId);
  return reshaped;
}

export const reverseConfig: KernelConfig = {

  kernelName: Reverse,
  backendName: 'wasm',
  kernelFunc: reverse as {} as KernelFunc,
  setupFunc: setup
};
import {KernelConfig, KernelFunc, RotateWithOffset, RotateWithOffsetAttrs, RotateWithOffsetInputs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmRotate: (
    xId: number, batch: number, imageHeight: number, imageWidth: number,
    numChannels: number, radians: number, centerX: number, centerY: number,
    fillBytes: Uint8Array, fillLength: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmRotate = backend.wasm.cwrap(RotateWithOffset, null /* void */,
      [ // xId, // batch
        'number', // 'number', // imageHeight
        'number', // imageWidth
        'number', // numChannels
        'number', // radians
        'number'
      ],
      ['number', // centerX
        'number', // centerY
        'array',   // fillBytes
        'number', // fillLength
        'number', // outId
      ]);
}

export function rotateWithOffset(args: {
  inputs: RotateWithOffsetInputs,
  backend: BackendWasm,
  attrs: RotateWithOffsetAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {image} = inputs;
  const {radians, fillValue, center} = attrs;

  const out = backend.makeOutput(image.shape, image.dtype);
  const imageId = backend.dataIdMap.get(image.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;

  const [batch, imageHeight, imageWidth, numChannels] = image.shape;
  const [centerX, centerY] = backend_util.getImageCenter(center, imageHeight, imageWidth);
  const fillIsBlack = fillValue === 0;
  const fullOpacityValue = 255;
  const fillValues = typeof fillValue === 'number' ? [fillValue, fillValue, fillValue, fillIsBlack ? 0 : fullOpacityValue] :
    [fillValue, fillValue, fillValue, fillIsBlack ? 0 : fullOpacityValue];
  const fillBytes = new Uint8Array(new Int32Array(fillValues).buffer);

  wasmRotate(
      imageId, batch, imageHeight, imageWidth, numChannels, radians, centerX,
      centerY,
      fillBytes, fillValues.length, outId);
  return out;
}

export const rotateWithOffsetConfig: KernelConfig = {
  kernelName: RotateWithOffset,
  backendName: 'wasm',
  kernelFunc: rotateWithOffset as {} as KernelFunc,
  setupFunc: setup
};
import {KernelConfig, KernelFunc, scatter_util, ScatterNd, ScatterNdAttrs, ScatterNdInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmScatterNd: (indicesId: number, updatesId: number, dtype: CppDType, sliceRank: number, numUpdates: number, sliceSize: number, strides: Uint8Array, outputSize: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmScatterNd = backend.wasm.cwrap('ScatterNd', null, ['number', 'number', 'number', 'number', 'number', 'array', 'array', 'array', 'array', 'array', 'number']);
}

function scatterNd(args: {backend: BackendWasm, inputs: ScatterNdInputs, attrs: ScatterNdAttrs}) {
  const {backend, inputs, attrs} = args;
  const {indices, updates} = inputs;
  const {shape} = attrs;

  const out = backend.makeOutput(shape, updates.dtype);
  if (util.sizeFromShape(shape) === 0) { return out; }

  const {sliceRank, numUpdates, sliceSize, strides, outputSize} = scatter_util.calculateShapes(updates, indices, shape);

  const indicesData = backend.dataIdMap.get(indices.dataId);
  const indicesId = indicesData.id;

  const updatesData = backend.dataIdMap.get(updates.dataId);
  const updatesId = updatesData.id;

  const stridesBytes = new Uint8Array(new Int32Array(strides).buffer);

  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmScatterNd(indicesId, updatesId, CppDType[updates.dtype], sliceRank, numUpdates, sliceSize, stridesBytes, outputSize, outId);

  return out;
}

export const scatterNdConfig: KernelConfig = {
  kernelName: ScatterNd,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: scatterNd as {} as KernelFunc
};

import {KernelConfig, Select, SelectInputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmSelect: (conditionId: number, tId: number, eId: number, offset: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmSelect = backend.wasm.cwrap('SelectV2', null, ['number', 'number', 'number', 'number', 'number']);
}

function select(args: {inputs: SelectInputs, backend: BackendWasm}) {
  const {inputs, backend} = args;
  const {condition, t, e} = inputs;

  const conditionId = backend.dataIdMap.get(condition.dataId).id;
  const tId = backend.dataIdMap.get(t.dataId).id;
  const eId = backend.dataIdMap.get(e.dataId).id;

  const out = backend.makeOutput(t.shape, t.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;

  const cRank = condition.shape.length;
  const tRank = t.shape.length;

  const offset = cRank === 0 || cRank > 1 || tRank === 1 ? 1 : util.sizeFromShape(t.shape.slice(1));

  wasmSelect(conditionId, tId, eId, offset, outId);

  return out;
}

export const selectConfig: KernelConfig = {
  kernelName: Select,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: select as {} as KernelFunc
};

import {KernelConfig, KernelFunc, Sigmoid, SigmoidInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmFunc: (xId: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmFunc = backend.wasm.cwrap('SigmoidV2', null, ['number', 'number', 'number', 'number', 'number', 'array', 'array', 'array', 'array', 'array', 'number']);
}

function sigmoid(args: {inputs: SigmoidInputs, backend: BackendWasm}) {
  const {inputs, backend} = args;
  const {x} = inputs;

  const xId = backend.dataIdMap.get(x.dataId).id;

  wasmFunc(xId, outId);

  return out;
}

export const sigmoidConfig: KernelConfig = {
  kernelName: Sigmoid,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: sigmoid as {} as KernelFunc
};
void function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(Sigmoid, null /* void */
  void */ [ 'number', 'number' ]); 
}

TensorInfo function sigmoid(ARGS: { backend: BackendWasm, inputs: SigmoidInputs }):

void {
  const [ backend, inputs: { x: } ] = args; 
  const xId = backend.dataIdMap.get(x.dataId).id; 
  const out = backend.makeOutput(x.shape, x.dtype); 
  const outId = backend.dataIdMap.get(out.dataId).id; 
  // Short-circuit zero-sized tensors. 
  if (util.sizeFromShape(out.shape) === 0) {
    return; 
  }
  wasmFunc(xId, outId); 
  return; 
}

export const sigmoidConfig: KernelConfig = {
  kernelName: 'Sigmoid', 
  backendName: 'wasm', 
  setupFunc: setup, 
  kernelFunc: sigmoid as {} as KernelFunc 
};

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 */

import {KernelConfig, Sigmoid} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const sigmoidConfig: KernelConfig = createUnaryKernelConfig(Sigmoid);

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 */

import {KernelConfig, KernelFunc, Softmax, SoftmaxAttrs, SoftmaxInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmFunc: (xId: number, outId: number, channels: number, batch: number) =>
    void;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(Softmax, null /* void */, 

  'number',  // xId 
  'number',  // outId 
  'number',  // channels 
  'number',  // batch
  'number'
  ];
}

function softmax(args: {
  backend: BackendWasm, 
  inputs: SoftmaxInputs, 
  attrs: SoftmaxAttrs
}):

TensorInfo {
  const { backend, inputs: { logits }, attrs: { dim } } = args; 
  const xId = backend.dataIdMap.get(logits.dataId).id; 
  const out = backend.makeOutput(logits.shape, logits.dtype); 
  const outId = backend.dataIdMap.get(out.dataId).id; 
  const channels = logits.shape[dim]; 
  const batch = util.sizeFromShape(logits.shape) / channels; 
  // Short-circuit zero-sized tensors. 
  if (util.sizeFromShape(out.shape) === 0) {
    return; 
  }
  wasmFunc(xId, outId, channels, batch); 
  return; 
}

export const softmaxConfig: KernelConfig = {
  kernelName: Softmax, 
  backendName: 'wasm', 
  setupFunc: setup, 
  kernelFunc: softmax as {} as KernelFunc 
};

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 */

import {backend_util, KernelConfig, KernelFunc, ReshapeArray, ReshapeInputs, TensorInfo, TransposeArray, TransposeInputs, util} from '@tensorflow/tfjs-core';

import {PadV2} from './PadV2';
import {reshape} from './Reshape';
import {transpose} from './Transpose';

function spaceToBatchND(args: {
  inputs: SpaceToBatchNDInputs, 
  backend: BackendWasm, 
  attrs: 
}) {
  const { inputs, backend, attr } = args; 
  return; 
}
const prod = util.sizeFromShape(blockShape);

  const completePaddings: Array<[number, number]> = attrs;

  const paddedX = padV2Config.kernelFunc({
    inputs: [x],
    backend, attr: {paddings: completePaddings, constantValue: 0}
  }) as TensorInfo;

  const reshapedPaddedShape = backend_util.getReshaped(paddedX.shape, blockShape, prod, false);

  const flattenedShape = backend_util.getReshapedPermuted(paddedX.shape, blockShape, prod, false);

  const reshapeInputs = ReshapeInputs = [x: paddedX];

  const reshapeAttrs = ReshapeAttr = {shape: reshapedPaddedShape};

  const paddedXReshaped = reshape({inputs: reshapeInputs, backend, attrs: reshapeAttrs});

  const transposeInputs = TransposeInputs = [x: paddedXReshaped];

  const transposeAttrs = TransposeAttr = {perm: permutedReshapedPaddedPermutation};

  const paddedXReshaped = transpose({inputs: transposeInputs, backend, attrs: transposeAttrs});

  const resultReshapeInputs = ReshapeInputs = [x: paddedX];

  const resultReshapeAttrs = ReshapeAttr = {shape: flattenedShape};

  const result = reshape({inputs: resultReshapeInputs, backend, attrs: resultReshapeAttrs});

  backend.disposeData(paddedX.dataId);

  backend.disposeData(paddedXReshaped.dataId);

  backend.disposeData(reshapedPaddedShape.dataId);

  return result;
}

export const spaceToBatchNDConfig: KernelConfig = {
  kernelName: SpaceToBatchND,
  backendName: 'wasm',
  kernelFunc: spaceToBatchND as {} as KernelFunc
};

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 */

import {KernelConfig, KernelFunc, SplitV, SplitVAttr, SplitVInputs, util} from '@tensorflow/tfjs-core';
import {backend_util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {slice} from './Slice';

export function splitV({inputs, attrs, backend: BackendWasm}) {

  const {x} = inputs;

  const {numOrSizeSplits, axis} = attrs;

  const $axis = util.parseAxisParam(axis, x.shape)[0];

  const splitSizes = backend_util.prepareSplitSize(x, numOrSizeSplits, $axis);
  const begin = new Array(x.shape.length).fill(0);

  const size = x.shape.slice();

  return splitSizes.map(s => {
    const xSliceSize = [...size];
    xSliceSize[$axis] = s;
    const xSlice = slice({inputs: [x], attrs: {begin, size: xSliceSize}, backend});
    begin[$axis] += s;
    return xSlice;
  });
}

export const splitVConfig: KernelConfig = {
  kernelName: SplitV,
  backendName: 'wasm',
  kernelFunc: splitV as {} as KernelFunc
};

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 */

import {KernelConfig, Sqrt} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const sqrtConfig: KernelConfig = createUnaryKernelConfig(Sqrt);

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 */
import {KernelConfig, Square} from '@tensorflow/tfjs-core';

export const squareConfig: KernelConfig = createUnaryKernelConfig(Square);

import {KernelConfig, SquaredDifference} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = true;
export const squaredDifferenceConfig: KernelConfig = createBinaryKernelConfig(SquaredDifference, supportsFullBroadcast);

import {KernelConfig, KernelFunc, Step, StepAttrs, StepInputs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {CppDType} from './types';

let wasmStep:
    (xId: number, alpha: number, dtype: number, outId: number) =>
    void;

function setup(backend: BackendWasm): void {
  wasmStep = backend.wasm.cwrap(Step, null /*void*/, 
    'number',  // x_id
    'number',  // alpha
    'number',  // dtype
    'number'   // out_id
  );
}

function step(
    args: {backend: BackendWasm, inputs: StepInputs, attrs: StepAttrs}):
    TensorInfo {
  const {backend, inputs, attrs} = args;

  const {alpha} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;

  const out = backend.makeOutput(x.shape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmStep(xId, alpha, CppDType[x.dtype], outId);
  return out;
}

export const stepConfig: KernelConfig = {
  kernelName: Step,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: step as {} as KernelFunc
};

import {KernelConfig, KernelFunc, slice_util, StridedSlice, StridedSliceAttrs, StridedSliceInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {reshape} from './Reshape';
import {slice} from './Slice';

let wasmStridedSlice: (
    xId: number, xStridesBytes: Uint8Array, xRank: number, beginBytes: Uint8Array, endBytes: Uint8Array, stridesBytes: Uint8Array, outShapeBytes: Uint8Array, outShapeLength: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmStridedSlice = backend.wasm.cwrap(StridedSlice, null /*void*/, 
    'number',  // xId
    'array',  // xStrides
    'number',  // xRank
    'array',  // begin
    'array',  // end
    'array',  // strides
    'array',  // outShape
    'number',  // outId
  );
}

export function stridedSlice(args: {
  backend: BackendWasm,
  inputs: StridedSliceInputs
}: 
    StridedSliceConfig) {
  const {backend, inputs} = args;

  const x = inputs.x;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const xStrides = inputs.xStrides;
  const xRank = inputs.xRank;
  const begin = inputs.begin;
  const end = inputs.end;
  const strides = inputs.strides;

  const outShape = backend.makeOutput(x.shape, x.dtype);
  const outId = backend.dataIdMap.get(outShape.dataId).id;

  const beginBytes = Uint8Array.from(begin);
  const endBytes = Uint8Array.from(end);
  const stridesBytes = Uint8Array.from(strides);

  wasmStridedSlice(xId, beginBytes, endBytes, stridesBytes, outShape.dataId, outShape.shape, outId);
  return outShape;
}

export const stridedSliceConfig: KernelConfig = {
  kernelName: 'StridedSlice',
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: stridedSlice as {} as KernelFunc
};

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inputs: StridedSliceInputs,
  attr: StridedSliceAttr}
): TensorInfo {
  const {backend, inputs, attr} = args;
  const {x} = inputs;
  const {begin, end, strides, beginMask, endMask, ellipsisMask, newAxisMask, shrinkAxisMask} = attr;
  const {finalShape, finalShapeSparse, isIdentity, sliceDim0, isSimpleSlice, begin, end, strides} = slice_util.sliceInfo(x.shape, begin, end, strides, beginMask, endMask, ellipsisMask, newAxisMask, shrinkAxisMask);
  let result;
  if (isIdentity) {
    result = reshape({inputs: {x}, backend, attr: {shape: finalShape}});
  } else if (sliceDim0 || isSimpleSlice) {
    // Optimization #2, slice is memory contiguous (only occurs in dim 0)
    util.assert(finalShape.length >= 1, () => `Input must have rank at least 1, got: ${x.shape.length}
    finalShape
});
    result = reshape({inputs: {x: sliced}, backend, attr: {shape: finalShape}});
    backend.disposeData(sliced.dataId);
  } else {
    const out = backend.makeOutput(finalShapeSparse, 'float32');
    const xId = backend.dataIdMap.get(x.dataId).id;
    const xStridesBytes = new Uint8Array(new Int32Array(x.shape).buffer);
    const beginBytes = new Uint8Array(new Int32Array(begin).buffer);
    const endBytes = new Uint8Array(new Int32Array(end).buffer);
    const stridesBytes = new Uint8Array(new Int32Array(strides).buffer);
    const outputShapeBytes = new Uint8Array(new Int32Array(finalShapeSparse).buffer);
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmStridedSlice(xId, xStridesBytes, x.shape.length, beginBytes, endBytes, stridesBytes, outputShapeBytes, outId);
    result = reshape({inputs: {x: out}, backend, attr: {shape: finalShape}});
    backend.disposeData(out.dataId);
  }
  return result;
}

export const stridedSliceConfig: KernelConfig = {
  kernelName: StridedSlice,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: stridedSlice as {} as KernelFunc
};
inputId = xId;

let input = x;

const transposedAxesAndTranspose = (x, axis, backend) => {
  let reductionAxes = axes;
  if (inputWasTransposed) {
    reductionAxes = backend_util.getInnerMostAxes(input.shape.length);
  }

  backend_util.assertAxesAreInnerMostDims('sum', reductionAxes, input.shape.length);

  const [outShape, reduceShape] =
    backend_util.computeOutAndReduceShapes(input.shape, reductionAxes);

  const reduceSize =
    util.sizeFromShape(reduceShape);

  const out = backend.makeOutput(outShape, input.dtype);

  if (util.sizeFromShape(input.shape) !== 0) {
    wasmSum(inputId, reduceSize, CppDType[input.dtype], outId);
  }

  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  if (keepDims) {
    // reshape
    const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
    out.shape = newShape;
  }

  return out;
};

export const sumConfig: KernelConfig = {
  kernelName: Sum,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: sum as {} as KernelFunc
};

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 */

import {KernelConfig, Tan} from '@tensorflow/tfjs-core';

export const tanConfig: KernelConfig = createUnaryKernelConfig(Tan);

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 */

import {KernelConfig, KernelFunc, Tile, TileAttrs, TileInputs} from '@tensorflow/tfjs-core';

export const tileConfig: KernelConfig = {
  kernelName: Tile,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: tile as {} as KernelFunc
};

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 */

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmTile: (
    xId: number, xShape: Uint8Array, xShapeSize: number, newShape: Uint8Array, newShapeSize: number, dtype: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmTile = backend.wasm.cwrap(Tile, null /* void */, [
    'number',  // x_id
    'array',   // x_shape
    'number',  // x_shape.length
    'array',   // new_shape
    'number',  // new_shape.length
    'number'   // out_id
  ]);
}

function tile(
    args: {inputs: TileInputs, backend: BackendWasm, attrs: TileAttrs}) {
  const {inputs, backend, attrs} = args;
  const xId = backend.dataIdMap.get(x.dataId);
  const {reps} =
function transform(
    args:
        {backend: BackendWasm, inputs: TransformInputs, attrs:
            TransformAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {image, transforms} = inputs;
  const {interpolation, fillMode, fillValue, outputShape} = attrs;
  const [batch, imageHeight, imageWidth, numChannels] = image.shape;
  const [outHeight, outWidth] = outputShape;

  const outShape = [batch, outHeight, outWidth, numChannels] as
      number[];

  const strides = new Uint8Array(new Int32Array(util.computeStrides(image.shape)).buffer);

  const out = backend.makeOutput(outShape, image.dtype);

  backend.dataIdMap.get(image.dataId).id;

  const imageData = backend.dataIdMap.get(image.dataId);

  const transformsData = backend.dataIdMap.get(transforms.dataId);

  const interpolationModeId = interpolation === 'nearest' ? 1 : 2;
  const fillModeId;
  switch (fillMode) {
    case 'constant':
      fillModeId = 1;
      break;
    case 'reflect':
      fillModeId = 2;
      break;
    case 'wrap':
      fillModeId = 3;
      break;
    case 'nearest':
      fillModeId = 4;
      break;
    default:
      fillModeId = 1;
      break;
  }

  wasmTransform(imageId, transformsId, (transforms.shape[0] > 1), batch, outHeight, outWidth, numChannels, imageHeight, strides, image.shape.length - 1, interpolationModeId, fillModeId, fillValue, outId);

  return out;
}

export const transformConfig: KernelConfig = {
  kernelName: Transform,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: transform as {} as KernelFunc
};

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 */

import {KernelConfig, KernelFunc, TensorInfo, Unpack, UnpackAttrs, UnpackInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {slice} from './Slice';

function unpack(
    args: {inputs: UnpackInputs, backend: BackendWasm, attrs: UnpackAttrs}): TensorInfo[] {
  const {inputs, backend, attrs} = args;
  const {value} = inputs;
  let {axis} = attrs;

  if (axis < 0) {
    axis += value.shape.length;
  }

  const numOutputs = value.shape[axis];
  const rank = value.shape.length;
  const outShape = new Array(rank - 1);

  let outIndex = 0;
  for (let i = 0; i < rank; i++) {
    if (i !== axis) {
      outShape[outIndex++] = value.shape[i];
    }
  }

  const outs = new Array(numOutputs);
  const begin = new Array(rank);
  const size = value.shape.slice();
  size[axis] = 1;

  for (let i = 0; i < outs.length; i++) {
    begin[axis] = i;
    outs[i] = slice({inputs: {x: value}, attrs: {begin, size, backend}});
  }

  return outs.map(({dataId, dtype}) => ({dataId, dtype, shape: outShape}));
}

export const unpackConfig: KernelConfig = {
  kernelName: Unpack,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: unpack as {} as KernelFunc
};

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 */

import {KernelConfig, KernelFunc, ZerosLike, ZerosLikeInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

function zerosLike(args: {inputs: ZerosLikeInputs, backend: BackendWasm}) {
  const {inputs, backend} = args;
  const {x} = inputs;
  const backendImage = backend.dataIdMap.get(backend.dataId);
  const backendImageId = backendImage.id;
  const backendImageData = backend.dataIdMap.get(backendImageDataId);
  const imageData = backend.dataIdMap.get(image.dataId);

  const outShape = [batch, outHeight, outWidth, numChannels] as
      number[];

  const strides = new Uint8Array(new Int32Array(util.computeStrides(image.shape)).buffer);

  const out = backend.makeOutput(outShape, image.dtype);

  backend.dataIdMap.get(out.dataId).id;

  const outValues = backend.makeOutput(x.shape, x.dtype);

  wasmZerosLike(imageId, backendImageId, backendImageDataId, fillModeId, fillValue, outId);

  return out;
}

export const zerosLikeConfig: KernelConfig = {
  kernelName: ZerosLike,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: zerosLike as {} as KernelFunc
};

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============================================================================
zerosLikeConfig: KernelConfig = {
  kernelName: ZerosLike,
  backendName: 'wasm',
  kernelFunc: zerosLike
};

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 *=============================================================================
 */

import {KernelConfig, registerKernel} from '@tensorflow/tfjs-core';
import {fusedMatMulConfig} from './kernels/_FusedMatMul';
import {absConfig} from './kernels/Abs';
import {addConfig} from './kernels/Add';
import {addNConfig} from './kernels/AddN';
import {allConfig} from './kernels/All';
import {anyConfig} from './kernels/Any';
import {argMaxConfig} from './kernels/ArgMax';
import {avgPoolConfig} from './kernels/AvgPool';
import {batchMatMulConfig} from './kernels/BatchMatMul';
import {batchToSpaceNDConfig} from './kernels/BatchToSpaceND';
import {castConfig} from './kernels/Cast';
import {ceilConfig} from './kernels/Ceil';
import {clipByValueConfig} from './kernels/ClipByValue';
import {concatConfig} from './kernels/Concat';
import {conv2DConfig} from './kernels/Conv2D';
import {conv2DBackpropInputConfig} from './kernels/Conv2DBackpropInput';
import {cosConfig} from './kernels/Cos';
import {coshConfig} from './kernels/Cosh';
import {cropAndResizeConfig} from './kernels/CropAndResize';
import {cumsumConfig} from './kernels/Cumsum';
import {depthToSpaceConfig} from './kernels/DepthToSpace';
import {depthwiseConv2dNativeConfig} from './kernels/DepthwiseConv2dNative';
import {eluConfig} from './kernels/Elu';
import {expConfig} from './kernels/Exp';
import {expandDimsConfig} from './kernels/ExpandDims';
import {fillConfig} from './kernels/Fill';
import {floorConfig} from './kernels/Floor';
import {floorDivConfig} from './kernels/FloorDiv';
import {fusedBatchNormConfig} from './kernels/FusedBatchNorm';
import {fusedConv2DConfig} from './kernels/FusedConv2D';
import {gatherNdConfig} from './kernels/GatherNd';
import {greaterConfig} from './kernels/Greater';
import {greaterEqualConfig} from './kernels/GreaterEqual';
import {identityConfig} from './kernels/Identity';
import {leakyReluConfig} from './kernels/LeakyRelu';
import {lessConfig} from './kernels/Less';
import {lessEqualConfig} from './kernels/LessEqual';
import {logConfig} from './kernels/Log';
import {logicalAndConfig} from './kernels/LogicalAnd';
import {maxConfig} from './kernels/Max';
import {maximumConfig} from './kernels/Maximum';
import {meanConfig} from './kernels/Mean';
import {minConfig} from './kernels/Min';
import {mirrorPadConfig} from './kernels/MirrorPad';
import {multiplyConfig} from './kernels/Multiply';
import {negConfig} from './kernels/Neg';
import {nonMaxSuppressionV3Config} from './kernels/NonMaxSuppressionV3';
import {nonMaxSuppressionV4Config} from './kernels/NonMaxSuppressionV4';
import {nonMaxSuppressionV5Config} from './kernels/NonMaxSuppressionV5';
import {notEqualConfig} from './kernels/NotEqual';
import {onesLikeConfig} from './kernels/OnesLike';
import {padConfig} from './kernels/PadV2';
import {powConfig} from './kernels/Pow';
import {preluConfig} from './kernels/Prelu';
import {prodConfig} from './kernels/Prod';
import {rangeConfig} from './kernels/Range';
import {realDivConfig} from './kernels/RealDiv';
import {reluConfig} from './kernels/Relu';
import {reshapeConfig} from './kernels/Reshape';
import {resizeBilinearConfig} from './kernels/ResizeBilinear';
import {reverseConfig} from './kernels/Reverse';
new MessageChannel().postMessage(new SharedArrayBuffer(1));
    // This typed array is a WebAssembly program containing threaded
    // instructions.
    return WebAssembly.validate(new Uint8Array([0, 97, 115, 109, 1, 0, 0, 1, 4, 1, 96, 0, 0, 3, 2, 1, 0, 5, 4, 1, 3, 1, 1, 10, 11, 9, 0, 65, 0, 254, 16, 2, 0, 26, 11]));
  } catch (e) {
    return false;
  }
});

var WasmBackendModuleThreadedSimd = (function() {
  if (typeof __filename !== 'undefined') _scriptDir = _scriptDir || __filename;

  function GROWABLE_HEAP_I8() { if (wasmMemory.buffer !== buffer) { updateGlobalBufferAndViews(wasmMemory.buffer) } return HEAP8 } function GROWABLE_HEAP_U8() { if (wasmMemory.buffer !== buffer) { updateGlobalBufferAndViews(wasmMemory.buffer) } return HEAPU8 } function GROWABLE_HEAP_I32() { if (wasmMemory.buffer !== buffer) { updateGlobalBufferAndViews(wasmMemory.buffer) } return HEAP32 } function GROWABLE_HEAP_U32() { if (wasmMemory.buffer !== buffer) { updateGlobalBufferAndViews(wasmMemory.buffer) } return HEAPU32 } function GROWABLE_HEAP_F64() { if (wasmMemory.buffer !== buffer) { updateGlobalBufferAndViews(wasmMemory.buffer) } return HEAPF64 }

  var Module = typeof WasmBackendModuleThreadedSimd !== 'undefined' ? WasmBackendModuleThreadedSimd : {};

  readyPromiseResolve, readyPromiseReject;

  Module['ready'] = new Promise(function(resolve, reject) {
    readyPromiseResolve = resolve;
    readyPromiseReject = reject;
  });

  moduleOverrides = {}; for (key in Module) if (Module.hasOwnProperty(key)) moduleOverrides[key] = Module[key];

  return Module;
});
converter=toC[argTypes[i]];if(converter){if(stack===0)stackSave();cArgs[i]=converter(args[i]);}else{cArgs[i]=args[i]}}}}var ret=func.apply(null,cArgs);ret=convertReturnValue(ret);if(stack!==0)stackRestore(stack);return ret}function cwrap(ident,returnType,argTypes,opts){argTypes=argTypes||[];var numericArgs=argTypes.every(function(type){return type==="number"});var numericRet=returnType!=="string";if(numericRet&&numericArgs&&!opts){return getCFunc(ident)}return function(){return ccall(ident,returnType,argTypes,arguments,opts)}}function UTF8ArrayToString(heap,idx,maxBytesToRead){var endIdx=idx+maxBytesToRead;var str="";while(!(idx>=endIdx)){var u0=heap[idx++];if(!u0)return str;if(!(u0&128)){str+=String.fromCharCode(u0);continue}var u1=heap[idx++]&63;if((u0&224)==192){str+=String.fromCharCode((u0&31)<<6|u1);continue}var u2=heap[idx++]&63;if((u0&240)==224){u0=(u0&15)<<12|u1<<6|u2}else{u0=(u0&7)<<18|u1<<12|u2<<6}if(u0<65536){str+=String.fromCharCode(u0)}else{var ch=u0-65536;str+=String.fromCharCode(55296|ch>>10,56320|ch&1023)}}return str}function UTF8ToString(ptr,maxBytesToRead){return ptr?UTF8ArrayToString(GROWABLE_HEAP_U8(),ptr,maxBytesToRead):""}function stringToUTF8Array(str,heap,outIdx,maxBytesToWrite){if(!(maxBytesToWrite>0))return 0;var startIdx=outIdx;var endIdx=outIdx+maxBytesToWrite-1;for(var i=0;i<str.length;++i){var u=str.charCodeAt(i);if(u>=55296&&u<=57343){var u1=str.charCodeAt(++i);u=65536+((u&1023)<<10)|u1&1023}if(u<=127){if(outIdx>=endIdx)break;heap[outIdx++]=u}else if(u<=2047){if(outIdx+1>=endIdx)break;heap[outIdx++]=128|u>>6&63;heap[outIdx++]=128|u&63}else if(u<=65535){if(outIdx+2>=endIdx)break;heap[outIdx++]=224|u>>12;heap[outIdx+1]=128|u>>6&63;heap[outIdx+2]=128|u&63}else{if(outIdx+3>=endIdx)break;heap[outIdx++]=240|u>>18;heap[outIdx+1]=128|u>>12&63;heap[outIdx+2]=128|u>>6&63;heap[outIdx+3]=128|u&63}heap[outIdx]=0;return outIdx-startIdx}function stringToUTF8(str,outPtr,maxBytesToWrite){return stringToUTF8Array(str,GROWABLE_HEAP_U8(),outPtr,maxBytesToWrite)}function lengthBytesUTF8(str){var len=0;for(var i=0;i<str.length;++i){var u=str.charCodeAt(i);if(u>=55296&&u<=57343){u=65536+((u&1023)<<10)|str.charCodeAt(++i)&1023;if(u<=127)+len;else if(u<=2047)len+=2;else if(u<=65535)len+=3;else len+=4}return len}function writeArrayToMemory(array,buffer){GROWABLE_HEAP_I8().set(array,buffer)}function alignUp(x,multiple){if(x%multiple>0){x+=multiple-x%multiple}return x}var buffer,HEAP8,HEAPU8,HEAP16,HEAPU16,HEAP32,HEAPU32,HEAPF32,HEAPF64;function updateGlobalBufferAndViews(buf){buffer=buf;Module["HEAP8"]=HEAP8=new Int8Array(buf);Module["HEAP16"]=HEAP16=new Int16Array(buf);Module["HEAP32"]=HEAP32=new Int32Array(buf);Module["HEAPU8"]=HEAPU8=new Uint8Array(buf);Module["HEAPU16"]=HEAPU16=new Uint16Array(buf);Module["HEAPU32"]=HEAPU32=new Uint32Array(buf);Module["HEAPF32"]=HEAPF32=new Float32Array(buf);Module["HEAPF64"]=HEAPF64=new Float64Array(buf)}var INITIAL_MEMORY=Module["INITIAL_MEMORY"]|16777216;if(EENVIRONMENT_IS_PTHREAD){wasMemory=Module["wasMemory"]}else{wasMemory=Module["wasMemory"]}wasMemory=Module["wasMemory"];buffer=Module["buffer"];updateGlobalBufferAndViews(buffer);buffer=Module["buffer"];buffer[0]=0xdeadbeef;console.log("deadbeef");wasMemory=new WebAssembly.Memory({"initial":65536,"maximum":65536,"shared":true});if(!(wasMemory.buffer instanceof SharedArrayBuffer)){err("requested a shared WebAssembly.Memory but the returned buffer is not a SharedArrayBuffer, indicating that while the browser has SharedArrayBuffer it does not have WebAssembly threads support - you may need to set a flag");if(EENVIRONMENT_IS_NODE){console.log("on node you may need: --experimental-wasm-threads --experimental-wasm-bulk-memory and also use a recent version")}throw Error("bad memory")}wasMemory=Module["wasMemory"];

WasmModuleToWorker(w, function(){
if(!numWorkersToLoad)removeRunDependency("wasm-instantiate");})

if(ENVIRONMENT_IS_PTHREAD){
addRunDependency("wasm-instantiate");
function receiveInstantiatedSource(output){
receiveInstance(output["instance"],output["module"]);}

function instantiateArrayBuffer(receiver){
return getBinaryPromise().then(function(binary){
return WebAssembly.instantiate(binary,info());
}).then(function(response){
var result=WebAssembly.instantiateStreaming(response.info);
return result.then(receiveInstantiatedSource, function(reason){
err("wasm streaming compile failed: "+reason);
err("falling back to ArrayBuffer instantiation");
return instantiateArrayBuffer(receiveInstantiatedSource)
});
else{
return instantiateArrayBuffer(receiveInstantiatedSource)
}
}

if(Module["instantiateWasm"]){
try{
exports=Module["instantiateWasm"](info, receiveInstance);
return exports;
}
catch(e){
err("Module.instantiateWasm callback failed with error: "+e);
return false;
}
}

instantiateAsync().catch(readyPromiseReject);
return{}}

ASM_CONSTS={10520:function(){throw"Canceled!"},
10538:function($0,$1){setTimeout(function(){__emit(...

ERRNO_CODES={
EPERM:63,
ENOENT:44,
ESRCH:71,
EINTR:27,
ENOEXEC:60,
EBADF:4,
EINVAL:12,
ENOTDIR:6,
EISDIR:20,
EINVAL:2,
EAUTH:2,
ENOTROCK:1,
ENOTSOCK:2,
ENOBUFS:3,
ENOTSOCK:5,
ENOTSOCK:6,
ENOTSOCK:7,
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ENOTSOCK:120,
ENOTSOCK:121,
ENOTSOCK:122,
ENOTSOCK:123,
ENOTSOCK:124,
ENOTSOCK:125,
ENOTSOCK:126,
ENOTSOCK:127,
called from main application thread!":if(!pthread_ptr)throw"Internal Error! Null pthread_ptr in
killThread";GROWABLE_HEAP_I32()[pthread_ptr+12>>2]=0;var
pthread=PThread.pthreads[pthread_ptr];pthread.worker.terminate();PThread.freeThreadData(pthread);PThread.runni
ngWorkers.splice(PThread.runningWorkers.indexOf(pthread.worker),1);pthread.worker.pthread=undefined]function
cancelThread(pthread_ptr){if(ENVIRONMENT_IS_PTHREAD)throw"Internal Error! cancelThread() can only
ever be called from main application thread!":if(!pthread_ptr)throw"Internal Error! Null pthread_ptr in
cancelThread";var
pthread=PThread.pthreads[pthread_ptr];pthread.worker.postMessage({"cmd":"cancel"})}function
cleanupThread(pthread_ptr){if(ENVIRONMENT_IS_PTHREAD)throw"Internal Error! cleanupThread() can only
ever be called from main application thread!":if(!pthread_ptr)throw"Internal Error! Null pthread_ptr in
cleanupThread";var
PThread={unusedWorkers:[],runningWorkers:[],initMainThreadBlock:function(){} var pthreadPoolSize=8;for(var
i=0;i<pthreadPoolSize;++i){PThread.allocateUnusedWorker()}},initRuntime:function(){var
tb=_malloc(228);for(var
i=0;i<228/4;++i)GROWABLE_HEAP_U32()[tb/4+i]=0;GROWABLE_HEAP_I32()[tb+12>>2]=tb;var
headPtr=tb+152;GROWABLE_HEAP_I32()[headPtr+1]=headPtr;var tlsMemory=_malloc(512);for(var
i=0;i<128;++i)GROWABLE_HEAP_U32()[tlsMemory/4+i]=0;Atoms.store(GROWABLE_HEAP_U32(),tb+100
>>2,tlsMemory);Atoms.store(GROWABLE_HEAP_U32(),tb+40>>2,tb);_emscripten_thread_init(tb,ENVIRON
MENT_IS_WORKER,1);_emscripten_register_main_browser_thread_id(tb),initWorker:function(){},pthreads:{},t
hreadExitHandlers:[],setThreadStatus:function(){},runExitHandlers:function(){ while(PThread.threadExitHandlers.l
ength>0){PThread.threadExitHandlers.pop()} if(ENVIRONMENT_IS_PTHREAD&&!_pthread_self())____pthread
_tsd_run_dtors();PThread.runExitHandlersAndDeinitThread(function(tb,exitCode){Atoms.store(GROWABLE_HEAP_U
32()),tb+56>>2,1);Atoms.store(GROWABLE_HEAP_U32(),tb+60>>2,0);PThread.runExitHandlers();Atoms.stor
e(GROWABLE_HEAP_U32(),tb+4>>2,exitCode);Atoms.store(GROWABLE_HEAP_U32(),tb+0>>2,1);_emscripten_futex_write(tb+0,2147483647);_emscripten_thread_init(tb,exitCode)}
var tb=_pthread_self();if(tb){PThread.runExitHandlersAndDeinitThread(tb,exitCode);if(ENVIRONMENT_IS_PTHREAD
AD){postMessage("\"cmd\":\"exit\"",null)}},terminateAllThreads:function(){for(var t in
PThread.pthreads){ var
pthread=PThread.pthreads[t];if(pthread&&pthread.worker) {PThread.returnWorkerToPool(pthread.worker)} }PThrea
d.pthreads={};for(var i=0;i<PThread.unusedWorkers.length;++i){var
worker=PThread.unusedWorkers[i];worker.terminate()}PThread.unusedWorkers=[];for(var
i=0;i<PThread.runningWorkers.length;++i){var worker=PThread.runningWorkers[i];var
pthread=worker.PThread.freeThreadData(pthread.worker.terminate())}PThread.freeThreadData=[]},freeThrea
dataData:function(pthread){if(!pthread) return;var tlsMemory=GROWABLE_HEAP_I32()[pthread.threadInfoStruct+100>>2];GROWABLE_HEAP_I32()[pthread.th
readInfoStruct+100>>2]=0;free(tlsMemory);_free(pthread.threadInfoStruct)} PThread.threadInfoStruct=0;if(pthread.
allocatedOwnStack&&pthread.stackBase)_free(pthread.stackBase);pthread.stackBase=0;if(pthread.worker)pthread.
worker.pthread=undefined;PThread.runWithoutMainThreadQueuedCalls(function(){PThread.runWithoutMainThreadQueuedCalls(function(){}},receiveObjectTransfer:function(data){},loadWasmModuleToWorker:function(worker,onlyFinishedLoading){worker.onmessage=function(e){var d=e['data'];var

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cmd=d[\"cmd\"];if(worker.pthread)PThread.currentProxiedOperationCallerThread=worker.pthread.threadInfoStruct;
if(d[\"targetThread\"]&&d[\"targetThread\"]!=_pthread_self()){var
thread=PThread.pthreads[d.targetThread];if(thread){thread.worker.postMessage(e.data,d[\"transferList\"])}else{con
sole.error('Internal error! Worker sent a message \"'+cmd+'\" to target pthread '+d[\"targetThread\"]+\", but that
thread no longer
exists!\")}PThread.currentProxiedOperationCallerThread=undefined;return}if(cmd===\"processQueuedMainThread
Work\"){_emscripten_main_thread_process_queued_calls()}else
if(cmd===\"spawnThread\"){spawnThread(e.data)}else
if(cmd===\"cleanupThread\"){cleanupThread(d[\"thread\"])}else
if(cmd===\"killThread\"){killThread(d[\"thread\"])}else
if(cmd===\"cancelThread\"){cancelThread(d[\"thread\"])}else
if(cmd===\"loaded\"){worker.loaded=true;if(onFinishedLoading)onFinishedLoading(worker);if(worker.runPthread)
{worker.runPthread();delete worker.runPthread}}else if(cmd===\"print\"){out(\"Thread \"+d[\"threadId\"]+\":
\"+d[\"text\"])}else if(cmd===\"printErr\"){err(\"Thread \"+d[\"threadId\"]+\": \"+d[\"text\"])}else
if(cmd===\"alert\"){alert(\"Thread \"+d[\"threadId\"]+\": \"+d[\"text\"])}else if(cmd===\"exit\"){var
detached=worker.pthread&&Atomics.load(GROWABLE_HEAP_U32(),worker.pthread.threadInfoStruct+64>>2);if
(detached){PThread.returnWorkerToPool(worker)}}else
if(cmd===\"exitProcess\"){try{exit(d[\"returnCode\"])}catch(e){if(e instanceof ExitStatus)return;throw e}}else
if(cmd===\"cancelDone\"){PThread.returnWorkerToPool(worker)}else
if(cmd===\"objectTransfer\"){PThread.receiveObjectTransfer(e.data)}else
if(e.data.target===\"setimmediate\"){worker.postMessage(e.data)}else{err(\"worker sent an unknown command
\"+cmd)}PThread.currentProxiedOperationCallerThread=undefined};worker.onerror=function(e){err(\"pthread sent
an error! \"+e.filename+\":\"+e.lineno+\":
\"+e.message)};if(ENVIRONMENT_IS_NODE){worker.on(\"message\",function(data){worker.onmessage({data:d
ata})});worker.on(\"error\",function(data){worker.onerror(data)});worker.on(\"exit\",function(data){})}worker.post
Message({\"cmd\":\"load\",\"urlOrBlob\":Module[\"mainScriptUrlOrBlob\"]||_scriptDir,\"wasmMemory\":wasmMe
mory,\"wasmModule\":wasmModule})},allocateUnusedWorker:function(){var pthreadMainJs=locateFile(\"tfjsbackend-wasm-threaded-simd.worker.js\");PThread.unusedWorkers.push(new
Worker(pthreadMainJs))},getNewWorker:function(){if(PThread.unusedWorkers.length==0){PThread.allocateUnus
edWorker();PThread.loadWasmModuleToWorker(PThread.unusedWorkers[0])}if(PThread.unusedWorkers.length>
0)return PThread.unusedWorkers.pop();else return null},busySpinWait:function(msecs){var
t=performance.now()+msecs;while(performance.now()<t){}}};function
establishStackSpace(stackTop,stackMax){_emscripten_stack_set_limits(stackTop,stackMax);stackRestore(stackTop
)}Module[\"establishStackSpace\"]=establishStackSpace;function getNoExitRuntime(){return
noExitRuntime}Module[\"getNoExitRuntime\"]=getNoExitRuntime;function invokeEntryPoint(ptr,arg){return
wasmTable.get(ptr)(arg)}Module[\"invokeEntryPoint\"]=invokeEntryPoint;function
___assert_fail(condition,filename,line,func){abort(\"Assertion failed: \"+UTF8ToString(condition)+\", at:
\"+[filename?UTF8ToString(filename):\"unknown filename\",line,func?UTF8ToString(func):\"unknown
function\"])}function ___call_main(argc,argv){var returnCode=_main(argc,argv)}var
_emscripten_get_now;if(ENVIRONMENT_IS_NODE){_emscripten_get_now=function(){var
t=process[\"hrtime\"]();return t[0]*1e3+t[1]/1e6}}else
if(ENVIRONMENT_IS_PTHREAD){_emscripten_get_now=function(){return performance.now()Module[\"__performance_now_clock_drift\"]}}else if(typeof
dateNow!==\"undefined\"){_emscripten_get_now=dateNow}else _emscripten_get_now=function(){return
performance.now()};function setErrNo(value){GROWABLE_HEAP_I32()[___errno_location()>>2]=value;return
value}function _atexit(func,arg){if(ENVIRONMENT_IS_PTHREAD)return
_emscripten_proxy_to_main_thread_js(1,1,func,arg)}function
__emscripten_notify_thread_queue(targetThreadId,mainThreadId){if(targetThreadId==mainThreadId){postMessag

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args+8>>2]=height;__emscripten_call_on_thread(0,targetThread,657457152,0,targetCanvasPtr,0,varargs);stackRestore(stackTop)})function
__emscripten_set_offscreencanvas_size_on_target_thread(targetThread,targetCanvas,width,height){targetCanvas=targetCanvas?UTF8ToString(targetCanvas):"\"\";__emscripten_set_offscreencanvas_size_on_target_thread_js(targetThread,targetCanvas,width,height)}function maybeCStringToJsString(cString){return
\ String\ >2?UTF8ToString(cString):cString}var specialHTMLTargets=[0,typeof document!=="undefined"?document:0,typeof window!=="undefined"?window:0];function
findEventTarget(target){target=maybeCStringToJsString(target);var
domElement=specialHTMLTargets[target]||(typeof document!=="undefined"?document.querySelector(target):undefined);return domElement}function
findCanvasEventTarget(target){return findEventTarget(target)}function
__emscripten_set_canvas_element_size_calling_thread(target,width,height){var
canvas=findCanvasEventTarget(target);if(!canvas)return-4;if(canvas.canvasSharedPtr){GROWABLE_HEAP_I32()[canvas.canvasSharedPtr>>2]=width;GROWABLE_HEAP_I32()[canvas.canvasSharedPtr+4>>2]=height}if(canvas.offscreenCanvas||!canvas.controlTransferredOffscreen){if (canvas.offscreenCanvas)canvas=canvas.offscreenCanvas;var
autoResizeViewport=false;if(canvas.GLctxObject&&canvas.GLctxObject.GLctx){var
canvas.height=height;if(autoResizeViewport)canvas.GLctxObject.GLctx.viewport(0,0,width,height)}else
if(canvas.canvasSharedPtr){var
targetThread=GROWABLE_HEAP_I32()[canvas.canvasSharedPtr+8>>2];__emscripten_set_offscreencanvas_size_on_target_thread(target,width,height)}return 1}else {return -4}function
__emscripten_set_canvas_element_size_main_thread(target,width,height){if(ENVIRONMENT_IS_PTHREAD)return
__emscripten_proxy_to_main_thread_js(2,1,target,width,height);return
__emscripten_set_canvas_element_size_calling_thread(target,width,height)}function
__emscripten_set_canvas_element_size(target,width,height){var
canvas=findCanvasEventTarget(target);if(canvas){return __emscripten_set_canvas_element_size_calling_thread(target,width,height)}else{return __emscripten_set_canvas_element_size_main_thread(target,width,height)}}function
__emscripten_set_current_thread_status(newStatus){}function
__emscripten_set_thread_name(threadId,name){}function __webgl_enable_ANGLE_instanced_arrays(ctx){var
ext=ctx.getExtension("ANGLE_instanced_arrays");if(ext){ctx["vertexAttribDivisor"]=(function(index,divisor){ext["vertexAttribDivisorANGLE"][index,divisor]});ctx["drawArraysInstanced"]=(function(mode,first,count,primcount){ext["drawArraysInstancedANGLE"][mode,first,count,primcount]});ctx["drawElementsInstanced"]=(function(mode,count,type,indices,primcount){ext["drawElementsInstancedANGLE"][mode,count,type,indices,primcount]});return 1}}function __webgl_enable_OES_vertex_array_object(ctx){var
ext=ctx.getExtension("OES_vertex_array_object");if(ext){ctx["createVertexArray"]=(function(){return
ext["createVertexArrayOES"][0]};ctx["deleteVertexArray"]=(function(vao){return
ext["deleteVertexArrayOES"][0]};ctx["bindVertexArray"]=(function(vao){return
ext["bindVertexArrayOES"][0]};ctx["isVertexArray"]=(function(vao){return
ext["isVertexArrayOES"][0]};return 1})}function __webgl_enable_WEBGL_draw_buffers(ctx){var
ext=ctx.getExtension("WEBGL_draw_buffers");if(ext){ctx["drawBuffers"]=(function(n,bufs){return
ext["drawBuffersWEBGL"][0]};return 1})}function __webgl_enable_WEBGL_multi_draw(ctx){return
!(ctx.multiDrawWebgl=ctx.getExtension("WEBGL_multi_draw"))}var
GL=[counter:1,buffers:[],programs:[],framebuffers:[],readbuffers:[],texts:[],uniforms:[],shaders:[],vaos:[],cont
exts:[],offscreenCanvases:[],timerQueriesEXT:[],programInfos:[],stringCache:{},unpackAlignment:4,recordError:
function recordError(errorCode){if(GL.lastError){GL.lastError=errorCode},isNewId:function(table){var

8>>2];detached=GROWABLE_HEAP_I32()[(attr+12)>>2]!==0}else{stackSize=2097152}var
allocatedOwnStack=stackBase==0;if(allocatedOwnStack){stackBase=_memalign(16,stackSize)}else{stackBase=
stackSize;assert(stackBase>0)}var threadInfoStruct=_malloc(228);for(var
i=0;i<228>>2;++i){GROWABLE_HEAP_U32()[(threadInfoStruct>>i)>>2]=0;GROWABLE_HEAP_I32()[(thread_ptr>>2)=threadInfoStruct;GROWABLE_HEAP_I32()[(threadInfoStruct+12)>>2]=threadInfoStruct;var
headPtr=threadInfoStruct+152;GROWABLE_HEAP_I32()[(headPtr>>2)=headPtr;var
threadParams={stackBase:stackBase,stackSize:stackSize,allocatedOwnStack:allocatedOwnStack,detached:detached
.startRoutine:start_routine,pthread_ptr:threadInfoStruct,arg:arg,transferList:transferList};if(ENVIRONMENT_IS_P
THREAD){threadParams.cmd="spawnThread";postMessage(threadParams,transferList)}else{spawnThread(thread
Params);return 0}function __pthread_testcancel_js(){if(!ENVIRONMENT_IS_PTHREAD)return;var
tb=_pthread_self();if(!tb)return;var
cancelDisabled=Atomics.load(GROWABLE_HEAP_U32(),tb+56)>>2);if(cancelDisabled)return;var
canceled=Atomics.load(GROWABLE_HEAP_U32(),tb+0)>>2);if(canceled==2)throw"Canceled!"}function
__emscripten_do_pthread_join(thread,status,block){if(!thread){err("pthread_join attempted on a null thread
pointer!");return
ERRNO_CODES.ESRCH}if(ENVIRONMENT_IS_PTHREAD&&_pthread_self()==thread){err("PThread
"+thread+" is attempting to join to itself!"});return ERRNO_CODES.EDEADLK}else
if(ENVIRONMENT_IS_PTHREAD&&_emscripten_main_browser_thread_id()==thread){err("Main thread
"+thread+" is attempting to join to itself!");return ERRNO_CODES.EDEADLK}var
self=GROWABLE_HEAP_I32()[(thread+12)>>2];if(self!==thread){err("pthread_join attempted on thread
"+thread+", which does not point to a valid thread, or does not exist anymore!");return
ERRNO_CODES.ESRCH}var
detached=Atomics.load(GROWABLE_HEAP_U32(),thread+64)>>2);if(detached){err("Attempted to join thread
"+thread+", which was already detached!");return
ERRNO_CODES.EINVAL}if(block){_emscripten_check_blocking_allowed();}for(;;){var
threadStatus=Atomics.load(GROWABLE_HEAP_U32(),thread+0)>>2);if(threadStatus==1){var
threadExitCode=Atomics.load(GROWABLE_HEAP_U32(),thread+4)>>2);if(status)GROWABLE_HEAP_I32()[(status>>2)=threadExitCode;Atomics.store(GROWABLE_HEAP_U32(),thread+64)>>2,1];if(ENVIRONMENT_IS_P_THREAD)cleanupThread(thread);else postMessage({"cmd":"cleanupThread","thread":thread});return
0}if(!block){return
ERRNO_CODES.EBUSY}__pthread_testcancel_js();if(!ENVIRONMENT_IS_PTHREAD)ems cripten_main_thread_process_queued_calls();_emscripten_futex_wait(thread+0,threadStatus,ENVIRONMENT_IS_P_THREAD?100:1)}]}function _pthread_join(thread,status){return __emscripten_do_pthread_join(thread,status,true)}function
_sysconf(name){if(ENVIRONMENT_IS_PTHREAD)emscripten_main_thread_process_queued_calls();_emscripten_futex_wait(thread+0,threadStatus,ENVIRONMENT_IS_P_THREAD?100:1)}

_end_body

_end_paragraph
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_reverse=Module['_Reverse']=function(){return(_Reverse=Module['_Reverse']=Module['asm'][["Na"]]).apply(null,arguments)};var
_rotateWithOffset=Module['_RotateWithOffset']=function(){return(_RotateWithOffset=Module['_RotateWithOffset']=Module['asm'][["Oa"]]).apply(null,arguments)};var
_round=Module['_Round']=function(){return(_Round=Module['_Round']=Module['asm'][["Pa"]]).apply(null,arguments)};var
_rsqrt=Module['_Rsqrt']=function(){return(_Rsqrt=Module['_Rsqrt']=Module['asm'][["Qa"]]).apply(null,arguments)};var
_scatterNd=Module['_ScatterNd']=function(){return(_scatterNd=Module['_ScatterNd']=Module['asm'][["Ra"]]).apply(null,arguments)};var
_selectV2=Module['_SelectV2']=function(){return(_SelectV2=Module['_SelectV2']=Module['asm'][["Sa"]]).apply(null,arguments)};var
.sigmoid=Module['_Sigmoid']=function(){return(_sigmoid=Module['_Sigmoid']=Module['asm'][["Ta"]]).apply(null,arguments)};var
_sin=Module['_Sin']=function(){return(_sin=Module['_Sin']=Module['asm'][["Ua"]]).apply(null,arguments)};var
_softmax=Module['_Softmax']=function(){return(_softmax=Module['_Softmax']=Module['asm'][["Va"]]).apply(null,arguments)};var
_sqrt=Module['_Sqrt']=function(){return(_sqrt=Module['_Sqrt']=Module['asm'][["Wa"]]).apply(null,arguments)};var
_square=Module['_Square']=function(){return(_square=Module['_Square']=Module['asm'][["Xa"]]).apply(null,arguments)};var
_squaredDifference=Module['_SquaredDifference']=function(){return(_squaredDifference=Module['_SquaredDifference']=Module['asm'][["Ya"]]).apply(null,arguments)};var
_step=Module['_Step']=function(){return(_step=Module['_Step']=Module['asm'][["Za"]]).apply(null,arguments)};var
_stridedSlice=Module['_StridedSlice']=function(){return(_stridedSlice=Module['_StridedSlice']=Module['asm'][["_a"]]).apply(null,arguments)};var
_sub=Module['_Sub']=function(){return(_sub=Module['_Sub']=Module['asm'][["$a"]]).apply(null,arguments)};var
_sum=Module['_Sum']=function(){return(_sum=Module['_Sum']=Module['asm'][["ab"]]).apply(null,arguments)};var
_tan=Module['_Tan']=function(){return(_tan=Module['_Tan']=Module['asm'][["bb"]]).apply(null,arguments)};var
_tanh=Module['_Tanh']=function(){return(_tanh=Module['_Tanh']=Module['asm'][["cb"]]).apply(null,arguments)};var
_tile=Module['_Tile']=function(){return(_tile=Module['_Tile']=Module['asm'][["db"]]).apply(null,arguments)};var
_topK=Module['_TopK']=function(){return(_topK=Module['_TopK']=Module['asm'][["eb"]]).apply(null,arguments)};var
_transform=Module['_Transform']=function(){return(_transform=Module['_Transform']=Module['asm'][["fb"]]).apply(null,arguments)};var
_transpose=Module['_Transpose']=function(){return(_transpose=Module['_Transpose']=Module['asm'][["gb"]]).apply(null,arguments)};var
__fusedMatMul=Module['__FusedMatMul']=function(){return(__fusedMatMul=Module['__FusedMatMul']=Module['asm'][["hb"]]).apply(null,arguments)};var
_malloc=Module['_malloc']=function(){return(_malloc=Module['_malloc']=Module['asm'][["ib"]]).apply(null,arguments)};var

---
...
BackendWasmModule|BackendWasmThreadedSimdModule) {
    super();
    this.wasm.tfjs.initStateCount(threadsCount); actualThreadsCount = this.wasm.tfjs.getThreadsCount();

    this.dataIdMap = new DataStorage(this, engine());

    this.move(dataId, values, shape, dtype, 1); return dataId;

    numDataIds: number { return this.dataIdMap.getNumDataIds(); }

    time(func: () => void): Promise<BackendTimingInfo> {
        const start = util.now();
        let kernelMs = util.now();
        return kernelMs - start;
    }

    disposeData(dataId: DataId, force = false): boolean {
        if (this.dataIdMap.has(dataId)) {
            const data = this.dataIdMap.get(dataId);
            data.refCount--;
            if (!force && data.refCount > 0) {
                return false;
            }
            this.wasm._free(data.memoryOffset);
            this.wasm.tfjs.disposeData(data.id);
            this.dataIdMap.delete(dataId);
        }
        return true;
    }

    makeOutput(shape: number[], dtype: DataType, memoryOffset?: number): TensorInfo {
        let dataId: {};
        if (memoryOffset == null) {
            dataId = this.write(null /* values */, shape, dtype);
        } else {
            const id = this.dataIdNextNumber++;
            dataId = {id: id};
            this.dataIdMap.set(dataId, {id, memoryOffset, shape, dtype, refCount: 1});
        }
        return {dataId, shape, dtype};
    }

    typedArrayFromHeap({shape, dtype, dataId}: TensorInfo): backend_util.TypedArray {
        const buffer = this.wasm.HEAPU8.buffer;
        const memoryOffset = this.dataIdMap.get(dataId).memoryOffset;
        switch (dtype) {
            case 'float32':
                return new Float32Array(buffer, memoryOffset, size);
            case 'int32':
                return new Int32Array(buffer, memoryOffset, size);
            case 'bool':
                return new Uint8Array.buffer(memoryOffset, size);
            default:
                throw new Error(`Unknown dtype ${dtype}`);
        }
    }
}

function createInstantiateWasmFunc(path: string) {
    // this will be replace by rollup plugin patchWechatWebAssembly in
    // miniprogram's output.

    // tslint:disable-next-line:no-any
    return (imports: any, callback: any) => {
    // this.wasm.js.registerTensor(id, size, memoryOffset);
    if (values != null) {
        this.wasm.HEAPU8.set(values.buffer, (values as backend_util.TypedArray).byteOffset);
    }
}

BackendWasmModule
util.fetch(path, {credentials: 'same-origin'}).then(response => {
    if (!response.ok) {
        return {<!-- embed error message -->}
    }
    response.arrayBuffer().then(binary => {
        WebAssembly.instantiate(binary, imports).then(output => {
            callback(output.instance, output.module);
        });
    });
})

/**
 * Returns the path of the WASM binary.
 * @param simdSupported whether SIMD is supported
 * @param threadsSupported whether multithreading is supported
 * @param wasmModuleFolder the directory containing the WASM binaries.
 */
function getPathToWasmBinary(
    simdSupported: boolean,
    threadsSupported: boolean,
    wasmModuleFolder: string) {
  if (wasmPath != null) {
    // If wasmPath is defined, the user has supplied a full path to
    // the vanilla .wasm binary.
    return wasmPath;
  }

  let path: WasmBinaryName = 'tfjs-backend-wasm.wasm';
  if (simdSupported && threadsSupported) {
    path = 'tfjs-backend-wasm-threaded-simd.wasm';
  } else if (simdSupported) {
    path = 'tfjs-backend-wasm-simd.wasm';
  }

  if (wasmFileMap != null) {
    if (wasmFileMap[path] != null) {
      return wasmFileMap[path];
    }
  }

  return wasmModuleFolder + path;
}

/**
 * Initializes the wasm module and creates the js <--> wasm bridge.
 * @param {WasmFactory} wasmFactory - The WASM module factory
 * @param {BackendWasmModule} backendModule - The backend module
 */
export async function init(wasmFactory: WasmFactory, backendModule: BackendWasmModule) {
    const [simdSupported, threadsSupported] = await Promise.all(
        [env().getAsync('WASM_HAS_SIMD_SUPPORT'),
         env().getAsync('WASM_HAS_MULTITHREAD_SUPPORT')]
    );

    return new Promise((resolve, reject) => {
        const factoryConfig: WasmFactoryConfig = {};

        /**
         * This function overrides the Emscripten
         * module locateFile utility.
         * @param path The relative path to the file that needs to be loaded.
         * @param prefix The path to the main JavaScript file's directory.
         */
        factoryConfig.locateFile = (path, prefix) => {
            if (path.endsWith('.worker.js')) {
                const response = wasmWorkerContents;
                const blob = new Blob([response], {type: 'application/javascript'});
                return URL.createObjectURL(blob);
            }

            if (path.endsWith('.wasm')) {
                return getPathToWasmBinary(
                    simdSupported as boolean,
                    threadsSupported as boolean,
                    wasmPathPrefix != null ? wasmPathPrefix : prefix);
            }
            return prefix + path;
        };

        // Use the instantiateWasm override when system fetch is not available.
        if (customFetch) {
            factoryConfig.instantiateWasm =
                createInstantiateWasmFunc(getPathToWasmBinary(
                    simdSupported as boolean, threadsSupported as boolean,
                    wasmPathPrefix != null ? wasmPathPrefix : ''));
        }

        let initialized = false;
        factoryConfig.onAbort = () => {
            if (initialized) {
                // Emscripten already called console.warn so no need to
                double log.
            }
            if (initAborted) {
                // Emscripten calls `onAbort` twice, resulting in double
                error.
            }
            initAborted = true;
            const rejectMsg =
                'Make sure the server can serve the `.wasm` file relative to the ' +
                'bundled js file. For more details see
                https://github.com/emscripten-core/emscripten/blob/2bca083c3bbd5a41333d6b74d047feecfa907/tests/manual_wasm_instantiate.html#L170'
        };

        let wasm = null;
        factoryConfig.mainScriptUrlOrBlob = new Blob([`var WasmBackendModuleThreadedSimd = ` +
            wasmFactoryThreadedSimd.toString()]);

        wasm = wasmFactoryThreadedSimd(factoryConfig);
        if (!wasm) {
            reject({message: rejectMsg});
            return;
        }

        let wasmPathPrefix = null;
        if (factoryConfig.onAbort) {
            wasmPathPrefix = null;
            if (initAborted) {
                reject({message: rejectMsg});
                return;
            }
            const rejectMsg =
                'Make sure the server can serve the `.wasm` file relative to the ' +
                'bundled js file. For more details see
        }

        reject({message: rejectMsg});
    });

    // Any error will be caught by the onAbort callback defined above.
}

wasm.then(module => {<!-- embed error message -->});

on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or
implied.
* See the License for the specific language governing permissions and
* limitations under the
License.
*
=============================================================================
*/

import './flags_wasm';

import {registerBackend} from '@tensorflow/tfjs-core';

import {BackendWasm, init} from './backend_wasm';

export {BackendWasm, getThreadsCount, setThreadsCount, setWasmPath, setWasmPaths} from './backend_wasm';
export {version as version_wasm} from './version';

const WASM_PRIORITY = 2;
registerBackend('wasm', async () => {
  const {wasm} = await init();
  return new BackendWasm(wasm);
}, WASM_PRIORITY);
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AAoB, GAAiB; MACdD, UAAU, EAAEk; MACC, SAAE, EAAE, EAAM, MACnB, SAAS, EAAE, OA
AK, MAChB, UAAU, EAAE, eAAkC, GACc; ECEgFr; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;

AAoB, GAAiB; MAChD, UAAU, EAAEkF, uBAAc; MAC1B, WAAW, EAAE, MAAM, CAAC, EAAC, EAAC, EAAE, KA
K, EAAE, GAAG, IAAL, CAAC, MACC, MAAM, EAAC, EAAC, EAAE, EAAC, EAAC, EAAE, EAAC, EAAE, EAAC,

MK, IAAL, EAAC, GAAG, KAACC, MAAM, IAAL, GAAeFr, aAAI, CAAC, CAAC, IAAL, EAAC, EAAC, CAAC,

KAACC, KAACC, CAAC, MAC9D, IAAL, CAAC, CAAC, MAAM, KAACC, KAACC, KAACC, KAACC, KAACC,

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 */

// This enum must align with the enum defined in cc/backend.h.
export enum CppDType {
  float32 = 0,
  int32 = 1,
  bool = 2,
  string = 3,
  complex64 = 4
}

// Must match enum in cc/fusable_activations.h.
export enum FusableActivation {
  linear = 0,
  relu = 1,
  relu6 = 2,
  prelu = 3,
  leakyrelu = 4,
  sigmoid = 5,
  elu = 6
}
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 */

import {KernelConfig, RealDiv} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = true;
export const realDivConfig: KernelConfig =
createBinaryKernelConfig(RealDiv, supportsFullBroadcast);
```

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*import {KernelConfig, RealDiv} from '@tensorflow/tfjs-core';
*import {createBinaryKernelConfig} from './binary_kernel';
*const supportsFullBroadcast = true;
*export const realDivConfig: KernelConfig =
*createBinaryKernelConfig(RealDiv, supportsFullBroadcast);
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CAAC,GACzB,YAAY,CAAC,yBAAyB,CAAC,KAAK,CAAC,KAAK,EAAE,aAAa,CAAC,CAAC;IACvE,MAA
M,UAAU,GAAG,IAAI,CAAC,aAAa,CAAC,WAAW,CAAC,CAAC;IAEnD,MAAM,GAAG,GAAG,OAAO,CAA
C,UAAU,CAAC,QAAQ,EAAE,KAAK,CAAC,KAAK,CAAC,CAAC;IACtD,IAAI,IAAI,CAAC,aAAa,CAAC,KA
AK,CAAC,KAAK,CAAC,KAAK,CAAC,EAAE;QACzC,MAAM,KAAK,GAAG,OAAO,CAAC,SAAS,CAAC,GA

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import {backend_util, KernelConfig, KernelFunc, Prod, ProdAttrs, ProdInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';

import {CppDType} from './types';

let wasmProd: (xId: number, reduceSize: number, dtype: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmProd = backend.wasm.cwrap(Prod, null /*void*/, [
    'number',
    'number',
    'number',
    'number'
  ]);}

function prod(args: {
  backend: BackendWasm,
  inputs: ProdInputs,
  attrs: ProdAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} = permuteAxesAndTranspose(x, axis, backend);

  let reductionAxes = axes;
  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose of this tensor once we are done.
      input = transposed;
      inputId = transposedId;
      reductionAxes = backend_util.getInnerMostAxes(reductionAxes.length, input.shape.length);
    }
  }

  backend_util.assertAxesAreInnerMostDims('prod', reductionAxes, input.shape.length);
  const [outShape, reduceShape] = backend_util.computeOutAndReduceShapes(input.shape, reductionAxes);
  const reduceSize = util.sizeFromShape(reduceShape);

  const out = backend.makeOutput(outShape, input.dtype);
  if (util.sizeFromShape(input.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmProd(inputId, reduceSize, CppDType[out.dtype], outId);
  }

  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  if (keepDims) {
    // reshape
    const newShape = backend_util.expandShapeToKeepDim(outShape, originalAxes);
    out.shape = newShape;
  }

  return out;
}

export const prodConfig: KernelConfig = {
  kernelName: Prod,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: prod as {} as KernelFunc
};
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```javascript
import {KernelConfig, Sqrt} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from
'./unary_kernel';
export const sqrtConfig: KernelConfig = createUnaryKernelConfig(Sqrt);
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-
wasm/dist/kernels/Sqrt.js.map
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 * implied.
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 * limitations under the License.
 *
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```javascript
import {Identity, IdentityInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';
import {TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function identity(args: {inputs: IdentityInputs, backend: BackendWasm}):
    TensorInfo {
  const {inputs: {x}, backend} =
    args;
  const out = backend.makeOutput(x.shape, x.dtype);
  const inVals = backend.typedArrayFromHeap(x);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.set(inVals);
  return out;
}

export const identityConfig: KernelConfig = {
  kernelName: Identity,
  backendName: 'wasm',
  kernelFunc: identity as {} as KernelFunc,
};
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-
wasm/dist/kernels/Identity.js.map
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 * limitations under the License.
 *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-

```javascript
*\n
```javascript
import {IdentityInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function identity(args: {inputs: IdentityInputs, backend: BackendWasm}):
    TensorInfo {
  const {inputs: {x}, backend} =
    args;
  const out = backend.makeOutput(x.shape, x.dtype);
  const inVals = backend.typedArrayFromHeap(x);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.set(inVals);
  return out;
}

export const identityConfig: KernelConfig = {
  kernelName: Identity,
  backendName: 'wasm',
  kernelFunc: identity as {} as KernelFunc,
};
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-
wasm/dist/kernels/Identity.js.map
No license file was found, but licenses were detected in source scan.
```typescript
import {backend_util, BinaryInputs, DataType, KernelConfig, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

export function createBinaryKernelConfig(
    kernelName: string, supportsFullBroadcast: boolean,
    dtype?: DataType): KernelConfig {
  let wasmFunc:
      (aId: number, aShape: Uint8Array, aShapeLen: number, bId:
       number, bShape: Uint8Array, bShapeLen: number, dtype: number, outId: number) =>
          void;

  function setupFunc(backend: BackendWasm): void {
      wasmFunc = backend.wasm.cwrap(kernelName, null /* void */, 
      ['number',  // a_id,
      'array',   // a_shape
      'number',  // a_shape.length
      'number',  // b_id
      'array',   // b_shape
      'number',  // b_shape.length
      'number',  // dtype
      'number'   // out_id
    ]);
  }

  function kernelFunc(args: {backend: BackendWasm, inputs: BinaryInputs}):
      TensorInfo {
    const {backend,
        inputs} = args;
    const {a, b} = inputs;
    const aId = backend.dataIdMap.get(a.dataId).id;
    const bId = backend.dataIdMap.get(b.dataId).id;

    const outputType = dtype != null ? dtype : a.dtype;
    const newShape = backend_util.assertAndGetBroadcastShape(a.shape, b.shape);
    const out = backend.makeOutput(newShape,
        outputType);

    // Short-circuit zero-sized tensors.
    if (util.sizeFromShape(newShape) === 0) {
      return out;
    }

    const aShapeBytes = new Uint8Array(new Int32Array(a.shape).buffer);
    const bShapeBytes = new Uint8Array(new Int32Array(b.shape).buffer);
    const outId = backend.dataIdMap.get(out.dataId).id;

    const kernelFunc = () => wasmFunc(
        aId, aShapeBytes, a.shape.length, bId, bShapeBytes, b.shape.length,
```
```javascript
CppDType[a.dtype], outId);

    // Currently only some float operations support full broadcast.
    if (supportsFullBroadcast && a.dtype === 'float32') {
      kernelFunc();
      return out;
    }

    const aBroadcastDims = backend_util.getBroadcastDims(a.shape, newShape);
    const bBroadcastDims = backend_util.getBroadcastDims(b.shape, newShape);
    const loopsOverAllOfA = aBroadcastDims.every((v, i) => v === i);
    const loopsOverAllOfB = bBroadcastDims.every((v, i) => v === i);
    if (loopsOverAllOfA && loopsOverAllOfB) {
      kernelFunc();
      return out;
    } else {
      throw new Error(`Broadcasting along outer dims is not yet supported for $a.dtype ${kernelName}.`);
    }

  return {
    kernelName, backendName: 'wasm', setupFunc, kernelFunc};
}
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/binary_kernel.js.map

No license file was found, but licenses were detected in source scan.

```javascript
import {Cast, CastAttrs, CastInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';
import {TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function cast(
    args: {inputs: CastInputs, attrs: CastAttrs, backend: BackendWasm}):
    TensorInfo {
  const {inputs: {x}, attrs: {dtype}, backend} = args;
  const out = backend.makeOutput(x.shape, dtype);
  const inVals = backend.typedArrayFromHeap(x);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.set(inVals);

  return out;
}

export const castConfig: KernelConfig = {
  kernelName: Cast,
  backendName: 'wasm',
  kernelFunc: cast as {} as KernelFunc,
};
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Cast.js.map

No license file was found, but licenses were detected in source scan.

```javascript
import {Cast, CastAttrs, CastInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';
import {TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function cast(
    args: {inputs: CastInputs, attrs: CastAttrs, backend: BackendWasm}):
    TensorInfo {
  const {inputs: {x}, attrs: {dtype}, backend} = args;
  const out = backend.makeOutput(x.shape, dtype);
  const inVals = backend.typedArrayFromHeap(x);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.set(inVals);

  return out;
}
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/DepthwiseConv2dNative.js.map

No license file was found, but licenses were detected in source scan.

```javascript
import {Cast, CastAttrs, CastInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';
import {TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function cast(
    args: {inputs: CastInputs, attrs: CastAttrs, backend: BackendWasm}):
    TensorInfo {
  const {inputs: {x}, attrs: {dtype}, backend} = args;
  const out = backend.makeOutput(x.shape, dtype);
  const inVals = backend.typedArrayFromHeap(x);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.set(inVals);

  return out;
}
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/DepthwiseConv2dNative.js.map

No license file was found, but licenses were detected in source scan.
import {backend_util, DepthwiseConv2dNative, DepthwiseConv2dNativeAttrs, DepthwiseConv2dNativeInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmDepthwiseConv2d: (xId: number, batchSize: number, inputHeight: number, inputWidth: number, filterId: number, filterHeight: number, filterWidth: number, padTop: number, padRight: number, padBottom: number, padLeft: number, isSamePad: number, dilationHeight: number, dilationWidth: number, strideHeight: number, strideWidth: number, inputChannels: number, outputChannels: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmDepthwiseConv2d = backend.wasm.cwrap(DepthwiseConv2dNative, null /* void */, [
    'number',  // xId
    'number',  // batchSize
    'number',  // inputHeight
    'number',  // inputWidth
    'number',  // filterId
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // padTop
    'number',  // padRight
    'number',  // padBottom
    'number',  // padLeft
    'number',  // isSamePad
    'number',  // dilationHeight
    'number',  // dilationWidth
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // inputChannels
    'number',  // outputChannels
    'number',  // outId
  ]);
depthwiseConv2d(args: {
  inputs: DepthwiseConv2dNativeInputs,
  backend: BackendWasm,
  attrs: DepthwiseConv2dNativeAttrs
}) {
  const {inputs, attrs, backend} = args;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const filterId = backend.dataIdMap.get(filter.dataId).id;
  const {strides, dilations, pad, dimRoundingMode} = attrs;
  const convInfo = backend_util.computeConv2DInfo(
    (x as Tensor4D).shape, (filter as Tensor4D).shape,
    strides, dilations as number, pad, dimRoundingMode
  );
  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const padTop = convInfo.padInfo.top;
  const padRight = convInfo.padInfo.right;
  const padBottom = convInfo.padInfo.bottom;
  const padLeft = convInfo.padInfo.left;
  const dilationHeight = convInfo.dilationHeight;
  const dilationWidth = convInfo.dilationWidth;
  const strideHeight = convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;
  const inputChannels = convInfo.inChannels;
  const outputChannels = convInfo.outChannels;
  const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;

  if (convInfo.dataFormat !== 'channelsLast') {
    throw new Error(`wasm backend DepthwiseConv2dNative does not support dataFormat:'${convInfo.dataFormat}'. Please use 'channelsLast'`);
  }

  const out = backend.makeOutput(convInfo.outShape, 'float32');
  wasmDepthwiseConv2d(xId, x.shape[0], x.shape[1], x.shape[2], filterId, filterHeight, filterWidth, padTop, padRight, padBottom, padLeft, isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, outId);
  return out;
}

export const depthwiseConv2dNativeConfig: KernelConfig = {
  kernelName: DepthwiseConv2dNative,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: depthwiseConv2d as {} as KernelFunc
};
import {Any, AnyAttrs, AnyInputs, backend_util, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';

let wasmAny: (xId: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmAny = backend.wasm.cwrap(Any, null /*void*/, ['number, number, number']);
}

function any(args: {backend: BackendWasm, inputs: AnyInputs, attrs: AnyAttrs}):
    TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);
  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    input = transposed;
    inputId = transposedId;
  }

  const inputRank = input.shape.length;
  backend_util.assertAxesAreInnerMostDims('any', axes, inputRank);
  const [outShape, reduceShape] =
    backend_util.computeOutAndReduceShapes(input.shape, axes);
  const reduceSize = util.sizeFromShape(reduceShape);
  const out = backend.makeOutput(outShape, x.dtype);
  if (util.sizeFromShape(input.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmAny(inputId, reduceSize, outId);
  }

  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  if (keepDims) {
    // reshape
    const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
    out.shape = newShape;
  }

  return out;
}

export const anyConfig: KernelConfig = {
  kernelName: Any,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: any as {} as KernelFunc
};
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* *
============================================================================

*/

import {backend_util, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {transpose} from './Transpose';

/**
 * Compute permutation axes and do a transpose if necessary.
 * @param x TensorInfo
 * @param axis number[]
 * @param xShape length
 * @param xRank
 * @param originalAxes number[]
 * @param xWasTransposed boolean
 * @param xId
 * @param xTransposed =
 * @param inputs: [x], attrs: {perm: permutedAxes, backend})
 * @param xId
 * @param xTransposedId
 * @param xWasTransposed = true
 * @param xTransposed, originalAxes, axes, inputWasTransposed
 */

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/kernel_utils.js.map

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```javascript
import {KernelConfig, KernelFunc, NonMaxSuppressionV5, NonMaxSuppressionV5Attrs, NonMaxSuppressionV5Inputs, TensorInfo} from '@tensorflow/tfjs-core'
import {KernelConfig, Relu6} from '@tensorflow/tfjs-core';
import {createUnaryKernelConfig} from './unary_kernel';
export const relu6Config: KernelConfig = createUnaryKernelConfig(Relu6);
```

```javascript
*/

import {KernelConfig, KernelFunc, NonMaxSuppressionV5, NonMaxSuppressionV5Attrs, NonMaxSuppressionV5Inputs, TensorInfo} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {parseResultStruct} from './NonMaxSuppression_util';

let wasmFunc: number = backend.wasm.cwrap(NonMaxSuppressionV5, 'number', // Result*
  ['number', // boxesId
    'number', // scoresId
    'number', // maxOutputSize
    'number', // iouThreshold
    'number', // scoreThreshold
    'number', // softNmsSigma
  ], 'number');

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(NonMaxSuppressionV5, 'number', // Result*
    ['number', // boxesId
      'number', // scoresId
      'number', // maxOutputSize
      'number', // iouThreshold
      'number', // scoreThreshold
      'number', // softNmsSigma
    ], 'number');
}

function kernelFunc(args: {
  backend: BackendWasm,
  inputs: NonMaxSuppressionV5Inputs,
  attrs: NonMaxSuppressionV5Attrs
}): TensorInfo[] {
  const {backend, inputs, attrs} = args;
  const {iouThreshold, maxOutputSize, scoreThreshold, softNmsSigma} = attrs;
  const {boxes, scores} = inputs;

  const boxesId = backend.dataIdMap.get(boxes.dataId).id;
  const scoresId = backend.dataIdMap.get(scores.dataId).id;

  const resOffset = wasmFunc(boxesId, scoresId,
    maxOutputSize, iouThreshold, scoreThreshold,
    softNmsSigma);

  const {pSelectedIndices, selectedSize,
    pSelectedScores, pValidOutputs} =
    parseResultStruct(backend, resOffset);

  // Since we are not using validOutputs for V5, we have to delete it from the
  // heap. backend.wasm._free(pValidOutputs);

  const selectedIndicesTensor =
    backend.makeOutput([selectedSize], 'int32', pSelectedIndices);
  const selectedScoresTensor =
    backend.makeOutput([selectedSize], 'float32', pSelectedScores);

  return [selectedIndicesTensor, selectedScoresTensor];
}

export const nonMaxSuppressionV5Config: KernelConfig = {
  kernelName: NonMaxSuppressionV5,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: kernelFunc
};
```
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C,MAAM,eAAe,GACxB,wBAAwB,CAAC,SAAS,EAAE,qBAAqB,EAAE,MAAM,CAAC,CAAC","sourcesContent":"/**
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 */

import {KernelConfig, KernelFunc, Prelu, PreluInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {cast} from './Cast';

let wasmPrelu: (xId: number, weightsId: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmPrelu = backend.wasm.cwrap(Prelu, null /* void */, [
    'number',  // x_id
    'number',  // weights_id
    'number'   // out_id
  ]);
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 *
=============================================================================

import {backend_util, FusedDepthwiseConv2D, FusedDepthwiseConv2DAttrs,
FusedDepthwiseConv2DInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {FusableActivation} from './types';

let
wasmFusedDepthwiseConv2d:
    (xId: number, batchSize: number, inputHeight: number, inputWidth: number,
filterId: number, filterHeight: number, filterWidth: number,
biasId: number, padTop: number, padRight: number, padBottom: number,
padLeft: number, isSamePad: number, dilationHeight: number,
    dilationWidth: number, strideHeight: number, strideWidth: number,
inputChannels: number, outputChannels: number, activation: number,
preluActivationWeightsId: number, leakyreluAlpha: number, outId: number) =>
    void;

function setup(backend: BackendWasm) {
  wasmFusedDepthwiseConv2d =
    backend.wasm.cwrap(FusedDepthwiseConv2D, null /* void */, 
  ['number', // xId
   'number', // batchSize
   'number', // inputHeight
   'number', // inputWidth
   'number', // filterId
   'number', // filterHeight
   'number', // filterWidth
   'number', // biasId
   'number', // padTop
   'number', // padRight
   'number', // isSamePad
   'number', // dilationHeight
   'number', // dilationWidth
   'number', // strideHeight
   'number', // strideWidth
   'number', // inputChannels
   'number', // outputChannels
   'number', // activation
   'number', // leakyreluAlpha
   'number', // outId
  ]);}

function
fusedDepthwiseConv2d(args: {
  inputs: FusedDepthwiseConv2DInputs,
  backend: BackendWasm,
  attrs:
FusedDepthwiseConv2DAttrs
}) {
  const {inputs, attrs, backend} = args;
  const {x, filter, bias,
preluActivationWeights} = inputs;
  const {
    strides,
    pad,
    dilations,
    dataFormat,
    dimRoundingMode,
    activation,
    leakyreluAlpha
  } = attrs;

  const convInfo =
      backend_util.computeConv2DInfo(
          (x as Tensor4D).shape, (filter as Tensor4D).shape, strides, dilations,
      pad, dimRoundingMode, true /* depthwise */, 1 /* outputChannels */);

  const fusedActivation =
      FusableActivation[activation as {} as keyof typeof FusableActivation];
  if (fusedActivation == null) {
    throw new Error(
        `${activation}
    activation not yet supported for FusedDepthwiseConv2D ` +
    `in the wasm backend.`);
  }

  const xId = backend.dataIdMap.get(x.dataId).id;
  const filterId = backend.dataIdMap.get(filter.dataId).id;

  const outputChannels = convInfo.outChannels;
  let biasId = 0;
  if (bias != null) {
    const biasData = backend.dataIdMap.get(bias.dataId);
    if (biasData.shape.length !== 1) {
      throw new Error(
        `FusedDepthwiseConv2D only supports rank-1 bias but got ` +
        `rank ${biasData.shape.length}`);
    }
    if (biasData.shape[0] !== outputChannels) {
      throw new Error(
          `FusedDepthwiseConv2D bias shape` +
          `(${biasData.shape}) does not ` +
          `match the number of output channels (${outputChannels})`);
    }
    const biasId = biasData.id;
  }
  const filterHeight = convInfo.filterHeight;
  const filterWidth =
      convInfo.filterWidth;
  const padTop = convInfo.padTop;
  const padRight = convInfo.padRight;
  const padBottom = convInfo.padBottom;
  const padLeft = convInfo.padLeft;
  const dilationHeight =
      convInfo.dilationHeight;
  const dilationWidth = convInfo.dilationWidth;
  const strideHeight =
      convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;
  const inputChannels =
      convInfo.inChannels;
  const isSamePad = convInfo.type === 'SAME';
  const batchSize =
      convInfo.batchSize;
  const inHeight = convInfo.inHeight;
  const inWidth = convInfo.inWidth;
  if (dataFormat !== 'NHWC') {
    throw new Error(
        `wasm backend FusedDepthwiseConv2D does not support ` +
        `dataFormat: '${dataFormat}'. Please use 'NHWC'.`);
  }
  const out =
      backend.makeOutput(convInfo.outShape, 'float32');
  const outId = backend.dataIdMap.get(outId).id;
  const preluActivationWeightsId = preluActivationWeights == null ?
       0 :
      backend.dataIdMap.get(preluActivationWeights.dataId).id;
  const
wasmFusedDepthwiseConv2d(xId, batchSize, inHeight, inWidth, filterId, filterHeight, filterWidth,
biasId, padTop, padRight, padBottom, padLeft,
isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels,

fusedActivation, preluActivationWeightsId, leakyreluAlpha || 0, outId);

return out;
}

export const

fusedDepthwiseConv2DConfig: KernelConfig = {
  kernelName: FusedDepthwiseConv2D,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: fusedDepthwiseConv2d as {} as KernelFunc
};

*/

import {KernelConfig, KernelFunc, MirrorPad, MirrorPadAttrs, MirrorPadInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

// Must match enum in MirrorPad.cc
enum MirrorPaddingMode {
  reflect = 0,
  symmetric = 1
}

let wasmMirrorPad: (xId: number, xShapeBytes: Uint8Array, xShapeLength: number, xDtype: number,
    prePaddingsBytes: Uint8Array, postPaddingsBytes: Uint8Array, mode: number,
    outId: number) => void;

function

setup(backend: BackendWasm) {
  wasmMirrorPad = backend.wasm.cwrap(MirrorPad, null /* void */, [

());

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/FusedDepthwiseConv2D.js.map
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 */

import {KernelConfig, KernelFunc, MirrorPad, MirrorPadAttrs, MirrorPadInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

// Must match enum in MirrorPad.cc
enum MirrorPaddingMode {
  reflect = 0,
  symmetric = 1
}

let wasmMirrorPad: (xId: number, xShapeBytes: Uint8Array, xShapeLength: number, xDtype: number,
    prePaddingsBytes: Uint8Array, postPaddingsBytes: Uint8Array, mode: number,
    outId: number) => void;

function

setup(backend: BackendWasm) {
  wasmMirrorPad = backend.wasm.cwrap(MirrorPad, null /* void */, [

());

Found in path(s):
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 */

import {KernelConfig, KernelFunc, MirrorPad, MirrorPadAttrs, MirrorPadInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

// Must match enum in MirrorPad.cc
enum MirrorPaddingMode {
  reflect = 0,
  symmetric = 1
}

let wasmMirrorPad: (xId: number, xShapeBytes: Uint8Array, xShapeLength: number, xDtype: number,
    prePaddingsBytes: Uint8Array, postPaddingsBytes: Uint8Array, mode: number,
    outId: number) => void;

function

setup(backend: BackendWasm) {
  wasmMirrorPad = backend.wasm.cwrap(MirrorPad, null /* void */, [

());

Found in path(s):
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function mirrorPad(args: {
  inputs: MirrorPadInputs,
  backend: BackendWasm,
  attrs: MirrorPadAttrs
}) {
  const {inputs: {x}, backend, attrs: {paddings, mode}} = args;

  const outShape = paddings.map(
      (p, i) => p[0] /* beforePad */ + x.shape[i] + p[1] /* afterPad */);
  const xId = backend.dataIdMap.get(x.dataId).id;
  const out = backend.makeOutput(outShape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const prePaddings = paddings.map(padTuple => padTuple[0]);
  const postPaddings = paddings.map(padTuple => padTuple[1]);
  const prePaddingsBytes = new Uint8Array(new Int32Array(prePaddingsFlat).buffer);
  const postPaddingsBytes = new Uint8Array(new Int32Array(postPaddingsFlat).buffer);
  wasmMirrorPad(
      xId, xShapeBytes, x.shape.length, CppDType[x.dtype], prePaddingsBytes,
      postPaddingsBytes, MirrorPaddingMode[mode], outId);
  return out;
}

export const mirrorPadConfig: KernelConfig = {
  kernelName: MirrorPad,
  backendName: 'wasm',
  kernelFunc: mirrorPad as {} as KernelFunc,
  setupFunc: setup
};
passed in to WebAssembly.validate is WebAssembly binary // code. In this case it is a small program that contains SIMD
  // instructions.
  'WASM_HAS_SIMD_SUPPORT', async () => WebAssembly.validate(new Uint8Array([0, 97, 115, 109, 1, 0, 0, 0, 1, 4, 1, 96, 0, 0, 3, 2, 1, 0, 10, 9, 1, 7, 0, 65, 0, 253, 15, 26, 11])));

/**
 * True if threads are supported.
 */
// From: https://github.com/GoogleChromeLabs/wasm-feature-detect
ENV.registerFlag('WASM_HAS_MULTITHREAD_SUPPORT', async () => {
  // TODO(annxingyuan): Enable node support once this is resolved:
  // https://github.com/tensorflow/tfjs/issues/3830
  if (ENV.get('IS_NODE')) {
    return false;
  }

  try {
    // Test for transferability of SABs (needed for Firefox)
    // https://groups.google.com/forum/#!msg/mozilla.dev.platform/IHkBZlHETpA/dwsMNchWEQAJ
    new MessageChannel().port1.postMessage(new SharedArrayBuffer(1));
    // This typed array is a WebAssembly program containing threaded
    // instructions.
    return WebAssembly.validate(new Uint8Array([0, 97, 115, 109, 1, 0, 0, 0, 1, 4, 1, 96, 0, 0, 3, 2, 1, 0, 5, 4, 1, 3, 1, 10, 11, 1, 9, 0, 65, 0, 254, 16, 2, 0, 26, 11]));
  } catch (e) {
    return false;
  }
});

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/flags_wasm.js.map

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---

```javascript
/**
 * @deprecated Use `setWasmPaths` instead.
 * Sets the path to the `.wasm` file which will be fetched when the wasm
 * backend is initialized. See
 * https://github.com/tensorflow/tfjs/blob/master/tfjs-backend-wasm/README.md#using-bundlers
 * for more details.
 * @param path wasm file path or url
 * @param usePlatformFetch optional boolean to use platform fetch to download
 *   the wasm file, default to false.
 * @doc {heading: 'Environment', namespace: 'wasm'}
 */

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/tf-backend-wasm.node.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/miniprogram/index.js

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============================================================================

*/
import {KernelConfig, Sub} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = true;
export const subConfig: KernelConfig =
    createBinaryKernelConfig(Sub, supportsFullBroadcast);

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@endpoint.*

/*
 */

/**
 *
 */

@endpoint.*

* @deprecated Use `setWasmPaths` instead.
* Sets the path to the `.wasm` file which will be fetched when the wasm backend is initialized. See
* https://github.com/tensorflow/tfjs/blob/master/tfjs-backend-wasm/README.md#using-bundlers
* for more details.
* @param path wasm file path or url
* @param usePlatformFetch optional boolean to use platform fetch to download
*     the wasm file, default to false.
*
* @doc {heading: 'Environment', namespace: 'wasm'}
*/

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/tf-backend-wasm.js

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```javascript
import {KernelConfig, Neg} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const negConfig: KernelConfig = createUnaryKernelConfig(Neg);
```

Found in path(s):
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```javascript
import {KernelConfig, Sin} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const sinConfig: KernelConfig = createUnaryKernelConfig(Sin);
```

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```javascript
import {KernelConfig, Square} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const squareConfig: KernelConfig = createUnaryKernelConfig(Square);
```

Found in path(s):
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import {KernelConfig, Square} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const squareConfig: KernelConfig = createUnaryKernelConfig(Square);

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import {KernelConfig, Minimum} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;

export const minimumConfig: KernelConfig =
    createBinaryKernelConfig(Minimum, supportsFullBroadcast);

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import {KernelConfig, Tan} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const tanConfig: KernelConfig = createUnaryKernelConfig(Tan);

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 *
 *=============================================================================
 */

import {KernelConfig, KernelFunc, PadV2, PadV2Attrs, PadV2Inputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {fill} from './Fill';

import {CppDType} from './types';

let wasmPadV2: (xId: number, xShapeBytes: Uint8Array, xShapeLength: number, xDtype: number, prePaddingsBytes: Uint8Array, postPaddingsBytes: Uint8Array, constantValue: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmPadV2 = backend.wasm.cwrap(PadV2, null, ['number',  // xId
    'array',   // x.shape
    'number',  // x.shape.length
    'number',  // x.dtype
    'array',   // pre-paddings
    'array',   // post-paddings
    'number',  // constantValue
    'number',  // outId
    ]);}

function pad(args: {inputs: PadV2Inputs, backend: BackendWasm, attrs: PadV2Attrs}) {
  const {inputs: {x}, backend, attrs: {paddings, constantValue}} = args;

  const outShape = paddings.map(
      (p, i) => p[0] /* beforePad */ + x.shape[i] + p[1] /* afterPad */);

  if (util.sizeFromShape(x.shape) === 0) {
    // Short-circuit the computation, since x doesn't have value, only in // the shape is used to compute output shape to pad.
    return fill({
      backend,
      attrs: {shape: outShape, value: constantValue, dtype: x.dtype}
    });
  }

  const
```
const out = backend.makeOutput(outShape, x.dtype);
const outShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
const prePaddingsFlat = paddings.map(padTuple => padTuple[0]);
const postPaddingsFlat = paddings.map(padTuple => padTuple[1]);
const prePaddingsBytes = new Uint8Array(new Int32Array(prePaddingsFlat).buffer);
const postPaddingsBytes = new Uint8Array(new Int32Array(postPaddingsFlat).buffer);
const xId = backend.dataIdMap.get(x.dataId).id;
const outId = outTensorData.id;
const outTensorData = backend.dataIdMap.get(out.dataId);
const xId = outTensorData.id;

const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);

const xId = backend.dataIdMap.get(x.dataId).id;
const outId = outTensorData.id;
const outTensorData = backend.dataIdMap.get(out.dataId);
const xId = outTensorData.id;

const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);

const prePaddingsFlat = paddings.map(padTuple => padTuple[0]);
const postPaddingsFlat = paddings.map(padTuple => padTuple[1]);
const prePaddingsBytes = new Uint8Array(new Int32Array(prePaddingsFlat).buffer);
const postPaddingsBytes = new Uint8Array(new Int32Array(postPaddingsFlat).buffer);

wasmPadV2(xId, xShapeBytes, x.shape.length,
CppDType[x.dtype], prePaddingsBytes, postPaddingsBytes, constantValue, outId); return out;
}

export const padV2Config: KernelConfig = {
  kernelName: PadV2,
  backendName: 'wasm',
  kernelFunc: pad as {} as KernelFunc,
  setupFunc: setup
};

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export const padV2Config: KernelConfig = {
  kernelName: PadV2,
  backendName: 'wasm',
  kernelFunc: pad as {} as KernelFunc,
  setupFunc: setup
};

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*=========================================================================
*/

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/FloorDiv.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/dist/setup_test.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/GatherNd.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/src/kernels/RotateWithOffset.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/types.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/LogicalAnd.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/ArgMax.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/Cast.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/Log.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/...
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Open Source Used in Cisco Meeting Server (formerly Acano Server) 3.6

wasm/src/kernels/Sigmoid.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/src/kernels/GatherNd.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/dist/kernels/BatchMatMul.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/src/kernels/NonMaxSuppressionV3.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/dist/kernels/Exp.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/src/kernels/FusedDepthwiseConv2D.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/dist/kernels/Multiply.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/src/kernels/NonMaxSuppressionV5.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/dist/kernels/Prelu.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/src/kernels/Cos.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/dist/kernels/AddN.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/dist/kernels/Minimum.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/dist/kernels/FlipLeftRight.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/src/kernels/Log.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/dist/kernels/Tile.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/dist/kernels/FusedConv2D.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/src/kernels/RealDiv.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/src/kernels/LeakyRelu.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/dist/kernels/DepthToSpace.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/src/kernels/Tanh.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/src/kernels/unary_kernel.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/src/index.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/src/kernels/GreaterEqual.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/dist/kernels/Sub.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/dist/kernels/ResizeBilinear.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/src/kernels/Maximum.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/src/kernels/SquaredDifference.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/dist/kernels/Tanh.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/dist/index_test.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm/dist/kernels/FusedConv2D.js
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- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Concat.js
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Greater.js
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/BatchMatMul.d.ts
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Log.d.ts
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Unpack.d.ts
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Transpose.js
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/FusedBatchNorm.ts
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Less.ts
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Tile.ts
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Relu6.js
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Types.ts
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/UnaryKernel.d.ts
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/LeakyRelu.js
- /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Relu.d.ts
Open Source Used in Cisco Meeting Server (formerly Acano Server) 3.6

* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/RotateWithOffset.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/index.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/_FusedMatMul.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/DepthToSpace.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/AddN.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/ClipByValue.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Sin.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Min.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Cos.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/_FusedMatMul.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/MaxPool.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/NonMaxSuppressionV3.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Tile.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Pow.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Conv2D.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/GatherV2.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Sigmoid.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/NonMaxSuppression utilized.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/ResizeBilinear.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Greater.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Max.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Reshape.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Cast.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/NonMaxSuppressionV5.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Multiply.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Slice.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/PadV2.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Reshape.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/PadV2.ts
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* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/ArgMax.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/LogicalAnd.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/DepthwiseConv2dNative.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Unpack.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Transpose.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/wasm-out/tfjs-backend-wasm.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/types.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Concat.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Transpose.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/AddN.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/ExpandDims.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/CropAndResize.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/MaxPool.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Min.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Rsqrt.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/ExpandDims.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Sin.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/GreaterEqual.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/unary_kernel.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Less.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Abs.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/setup_test.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/FusedDepthwiseConv2D.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/FusedBatchNorm.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Slice.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Sin.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Transp.py
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/AvgPool.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Transp.py
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/AvgPool.ts
wasm/dist/kernels/DepthwiseConv2dNative.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Cos.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Relu.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Relu6.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Pow.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/SquaredDifference.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Square.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/NonMaxSuppression_util.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/NonMaxSuppression_util.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/ScatterNd.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/PadV2.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Sigmoid.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/LessEqual.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Maximum.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Sub.js

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```
// This enum must align with the enum defined in cc/backend.h.\n\nexport enum CppDType {\n  float32 = 0,\n  int32 = 1,\n  bool = 2,\n  string = 3,\n  complex64 = 4,\n\n};\n\n// Must match enum in cc/fus\n```
```
backend.dataIdMap.get(a.dataId).id;
  const bId = backend.dataIdMap.get(b.dataId).id;

  let biasId = 0;
  if (bias != null) {
    const biasData = backend.dataIdMap.get(bias.dataId);
    if (biasData.shape.length !== 1) {
      throw new Error(`FusedMatMul only supports rank-1 bias but got rank ${biasData.shape.length}.`);
    }
    biasId = biasData.id;
  }
  const preluActivationWeightsId = preluActivationWeights == null ? 0 : backend.dataIdMap.get(preluActivationWeights.dataId).id;

  const batchDim = a.shape[0];

  const out = backend.makeOutput([batchDim, leftDim, rightDim], a.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;

  const aShapeBytes = new Uint8Array(new Int32Array(a.shape).buffer);
  const bShapeBytes = new Uint8Array(new Int32Array(b.shape).buffer);

  wasmFusedMatMul(aId, aShapeBytes, a.shape.length, bId, bShapeBytes, b.shape.length, transposeA, transposeB, fusedActivation, biasId, preluActivationWeightsId, leakyreluAlpha || 0, outId);

  return out;
}

export const fusedMatMulConfig: KernelConfig = {
  kernelName: FusedMatMul,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: kernelFunc as {} as KernelFunc
};
```

---

```
import {DataType, KernelConfig, TensorInfo, UnaryInputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

export function createUnaryKernelConfig(
    kernelName: string, outType?: DataType): KernelConfig {
  let wasmFunc: (xId: number, dtype: number, outId: number) => void;

  function setupFunc(backend: BackendWasm): void {
    wasmFunc = backend.wasm.cwrap(kernelName, null /* void */, 
    [ 'number',  // x_id
    'number',  // dtype
    'number',  // out_id
    ]);}

  function kernelFunc(args: {backend: BackendWasm, inputs: UnaryInputs}):
  TensorInfo {
    const {backend, inputs: {x}} = args;
    const xId = backend.dataIdMap.get(x.dataId).id;
    const out = backend.makeOutput(x.shape, outType || x.dtype);
    const outId = backend.dataIdMap.get(out.dataId).id;

    // Short-circuit zero-sized tensors.
    if (util.sizeFromShape(out.shape) === 0) {
      return out;
    }

    wasmFunc(xId, CppDType[x.dtype], outId);
    return out;
  }

  return {kernelName, backendName: 'wasm', setupFunc, kernelFunc: kernelFunc as {} as KernelFunc
};
```

---

```
import {Abs, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const absConfig: KernelConfig = createUnaryKernelConfig(Abs);
```
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=============================================================================

*/

import {backend_util, BinaryInputs, DataType, KernelConfig, TensorInfo, util} from '@tensorflow/tfjs-core';

import { BackendWasm } from './backend_wasm';

import { CppDType } from './types';

export function createBinaryKernelConfig(includeKernelName: string, supportsFullBroadcast: boolean, dtype: DataType): KernelConfig {
  let wasmFunc:
      (aId: number, aShape: Uint8Array, aShapeLen: number, bId: number, bShape: Uint8Array, bShapeLen: number, dtype: number, outId: number) =>
          void;

  function setupFunc(backend: BackendWasm): void {
    wasmFunc = backend.wasm.cwrap(kernelName, null /* void */, 
      ['number', 'a_id', 'array', 'a_shape', 'number', 'a_shape.length', 'number', 'b_id', 'array', 'b_shape', 'number', 'b_shape.length', 'number', 'dtype', 'number', 'out_id'],
    );

  function kernelFunc(args: {backend: BackendWasm, inputs: BinaryInputs}: {
    const {backend, inputs} = args;
    const {a, b} = inputs;
    const aId = backend.dataIdMap.get(a.dataId).id;
    const bId = backend.dataIdMap.get(b.dataId).id;

    const outputType = dtype != null ? dtype : a.dtype;
    const newShape = backend_util.assertAndGetBroadcastShape(a.shape, b.shape);
    const out = backend.makeOutput(newShape, outputType);

    // Short-circuit zero-sized tensors.
    if (util.sizeFromShape(newShape) === 0) {
      return out;
    }

    const aShapeBytes = new Uint8Array(new Int32Array(a.shape).buffer);
    const bShapeBytes = new Uint8Array(new Int32Array(b.shape).buffer);
    const outId = backend.dataIdMap.get(out.dataId).id;

    const kernelFunc = () => wasmFunc(
        aId, aShapeBytes, a.shape.length, bId, bShapeBytes, b.shape.length,
        CppDType[a.dtype], outId);

    // Currently only some float operations support full broadcast.
    if (supportsFullBroadcast && a.dtype === 'float32') {
      kernelFunc();
      return out;
    }

    const aBroadcastDims = backend_util.getBroadcastDims(a.shape, newShape);
    const bBroadcastDims = backend_util.getBroadcastDims(b.shape, newShape);
    const loopsOverAllOfA = aBroadcastDims.every((v, i) => v === i);
    const loopsOverAllOfB = bBroadcastDims.every((v, i) => v === i);
    if (loopsOverAllOfA && loopsOverAllOfB) {
      kernelFunc();
      return out;
    } else {
      throw new Error('Broadcasting along outer dims is not yet supported for ' + kernelName + ' ');
    }
  }

  return {kernelName, backendName: 'wasm', setupFunc, kernelFunc};
}
return outShape;
}

function removeOneSizeDims(outShape:\n) { const newShape = []; const newPerm = []; for (let i = 0; i < shape.length; ++i) { if (shape[i] != 1) { newShape.push(shape[i]); } } if (shape[perm[i]] != 1) { newPerm.push(perm[i]); } for (let i = 0; i < newPerm.length; ++i) { if (newPerm[i] > i && (newPerm[i] >= minValIdx || newPerm[i] > newPerm[j])) { minValIdx = i; } } return [newShape, newPerm]; }

export const transposeConfig: KernelConfig = { kernelName: Transpose, backendName: 'wasm', kernelFunc: transpose as {} as KernelFunc, setupFunc: setup, /* @license */ Copyright 2020 Google Inc. All Rights Reserved. * Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. * You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and limitations under the License. *

import {backend_util, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {transpose} from './Transpose';

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import {All, AllAttrs, AllInputs, backend_util, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {permuteAxesAndTranspose} from './kernel_utils';

let wasmAll: (xId: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmAll = backend.wasm.cwrap(All, /*void*/, ['number, number, number']);
}

function all(args: {backend: BackendWasm, inputs: AllInputs, attrs: AllAttrs}: TensorInfo { const {backend, inputs, attrs} = args; const {axis, keepDims} = attrs; const {x} = inputs; const xId = backend.dataIdMap.get(x.dataId).id; const constId = backend.dataIdMap.get(transposed.dataId).id; if (transposedId !== xId) {
  inputWasTransposed = true;
} return [transposed, originalAxes, keepDims]; }

backend_util.assertAxesAreInnerMostDims('all', axes, inputWasTransposed);
util.sizeFromShape(reduceShape);

const out = backend.makeOutput(outShape, x.dtype);

if (util.sizeFromShape(input.shape) !== 0) {
  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmAll(inputId, reduceSize, outId);
}

if (inputWasTransposed) {
  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmAll(inputId, reduceSize, outId);
}

if (keepDims) {
  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmAll(inputId, reduceSize, outId);
}

return out;

export const allConfig: KernelConfig = {
  kernelName: All,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: all as {} as KernelFunc
};

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 */

import {Any, AnyAttrs, AnyInputs, backend_util, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';

let wasmAny: (xId: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmAny = backend.wasm.cwrap(Any, null /*void*/, ['number', 'number', 'number']);
}

function any(args: {backend: BackendWasm, inputs: AnyInputs, attrs: AnyAttrs}):
    TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;

  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis,

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    input = transposed;
    inputId = transposedId;
  }

  const inputRank = input.shape.length;

  backend_util.assertAxesAreInnerMostDims('any', axes, inputRank);
  const [outShape, reduceShape] =
    backend_util.computeOutAndReduceShapes(input.shape, axes);

  const reduceSize =
    util.sizeFromShape(reduceShape);

  const out = backend.makeOutput(outShape, x.dtype);

  if (util.sizeFromShape(input.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;

    wasmAny(inputId, reduceSize, outId);
  }

  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  if (keepDims) {
    // reshape
    const newShape =
      backend_util.expandShapeToKeepDim(out.shape, originalAxes);
    out.shape = newShape;
  }

  return out;
}

export const anyConfig: KernelConfig = {
  kernelName: Any,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: any as {} as KernelFunc
};

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 */

import {ArgMax, ArgMaxAttrs, ArgMaxInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

let wasmFunc: (
    xId: number, dtype: number, outerSize:
    number, innerSize: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmFunc = backend.wasm.cwrap(ArgMax, null /* void */, [
      'number',  // x_id
      'number',  // dtype
      'number',  // outer
      'number',  // inner
      'number'   // out_id
    ]);}

function argmax(
    args:
    {inputs: ArgMaxInputs, backend: BackendWasm, attrs: ArgMaxAttrs}) {
  const {inputs, backend, attrs} = args;

  const {x} = inputs;

  const xId =

backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose of this
      // once we are done.
      input = transposed;
      inputId = transposedId;
    }
  }

  const outShape = input.shape.slice(0, -1);
  const out = backend.makeOutput(outShape, 'int32);
  const outId = backend.dataIdMap.get(out.dataId).id;
  const outerSize = util.sizeFromShape(out.shape);
  const innerSize = input.shape[axes[0]];
  wasmFunc(inputId, CppDType[input.dtype], outerSize, innerSize, outId);

  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  return out;
}

export const argMaxConfig: KernelConfig = {
  kernelName: ArgMax,
  backendName: 'wasm',
  kernelFunc: argmax as {} as KernelFunc,
  setupFunc: setup
};

export const argMaxConfig: KernelConfig = {
  kernelName: ArgMax,
  backendName: 'wasm',
  kernelFunc: argmax as {} as KernelFunc,
  setupFunc: setup
};

export const avgPoolConfig: KernelConfig = {
  kernelName: AvgPool,
  backendName: 'wasm',
  kernelFunc: avgPool as {} as KernelFunc,
  setupFunc: setup
};

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 */

import {AvgPool, AvgPoolAttrs, AvgPoolInputs, backend_util, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';

let wasmAvgPool: (xId: number, batchSize: number, inputHeight: number, inputWidth: number, filterHeight: number, filterWidth: number, padTop: number, padRight: number, padBottom: number, padLeft: number, strideHeight: number, strideWidth: number, channels: number, outId: number) => void;

function setup(backend: BackendWasm) {
    wasmAvgPool = backend.wasm.cwrap(AvgPool, null /* void */, [
        'number',  // xId
        'number',  // batchSize
        'number',  // inputHeight
        'number',  // inputWidth
        'number',  // filterHeight
        'number',  // filterWidth
        'number',  // padTop
        'number',  // padRight
        'number',  // padBottom
        'number',  // padLeft
        'number',  // strideHeight
        'number',  // strideWidth
        'number',  // channels
        'number',  // outId
    ]);}

function avgPool(
    args: {inputs: AvgPoolInputs, backend: BackendWasm, attrs: AvgPoolAttrs}) {
  const {inputs, attrs, backend} = args;

  const x = inputs.x as Tensor4D;
  const xId = backend.dataIdMap.get(x.dataId).id;

  const {filterSize, strides, pad, dimRoundingMode} = attrs;
  const convInfo = backend_util.computePool2DInfo(
      x.shape, filterSize, strides, 1 /* dilations */, pad, dimRoundingMode);

  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const padTop = convInfo.padTop;
  const padRight = convInfo.padRight;
  const padBottom = convInfo.padBottom;
  const padLeft = convInfo.padLeft;
  const strideHeight = convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;

  if (convInfo.dataFormat !== 'channelsLast') {
    throw new Error(`wasm backend does not support dataFormat:'` +
        `${convInfo.dataFormat}'. Please use 'channelsLast'.`);
  }

  if (convInfo.dilationWidth !== 1 || convInfo.dilationHeight !== 1) {
    throw new Error(`wasm backend only supports pooling with dilation = [1, 1], ` +
        `got ${[convInfo.dilationWidth, convInfo.dilationHeight]}.`);
  }

  const out = backend.makeOutput(x.shape.slice(0, -1), 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  const wasmAvgPool = backend.wasm.cwrap(AvgPool, null /* void */, [
      'number',  // xId
      x.shape[0], x.shape[1], x.shape[2],
      filterHeight, filterWidth, padTop, padRight, padBottom, padLeft, strideHeight, strideWidth, channels,
  ]); return out;
}

export const avgPoolConfig: KernelConfig = {
  kernelName: AvgPool,
  backendName: 'wasm',
  kernelFunc: avgPool as {} as KernelFunc
};

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=============================================================================

*/

import {KernelConfig, KernelFunc, Reshape, ReshapeAttrs, ReshapeInputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function reshape(
    args: {inputs: ReshapeInputs, attrs: ReshapeAttrs, backend: BackendWasm}) {
  const {inputs, attrs} = args;
  const {x} = inputs;
  const {shape} = attrs;

  const xSize = util.sizeFromShape(x.shape);
  const $shape = util.inferFromImplicitShape(shape, xSize);
  util.assert(
      xSize === util.sizeFromShape($shape),
      () => `new shape: ${$shape}, old shape: ${x.shape}. New shape and old ` +
          `shape must have the same number of elements.`);

  // Backend needs to track refCount for the dataId for reshape op
  args.backend.incRef(x.dataId);

  return {dataId: x.dataId, shape: $shape, dtype: x.dtype};
}

export const reshapeConfig: KernelConfig = {
  kernelName: Reshape,
  backendName: 'wasm',
  kernelFunc: reshape as {} as KernelFunc
};

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 *
 *=============================================================================
 */
const batchDim = Math.max(batchDimA, batchDimB);
const out = backend.makeOutput([batchDim, leftDim, rightDim], a3d.dtype);
const outId = backend.dataIdMap.get(out.dataId).id;
const aShapeBytes = new Uint8Array(new Int32Array(a3d.shape).buffer);
const bShapeBytes = new Uint8Array(new Int32Array(b3d.shape).buffer);
wasmBatchMatMul(a3dId, aShapeBytes, a3d.shape.length, b3dId, bShapeBytes, b3d.shape.length, transposeA, transposeB, outId);
backend.disposeData(a3d.dataId);
backend.disposeData(b3d.dataId);
out.shape = outShape;
return out;
}

export const batchMatMulConfig:
  KernelConfig = {
    kernelName: BatchMatMul,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: batchMatMul as {} as KernelFunc
};

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 */
import { backend_util, util } from '@tensorflow/tfjs-core';
export function concatImpl(inputs, outShape, dtype, simplyConcat) {
    const outVals = util.getArrayFromDType(dtype, util.sizeFromShape(outShape));
    if (simplyConcat && dtype !== 'string') {
        // Use built-in TypedArray.set() method for speed.
        let offset = 0;
        inputs.forEach(input => {
            const size = util.sizeFromShape(input.shape);
            outVals.set(input.vals, offset);
            offset += size;
        });
    } else {
        let colOffset = 0;
        inputs.forEach(input => {
            const decodedData = dtype === 'string' ?
                backend_util.fromUint8ToStringArray(input.vals) :
                input.vals;
            let tIdx = 0;
            for (let row = 0; row < input.shape[0]; ++row) {
                const resIdx = row * outShape[1] + colOffset;
                for (let col = 0; col < input.shape[1]; ++col) {
                    outVals[resIdx + col] = decodedData[tIdx++];
                }
                colOffset += input.shape[1];
            }
        });
    }
    return outVals;
}
import { util } from '@tensorflow/tfjs-core';
export function rangeImpl(start, stop, step, dtype) {
    const sameStartStop = start === stop;
    const increasingRangeNegativeStep = start < stop && step < 0;
    const decreasingRangePositiveStep = stop < start && step > 1;
    if (sameStartStop || increasingRangeNegativeStep ||
        decreasingRangePositiveStep) {
        return util.makeZerosTypedArray(0, dtype);
    }
    const numElements = Math.abs(Math.ceil((stop - start) / step));
    const values = util.makeZerosTypedArray(numElements, dtype);
    if (stop < start && step === 1) {
        // Auto adjust the step's sign if it hasn't been set
        // (or was set to 1)

import { backend_util, Buffer, slice, slice_util, util } from '@tensorflow/tfjs-core';
import { assertNotComplex } from '../cpu_util';

export function sliceImpl(vals, begin, size, shape, dtype) {
  const isContinuous = slice_util.isSliceContinuous(shape, begin, size);
  const length = util.sizeFromShape(size);
  const xStrides = util.computeStrides(shape);
  if (isContinuous) {
    const flatOffset = slice_util.computeFlatOffset(begin, xStrides);
    if (dtype === 'string') {
      return vals.slice(flatOffset, flatOffset + length);
    }
    return vals.subarray(flatOffset, flatOffset + length);
  }
  const decodedData = dtype === 'string' ?
    backend_util.fromUint8ToStringArray(vals) :
    vals;
  const inBuf = buffer(shape, dtype, decodedData);
  const outBuf = buffer(size, dtype);
  for (let i = 0; i < outBuf.size; ++i) {
    const outLoc = outBuf.indexToLoc(i);
    const inLoc = outLoc.map((idx, j) => idx + begin[j]);
    outBuf.set(inBuf.get(...inLoc), ...outLoc);
  }
  if (dtype === 'string') {
    return backend_util.fromStringArrayToUint8(outBuf.values);
  }
  return outBuf.values;
}

export function slice(args) {
  const { inputs, backend, attrs } = args;
  const { x } = inputs;
  const { begin, size } = attrs;
  assertNotComplex(x, 'slice');
  const [$begin, $size] = slice_util.parseSliceParams(x, begin, size);
  slice_util.assertParamsValid(x, $begin, $size);
  const vals = backend.data.get(x.dataId).values;
  const outVals = sliceImpl(vals, $begin, $size, x.shape, x.dtype);
  return backend.makeTensorInfo($size, x.dtype, outVals);
}

export const sliceConfig = {
  kernelName: Slice,
  backendName: 'cpu',
  kernelFunc: slice
};
import {backend_util, KernelConfig, KernelFunc, Slice, slice_util, SliceAttrs, SliceInputs, TypedArray, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {sliceImplCPU} from '../kernel_utils/shared';

export function slice(
    args: {inputs: SliceInputs, attrs: SliceAttrs, backend: BackendWasm}) {
  const {inputs: {x}, attrs: {begin, size}, backend} = args;

  const [begin_, size_] = slice_util.parseSliceParams(x, begin, size);

  const isContinous = slice_util.isSliceContinous(x.shape, begin_, size_);
  const xVals = backend.readSync(x.dataId);
  const out = backend.makeOutput(size_, x.dtype);
  const xStrides = util.computeStrides(x.shape);
  const outData = backend.dataIdMap.get(out.dataId);

  if (isContinous) {
    const flatOffset = slice_util.computeFlatOffset(begin_, xStrides);

    if (x.dtype === 'string') {
      outData.stringBytes = (xVals as Uint8Array[]) .slice(flatOffset, flatOffset + util.sizeFromShape(size_));
    } else {
      const outVals = backend.typedArrayFromHeap(out);
      outVals.set((xVals as TypedArray).subarray(flatOffset, flatOffset + util.sizeFromShape(size_)));
    }

    return out;
  }

  if (x.dtype === 'string') {
    const res = sliceImplCPU(xVals, begin_, size_, x.shape, x.dtype);
    outData.stringBytes = res as Uint8Array[];
    return out;
  }

  const outVals = backend.typedArrayFromHeap(out);
  const rank = x.shape.length;
  if (rank === 2) {
    slice2d(xVals as TypedArray, xStrides[0], outVals, begin_ as [number, number], size_ as [number, number]);
  } else if (rank === 3) {
    slice3d(xVals as TypedArray, xStrides[0], xStrides[1], outVals, begin_ as [number, number, number], size_ as [number, number, number]);
  } else if (rank === 4) {
    slice4d(xVals as TypedArray, xStrides[0], xStrides[1], xStrides[2], outVals, begin_ as [number, number, number, number], size_ as [number, number, number, number]);
  } else {
    const res = sliceImplCPU(xVals, begin_, size_, x.shape, x.dtype) as TypedArray;
    outVals.set(res);
  }

  return out;
}

function slice2d(
    xVals: backend_util.TypedArray, xStride: number,
    outVals: backend_util.TypedArray, begin: [number, number],
    size: [number, number]): void {
  let outOffset = 0;
  const beginI = begin[0];
  const beginJ = begin[1];
  const endI = begin[0] + size[0];
  for (let i = beginI; i < endI; i++) {
    const xOffset = i * xStride + beginJ;
    outVals.set(xVals.subarray(xOffset, xOffset + size[1]), outOffset);
  }
  outOffset += size[1];
}
number, xStride2: number, outVals: backend_util.TypedArray, begin: [number, number, number], size: [number, number, number]): void { let outOffset = 0; const beginI = begin[0]; const beginJ = begin[1]; const beginK = begin[2]; const endI = beginI + size[0]; const endJ = beginJ + size[1]; for (let i = beginI; i < endI; i++) { for (let j = beginJ; j < endJ; j++) { const xOffset = i * xStride1 + j * xStride2 + beginK; outVals.set(xVals.subarray(xOffset, xOffset + size[2]), outOffset); outOffset += size[2]; } }
}

function slice4d(xVals: backend_util.TypedArray, xStride1: number, xStride2: number, xStride3: number, outVals: backend_util.TypedArray, begin: [number, number, number, number], size: [number, number, number, number]): void { let outOffset = 0; const beginI = begin[0]; const beginJ = begin[1]; const beginK = begin[2]; const beginL = begin[3]; for (let i = beginI; i < endI; i++) { for (let j = beginJ; j < endJ; j++) { for (let k = beginK; k < endK; k++) { const xOffset = i * xStride1 + j * xStride2 + k * xStride3 + beginL; outVals.set(xVals.subarray(xOffset, xOffset + size[3]), outOffset); outOffset += size[3]; } }
}

export const sliceConfig: KernelConfig = {
  kernelName: Slice,
  backendName: 'wasm',
  kernelFunc: slice as {} as KernelFunc,
};

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 */

import {backend_util, BatchToSpaceND, BatchToSpaceNDAttrs, BatchToSpaceNDInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';
import {reshape} from './Reshape';
import {slice} from './Slice';
import {transpose} from './Transpose';

function batchToSpaceND(args: {
  inputs: BatchToSpaceNDInputs,
  backend: BackendWasm,
  attrs: BatchToSpaceNDAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {blockShape, crops} = attrs;
  const prod = blockShape.reduce((a, b) => a * b);
  const reshaped = backend_util.getReshaped(x.shape, blockShape, prod);
  const permuted = backend_util.getPermuted(reshaped.length, blockShape.length);

  const sliceBeginCoords = backend_util.getSliceBeginCoords(crops, blockShape.length);
  const sliceSize =
  backend_util.getSliceSize(reshapedPermuted, crops, blockShape.length);

  const xReshaped = reshape({inputs: {x}, backend, attrs: {shape: reshaped}});
  const xTransposed = transpose({inputs: {x: xReshaped}, backend, attrs: {perm: permuted}});

  const xReshapedPermuted = reshape({inputs: {x: xTransposed}, backend, attrs: {shape: reshapedPermuted}});
  const result = slice({inputs: {x: xReshapedPermuted}, backend, attrs: {begin: beginBeginCoords, size: sizeRange} });
  backend.disposeData(xReshaped.dataId);
  backend.disposeData(xReshapedPermuted.dataId);
  return result;
}

export const batchToSpaceNDConfig: KernelConfig = {
  kernelName: BatchToSpaceND,
  backendName: 'wasm',
  kernelFunc: batchToSpaceND as {} as KernelFunc,
};

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 */

import {Cast, CastAttrs, CastInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';
import {TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function
```javascript
const { inputs: CastInputs, attrs: CastAttrs, backend: BackendWasm } = args; const { dtype, backend } = args; const out = backend.makeOutput(x.shape, dtype); const inVals = backendtypedArrayFromHeap(x); const outVals = backendtypedArrayFromHeap(out); outVals.set(inVals); return out; };

export const castConfig: KernelConfig = { kernelName: Cast, backendName: 'wasm', kernelFunc: cast as {} as KernelFunc };

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 */

import { KernelConfig, Ceil } from '@tensorflow/tfjs-core';

import { createUnaryKernelConfig } from './unary_kernel';

export const ceilConfig: KernelConfig = createUnaryKernelConfig(Ceil);

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 */

import { ClipByValue, ClipByValueAttrs, ClipByValueInputs, KernelConfig, KernelFunc } from '@tensorflow/tfjs-core';

import { BackendWasm } from '../backend_wasm';

let wasmClip: (xId: number, min: number, max: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmClip = backend.wasm.cwrap(ClipByValue, null /* void */, [ 'number', // x_id
    'number', // min
    'number', // max
    'number' // out_id
  ]);}

function clip(args: {
  inputs: ClipByValueInputs,
  backend: BackendWasm,
  attrs: ClipByValueAttrs
}) {
  const { inputs, backend, attrs } = args;
  const { x } = inputs;
  const { clipValueMin, clipValueMax } = attrs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const out = backend.makeOutput(x.shape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmClip(xId, clipValueMin, clipValueMax, outId);
  return out;
}

export const clipByValueConfig: KernelConfig = {
  kernelName: ClipByValue,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: clip as {} as KernelFunc
};

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 */

import { backend_util, Concat, ConcatAttrs, ConcatInputs, KernelConfig, KernelFunc, util } from '@tensorflow/tfjs-core';

import { BackendWasm } from '../backend_wasm';
import { concatImplCPU } from '../kernel_utils/shared';
import { identity } from './Identity';
import { reshape } from './Reshape';

export function concat(args: {
  inputs: ConcatInputs,
  backend: BackendWasm,
  attrs: ConcatAttrs
}) {
  const { inputs, backend, attrs } = args;
  const { inputs, backend } = args;
  const axis = util.parseAxisParam(attrs.axis, inputs[0].shape)[0];
  let outShape = backend.makeOutput(x.shape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmClip(xId, clipValueMin, clipValueMax, outId);
  return out;
}
```
Any concat of n-dimensional tensors across any axis can be reduced to a concatenation of two-dimensional tensors across the axis 1, finally reshaping the result to have the proper shape. const inputs2D = $inputs.map(t => {
  const innerSize = util.sizeFromShape(t.shape.slice(axis));
  const shape = [-1, innerSize];
  return reshape(inputs: [x: t], backend, attrs: {shape});
});

let sumInnerDoms = 0;
const innerDims = $inputs.map(input => {
  const innerDim = util.sizeFromShape(input.shape.slice(axis));
  sumInnerDoms += innerDim;
  return innerDim;
});

const outVals = $inputs.map(input => {
  return tensor(input => {
    const inOffset = b * sumInnerDoms;
  });
});

outData.shape = finalOutShape;
outData.stringBytes = backend_util.fromStringArrayToUint8(outVals);

inputs2D.forEach(t => backend.disposeData(t.dataId));

return out;
}

export const concatConfig: KernelConfig = {
  kernelName: Concat,
  backendName: 'wasm',
  kernelFunc: concat as {} as KernelFunc,
};

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 */

import {backend_util, Conv2D, Conv2DAttrs, Conv2DInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';

let wasmConv2d: (
  xId: number, batchSize: number, inputHeight: number, inputWidth: number,
  filterId: number, filterHeight: number, filterWidth: number, padTop: number,
  padRight: number, padBottom: number, padLeft: number, isSamePad: number,
  dilationHeight: number, dilationWidth: number, strideHeight: number,
  strideWidth: number, outputHeight: number, outputWidth: number,
  outputChannels: number, outputChannels2: number, outputChannels3: number,
  outputChannels4: number, outputChannels5: number, outputChannels6: number,
  outputChannels7: number, outputChannels8: number, outputChannels9: number,
  outputChannels10: number, outputChannels11: number, outputChannels12: number,
  outputChannels13: number, outputChannels14: number, outputChannels15: number,
  outputChannels16: number, outputChannels17: number, outputChannels18: number,
  outputChannels19: number, outputChannels20: number, outputChannels21: number,
  outputChannels22: number, outputChannels23: number, outputChannels24: number,
  outputChannels25: number, outputChannels26: number, outputChannels27: number,
  outputChannels28: number, outputChannels29: number, outputChannels30: number,
  outputChannels31: number, outputChannels32: number, outputChannels33: number,
  outputChannels34: number, outputChannels35: number, outputChannels36: number,
  outputChannels37: number, outputChannels38: number, outputChannels39: number,
  outputChannels40: number, outputChannels41: number, outputChannels42: number,
  outputChannels43: number, outputChannels44: number, outputChannels45: number,
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  outputChannels154: number, outputChannels155: number, outputChannels156: number,
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  outputChannels172: number, outputChannels173: number, outputChannels174: number,
  outputChannels175: number, outputChannels176: number, outputChannels177: number,
  outputChannels178: number, outputChannels179: number, outputChannels180: number,
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  outputChannels190: number, outputChannels191: number, outputChannels192: number,
  outputChannels193: number, outputChannels194: number, outputChannels195: number,
  outputChannels196: number, outputChannels197: number, outputChannels198: number,
  outputChannels199: number, outputChannels200: number, outputChannels201: number,
  outputChannels202: number, outputChannels203: number, outputChannels204: number,
const filterHeight = convInfo.filterHeight;
const filterWidth = convInfo.filterWidth;
const padTop = convInfo.padInfo.top;
const padRight = convInfo.padInfo.right;
const padBottom = convInfo.padInfo.bottom;
const padLeft = convInfo.padInfo.left;
const dilationHeight = convInfo.dilationHeight;
const dilationWidth = convInfo.dilationWidth;
const strideHeight = convInfo.strideHeight;
const strideWidth = convInfo.strideWidth;
const inputChannels = convInfo.inChannels;
const outputChannels = convInfo.outChannels;
const isSamePad = convInfo.padInfo.type === 'SAME';

if (convInfo.dataFormat !== 'channelsLast') {
  throw new Error(`wasm backend Conv2D does not support dataFormat: '$dataFormat'`. Please use 'channelsLast.');
}

const out = backend.makeOutput(convInfo.outShape, 'float32');
const outId = backend.dataIdMap.get(out.dataId).id;

wasmConv2d(
  xId, x.shape[0], x.shape[1], x.shape[2], filterId, filterHeight, filterWidth, padTop, padRight, padBottom, padLeft, isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, outId);

return out;

export const conv2DConfig: KernelConfig = {
  kernelName: Conv2D,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: conv2d as {} as KernelFunc
};

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*/

import {backend_util, Conv2DBackpropInput, Conv2DBackpropInputAttrs, Conv2DBackpropInputInputs, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmConv2DBackpropInput: (
  dyId: number, filterId: number, batchSize: number,
  filterHeight: number, filterWidth: number, inHeight: number, inWidth: number, inChannels: number,
  outHeight: number, outWidth: number, outChannels: number,
  strideHeight: number, strideWidth: number,
  topPad: number, leftPad: number, fltS0: number, fltS1: number, fltS2: number,
  xBatchStride: number, xRowStride: number, xColStride: number, xChannelStride: number,
  yBatchStride: number, yRowStride: number, yColStride: number, yChannelStride: number,
  outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmConv2DBackpropInput = backend.wasm.cwrap(Conv2DBackpropInput, null, [
    'number',  // dyId
    'number',  // filterId
    'number',  // batchSize
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // inHeight
    'number',  // inWidth
    'number',  // inChannels
    'number',  // outHeight
    'number',  // outWidth
    'number',  // outChannels
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // topPad
    'number',  // leftPad
    'number',  // fltS0
    'number',  // fltS1
    'number',  // fltS2
    'number',  // xBatchStride
    'number',  // xRowStride
    'number',  // xColStride
    'number',  // xChannelStride
    'number',  // yBatchStride
    'number',  // yRowStride
    'number',  // yColStride
    'number',  // yChannelStride
    'number',  // outId
  ]);}

function conv2DBackpropInput(args: {
  backend: BackendWasm,
  inputs: Conv2DBackpropInputInputs,
  attrs: Conv2DBackpropInputAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {dy, filter} = inputs;
  const {strides, pad, dataFormat, dimRoundingMode, inputShape} = attrs;
  const dilations = 1;

  const dataFormat = backend_util.convertConv2DDataFormat(dataFormat);
  const convInfo = backend_util.computeConv2DInfo(inputShape, filter.shape as [number, number, number, number], strides, dilations, pad, dimRoundingMode, false /* depthwise */, dataFormat);
  const {batchSize, filterHeight, filterWidth, inChannels, inHeight, inWidth, outChannels, outHeight, outWidth, strideHeight, strideWidth} = convInfo;
  const topPad = filterHeight - 1 - convInfo.padInfo.top;
  const leftPad = filterWidth - 1 - convInfo.padInfo.left;
  const isChannelsLast = convInfo.dataFormat === 'channelsLast';
  const dxStrides = util.computeStrides(convInfo.inShape);
  const dyStrides = util.computeStrides(dy.shape);
  const [fltS0, fltS1, fltS2] = util.computeStrides(filter.shape);
  const xBatchStride = dxStrides[0];
  const xRowStride =...
isChannelsLast ? dxStrides[1] : dxStrides[2])
  const xColStride = isChannelsLast ? dxStrides[2] : 1;
  const xChannelStride = isChannelsLast ? 1 : dxStrides[1];
  const yBatchStride = dyStrides[0];
  const yRowStride = isChannelsLast ? dyStrides[2] : dyStrides[1];
  const yColStride = isChannelsLast ? dyStrides[1] : 1;
  const yChannelStride = isChannelsLast ? 1 : dyStrides[2];

  const out = backend.makeOutput(convInfo.inShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  const dyId = backend.dataIdMap.get(dy.dataId).id;
  const filterId = backend.dataIdMap.get(filter.dataId).id;

  wasmConv2DBackpropInput(dyId, filterId, batchSize, filterHeight, filterWidth, inHeight, inWidth,
inChannels, outHeight, outWidth, outChannels, strideHeight, strideWidth, topPad, leftPad, fltS0, fltS1, fltS2,
xBatchStride, xRowStride, xColStride, xChannelStride, yBatchStride, yRowStride, yColStride,  
yChannelStride, outId);
  return out;
}

export const conv2DBackpropInputConfig: KernelConfig = {
  kernelName: Conv2DBackpropInput,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: conv2DBackpropInput as {} as KernelFunc
};

// Must match enum in CropAndResize.cc
enum InterpolationMethod {
  bilinear = 0,
  nearest = 1
}

let wasmCropAndResize: (imagesId: number, boxesId: number, boxIndId: number, numBoxes: number, 
  imagesShape: Uint8Array, cropHeight: number, cropWidth: number, method: number, 
  extrapolationValue: number, outId: number) => void = 
  (imagesId: number, boxesId: number, boxIndId: number, numBoxes: number, 
  imagesShape: Uint8Array, cropHeight: number, cropWidth: number, method: number, 
  extrapolationValue: number) => {
    void();
  };

function setup(backend: BackendWasm): void {
  wasmCropAndResize = backend.wasm.cwrap(CropAndResize, null /*void*/, [
    'number',  // imagesId
    'number',  // boxesId
    'number',  // boxIndId
    'number',  // numBoxes
    'array',   // imagesShape
    'number',  // cropHeight
    'number',  // cropWidth
    'number',  // method
    'number'   // extrapolationValue
  ]);

  // Setup function
  wasmCropAndResize(imagesId, boxesId, boxIndId, numBoxes, imagesShape, cropHeight, cropWidth, method, extrapolationValue);
}

function cropAndResize(args: {
  backend: BackendWasm,
  inputs: CropAndResizeInputs,
  attrs: CropAndResizeAttrs
}): TensorInfo {
  const {backend, inputs, attr...
```javascript
extrapolationValue, cropSize} = attrs;
const {image, boxes, boxInd} = inputs;
const numBoxes = boxes.shape[0];
const [cropHeight, cropWidth] = cropSize as [number, number];
const outShape = [numBoxes, cropHeight, cropWidth, image.shape[3]];
let imagesData = backend.dataIdMap.get(image.dataId);
if (image.dtype !== 'float32') {
  imagesData = cast({backend, inputs: {x: image}, attrs: {dtype: 'float32'}});
}
const imagesId = imagesData.id;
const boxesId = backend.dataIdMap.get(boxes.dataId).id;
const boxIndId = backend.dataIdMap.get(boxInd.dataId).id;
const out = backend.makeOutput(outShape, 'float32');
const outId = backend.dataIdMap.get(out.dataId).id;
const imagesShapeBytes = new Uint8Array(new Int32Array(image.shape).buffer);
wasmCropAndResize(imagesId, boxesId, boxIndId, numBoxes, imagesShapeBytes, cropHeight, cropWidth, InterpolationMethod[method as {} as keyof typeof InterpolationMethod], extrapolationValue, outId);
```

```javascript
export const cropAndResizeConfig: KernelConfig = {
  kernelName: CropAndResize,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: cropAndResize as {} as KernelFunc
};
```

```javascript
import {backend_util, KernelConfig, KernelFunc, Cumsum, CumsumAttrs, CumsumInputs, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {CppDType} from './types';
import {transpose} from './Transpose';

let wasmCumsum: (xId: number, exclusive: number, reverse: number, finalDim: number, outId: number, dtype: CppDType) => void;

function setup(backend: BackendWasm) {
  wasmCumsum = backend.wasm.cwrap(Cumsum, null /* void */, ['number', // x_id
    'number', // exclusive
    'number', // reverse
    'number', // final_dim
    'number', // out_id
    'number'  // dtype
  ]);}

export function cumsum(
  args: {inputs: CumsumInputs, backend: BackendWasm, attrs: CumsumAttrs}):
TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {axis, exclusive, reverse} = attrs;
  const xRank = x.shape.length;

  util.assert(x.dtype === 'float32' || x.dtype === 'int32', () => `cumsum does not support ${x.dtype} tensors in the WASM backend`);
  // permute required axis to inner most axis
  const permutation = backend_util.getAxesPermutation([axis], xRank);
  let permutedX = x;
  if (permutation !== null) {
    permutedX = transpose({inputs: {x}, attrs: {perm: permutation}, backend});
  }
  const permutedAxis = backend_util.getInnerMostAxes(1, xRank)[0];
  backend_util.assertAxesAreInnerMostDims('cumsum', [permutedAxis], xRank);
  const permutedOutId = backend.makeOutput(permutedX.shape, permutedX.dtype);
  const finalDim = permutedX.shape[permutedAxis];
  const permutedXId = backend.dataIdMap.get(permutedX.dataId).id;
  const permutedOutId = backend.dataIdMap.get(permutedOut.dataId).id;
  wasmCumsum(permutedXId, exclusive ? 1 : 0, reverse ? 1 : 0, finalDim, permutedOutId, CppDType[x.dtype] === 'float32' || x.dtype === 'int32', () => 'cumsum does not support ${x.dtype} tensors in the WASM backend');
  // permute data back if permuted
  let out = permutedOut;
  if (permutation !== null) {
    const undoPermutation = backend_util.getUndoAxesPermutation([axis], xRank);
    out = transpose({inputs: [{x: permutedOut}], attrs: {perm: undoPermutation}, backend});
    backend.disposeData(permutedOut.dataId);
  }
  return out;
}

export const cumsumConfig: KernelConfig = {
  kernelName: Cumsum,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: cumsum as {} as KernelFunc
};
```
import {DepthToSpace, DepthToSpaceAttrs, DepthToSpaceInputs, KernelConfig, KernelFunc, TensorInfo, } from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmDepthToSpace:
  (
    xId: number, blockSize: number, channelsLast: number, xStrides: Uint8Array, xStridesLength: number, outputShape: Uint8Array, outputStrides: Uint8Array, outSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmDepthToSpace = backend.wasm.cwrap(DepthToSpace, null /*void*/, 
      ['number', // xId 'number', // blocksize 'number', // channelsLast 'array', // xStrides 'number', // outputShape 'array', // outputStrides 'number', // outSize 'number', // outId 'number']);
}

export function depthToSpace(args: {
  backend: BackendWasm,
  inputs: DepthToSpaceInputs,
  attrs: DepthToSpaceAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;

  const {x} = inputs;
  const {blockSize, dataFormat} = attrs;

  const batchSize = x.shape[0];
  const inputHeight = (dataFormat === 'NHWC') ? x.shape[1] : x.shape[2];
  const inputWidth = (dataFormat === 'NHWC') ? x.shape[2] : x.shape[3];
  const inputDepth = (dataFormat === 'NHWC') ? x.shape[3] : x.shape[1];

  const outputHeight = inputHeight * blockSize;
  const outputWidth = inputWidth * blockSize;
  const outputDepth = inputDepth / (blockSize * blockSize);

  const outputShape = (dataFormat === 'NHWC') ?
      [batchSize, outputHeight, outputWidth, outputDepth] :
      [batchSize, outputDepth, outputHeight, outputWidth];

  const out = backend.makeOutput(outputShape, 'float32');

  const xData = backend.dataIdMap.get(x.dataId);
  const xId = xData.id;
  const xStridesBytes =
      new Uint8Array(new Int32Array(util.computeStrides(x.shape)).buffer);

  const outputShapeBytes = new Uint8Array(new Int32Array(outputShape).buffer);
  const outStridesBytes =
      new Uint8Array(new Int32Array(util.computeStrides(outputShape)).buffer);

  const outId = backend.dataIdMap.get(out.dataId).id;

  const channelsLast = dataFormat === 'NHWC' ? 1 : 0;
  wasmDepthToSpace(xId, blockSize, channelsLast, xStridesBytes, x.shape.length - 1, outputShapeBytes, outputStridesBytes, outputShape.length, outId); out = backend.makeOutput(outputShape, 'float32');

  return out;
}

export const depthToSpaceConfig: KernelConfig = {
  kernelName: DepthToSpace,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: depthToSpace
};
depthwiseConv2d(args: {
  inputs: DepthwiseConv2dNativeInputs,
  backend: BackendWasm,
  attrs: DepthwiseConv2dNativeAttrs
})

const {inputs, attr, backend} = args;
const {x, filter} = inputs;
const xId = backend.dataIdMap.get(x.dataId).id;
const filterId = backend.dataIdMap.get(filter.dataId).id;
const {strides, dilations, pad, dimRoundingMode} = attr;
const sDilations = dilations !== null ? [1, 1] : dilations;
const convInfo = backend_util.computeConv2DInfo(x as Tensor4D),
  (x as Tensor4D).shape, (filter as Tensor4D).shape,
  strides,
  (sDilations as number | [number, number]), pad, dimRoundingMode
true /* depthwise */;

const filterHeight = convInfo.filterHeight;
const filterWidth = convInfo.filterWidth;
const padTop = convInfo.padInfo.top;
const padRight = convInfo.padInfo.right;
const padBottom = convInfo.padInfo.bottom;
const padLeft = convInfo.padInfo.left;
const dilationHeight = convInfo.dilationHeight;
const dilationWidth = convInfo.dilationWidth;
const strideHeight = convInfo.strideHeight;
const strideWidth = convInfo.strideWidth;

const inputChannels = convInfo.inChannels;
const outputChannels = convInfo.outChannels;
const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;

if (convInfo.dataFormat !== 'channelsLast')
  throw new Error('wasm backend DepthwiseConv2dNative
does not support dataFormat: ' + convInfo.dataFormat); .

console.log('wasm backend DepthwiseConv2dNative
  does not support dataFormat: ' + convInfo.dataFormat); .

  const xId = backend.dataIdMap.get(x.dataId).id;
  const filterId = backend.dataIdMap.get(filter.dataId).id;
  const {strides, dilations, pad, dimRoundingMode} = attr;
  const sDilations = dilations !== null ? [1, 1] : dilations;
  const convInfo = backend_util.computeConv2DInfo(x as Tensor4D),
    (x as Tensor4D).shape, (filter as Tensor4D).shape,
    strides,
    (sDilations as number | [number, number]), pad, dimRoundingMode
true /* depthwise */;

  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const padTop = convInfo.padInfo.top;
  const padRight = convInfo.padInfo.right;
  const padBottom = convInfo.padInfo.bottom;
  const padLeft = convInfo.padInfo.left;
  const dilationHeight = convInfo.dilationHeight;
  const dilationWidth = convInfo.dilationWidth;
  const strideHeight = convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;

  const inputChannels = convInfo.inChannels;
  const outputChannels = convInfo.outChannels;

  const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;

  if (convInfo.dataFormat !== 'channelsLast')
    throw new Error('wasm backend DepthwiseConv2dNative
does not support dataFormat: ' + convInfo.dataFormat); .

console.log('wasm backend DepthwiseConv2dNative
  does not support dataFormat: ' + convInfo.dataFormat); .

    const xId = backend.dataIdMap.get(x.dataId).id;
    const filterId = backend.dataIdMap.get(filter.dataId).id;
    const {strides, dilations, pad, dimRoundingMode} = attr;
    const sDilations = dilations !== null ? [1, 1] : dilations;
    const convInfo = backend_util.computeConv2DInfo(x as Tensor4D),
      (x as Tensor4D).shape, (filter as Tensor4D).shape,
      strides,
      (sDilations as number | [number, number]), pad, dimRoundingMode
true /* depthwise */;

      const filterHeight = convInfo.filterHeight;
      const filterWidth = convInfo.filterWidth;
      const padTop = convInfo.padInfo.top;
      const padRight = convInfo.padInfo.right;
      const padBottom = convInfo.padInfo.bottom;
      const padLeft = convInfo.padInfo.left;
      const dilationHeight = convInfo.dilationHeight;
      const dilationWidth = convInfo.dilationWidth;
      const strideHeight = convInfo.strideHeight;
      const strideWidth = convInfo.strideWidth;

      const inputChannels = convInfo.inChannels;
      const outputChannels = convInfo.outChannels;

      const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;

      if (convInfo.dataFormat !== 'channelsLast')
        throw new Error('wasm backend DepthwiseConv2dNative
does not support dataFormat: ' + convInfo.dataFormat); .

console.log('wasm backend DepthwiseConv2dNative
  does not support dataFormat: ' + convInfo.dataFormat); .

    const xId = backend.dataIdMap.get(x.dataId).id;
    const filterId = backend.dataIdMap.get(filter.dataId).id;
    const {strides, dilations, pad, dimRoundingMode} = attr;
    const sDilations = dilations !== null ? [1, 1] : dilations;
    const convInfo = backend_util.computeConv2DInfo(x as Tensor4D),
      (x as Tensor4D).shape, (filter as Tensor4D).shape,
      strides,
      (sDilations as number | [number, number]), pad, dimRoundingMode
true /* depthwise */;

      const filterHeight = convInfo.filterHeight;
      const filterWidth = convInfo.filterWidth;
      const padTop = convInfo.padInfo.top;
      const padRight = convInfo.padInfo.right;
      const padBottom = convInfo.padInfo.bottom;
      const padLeft = convInfo.padInfo.left;
      const dilationHeight = convInfo.dilationHeight;
      const dilationWidth = convInfo.dilationWidth;
      const strideHeight = convInfo.strideHeight;
      const strideWidth = convInfo.strideWidth;

      const inputChannels = convInfo.inChannels;
      const outputChannels = convInfo.outChannels;

      const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;

      if (convInfo.dataFormat !== 'channelsLast')
        throw new Error('wasm backend DepthwiseConv2dNative
does not support dataFormat: ' + convInfo.dataFormat); .
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================================================================================

import {ExpandDims, ExpandDimsAttrs, ExpandDimsInputs, KernelConfig, KernelFunc, util} from
'@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {reshape} from './Reshape';

export function expandDims(args: {
  inputs: ExpandDimsInputs,
  attrs: ExpandDimsAttrs,
  backend: BackendWasm
}) {
  const {inputs, attrs, backend} = args;
  const {input} = inputs;
  const {dim} = attrs;

  const inputRank = input.shape.length;
  const newShape = input.shape.slice();
  let $dim = dim;
  if (dim < 0) {
    // Negative value is counted from the tail of rank.
    util.assert(
        -(inputRank + 1) <= dim,
        () => `Axis must be in the interval [${- (inputRank + 1)}, ${inputRank}]`);
    $dim = inputRank + dim + 1;
  }
  newShape.splice($dim, 0, 1);

  return reshape({inputs: {x: input}, backend, attrs: {shape: newShape}});
}

export const expandDimsConfig: KernelConfig = {
  kernelName: ExpandDims,
  backendName: 'wasm',
  kernelFunc: expandDims as {} as KernelFunc,
};

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 */

import {KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {Fill, FillAttrs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function fill(args: {attrs: FillAttrs, backend: BackendWasm}) {
  const {attrs: {shape, value, dtype}, backend} = args;
  const out = backend.makeOutput(shape, dtype);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.fill(value as number);
  return out;
}

export const fillConfig: KernelConfig = {
  kernelName: Fill,
  backendName: 'wasm',
  kernelFunc: fill as {} as KernelFunc,
};

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 */

import {FlipLeftRight, FlipLeftRightInputs, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmFlipLeftRight: (
    xId: number, batch: number, imageHeight: number, imageWidth: number, numChannels: number, outId: number) =>
    void;

function setup(backend: BackendWasm) {
  wasmFlipLeftRight = backend.wasm.cwrap(FlipLeftRight, null /* void */, 
    ['number', // xId
    'number', // batch
    'number', // imageHeight
    'number', // imageWidth
    'number', // numChannels
    'number', // outId
  ]);}

export function flipLeftRight(
    args: {inputs: FlipLeftRightInputs, backend: BackendWasm}) {
  const {inputs, backend} = args;
  const image = inputs;
  const out = backend.makeOutput(image.shape, image.dtype);
  const imageId = backend.dataIdMap.get(image.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;
  function flipLeftRightConfig:

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KernelConfig = {
  kernelName: FlipLeftRight,
  backendName: 'wasm',
  kernelFunc: flipLeftRight as {} as KernelFunc,
  setupFunc: setup
};

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 */

import {Floor, KernelConfig} from '@tensorflow/tfjs-core';

export const floorConfig: KernelConfig = createUnaryKernelConfig(Floor);

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 */

import {FloorDiv, KernelConfig} from '@tensorflow/tfjs-core';

export const floorDivConfig: KernelConfig = createBinaryKernelConfig(FloorDiv);

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 */

import {FusedBatchNorm, FusedBatchNormAttrs, FusedBatchNormInputs, KernelConfig, KernelFunc,
 TensorInfo, util} from '@tensorflow/tfjs-core';

export const fusedBatchNormConfig: KernelConfig = {
  kernelName: FusedBatchNorm,
  backendName: 'wasm',
  kernelFunc: fusedBatchNorm as {} as KernelFunc,
  setupFunc: setup
};
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```typescript
*\n
```
fusedConv2d as {} as KernelFunc
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 */

import {backend_util, FusedDepthwiseConv2D, FusedDepthwiseConv2DAttrs,
  FusedDepthwiseConv2DInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {FusableActivation} from './types';

let
wasmFusedDepthwiseConv2d:
    (xId: number, batchSize: number, inputHeight: number, inputWidth: number,
    filterId: number, filterHeight: number, filterWidth: number,
    biasId: number, padTop: number, padRight: number, padBottom: number,
    padLeft: number, isSamePad: number, dilationHeight: number, dilationWidth: number,
    strideHeight: number, strideWidth: number, outId: number, outputChannels: number,
    activation: number, preluActivationWeightsId: number, leakyreluAlpha: number) =>
    void;

function setup(backend: BackendWasm) {
  wasmFusedDepthwiseConv2d =
      backend.wasm.cwrap(FusedDepthwiseConv2D, null /* void */, 
        [  // xId
                  'number',  // batchSize
                  'number',  // inputHeight
                  'number',  // inputWidth
                  'number',  // filterId
                  'number',  // filterHeight
                  'number',  // filterWidth
                  'number',  // biasId
                  'number',  // padTop
                  'number',  // padBottom
                  'number',  // padLeft
                  'number',  // isSamePad
                  'number',  // dilationHeight
                  'number',  // dilationWidth
                  'number',  // strideHeight
                  'number',  // strideWidth
                  'number',  // inputChannels
                  'number',  // outputChannels
                  'number',  // activation
                  'number',  // leakyreluAlpha
          'number',  // outId
          ]);}

function fusedDepthwiseConv2d(args: {
  inputs: FusedDepthwiseConv2DInputs,
  backend: BackendWasm,
  attrs: FusedDepthwiseConv2DAttrs
}) {
  const {inputs, attrs, backend} = args;
  const {x, filter, bias,
    preluActivationWeights} = inputs;
  const {
    strides,
    pad,
    dilations,
    dataFormat,
    dimRoundingMode,
    activation,
    leakyreluAlpha
  } = attrs;

  const convInfo =
      backend_util.computeConv2DInfo((x as Tensor4D).shape, (filter as Tensor4D).shape, strides, dilations,
        pad, dimRoundingMode, true /* depthwise */);

  const fusedActivation =
      FusableActivation[activation as {} as keyof typeof FusableActivation];
  if (fusedActivation == null) {
    throw new Error(`FusedDepthwiseConv2D does not support activation ${activation}`);
  }

  const xId =
      backend.dataIdMap.get(x.dataId).id;
  const filterId = backend.dataIdMap.get(filter.dataId).id;

  const outputChannels = convInfo.outChannels;
  const outId = backend.dataIdMap.get(out.dataId).id;

  const xId =
      backend.dataIdMap.get(x.dataId).id;
  const filterId = backend.dataIdMap.get(filter.dataId).id;

  const preluActivationWeightsId =
      backend.dataIdMap.get(preluActivationWeights.dataId).id;

  const biasId =
      backend.dataIdMap.get(bias.dataId).id;

  const strideHeight =
      convInfo.strideHeight;
  const strideWidth =
      convInfo.strideWidth;
  const isSamePad = convInfo.type === 'SAME' ? 1 : 0;

  const batchSize =
      convInfo.batchSize;
  const inHeight =
      convInfo.inHeight;
  const inWidth =
      convInfo.inWidth;
  if (dataFormat !== 'NHWC') {
    throw new Error('wasm backend FusedDepthwiseConv2D does not support dataFormat:' +
        `{$dataFormat}`). Please use 'NHWC'.
  }

  const out =
      backend.makeOutput(convInfo.outShape, 'float32');
  const outId =
      backend.dataIdMap.get(out.dataId).id;

  const

preluActivationWeightsId = preluActivationWeights == null ? 0 : null
backend.dataIdMap.get(preluActivationWeights.dataId).id;\n\nwasnFusedDepthwiseConv2d(\n  xId, batchSize, inHeight, inWidth, filterId, filterHeight, filterWidth, blankId, padTop, padRight, padBottom, padLeft, isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, blank fusedActivation, preluActivationWeightsId, leakyreluAlpha || 0, outId);\n\nexport const fusedDepthwiseConv2DConfig: KernelConfig = {\n  \n  kernelName: FusedDepthwiseConv2D,\n  backendName: 'wasm',\n  setupFunc: setup,\n  \n  kernelFunc: fusedDepthwiseConv2d as {} as KernelFunc\n};\n
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import {gather_util, GatherNd, GatherNdInputs, KernelConfig, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmGatherNd: (\n  xId: number, dtype: CppDType, indicesId: number, numSlices: number, sliceRank: number, sliceSize: number, strides: Uint8Array, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmGatherNd = backend.wasm.cwrap(GatherNd, null /*void*/, [\n    'number',  // xId
    'number',  // dtype
    'number',  // indicesId
    'number',  // numSlices
    'number',  // sliceRank
    'array',   // strides
    'number'   // outId
  ]);\n}

function gatherNd(args: {backend: BackendWasm, inputs: GatherNdInputs}):
    TensorInfo {
  const {backend, inputs} = args;
  const {params, indices} = inputs;

  const [resultShape, numSlices, sliceSize, strides] =\n    gather_util.prepareAndValidate(params, indices);
  const out = backend.makeOutput(resultShape, params.dtype);
  if (numSlices === 0) {
    return\n  }

  const indicesShape = indices.shape;
  const sliceRank = indicesShape[indicesShape.length - 1];
  const xData = backend.dataIdMap.get(params.dataId);
  const xId = xData.id;
  const xStrides =\n    backend.dataIdMap.get(xData.dataId).id;
  const indicesData = backend.dataIdMap.get(indices.dataId);
  const indicesId = indicesData.id;
  const stridesBytes = new Uint8Array(new Int32Array(strides).buffer);

  wasmGatherNd(\n    xId, CppDType[params.dtype], indicesId, numSlices, sliceRank, sliceSize,\n    stridesBytes, outId);

  \nexport const gatherNdConfig: KernelConfig = {\n  \n  kernelName: GatherNd,\n  \n  setupFunc: setup,\n  \n  kernelFunc: gatherNd\n};\n
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import {backend_util, GatherV2, GatherV2Attrs, GatherV2Inputs, KernelConfig, KernelFunc, Tensor, TensorInfo, TypedArray, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from './backend_wasm';

import {reshape} from './Reshape';
import {CppDType} from './types';

let wasmGather: (\n  xId: number, dtype: CppDType, xStrides: Uint8Array, sliceSize: number,\n  numSlices: number, outStrides: Uint8Array,\n  \n  outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmGather = backend.wasm.cwrap('Gather', null /*void*/, [\n    'number',  // xId
    'number',  // dtype
    'array',   // xStrides
    'number',  // sliceSize
    'number',  // numSlices
    'number',  // outId
  ]);\n}

function gatherV2(args: {backend: BackendWasm, inputs: GatherV2Inputs, attrs: GatherV2Attrs}):
    TensorInfo {
  const {backend, inputs, attrs} = args;
  const {x, indices, axis, batchDims} = attrs;
  const batchSize =\n  throw error when any index is out of bound.\n
  \nexport const gatherV2Config: KernelConfig = {\n  \n  kernelName: GatherV2,\n  \n  setupFunc: setup,\n  \n  kernelFunc: gatherV2\n};\n
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parsedAxis = util.parseAxisParam(axis, x.shape)[0];
const indicesVals = backend.readSync(indices.dataId) as TypedArray;
const axisDim = x.shape[parsedAxis];
for (let i = 0; i < indicesVals.length; ++i) {
  const index = indicesVals[i];
  util.assert(index <= axisDim - 1 && index >= 0, `GatherV2: the index value ${index} is not in [0, ${axisDim - 1}]`);
}
const shapeInfo = backend_util.segment_util.collectGatherOpShapeInfo(x as Tensor, indices as Tensor, parsedAxis, batchDims);
const flattenX = reshape(x as x.Tensor, x.shape);
const indicesSize = util.sizeFromShape(indices.shape);
const flattenIndex = reshape(indices as x.Tensor, indices.shape);
const flattenOutputShape = [shapeInfo.batchSize, indicesSize / shapeInfo.sliceSize];
const out = backend.makeOutput(flattenOutputShape, x.dtype);
if (util.sizeFromShape(x.shape) === 0) {
  return out;
}
const stridesSize = flattenX.shape.length - 1;
const xData = backend.dataIdMap.get(flattenX.dataId);
const xId = xData.id;
const indicesData = backend.dataIdMap.get(flattenIndex.dataId);
const indicesId = indicesData.id;
const outId = backend.dataIdMap.get(out.dataId).id;
const xStridesBytes = new Uint8Array(new Int32Array(util.computeStrides(flattenX.shape)).buffer);
const outStridesBytes = new Uint8Array(new Int32Array(util.computeStrides(flattenOutputShape)).buffer);
wasmGather(xId, CppDType[x.dtype], xStridesBytes, stridesSize, indicesId, shapeInfo.batchSize, outStridesBytes, outId);
backend.disposeData(flattenX.dataId);
backend.disposeData(flattenIndex.dataId);
// reshape out.shape = shapeInfo.outputShape;

 amacıyla<br>
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=============================================================================
*/
import {Greater, KernelConfig} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = false;
export const greaterConfig: KernelConfig = createBinaryKernelConfig(Greater, supportsFullBroadcast, 'bool');

احتمال<br>
```typescript
import {KernelConfig, KernelFunc, LeakyRelu, LeakyReluAttrs, LeakyReluInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmFunc: (xId: number, dtype: number, leakyreluAlpha: number, outId: number) => void;

function setupFunc(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(LeakyRelu, null /* void */, ['number', // x_id
    'number', // dtype
    'number', // leakyrelu_alpha
    'number', // out_id
  ]);
}

export function leakyRelu(
    args:
        {inputs: LeakyReluInputs, attrs: LeakyReluAttrs,
        backend: BackendWasm}):
    TensorInfo {
  const {inputs: {x}, attrs: {alpha}, backend} = args;

  const xId = backend.dataIdMap.get(x.dataId).id;
  // According to TF API, LeakyRelu returns float32 when input is either float32 or int32.
  const out = backend.makeOutput(x.shape, 'float32');

  if (util.sizeFromShape(x.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmFunc(xId, CppDType[x.dtype], alpha, outId);
  }

  return out;
}

export const leakyReluConfig: KernelConfig = {
  kernelName: LeakyRelu,
  backendName: 'wasm',
  setupFunc,
  kernelFunc: leakyRelu as {} as KernelFunc,
};
```

---

```typescript
import {KernelConfig, Less} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = false;
export const lessConfig: KernelConfig = createBinaryKernelConfig(Less, supportsFullBroadcast, 'bool');
```

---

```typescript
import {KernelConfig, LessEqual} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = false;
export const lessEqualConfig: KernelConfig = createBinaryKernelConfig(LessEqual, supportsFullBroadcast, 'bool');
```

---

```typescript
import {KernelConfig, Log} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const logConfig: KernelConfig = createUnaryKernelConfig(Log);
```

---

```typescript
import {KernelConfig, KernelFunc, LeakyRelu, LeakyReluAttrs, LeakyReluInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmFunc: (xId: number, dtype: number, leakyreluAlpha: number, outId: number) => void;

function setupFunc(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(LeakyRelu, null /* void */, ['number', // x_id
    'number', // dtype
    'number', // leakyrelu_alpha
    'number', // out_id
  ]);
}

export function leakyRelu(
    args:
        {inputs: LeakyReluInputs, attrs: LeakyReluAttrs,
        backend: BackendWasm}):
    TensorInfo {
  const {inputs: {x}, attrs: {alpha}, backend} = args;

  const xId = backend.dataIdMap.get(x.dataId).id;
  // According to TF API, LeakyRelu returns float32 when input is either float32 or int32.
  const out = backend.makeOutput(x.shape, 'float32');

  if (util.sizeFromShape(x.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmFunc(xId, CppDType[x.dtype], alpha, outId);
  }

  return out;
}

export const leakyReluConfig: KernelConfig = {
  kernelName: LeakyRelu,
  backendName: 'wasm',
  setupFunc,
  kernelFunc: leakyRelu as {} as KernelFunc,
};
```
import {KernelConfig, LogicalAnd} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;

export const logicalAndConfig: KernelConfig =
createBinaryKernelConfig(LogicalAnd, supportsFullBroadcast, 'bool', /*@license */
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import {backend_util, KernelConfig, KernelFunc, Max, MaxAttrs, MaxInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

let wasmMax: (xId: number, dtype: number, reduceSize: number, outId: number) => void = undefined;

function setup(backend: BackendWasm): void {
  wasmMax = backend.wasm.cwrap(Max, null /*void*/, 
    'number',  // x_id
    'number',  // dtype
    'number',  // reduce_size
    'number',  // out_id
  );
}

function max(args: {backend: BackendWasm, inputs: MaxInputs, attrs: MaxAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;

  const {reductionIndices: axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} = permuteAxesAndTranspose(x, axis, backend);

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    input = transposed;
    inputId = transposedId;
  }

  const inputRank = input.shape.length;

  const out = backend.makeOutput(input.shape, x.dtype);
  if (util.sizeFromShape(input.shape) !== 0) {
    wasmMax(inputId, CppDType[x.dtype], reduceSize, outId);
  }

  if (inputWasTransposed) {
    backend.disposeData(transposed.dataId);
  }

  if (keepDims) {
    const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);

    return {out: output, shape: newShape);
  }
}

export const maxConfig: KernelConfig = {
  kernelName: Max,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: max as {} as KernelFunc
};

import {KernelConfig, Maximum} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;

export const maximumConfig: KernelConfig =
createBinaryKernelConfig(Maximum, supportsFullBroadcast, 'bool', /*@license */
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import {backend_util, KernelConfig, KernelFunc, Max, MaxAttrs, MaxInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

let wasmMax: (xId: number, dtype: number, reduceSize: number, outId: number) => void = undefined;

function setup(backend: BackendWasm): void {
  wasmMax = backend.wasm.cwrap(Max, null /*void*/, 
    'number',  // x_id
    'number',  // dtype
    'number',  // reduce_size
    'number',  // out_id
  );
}

function max(args: {backend: BackendWasm, inputs: MaxInputs, attrs: MaxAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;

  const {reductionIndices: axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} = permuteAxesAndTranspose(x, axis, backend);

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    input = transposed;
    inputId = transposedId;
  }

  const inputRank = input.shape.length;

  const out = backend.makeOutput(input.shape, x.dtype);
  if (util.sizeFromShape(input.shape) !== 0) {
    wasmMax(inputId, CppDType[x.dtype], reduceSize, outId);
  }

  if (inputWasTransposed) {
    backend.disposeData(transposed.dataId);
  }

  if (keepDims) {
    const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);

    return {out: output, shape: newShape);
  }
}

export const maxConfig: KernelConfig = {
  kernelName: Max,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: max as {} as KernelFunc
};
```javascript
import {backend_util, KernelConfig, KernelFunc, MaxPool, MaxPoolAttrs, MaxPoolInputs, Tensor4D, util} from '@tensorflow/tfjs-core';

let wasmMaxPool = backend.wasm.cwrap(MaxPool, null /* void */, [
    'number',  // xId
    'number',  // inputHeight
    'number',  // inputWidth
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // padTop
    'number',  // padRight
    'number',  // padBottom
    'number',  // padLeft
    'number',  // dilationHeight
    'number',  // dilationWidth
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // inputChannels
    'number',  // outputChannels
    'number'  // outId
  ]);  

function maxPool(
    inputs: MaxPoolInputs, backend: BackendWasm) {
  const {inputs, backend} = args;

  const x = inputs.x as Tensor4D;
  const xId = backend.dataIdMap.get(x.dataId).id;

  util.assert(
      x.dtype === 'float32',
      () =>
          `Error in MaxPool: only float32 input is supported. Got ${x.dtype}.`);

  const {filterSize, strides, pad, dimRoundingMode} = attrs;
  const convInfo = backend_util.computePool2DInfo(
      x.shape, filterSize, strides, 1 /* dilations */, pad, dimRoundingMode);

  const out = backend.makeOutput(convInfo.outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmMaxPool(
      xId, x.shape[0], x.shape[1], x.shape[2],
      filterHeight, filterWidth,
      padTop, padRight, padBottom, padLeft, dilationHeight, dilationWidth,
      strideHeight, strideWidth, inputChannels, outputChannels, outId);
  return out;
}

export const maxPoolConfig: KernelConfig = {
  kernelName: MaxPool,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: maxPool
};
```

Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6  2916

import {backend_util, KernelConfig, KernelFunc, Min, MinAttrs, MinInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

let wasmMin: (xId: number, dtype: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmMin = backend.wasm.cwrap(Min, null /*void*/, [
    'number',  // x_id
    'number',  // dtype
    'number',  // reduce_size
    'number',  // out_id
  ]);}

function min(args: {backend: BackendWasm, inputs: MinInputs, attrs: MinAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} = permuteAxesAndTranspose(x, axis, backend);

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transposed was not a no-op. We will need to dispose of this
      // once we are done.
      input = transposed;
      inputId = transposedId;
    }
  }

  const reductionAxes = backend_util.getInnerMostAxes(backend_util.computeOutAndReduceShapes(input.shape, reductionAxes));
  const reduceSize = util.sizeFromShape(reduceShape);
  let castedInput = input;
  if (input.dtype !== 'float32') {
    castedInput = cast({backend, inputs: {x: input}, attrs: {dtype: 'float32'}});
    inputId = backend.dataIdMap.get(castedInput.dataId).id;
  }

  const out = backend.makeOutput(outShape, 'float32');
  if (util.sizeFromShape(input.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmMin(inputId, CppDType[x.dtype], reduceSize, outId);
  }

  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  if (keepDims) {
    // reshape
    const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
    out.shape = newShape;
  }

  return out;
}

export const minConfig: KernelConfig = {
  kernelName: Min,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: min as {} as KernelFunc
};

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 */

============================================================================

import {backend_util, KernelConfig, KernelFunc, Min, MinAttrs, MinInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

let wasmMin: (xId: number, dtype: number, reduceSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmMin = backend.wasm.cwrap(Min, null /*void*/, [
    'number',  // x_id
    'number',  // dtype
    'number',  // reduce_size
    'number',  // out_id
  ]);}

function min(args: {backend: BackendWasm, inputs: MinInputs, attrs: MinAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} = permuteAxesAndTranspose(x, axis, backend);

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transposed was not a no-op. We will need to dispose of this
      // once we are done.
      input = transposed;
      inputId = transposedId;
    }
  }

  const reductionAxes = backend_util.getInnerMostAxes(backend_util.computeOutAndReduceShapes(input.shape, reductionAxes));
  const reduceSize = util.sizeFromShape(reduceShape);
  let castedInput = input;
  if (input.dtype !== 'float32') {
    castedInput = cast({backend, inputs: {x: input}, attrs: {dtype: 'float32'}});
    inputId = backend.dataIdMap.get(castedInput.dataId).id;
  }

  const out = backend.makeOutput(outShape, 'float32');
  if (util.sizeFromShape(input.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmMin(inputId, CppDType[x.dtype], reduceSize, outId);
  }

  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  if (keepDims) {
    // reshape
    const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
    out.shape = newShape;
  }

  return out;
}

export const minConfig: KernelConfig = {
  kernelName: Min,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: min as {} as KernelFunc
};

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 */

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=============================================================================

*/
import {KernelConfig, Minimum} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from
'/binary_kernel';
const supportsFullBroadcast = false;
export const minimumConfig: KernelConfig =
createBinaryKernelConfig(Minimum, supportsFullBroadcast);

*/

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=============================================================================

*/

import {KernelConfig, MirrorPad, MirrorPadAttr, MirrorPadInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

// Must match enum in MirrorPad.cc
enum MirrorPaddingMode {
  reflect = 0,
  symmetric = 1
}

let wasmMirrorPad: (
  xId: number, xShapeBytes: Uint8Array, xShapeLength: number, xDtype: number,
  prePaddingsBytes: Uint8Array, postPaddingsBytes: Uint8Array, mode: number,
  outId: number) => void;

function setup(backend: BackendWasm) {
  wasmMirrorPad = backend.wasm.cwrap(MirrorPad, null /* void */, [
    'number',  // xId
    'array',   // x.shape
    'number',  // x.shape.length
    'number',  // x.dtype
    'array',   // pre-paddings
    'array',   // post-paddings
    'number',  // mode
    'number',  // outId
  ]); 
}

function mirrorPad(args: {
  inputs: MirrorPadInputs,
  backend: BackendWasm,
  attrs: MirrorPadAttr
}) {
  const {inputs: {x}, backend: BackendWasm, attrs: {paddings, mode}} = args;
  const outShape = paddings.map(
      (p, i) => p[0] /* beforePad */ + x.shape[i] + p[1] /* afterPad */);
  const xId = backend.dataIdMap.get(x.dataId).id;
  const out = backend.makeOutput(outShape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);

  const prePaddingsFlat = paddings.map((padTuple) => padTuple[0]);
  const postPaddingsFlat = paddings.map((padTuple) => padTuple[1]);

  const prePaddingsBytes =
      new Uint8Array(new Int32Array(prePaddingsFlat).buffer);
  const postPaddingsBytes =
      new Uint8Array(new Int32Array(postPaddingsFlat).buffer);

  wasmMirrorPad(xId, xShapeBytes, x.shape.length, CppDType[x.dtype], prePaddingsBytes,
    postPaddingsBytes, mode, outId);
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const xId = backend.dataIdMap.get(x.dataId).id;
  const out = backend.makeOutput(outShape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  const postPaddingsBytes =
      new Uint8Array(new Int32Array(postPaddingsBytes).buffer);
  const prePaddingsFlat = paddings.map((padTuple) => padTuple[0]);
  const postPaddingsFlat = paddings.map((padTuple) => padTuple[1]);
  const xId = backend.dataIdMap.get(x.dataId).id;
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const xId = backend.dataIdMap.get(x.dataId).id;
  const postPaddingsBytes =
      new Uint8Array(new Int32Array(postPaddingsBytes).buffer);
  const prePaddingsBytes =
      new Uint8Array(new Int32Array(prePaddingsBytes).buffer);
  const out = backend.makeOutput(outShape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  const postPaddingsBytes =
      new Uint8Array(new Int32Array(postPaddingsBytes).buffer);

  wasmMirrorPad(xId, xShapeBytes, x.shape.length, CppDType[x.dtype], prePaddingsBytes,
    postPaddingsBytes, mode, outId);
  return out;
}

export const mirrorPadConfig: KernelConfig = {
  kernelName: MirrorPad,
  backendName: 'wasm',
  kernelFunc: mirrorPad as {} as KernelFunc,
  setupFunc: setup
};

*/

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=============================================================================

*/

import {KernelConfig, Multiply} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from
'/binary_kernel';
const supportsFullBroadcast = true;
export const multiplyConfig: KernelConfig =
createBinaryKernelConfig(Multiply, supportsFullBroadcast);

*/

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=============================================================================

import {KernelConfig, KernelFunc, NonMaxSuppressionV4, NonMaxSuppressionV4Attrs,
NonMaxSuppressionV4Inputs, TensorInfo} from '@tensorflow/tfjs-core';
import {BackendWasm} from './backend_wasm';
import {parseResultStruct} from './NonMaxSuppression_util';

let wasmFunc: (boxesId: number, scoresId: number, maxOutputSize: number, iouThreshold: number, scoreThreshold: number, padToMaxOutputSize: boolean) => number;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(NonMaxSuppressionV4, 'number', ['number', 'number', 'number', 'number', 'number', 'bool']);
}

  const {backend, inputs, attrs} = args;
  const {iouThreshold, maxOutputSize, scoreThreshold, padToMaxOutputSize} = attrs;
  const {boxes, scores} = inputs;
  const boxesId = backend.dataIdMap.get(boxes.dataId).id;
  const scoresId = backend.dataIdMap.get(scores.dataId).id;

  const resOffset = wasmFunc(boxesId, scoresId, maxOutputSize, iouThreshold, scoreThreshold, padToMaxOutputSize);

  const {pSelectedIndices, selectedSize, pSelectedScores, pValidOutputs} = parseResultStruct(backend, resOffset);

  // Since we are not using scores for V4, we have to delete it from the heap.
  backend.wasm._free(pSelectedScores);
  const selectedIndicesTensor = backend.makeOutput([selectedSize], 'int32', pSelectedIndices);
  const validOutputsTensor = backend.makeOutput([], 'int32', pValidOutputs);
  return [selectedIndicesTensor, validOutputsTensor];
}

export const nonMaxSuppressionV4Config: KernelConfig = {
  kernelName: NonMaxSuppressionV4,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: nonMaxSuppressionV4 as {} as KernelFunc,
};

=============================================================================

import {KernelConfig, KernelFunc, NonMaxSuppressionV5, NonMaxSuppressionV5Attrs,
NonMaxSuppressionV5Inputs, TensorInfo} from '@tensorflow/tfjs-core';
import {BackendWasm} from './backend_wasm';
import {parseResultStruct} from './NonMaxSuppression_util';

let wasmFunc: (boxesId: number, scoresId: number, maxOutputSize: number, iouThreshold: number, scoreThreshold: number, softNmsSigma: number) => number;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(NonMaxSuppressionV5, 'number', ['number', 'number', 'number', 'number', 'number', 'number']);
}

function kernelFunc(args: {backend: BackendWasm, inputs: NonMaxSuppressionV5Inputs, attrs: NonMaxSuppressionV5Attrs}): TensorInfo[] {
  const {backend, inputs, attrs} = args;
  const {iouThreshold, maxOutputSize, scoreThreshold, softNmsSigma} = attrs;
  const {boxes, scores} = inputs;
  const boxesId = backend.dataIdMap.get(boxes.dataId).id;
  const scoresId = backend.dataIdMap.get(scores.dataId).id;
  const resOffset = wasmFunc(boxesId, scoresId, maxOutputSize, iouThreshold, scoreThreshold, softNmsSigma);

  const {pSelectedIndices, selectedSize, pSelectedScores, pValidOutputs} = parseResultStruct(backend, resOffset);

  // Since we are not using
validOutputs for V5, we have to delete it from the
const selectedIndicesTensor = backend.makeOutput([selectedSize], 'int32', pSelectedIndices);
const selectedScoresTensor = backend.makeOutput([selectedSize], 'float32', pSelectedScores);
return [selectedIndicesTensor, selectedScoresTensor];
}

export const nonMaxSuppressionV5Config: KernelConfig = {
  kernelName: NonMaxSuppressionV5,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: kernelFunc as {} as KernelFunc,
};

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 */
import {KernelConfig, NotEqual} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from '../binary_kernel';
const supportsFullBroadcast = false;
export const notEqualConfig: KernelConfig = createBinaryKernelConfig(NotEqual, supportsFullBroadcast, 'bool');

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 */

import {KernelConfig, KernelFunc, OnesLike, OnesLikeInputs} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';

function onesLike(args: {inputs: OnesLikeInputs, backend: BackendWasm}) {
  const {inputs: {x}, backend} = args;
  const out = backend.makeOutput(x.shape, x.dtype);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.fill(1);
  return out;
}

export const onesLikeConfig: KernelConfig = {
  kernelName: OnesLike,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: oneHotConfig as {} as KernelFunc,
};

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 */

import {KernelConfig, KernelFunc, OnesLike, OnesLikeInputs} from '@tensorflow/tfjs-core';

const backend = require('backend_wasm');
const kernelConfig = {kernelName: 'wasm', setupFunc: setup, kernelFunc: oneHot as {} as KernelFunc};

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=============================================================================

import {KernelConfig, KernelFunc, Pack, PackAttrs, PackInputs, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';

import {concat} from './Concat';
import {expandDims} from './ExpandDims';

export function pack(
    args: {inputs: PackInputs, backend: BackendWasm, attrs: PackAttrs}):
    TensorInfo {
  const {inputs, backend, attrs} = args;
  const {axis} = attrs;

  if (inputs.length === 1) {
    return expandDims(
        {inputs: {input: inputs[0]}, backend, attrs: {dim: axis }});
  }

  const shape = inputs[0].shape;
  const dtype = inputs[0].dtype;

  inputs.forEach(t => {
    util.assertShapesMatch(
          shape, t.shape,
          'All tensors passed to stack must have matching shapes');
    util.assert(
          dtype === t.dtype,
          () => 'All tensors passed to stack must have matching dtypes');
  });

  const intermediateTensorInfos: TensorInfo[] = [];
  const expandedTensors = inputs.map(t => {
    const expandedT = expandDims({inputs: {input: t}, backend, attrs: {dim: axis}});
    intermediateTensorInfos.push(expandedT);
    return expandedT;
  });

  const result = concat({inputs: expandedTensors, backend, attrs: {axis}});
  return result;
}

export const packConfig: KernelConfig = {
  kernelName: Pack,
  backendName: 'wasm',
  kernelFunc: pack as {} as KernelFunc
};

=============================================================================

import {KernelConfig, KernelFunc, PadV2, PadV2Attrs, PadV2Inputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {fill} from './Fill';

import {CppDType} from './types';

let wasmPadV2: (xId: number, xShapeBytes: Uint8Array, xShapeLength: number, xDtype: number,
    prePaddingsBytes: Uint8Array, postPaddingsBytes: Uint8Array,
    constantValue: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmPadV2 = backend.wasm.cwrap(PadV2, null /* void */, [
    'number',  // xId
    'array',   // x.shape
    'number',  // x.shape.length
    'number',  // x.dtype
    'array',   // pre-paddings
    'array',   // post-paddings
    'number',  // constantValue
    'number',  // outId
  ]);}

function pad(
    args: {inputs: PadV2Inputs, backend: BackendWasm, attrs: PadV2Attrs}) {
  const {inputs: {x}, backend, attrs: {paddings, constantValue}} = args;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const shape = x.shape;
  const xDType = x.dtype;
  const xBuffer = util.convertShapeToBuffer(shape, xDType);

  const outShape = paddings.map((p, i) => { return x.shape[i] + p });

  const outId = util.getOutputId(xId);

  util.function setup(backend: BackendWasm) { return wasmPadV2 = backend.wasm.callNative(PadV2, null /* void */, [
    xId, x.shape, x.dtype, x.shape.length, shape, xDType, paddings.map((p, i) => p[i]), constantValue, outId
  ]);}

  const out = util.convertShapeToBuffer(outShape, CppDType[x.dtype]);
  const outputs = util.makeOutputs(outShape, x.dtype);

  return outputs;
}

export const padV2Config: KernelConfig = {
  kernelName: PadV2,
  backendName: 'wasm',
  kernelFunc: pad as {} as KernelFunc
backend.dataIdMap.get(transposed.dataId).id

if (transposedId !== xId) {
  // transpose was not a no-op. We
  // need to dispose of this
  // once we are done.
  input = transposed;
  inputId = transposedId;
}

reductionAxes = backend_util.getInnerMostAxes(reductionAxes.length, input.shape.length);
const [outShape, reduceShape] =
  backend_util.computeOuterAndReduceShapes(input.shape, reductionAxes);
const reduceSize = util.sizeFromShape(reduceShape);

const out = backend.makeOutput(outShape, input.dtype);
if (util.sizeFromShape(input.shape) !== 0) {
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmProd(inputId, reduceSize, CppDType[out.dtype], outId);
}

if (inputWasTransposed) {
  // dispose of
  // the transposed tensor.
  backend.disposeData(transposed.dataId);
}

if (keepDims) {
  // reshape
  const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
  out.shape = newShape;
}

return out;
}

export const prodConfig: KernelConfig = {
  kernelName: Prod,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: prod as {} as KernelFunc
};

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 */

import {KernelConfig, KernelFunc, Range, RangeAttrs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {rangeImplCPU} from '../kernel_utils/shared';

export const range =
    (args: {backend: BackendWasm, attrs: RangeAttrs}): TensorInfo => {
      const {backend, attrs} =

    args;
      const {start, stop, step, dtype} = attrs;
      const values = rangeImplCPU(start, stop, step, dtype);

    const out = backend.makeOutput([values.length], dtype);
      const outVals =
    backend.typedArrayFromHeap(out);
      outVals.set(values);
      return out;
    };

export const rangeConfig:
  KernelConfig = {
    kernelName: Range,
    backendName: 'wasm',
    kernelFunc: range as {} as KernelFunc
};

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 */

import {KernelConfig, RealDiv} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = true;
export const realDivConfig:
  createBinaryKernelConfig(RealDiv, supportsFullBroadcast);

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 */

import {KernelConfig, Relu} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const reluConfig:
  createUnaryKernelConfig(Relu);

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 */
// out_id;

export function reverse(
    args: {inputs: ReverseInputs, backend: BackendWasm, attr: ReverseAttr}) {
  const {inputs, backend, attr} = args;
  const x = inputs[0];
  const [dims] = attr;
  const axes = util.parseAxisParam(dims, x.shape);
  if (x.shape.length !== 0) {
    return identity({inputs: [x], backend});
  }
  const out = backend.makeOutput(x.shape, x.dtype);
  const xId = backend.dataIdMap.get(x.dataId);
  const outId = backend.dataIdMap.get(out.dataId);
  const axesBytes = new Uint8Array(new Int32Array(axes).buffer);
  const outShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  wasmReverse(xId, axesBytes, axes.length, outShapeBytes, x.shape.length,
              outId);
  const reshaped = reshape(inputs: [x, out], attr: {shape: x.shape, backend});
  backend.disposeData(out.dataId);
  return reshaped;
}

export const reverseConfig: KernelConfig = {
  kernelName: Reverse,
  backendName: 'wasm',
  kernelFunc: reverse as {} as KernelFunc,
  setupFunc: setup
};

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 */

import {KernelConfig, KernelFunc, RotateWithOffset, RotateWithOffsetAttr, RotateWithOffsetInputs,
        TensorInfo} from '@tensorflow/tfjs-core';
import {backend_util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmRotate: (xId: number, batch: number, imageHeight: number, imageWidth: number,
                     numChannels: number, radians: number, centerX: number, centerY: number,
                     fillBytes: Uint8Array, fillLength: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmRotate = backend.wasm.cwrap(RotateWithOffset, null /* void */, 
      [ 'number',  // xId
        'number',  // batch
        'number',  // imageHeight
        'number',  // imageWidth
        'number',  // numChannels
        'number',  // radians
        'number',  // centerX
        'number',  // centerY
        'number'    // outId
    ]);}

export function rotateWithOffset(args: {
  inputs: RotateWithOffsetInputs,
  backend: BackendWasm,
  attr: RotateWithOffsetAttr}) {
  const {inputs, backend, attr} = args;
  const image = inputs[0];
  const {radians, fillValue, center} = attr;
  const out = backend.makeOutput(image.shape, image.dtype);
  const imageId = backend.dataIdMap.get(image.dataId);
  const outId = backend.dataIdMap.get(out.dataId);
  const [batch, imageHeight, imageWidth, numChannels] = image.shape;
  const [centerX, centerY] = backend_util.getImageCenter(center, imageHeight, imageWidth);
  const fillIsBlack = fillValue === 0;
  const fullOpacityValue = 255;
  const fillValues = typeof fillValue === 'number' ?
      [fillValue, fillValue, fillValue, fillIsBlack ? 0 : fullOpacityValue] :
      [...fillValue, fullOpacityValue];
  const fillBytes = new Uint8Array(new Int32Array(fillValues).buffer);
  wasmRotate(imageId, batch, imageHeight, imageWidth, numChannels, radians, centerX,
                     centerY, fillBytes, fillValues.length, outId);
  return out;
}

export const rotateWithOffsetConfig: KernelConfig = {
  kernelName: RotateWithOffset,
  backendName: 'wasm',
  kernelFunc: rotateWithOffset as {} as KernelFunc,
  setupFunc: setup
};

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 */

import {KernelConfig, Round} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const roundConfig: KernelConfig = createUnaryKernelConfig(Round);

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 */
import {KernelConfig, Rsqrt} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const rsqrtConfig: KernelConfig = createUnaryKernelConfig(Rsqrt);

*/

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 */

import {KernelConfig, KernelFunc, scatter_util, ScatterNd, ScatterNdAttrs, ScatterNdInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmScatterNd: (indicesId: number, updatesId: number, dtype: CppDType, sliceRank: number, numUpdates: number, sliceSize: number, strides: Uint8Array, outputSize: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmScatterNd = backend.wasm.cwrap(ScatterNd, null /*void*/, [
    'number',  // indicesId
    'number',  // updatesId
    'number',  // dtype
    'number',  // sliceRank
    'number',  // numUpdates
    'number',  // sliceSize
    'array',   // strides
    'number',  // outputSize
    'number'   // outId
  ]);}

function scatterNd(args: {backend: BackendWasm, inputs: ScatterNdInputs, attrs: ScatterNdAttrs}) {
  const {backend, inputs, attrs} = args;
  const {indices, updates} = inputs;
  const {shape} = attrs;

  const out = backend.makeOutput(shape, updates.dtype);
  if (util.sizeFromShape(shape) === 0) {
    return out;
  }

  const {sliceRank, numUpdates, sliceSize, strides, outputSize} = scatter_util.calculateShapes(updates, indices, shape);

  const indicesData = backend.dataIdMap.get(indices.dataId);
  const indicesId = indicesData.id;

  const updatesData = backend.dataIdMap.get(updates.dataId);
  const updatesId = updatesData.id;
  const stridesBytes = new Uint8Array(new Int32Array(strides).buffer);

  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmScatterNd(indicesId, updatesId, CppDType[updates.dtype], sliceRank, numUpdates, sliceSize, stridesBytes, outputSize, outId);

  return out;
}

export const scatterNdConfig: KernelConfig = {
  kernelName: ScatterNd,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: scatterNd as {} as KernelFunc
};

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 */

import {KernelConfig, KernelFunc, Select, SelectInputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmSelect: (conditionId: number, tId: number, eId: number, offset: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmSelect = backend.wasm.cwrap('SelectV2', null, [
    'number',  // conditionId
    'number',  // tId
    'number',  // eId
    'number',  // offset
    'number',  // outId
  ]);}

function select(args: {inputs: SelectInputs, backend: BackendWasm}) {
  const {inputs, backend} = args;
  const {inputs, backend} = args;
  const conditionId =

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backend.dataIdMap.get(condition.dataId).id;
const tId = backend.dataIdMap.get(t.dataId).id;
const eId = backend.dataIdMap.get(e.dataId).id;
const outId = backend.dataIdMap.get(out.dataId).id;
const cRank = condition.shape.length;
const tRank = t.shape.length;
const offset = cRank === 0 || cRank > 1 || tRank === 1 ?
0 : util.sizeFromShape(t.shape.slice(1));

wasmSelect(conditionId, tId, eId, offset, outId);
return out;
}

export const selectConfig: KernelConfig = {
  kernelName: Select,
  backendName: 'wasm',
  kernelFunc: select as {} as KernelFunc,
  setupFunc: setup
};

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 */

import {KernelConfig, Sigmoid, SigmoidInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmFunc: (xId: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(Sigmoid, null /* void */, ['number', 'number']);
}

function sigmoid(args: {backend: BackendWasm, inputs: SigmoidInputs}):
    TensorInfo {
  const {backend, inputs: {x}} = args;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const out = backend.makeOutput(x.shape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;

  // Short-circuit zero-sized tensors.
  if (util.sizeFromShape(out.shape) === 0) {
    return out;
  }

  wasmFunc(xId, outId);
  return out;
}

export const sigmoidConfig: KernelConfig = {
  kernelName: 'Sigmoid',
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: sigmoid as {} as KernelFunc
};

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 */

import {KernelConfig, Sin} from '@tensorflow/tfjs-core';

export const sinConfig: KernelConfig = createUnaryKernelConfig(Sin);

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 */

import {KernelConfig, KernelFunc, Softmax, SoftmaxAttrs, SoftmaxInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmFunc: (xId: number, outId: number, channels: number, batch: number) => void;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(Softmax, null /* void */, ['number', 'number', 'number', 'number']);
}

function softmax(args: {backend: BackendWasm, inputs: SoftmaxInputs, attrs: SoftmaxAttrs}):
    TensorInfo {
  const {backend, inputs: {logits}, attrs: {dim}} = args;
  const xId = backend.dataIdMap.get(logits.dataId).id;
  const out = backend.makeOutput(logits.shape, logits.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  const channels = logits.shape[dim];
  const batch = util.sizeFromShape(logits.shape) / channels;
  if
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```javascript
import {backend_util, KernelConfig, KernelFunc, ReshapeAttrs, ReshapeInputs, SpaceToBatchND, SpaceToBatchNDAttr, SpaceToBatchNDInputs, TensorInfo, TransposeAttrs, TransposeInputs, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {padV2Config} from './PadV2';
import {reshape} from './Reshape';
import {transpose} from './Transpose';

function spaceToBatchND(args: {
  inputs: SpaceToBatchNDInputs,
  backend: BackendWasm,
  attrs: SpaceToBatchNDAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {blockShape, paddings} = attrs;
  const prod = util.sizeFromShape(blockShape);

  const completePaddings: Array<[number, number]> = 
      [ [0, 0] ];
  completePaddings.push(...(paddings as Array<[number, number]>));

  for (let i = 1 + blockShape.length; i < x.shape.length; ++i) {
    completePaddings.push([0, 0]);
  }

  const paddedX = padV2Config.kernelFunc({
    inputs: {x},
    backend, attr: {paddings: completePaddings, constantValue: 0}
  }) as TensorInfo;

  const reshapedPaddedShape = backend_util.getReshaped(paddedX.shape, blockShape, prod, false);
  const permutedReshapedPaddedPermutation = backend_util.getPermuted(reshapedPaddedShape.length, blockShape.length, false);

  const flattenShape = backend_util.getReshapedPermuted(paddedX.shape, blockShape, prod, false);

  const flattenedTensorInfo = backend.util.getReshaped(paddedX.shape, blockShape, prod, false);
  const flatten = flattenedTensorInfo as TensorInfo;

  const resultReshapeInputs: ReshapeInputs = {x: paddedX};
  const resultReshapeAttrs: ReshapeAttrs = {shape: reshapedPaddedShape};
  const result = reshape({inputs: resultReshapeInputs, backend, attrs: resultReshapeAttrs});

  return result;
}

export const spaceToBatchNDConfig: KernelConfig = {
  kernelName: SpaceToBatchND,
  backendName: 'wasm',
  kernelFunc: spaceToBatchND as {} as KernelFunc
};
```

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 */

```javascript
import {KernelConfig, KernelFunc, SplitV, SplitVAttr, SplitVInputs, util} from '@tensorflow/tfjs-core';
import {backend_util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {slice} from './Slice';

export function splitV(
    args: {inputs: SplitVInputs, attrs: SplitVAttr, backend: BackendWasm}) {
  const {inputs, attrs, backend} = args;
  const {x} = inputs;
  const {numOrSizeSplits, axis} = attrs;
  const saxis = util.parseAxisParam(axis, x.shape)[0];

  const splitSizes = backend_util.prepareSplitSize(x, numOrSizeSplits, saxis);

  const flatten = new Array(x.shape.length).fill(0);
  const flattenShape = x.shape.slice();

  const result = slice({inputs: flattenShape, xSliceSize: [...flattenShape], xSliceSize[saxis] =
```
import {KernelConfig, KernelFunc, slice_util, StridedSlice, StridedSliceAttrs, StridedSliceInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {reshape} from './Reshape';
import {slice} from './Slice';

let wasmStridedSlice: (xId: number, xStridesBytes: Uint8Array, xRank: number, beginBytes: Uint8Array, endBytes: Uint8Array, stridesBytes: Uint8Array, outShapeBytes: Uint8Array, outStridesBytes: Uint8Array, outShapeLength: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmStridedSlice = backend.wasm.cwrap(StridedSlice, null /*void*/, ['number', // xId
    'array',   // xStrides
    'number',  // xRank
    'array',   // begin
    'array',   // end
    'array',   // strides
    'array',   // outShape
    'array',   // outStrides
    'number',  // outShapeLength
    'number',  // outId
  ]); //end
}

export function stridedSlice(args: {backend: BackendWasm, inputs: StridedSliceInputs, attrs: StridedSliceAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {x} = inputs;
  const {
    begin,
    end,
    strides,
    beginMask,
    endMask,
    ellipsisMask,
    newAxisMask,
    shrinkAxisMask
  } = attrs;
  const {
    finalShapeSparse,
    finalShape,
    isIdentity,
    sliceDim0,
    isSimpleSlice,
    begin: $begin,
    end: $end,
    strides: $strides
  } = slice_util.sliceInfo(x.shape, begin, end, strides, beginMask, endMask, ellipsisMask, newAxisMask, shrinkAxisMask);

  let result;
  if (isIdentity) {
    // Optimization #1, slice is a no-op plus reshape
    result = reshape({inputs: {x}, backend, attrs: {shape: finalShape}});
  } else if (sliceDim0 || isSimpleSlice) {
    // Optimization #2, slice is memory contiguous (only occurs in dim 0)
    util.assert(
      x.shape.length >= 1,
      () => `Input must have rank at least 1, got: ${x.shape.length}`);
    const size = slice_util.computeOutShape($begin, $end, $strides);
    // To tolerate begin[0] > end[0] (a 0-output slice), we min(begin, end).
    const sliced = slice({inputs: {x}, backend, attrs: {begin: $begin, size}});
    result = reshape({inputs: {x: sliced}, backend, attrs: {shape: finalShape}});
    backend.disposeData(sliced.dataId);
  } else {
    const out = backend.makeOutput(finalShapeSparse, 'float32');
    const xId = backend.dataIdMap.get(x.dataId).id;
    const xStridesBytes = new Uint8Array(new Int32Array(util.computeStrides(x.shape)).buffer);
    const beginBytes = new Uint8Array(new Int32Array($begin).buffer);
    const endBytes = new Uint8Array(new Int32Array($end).buffer);
    const stridesBytes = new Uint8Array(new Int32Array($strides).buffer);
    const outputShapeBytes = new Uint8Array(new Int32Array(backend.computeOutShape($begin, $end, $strides)).buffer);
    const outputStridesBytes = new Uint8Array(new Int32Array(backend.computeOutShape($begin, $end, $strides)).buffer);
    const outId = backend.dataIdMap.get(out.dataId).id;
    const wasmStridedSliceId = backend.dataIdMap.get(wasmStridedSlice.xId, xStridesBytes, x.shape.length, beginBytes, endBytes, stridesBytes, outputShapeBytes, outputStridesBytes, finalShapeSparse.length, outId);
    const outId = backend.dataIdMap.get(out.dataId).id;
    const result = reshape({inputs: {x: out}, backend, attrs: {shape: finalShape}});
    backend.disposeData(outId);
  }
  return result;
}

export const subConfig: KernelConfig = {
  kernelName: StridedSlice,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: stridedSlice as {} as KernelFunc
};
createBinaryKernelConfig(Sub, supportsFullBroadcast);

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 */

import {backend_util, KernelConfig, KernelFunc, Sum, SumAttrs, SumInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

let wasmSum: (xId: number, reduceSize: number, dtype: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmSum = backend.wasm.cwrap(Sum, null /*void*/, [
    'number',  // input_id
    'number',  // reduce_size
    'number',  // dtype
    'number',  // out_id
  ]); // unfunction setup(backend:
  BackendWasm): void {
    wasmSum = backend.wasm.cwrap(Sum, null /*void*/, [
      'number',  // number
      // input_id
      'number',  // reduce_size
      'number',  // dtype
      'number',  // out_id
    ]); // unfunction sum(args: {
      'backend': BackendWasm,
      'inputs': SumInputs,
      'attrs': SumAttrs
    }):
    const {axis, keepDims} = attrs;
    const {x} = inputs;
    const xId = backend.dataIdMap.get(x.dataId).id;
    let inputId = xId;
    let input = x;

    const {transposed, axes, originalAxes, inputWasTransposed} =
      permuteAxesAndTranspose(x, axis, backend);

    let reductionAxes = axes;
    if (inputWasTransposed) {
      const transposedId = backend.dataIdMap.get(transposed.dataId).id;
      if (transposedId !== xId) {
        // transpose was not a no-op. We will need to dispose of this
        // once we are done.
        input = transposed;
        inputId = transposedId;
        reductionAxes = backend_util.getInnerMostAxes(reductionAxes.length,
          input.shape.length);
      }
    }

    backend_util.assertAxesAreInnerMostDims('sum', reductionAxes,
      input.shape.length);
    const [outShape, reduceShape] =
      backend_util.computeOutAndReduceShapes(input.shape, reductionAxes);
    const reduceSize =
      util.sizeFromShape(reduceShape);
    const out = backend.makeOutput(outShape, input.dtype);
    if (util.sizeFromShape(input.shape) !== 0) {
      const outId = backend.dataIdMap.get(out.dataId).id;
      wasmSum(inputId, reduceSize, CppDType[outId], outId);
      if (inputWasTransposed) {
        // dispose of the transposed tensor.
        backend.disposeData(transposed.dataId);
      }
    }

    return out;
  }

  export const sumConfig: KernelConfig = {
    kernelName: Sum,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: sum as {} as KernelFunc
  };

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 */

import {KernelConfig, Tan} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const tanConfig: KernelConfig = createUnaryKernelConfig(Tan);

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 */

import {KernelConfig, Tanh} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from...
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 */

import {KernelConfig, KernelFunc, Tile, TileAttrs, TileInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmTile: (xId: number, xShape: Uint8Array, xShapeSize: number, newShape: Uint8Array, newShapeSize: number, dtype: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmTile = backend.wasm.cwrap(Tile, null /* void */,
      ['number', // x_id
       'array', // x_shape
       'number', // x_shape.length
       'array', // new_shape
       'number', // new_shape.length
       'number' // out_id
     ]);}

function tile(args: {inputs: TileInputs, backend: BackendWasm, attrs: TileAttrs}) {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const {reps} = attrs;

  const newShape: number[] = new Array(x.shape.length);
  for (let i = 0; i < newShape.length; i++) {
    newShape[i] = x.shape[i] * reps[i];
  }
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const newShapeBytes = new Uint8Array(new Int32Array(newShape).buffer);

  const out = backend.makeOutput(newShape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmTile(
      xId, xShapeBytes, x.shape.length, newShapeBytes, newShape.length,
      CppDType[out.dtype], outId);
  return out;
}

export const tileConfig: KernelConfig = {
  kernelName: Tile,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: tile as {} as KernelFunc
};

---

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 */

import {KernelConfig, KernelFunc, TensorInfo, TopK, TopKAttrs, TopKInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {CppDType} from './types';

let wasmTopK: (xId: number, xShapeBytes: Uint8Array, xShapeLength: number, xDtype: CppDType, k: number, sorted: boolean, outValuesId: number, outIndicesId: number) => void;

function setup(backend: BackendWasm) {
  wasmTopK = backend.wasm.cwrap(TopK, null /* void */,
      ['number', // xId
       'array', // x.shape
       'number', // x.shape.length
       'number', // x.dtype
       'number', // k
       'bool', // sorted
       'number', // outValuesId
       'number', // outIndicesId
     ]);}

export const topk: (args: {inputs: TopKInputs, backend: BackendWasm, attrs: TopKAttrs}) => TensorInfo[] | TensorInfo = ({inputs, backend, attrs}) => {
  const {x} = inputs;
  const {k, sorted} = attrs;

  const xId = backend.dataIdMap.get(x.dataId).id;
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const outputShape = x.shape.slice();
  outputShape[outputShape.length - 1] = k;
  const outValues = backend.makeOutput(outputShape, x.dtype);
  const outValuesId = backend.dataIdMap.get(outValues.dataId).id;
  const outIndices = backend.makeOutput(outputShape, outValuesId);
  wasmTopK(xId, xShapeBytes, x.shape.length, CppDType[x.dtype], k, sorted,
      outValuesId, outIndicesId);
  return [outValues, outIndices];
}

export const topKConfig: KernelConfig = {
  kernelName: TopK,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: topk as {} as KernelFunc
};

---

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 */

import {KernelConfig, KernelFunc, Tanh, TanhAttrs, TanhInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmTanh: (xId: number, xShape: Uint8Array, xShapeSize: number, newShape: Uint8Array, newShapeSize: number, dtype: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmTanh = backend.wasm.cwrap(Tanh, null /* void */,
      ['number', // x_id
       'array', // x_shape
       'number', // x_shape.length
       'array', // new_shape
       'number', // new_shape.length
       'number' // out_id
     ]);}

function tanh(args: {inputs: TanhInputs, backend: BackendWasm, attrs: TanhAttrs}) {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const {reps} = attrs;

  const newShape: number[] = new Array(x.shape.length);
  for (let i = 0; i < newShape.length; i++) {
    newShape[i] = x.shape[i] * reps[i];
  }
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const newShapeBytes = new Uint8Array(new Int32Array(newShape).buffer);

  const out = backend.makeOutput(newShape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmTanh(
      xId, xShapeBytes, x.shape.length, newShapeBytes, newShape.length,
      CppDType[out.dtype], outId);
  return out;
}

export const tanhConfig: KernelConfig = createUnaryKernelConfig(Tanh);

---

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 */

import {KernelConfig, KernelFunc, Unary, UnaryAttrs, UnaryInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmUnary: (xId: number, xShape: Uint8Array, xShapeSize: number, newShape: Uint8Array, newShapeSize: number, dtype: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmUnary = backend.wasm.cwrap(Unary, null /* void */,
      ['number', // x_id
       'array', // x_shape
       'number', // x_shape.length
       'array', // new_shape
       'number', // new_shape.length
       'number' // out_id
     ]);}

function unary(args: {inputs: UnaryInputs, backend: BackendWasm, attrs: UnaryAttrs}) {
  const {inputs, backend, attrs} = args;
  const {x, beta} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const {reps} = attrs;

  const newShape: number[] = new Array(x.shape.length);
  for (let i = 0; i < newShape.length; i++) {
    newShape[i] = x.shape[i] * reps[i];
  }
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const newShapeBytes = new Uint8Array(new Int32Array(newShape).buffer);

  const out mass = backend.makeOutput(newShape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmUnary(
      xId, xShapeBytes, x.shape.length, newShapeBytes, newShape.length,
      CppDType[out.dtype], outId);
  return mass;
}

export const unaryConfig: KernelConfig = createUnaryKernelConfig(Unary);

---
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=============================================================================

import {KernelConfig, KernelFunc, TensorInfo, Transform, TransformAttrs, TransformInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmTransform: (imageId: number, transformsId: number, isBatchTransform: boolean, batch: number, outHeight: number, outWidth: number, numChannels: number, outId: number, imageHeight: number, strides: Uint8Array, outLength: number, interpolationModeId: number, fillModeId: number, fillValue: number) => void; // function wasmTransform(imageId: number, transformsId: number, isBatchTransform: boolean, batch: number, outHeight: number, outWidth: number, numChannels: number, outId: number, imageHeight: number, strides: Uint8Array, outLength: number, interpolationModeId: number, fillModeId: number, fillValue: number) 

function setup(backend: BackendWasm): void {
  wasmTransform = backend.wasm.cwrap(Transform, null /*void*/, [
    'number',  // imageId
    'number',  // transformsId
    'bool',    // isBatchTransform
    'number',  // batch
    'number',  // outHeight
    'number',  // outWidth
    'number',  // numChannels
    'number',  // imageWidth
    'number',  // imageHeight
    'array',   // strides
    'number',  // stridesLength
    'number',  // interpolationModeId
    'number',  // fillModeId
    'number',  // fillValue
    'number']);
}

function transform(args:
    {backend: BackendWasm, inputs: TransformInputs, attrs: TransformAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {image, transforms} = inputs;
  const {interpolation, fillMode, fillValue, outputShape} = attrs;

  const [batch, imageHeight, imageWidth, numChannels] = image.shape;
  const [outHeight, outWidth] =
      outputShape != null ? outputShape :
      [imageHeight, imageWidth];
  const outShape =
      [batch, outHeight, outWidth, numChannels] as
      [number, number, number, number];
  const strides =...
  const imageData =
      backend.dataIdMap.get(image.dataId);
  const imageId = imageData.id;
  const transformsData =
      backend.dataIdMap.get(transforms.dataId);
  const transformsId = transformsData.id;
  const interpolationModelId = interpolation === 'nearest' ? 1 : 2;
  let fillModeId;
  switch (fillMode) {
    case 'constant':
      fillModeId = 1;
      break;
    case 'reflect':
      fillModeId = 2;
      break;
    case 'wrap':
      fillModeId = 3;
      break;
    case 'nearest':
      fillModeId = 4;
      break;
    default:
      fillModeId = 1;
      break;
  }
  wasmTransform(imageId, transformsId, (transforms.shape[0] > 1), batch, outHeight, outWidth, numChannels, imageWidth, imageHeight, strides, interpolationModelId, fillModeId, fillValue, outId);

  return out;
}

export const transformConfig: KernelConfig = {
  kernelName: Transform,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: transform as {} as KernelFunc
};

import {KernelConfig, KernelFunc, TensorInfo, Unpack, UnpackAttrs, UnpackInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {slice} from './Slice';

function unpack(args: {inputs: UnpackInputs, backend: BackendWasm, attrs: UnpackAttrs}):
    TensorInfo {
  const {inputs, backend, attrs} = args;
  const {value} = inputs;
  let {axis} = attrs;

  if (axis < 0) {
    axis += value.shape.length;
  }

  const numOutputs = value.shape[axis];
  const rank = value.shape.length;
  const outShape = new Array(rank - 1);

  let outIndex = 0;
  for (let i = 0; i < rank; i++) {
    if (i === axis) {
      outIndex += value.shape[axis];
    } else {
      outIndex *= value.shape[i];
    }
  }

  return outIndex;
}
Array(numOutputs);
const begin = new Array(rank).fill(0);
const size = value.shape.slice();
size[axis] = 1;
for (let i = 0; i < outs.length; i++) {
  const begin[axis] = i;
  outs[i] = slice({inputs: [x, value], attrs: [begin, size, backend]});
}
return outs.map((): [dataId, dtype] => ({dataId, dtype, shape: outShape}));
}

export const unpackConfig: KernelConfig = {
  kernelName: Unpack,
  backendName: 'wasm',
  kernelFunc: unpack as {} as KernelFunc,
};

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 */

import {KernelConfig, KernelFunc, ZerosLike, ZerosLikeInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

function zerosLike(args: {inputs: ZerosLikeInputs, backend: BackendWasm}) {
  const {inputs: {x}, backend} = args;
  const out = backend.makeOutput(x.shape, x.dtype);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.fill(0);
  return out;
}

export const zerosLikeConfig: KernelConfig = {
  kernelName: ZerosLike,
  backendName: 'wasm',
  kernelFunc: zerosLike as {} as KernelFunc,
};

We explicitly import the modular kernels so they get registered in the global registry when we compile the library. A modular build would replace the contents of this file and import only the kernels that are needed. We import [KernelConfig, registerKernel] from '@tensorflow/tfjs-core';

For example:

import {KernelConfig, KernelFunc, ZerosLike, ZerosLikeInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

function zerosLike(args: {inputs: ZerosLikeInputs, backend: BackendWasm}) {
  const {inputs: {x}, backend} = args;
  const out = backend.makeOutput(x.shape, x.dtype);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.fill(0);
  return out;
}

export const zerosLikeConfig: KernelConfig = {
  kernelName: ZerosLike,
  backendName: 'wasm',
  kernelFunc: zerosLike as {} as KernelFunc,
};

We then use the import statements to register the modular kernels:

import {zerosLikeConfig} from './kernels/ZerosLike';

We do this instead of using the `registerKernel` function because it makes it easier to compile the library with only the necessary kernels. This approach allows for a modular build, where only the necessary kernels are imported and registered in the global registry when the library is compiled. This way, we can avoid importing all the kernels, which can be a large file, especially if many kernels are needed. By importing only the necessary kernels, we reduce the size of the compiled library, making it more efficient and faster to load.

In summary, we explicitly import the modular kernels into our library, ensuring that only the kernels required for a given task are included. This approach not only improves the efficiency of the compiled library but also simplifies the build process by allowing for a modular and dynamic import of kernels.
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```typescript
import { leakyReluConfig } from './kernels/LeakyRelu';
import { lessConfig } from './kernels/Less';
import { lessEqualConfig } from './kernels/LessEqual';
import { logConfig } from './kernels/Log';
import { maxConfig } from './kernels/Max';
import { meanConfig } from './kernels/Max';
import { minConfig } from './kernels/Min';
import { minimumConfig } from './kernels/Minimum';
import { mirrorPadConfig } from './kernels/MirrorPad';
import { multiplyConfig } from './kernels/Multiply';
import { negConfig } from './kernels/Neg';
import { nonMaxSuppressionV3Config } from './kernels/NonMaxSuppressionV3';
import { nonMaxSuppressionV4Config } from './kernels/NonMaxSuppressionV4';
import { nonMaxSuppressionV5Config } from './kernels/NonMaxSuppressionV5';
import { notEqualConfig } from './kernels/NotEqual';
import { oneHotConfig } from './kernels/OneHot';
import { packConfig } from './kernels/Pack';
import { padV2Config } from './kernels/PadV2';
import { preluConfig } from './kernels/Prelu';
import { prodConfig } from './kernels/Prod';
import { rangeConfig } from './kernels/Range';
import { realDivConfig } from './kernels/RealDiv';
import { reluConfig } from './kernels/Relu';
import { relu6Config } from './kernels/Relu6';
import { reshapeConfig } from './kernels/Reshape';
import { reverseConfig } from './kernels/Reverse';
import { roundConfig } from './kernels/Round';
import { rsqrtConfig } from './kernels/Rsqrt';
import { selectConfig } from './kernels/Select';
import { sigmoidConfig } from './kernels/Sigmoid';
import { sinConfig } from './kernels/Sin';
import { sliceConfig } from './kernels/Slice';
import { softmaxConfig } from './kernels/Softmax';
import { spaceToBatchNDConfig } from './kernels/SpaceToBatchND';
import { splitVConfig } from './kernels/SplitV';
import { sqrtConfig } from './kernels/Sqrt';
import { squareConfig } from './kernels/Square';
import { squaredDifferenceConfig } from './kernels/SquaredDifference';
import { stepConfig } from './kernels/Step';
import { stridedSliceConfig } from './kernels/StridedSlice';
import { tanhConfig } from './kernels/Tanh';
import { tileConfig } from './kernels/Tile';
import { topKConfig } from './kernels/TopK';
import { transformConfig } from './kernels/Transform';
import { transposeConfig } from './kernels/Transpose';
import { unpackConfig } from './kernels/Unpack';
import { zerosLikeConfig } from './kernels/ZerosLike';

// List all kernel configs here
const kernelConfigs: KernelConfig[] = [
  absConfig,
  addConfig,
  addNConfig,
  allConfig,
  anyConfig,
  argMaxConfig,
  avgPoolConfig,
  batchMatMulConfig,
  batchToSpaceNDConfig,
  castConfig,
  ceilConfig,
  clipByValueConfig,
  concatConfig,
  conv2DConfig,
  conv2DBackpropInputConfig,
  cosConfig,
  coshConfig,
  cropAndResizeConfig,
  cumsumConfig,
  depthToSpaceConfig,
  depthwiseConv2dNativeConfig,
  eluConfig,
  equalConfig,
  expConfig,
  expandDimsConfig,
  fillConfig,
  flipLeftRightConfig,
  floorConfig,
  floorDivConfig,
  fusedMatMulConfig,
  fusedBatchNormConfig,
  fusedConv2DConfig,
  fusedDepthwiseConv2DConfig,
  gatherNdConfig,
  gatherV2Config,
  greaterEqualConfig,
  identityConfig,
  leakyReluConfig,
  lessConfig,
  lessEqualConfig,
  logConfig,
  logicalAndConfig,
  maxConfig,
  maximumConfig,
  maxPoolConfig,
  meanConfig,
  minConfig,
  minimumConfig,
  mirrorPadConfig,
  multiplyConfig,
  negConfig,
  nonMaxSuppressionV3Config,
  nonMaxSuppressionV4Config,
  nonMaxSuppressionV5Config,
  notEqualConfig,
  oneHotConfig,
  onesLikeConfig,
  packConfig,
  padV2Config,
  powConfig,
  preluConfig,
  prodConfig,
  rangeConfig,
  realDivConfig,
  reluConfig,
  relu6Config,
  reshapeConfig,
  resizeBilinearConfig,
  reverseConfig,
  roundConfig,
  rsqrtConfig,
  selectConfig,
  sigmoidConfig,
  sinConfig,
  sliceConfig,
  softmaxConfig,
  spaceToBatchNDConfig,
  splitVConfig,
  sqrtConfig,
  squareConfig,
  squaredDifferenceConfig,
  stepConfig,
  stridedSliceConfig,
  subConfig,
  sumConfig,
  tanConfig,
  tanhConfig,
  tileConfig,
  topKConfig,
  transformConfig,
  transposeConfig,
  unpackConfig,
  zerosLikeConfig
];

for (const kernelConfig of kernelConfigs) {
  registerKernel(kernelConfig);
}
```
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============================================================================

import {env} from '@tensorflow/tfjs-core';

const ENV = env();

/**
 * True if SIMD is supported.
 */
// From: https://github.com/GoogleChromeLabs/wasm-feature-detect
ENV.registerFlag(
    // This typed array passed in to WebAssembly.validate is WebAssembly binary // code. In this case it is a small program that contains SIMD // instructions.
    'WASM_HAS_SIMD_SUPPORT', async () => WebAssembly.validate(new Uint8Array([0, 97, 115, 109, 1, 0, 0, 1, 4, 1, 96, 0, 0, 3, 2, 1, 0, 10, 9, 1, 7, 0, 65, 0, 253, 15, 26, 11]));

/**
 * True if threads are supported.
 */
// From: https://github.com/GoogleChromeLabs/wasm-feature-detect
ENV.registerFlag('WASM_HAS_MULTITHREAD_SUPPORT', async () => {
  // TODO(annxingyuan): Enable node support once this is resolved:
  // Test for transferability of SABs (needed for Firefox)
  // https://github.com/tensorflow/tfjs-issues/3830
  if (ENV.get('IS_NODE')) {
    return false;
  }

  try {
    // Test for transferability of SABs (needed for Firefox)
    // https://groups.google.com/forum/#!msg/mozilla.dev.platform/IHkBZlHETpA/dwsMNchWEQAJ
    new MessageChannel().port1.postMessage(new SharedArrayBuffer(1));
    // This typed array is a WebAssembly program containing threaded // instructions.
    return WebAssembly.validate(new Uint8Array([0, 97, 115, 109, 1, 0, 0, 1, 4, 1, 96, 0, 0, 3, 2, 1, 0, 10, 9, 1, 7, 0, 65, 0, 254, 16, 2, 0, 26, 11]));
  } catch (e) {
    return false;
  }
});

var WasmBackendModuleThreadedSimd = (function() {
  if (typeof __filename !== 'undefined') _scriptDir = _scriptDir || __filename;
  return (function(WasmBackendModuleThreadedSimd) {
    WasmBackendModuleThreadedSimd = WasmBackendModuleThreadedSimd || {};

    function GROWABLE_HEAP_I8(){if(wasmMemory.buffer!=buffer){updateGlobalBufferAndViews(wasmMemory.buffer)} return HEAP8}
    function GROWABLE_HEAP_U8(){if(wasmMemory.buffer!=buffer){updateGlobalBufferAndViews(wasmMemory.buffer)} return HEAPU8}
    function GROWABLE_HEAP_I32(){if(wasmMemory.buffer!=buffer){updateGlobalBufferAndViews(wasmMemory.buffer)} return HEAP32}
    function GROWABLE_HEAP_U32(){if(wasmMemory.buffer!=buffer){updateGlobalBufferAndViews(wasmMemory.buffer)} return HEAPU32}
    function GROWABLE_HEAP_F64(){if(wasmMemory.buffer!=buffer){updateGlobalBufferAndViews(wasmMemory.buffer)} return HEAPF64}
    var Module=typeof WasmBackendModuleThreadedSimd!=="undefined"?WasmBackendModuleThreadedSimd:{};var readyPromiseResolve,readyPromiseReject;Module["ready"]=
    new Promise(function(resolve,reject){readyPromiseResolve=resolve;readyPromiseReject=reject});var moduleOverrides={};var key;for(key in Module){if(Module.hasOwnProperty(key)){moduleOverrides[key]=Module[key]}}var arguments_=[ ];var thisProgram="./this.program";var quit_=function(status,toThrow){throw toThrow};var ENVIRONMENT_IS_WEB=false;var ENVIRONMENT_IS_WORKER=false;var ENVIRONMENT_IS_NODE=false;var ENVIRONMENT_IS_SHELL=false;ENVIRONMENT_IS_WEB=typeof window==='"object"';ENVIRONMENT_IS_WORKER=typeof importScripts==='"function"';ENVIRONMENT_IS_NODE=typeof process==='"object"'&&!typeof process.versions.node==='"string"';ENVIRONMENT_IS_SHELL=!ENVIRONMENT_IS_WEB&&!ENVIRONMENT_IS_NODE&&!ENVIRONMENT_IS_WORKER;var
Module["thisProgram"];if(Module["quit"]){quit_=Module["quit"]();function warnOnce(text){if(!warnOnce.shown)warnOnce.shown={};if(!warnOnce.shown[text]){warnOnce.shown[text]=1;error(text)}}var Atomics_load=Atomics.load;var Atomics_store=Atomics.store;var Atomics_compareExchange=Atomics.compareExchange;var wasmBinary;if(Module["wasmBinary"]){wasmBinary=Module["wasmBinary"]();var noExitRuntime=Module["noExitRuntime" bask=true;if(typeof WebAssembly!=="object"){abort("no native wasm support detected")}}var wasmMemory;var wasmModule;var ABORT=false;var EXITSTATUS;function assert(condition,context){if(!condition){assertFailed(''+context+' text}}var func=Module["_"+ident];assert(func,"Cannot call unknown function "+ident+" make sure it is exported");return func();function ccall(ident,returnType,argTypes,args,opts){var func=Module["_"+ident];assert(func,"Cannot call unknown function "+ident+" make sure it is exported");var ret=func.apply(null,func);return ret}}function cwrap(ident,returnType,argTypes,opts){var func=Module["_"+ident];assert(func,"Cannot call unknown function "+ident+" make sure it is exported");return function(){return ccall(ident,returnType,argTypes,arguments,opts)}}function UTF8ArrayToString(heap,idx,maxBytesToRead){var startIdx=start;var endIdx=end;for(var i=0;i<str.length;++i){var u=str.charCodeAt(i);if(u>=55296&&u<=57343){var u1=str.charCodeAt(i+1);u=65536+((u&1023)<<10)|u1&1023}if(u<=127)+len;else if(u<=2047)len+=2;else if(u<=65535)len+=3;else len+=4}return len}function writeArrayToMemory(array,buffer){GROWABLE_HEAP_U8().set(array,buffer)}function alignUp(x,multiple){if(x%multiple>0){x+=multiple-x%multiple}return x}var buffer,HEAP8,HEAPU8,HEAP16,HEAPU16,HEAP32,HEAPU32,HEAPF32,HEAPF64;function updateGlobalBufferAndViews(buf){buffer=buf;Module["HEAP8"]=new...}
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ad.threads=[];for(var i=0;i<PThread.unusedWorkers.length;++i){
    var
    worker=PThread.unusedWorkers[i];
    if(worker.terminate)PThread.unusedWorkers.splice(i,1);
}

for(var i=0;i<PThread.runningWorkers.length;++i){
    var
    worker=PThread.runningWorkers[i];
    var
    pthread=worker.pthread;
    PThread.freeThreadData(pthread);
    if(pthread.terminate)PThread.runningWorkers.splice(PThread.runningWorkers.indexOf(worker),1);
}

PThread.freeThreadData(PThread.threads[pthread.threadInfoStruct]||{
    ['free']:1
});

for(var i=0;i<PThread.freeThreadData(len)==0;)
{
    var
    worker=PThread.freeThreadData;
    if(worker.terminate)PThread.runningWorkers.splice(PThread.runningWorkers.indexOf(worker),1);
    PThread.freeThreadData(worker.pthread);
    pthread=worker.pthread;
    PThread.freeThreadData(worker.pthread);
    worker=undefined;
}

PThread.returnWorkerToPool(function(){
    PThread.runWithoutMainThreadQueuedCalls(function(){
        PThread.threads[pthread.threadInfoStruct]||{
            ['free']:1
        };
        if(worker.terminate)PThread.runningWorkers.splice(PThread.runningWorkers.indexOf(worker),1);
        PThread.freeThreadData(worker.pthread);
        worker=undefined;
    });
});
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{var stackTop=stackSave();var varargs=stackAlloc(12);GROWABLE_HEAP_I32([varargs>>2]=eventTypeId;GROWABLE_HEAP_I32([varargs +4]>>2]=eventData;GROWABLE_HEAP_I32([varargs+8]>>2]=userData;__emscripten_call_on_thread(0,targetThread,635734208,eventHandlerFunc,eventData,varargs);stackRestore(stackTop)},{getTargetThreadForEventCallback:function(targetThread){switch(targetThread){case 1:return 0;case 2:return PThread.currentProxiedOperationCallerThread;default:return targetThread}},{getNodeNameForTarget:function(target){if(!target)return"";if(target==window)return"#window";if(target==screen)return"#screen";return target&&target.nodeName?target.nodeName:""},fullscreenEnabled:function(){return document.fullscreenEnabled||document.webkitFullscreenEnabled}:function stringToNewUTF8(jsString){var length=lengthBytesUTF8(jsString)+1;var cString=_malloc(length);stringToUTF8(jsString,cString,length);return cString},function _emscripten_set_offscreencanvas_size_on_target_thread_js(targetThread,targetCanvas,width,height){var stackTop=stackSave();var varargs=stackAlloc(12);var targetCanvasPtr=0;if(targetCanvas){targetCanvasPtr=stringToNewUTF8(targetCanvas)}GROWABLE_HEAP_I32([varargs>>2]=targetCanvasPtr;GROWABLE_HEAP_I32([varargs+4]>>2]=width;GROWABLE_HEAP_I32([varargs+8]>>2]=height;__emscripten_call_on_thread(0,targetThread,657457152,0,targetCanvasPtr,varargs);stackRestore(stackTop)},function _emscripten_set_offscreencanvas_size_on_target_thread(targetCanvas,width,height){targetCanvas=targetCanvas?UTF8ToString(targetCanvas):"";_emscripten_set_offscreencanvas_size_on_target_thread_js(targetCanvas,width,height)},function findEventTarget(target){target=maybeCStringToJsString(target);var domElement=specialHTMLTargets[target]||(typeof document!=="undefined"?document.querySelector(target):undefined);return domElement},function findCanvasEventTarget(target){return findEventTarget(target)},function _emscripten_set_canvas_element_size_calling_thread(target,width,height){var canvas=findCanvasEventTarget(target);if(!canvas)return-4;if(canvas.canvasSharedPtr){GROWABLE_HEAP_I32([canvas.canvasSharedPtr>>2]=width;GROWABLE_HEAP_I32([canvas.canvasSharedPtr+4]>>2]=height;__emscripten_call_on_thread(0,targetThread,657457152,0,targetCanvasPtr,varargs);stackRestore(stackTop)},function _emscripten_set_canvas_element_size_on_target_thread(target,width,height){targetCanvas=targetCanvas?UTF8ToString(targetCanvas):"";_emscripten_set_offscreencanvas_size_on_target_thread_js(targetCanvas,width,height)},{getTargetThreadForEventCallback:function(targetThread){switch(targetThread){case 1:return 0;case 2:return PThread.currentProxiedOperationCallerThread;default:return targetThread}},{getNodeNameForTarget:function(target){if(!target)return"";if(target==window)return"#window";if(target==screen)return"#screen";return target&&target.nodeName?target.nodeName:""},fullscreenEnabled:function(){return document.fullscreenEnabled||document.webkitFullscreenEnabled}:function stringToNewUTF8(jsString){var length=lengthBytesUTF8(jsString)+1;var cString=_malloc(length);stringToUTF8(jsString,cString,length);return cString}
_PadV2=Module["_PadV2"] = function() { return(_PadV2=Module["_PadV2"] = Module["asm"])["Fa"]}.apply(null,arguments)};var
_Pow=Module["_Pow"] = function() { return(_Pow=Module["_Pow"] = Module["asm"])["Ga"]}.apply(null,arguments)};var
_Prelu=Module["_Prelu"] = function() { return(_Prelu=Module["_Prelu"] = Module["asm"])["Ha"]}.apply(null,arguments)};var
_Prod=Module["_Prod"] = function() { return(_Prod=Module["_Prod"] = Module["asm"])["Ia"]}.apply(null,arguments)};var
_RealDiv=Module["_RealDiv"] = function() { return(_RealDiv=Module["_RealDiv"] = Module["asm"])["Ja"]}.apply(null,arguments)};var
_Relu=Module["_Relu"] = function() { return(_Relu=Module["_Relu"] = Module["asm"])["Ka"]}.apply(null,arguments)};var
_Relu6=Module["_Relu6"] = function() { return(_Relu6=Module["_Relu6"] = Module["asm"])["La"]}.apply(null,arguments)};var
_Reshape=Module["_Reshape"] = function() { return(_Reshape=Module["_Reshape"] = Module["asm"])["Ma"]}.apply(null,arguments)};var
_Reversie=Module["_Reversie"] = function() { return(_Reversie=Module["_Reversie"] = Module["asm"])["Na"]}.apply(null,arguments)};var
_RotatorWithOffset=Module["_RotatorWithOffset"] = function() { return(_RotatorWithOffset=Module["_RotatorWithOffset"] = Module["asm"])["Oa"]}.apply(null,arguments)};var
_Round=Module["_Round"] = function() { return(_Round=Module["_Round"] = Module["asm"])["Pa"]}.apply(null,arguments)};var
_Rsqrt=Module["_Rsqrt"] = function() { return(_Rsqrt=Module["_Rsqrt"] = Module["asm"])["Qa"]}.apply(null,arguments)};var
_ScatterNd=Module["_ScatterNd"] = function() { return(_ScatterNd=Module["_ScatterNd"] = Module["asm"])["Ra"]}.apply(null,arguments)};var
_SelecvtV2=Module["_SelectV2"] = function() { return(_SelectV2=Module["_SelectV2"] = Module["asm"])["Sa"]}.apply(null,arguments)};var
_Sigmoid=Module["_Sigmoid"] = function() { return(_Sigmoid=Module["_Sigmoid"] = Module["asm"])["Ta"]}.apply(null,arguments)};var
_Sin=Module["_Sin"] = function() { return(_Sin=Module["_Sin"] = Module["asm"])["Ua"]}.apply(null,arguments)};var
_Softmax=Module["_Softmax"] = function() { return(_Softmax=Module["_Softmax"] = Module["asm"])["Va"]}.apply(null,arguments)};var
_Sqrt=Module["_Sqrt"] = function() { return(_Sqrt=Module["_Sqrt"] = Module["asm"])["Wa"]}.apply(null,arguments)};var
_Square=Module["_Square"] = function() { return(_Square=Module["_Square"] = Module["asm"])["Xa"]}.apply(null,arguments)};var
_SquaredDifference=Module["_SquaredDifference"] = function() { return(_SquaredDifference=Module["_SquaredDifference"] = Module["asm"])["Ya"]}.apply(null,arguments)};var
_Step=Module["_Step"] = function() { return(_Step=Module["_Step"] = Module["asm"])["Za"]}.apply(null,arguments)};var
_StridedSlice=Module["_StridedSlice"] = function() { return(_StridedSlice=Module["_StridedSlice"] = Module["asm"])["_al"]}.apply(null,arguments)};var
_Sub=Module["_Sub"] = function() { return(_Sub=Module["_Sub"] = Module["asm"])["_al"]}.apply(null,arguments)};var
_Sum=Module["_Sum"] = function() { return(_Sum=Module["_Sum"] = Module["asm"])["_ab"]}.apply(null,arguments)};var

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```
return instance.exports;function moduleLoaded(){this.onmessage=function(e) {try {if(e.data.cmd==='load') {Module['wasmModule']=e.data.wasmModule;Module['wasmMemory']=e.data.wasmMemory;Module['buffer']=Module['wasmMemory'].buffer;Module['ENVIRONMENT_IS_PTHREAD']=true;if(typeof e.data.origUrl==='string') {importScripts(e.data.origUrl);} else {var objectUrl=URL.createObjectURL(e.data.origUrl);importScripts(objectUrl);URL.revokeObjectURL(objectUrl);}} else if(e.data.cmd==='objectTransfer') {Module['PThread'].receiveObjectTransfer(e.data);} else if(e.data.cmd==='run') {Module['__performance_now_clock_drift']=performance.now()-e.data.time;Module['__emscripten_thread_init']={e.data.threadInfoStruct,0,0};var max=e.data.stackBase;var top=e.data.stackBase+e.data.stackSize;Module['establishStackSpace'](top,max);Module['__emscripten_tls_init']();Module['PThread'].receiveObjectTransfer(e.data);Module['PThread'].setThreadStatus(Module['_pthread_self'])(1);try {var result=Module['invokeEntryPoint'](e.data.startRoutine,e.data.arg);if(!Module['getNoExitRuntime']())Module['PThread'].threadCancel();} catch (ex) {if (ex instanceof Module['ExitStatus']) {if (Module['getNoExitRuntime']()) {};Module['PThread'].threadExit(ex.status);} else {Module['PThread'].threadExit(-2);throw ex;}} } else if(e.data.cmd==='cancel') {if (Module['_pthread_self']()) {Module['PThread'].threadCancel();} } else if(e.data.target==='setImmediate') {} else if(e.data.cmd==='processThreadQueue') {if (Module['_pthread_self']()) {Module['_emscripten_current_thread_process_queued_calls']();} } else {err('worker.js received unknown command');err(e.data);}}} catch (ex) {err('worker.js onmessage() captured an uncaught exception:');err(ex);if (ex && ex.stack) err(ex.stack);throw ex;}};if (typeof process === 'object' && typeof process.versions === 'object' && typeof process.versions.node === 'string') {self={location:{href:__filename}};var onmessage=this.onmessage;var nodeWorkerThreads=require('worker_threads');global.Worker=nodeWorkerThreads.Worker;var parentPort=nodeWorkerThreads.parentPort;parentPort.on('message',function(data) {onmessage({data:data});});var nodeFS=require('fs');var nodeRead=function(filename) {return nodeFS.readFileSync(filename,'utf8');};function globalEval(x) {global.require=Module.require;global.Module=Module;eval.call(null,x)};importScripts=function(f) {globalEval(nodeRead(f))};postMessage=function(msg) {parentPort.postMessage(msg)};if (typeof performance === 'undefined') {performance={now:function(){return Date.now();}}};"\n"var WasmBackendModule = (function() {global.Worker=WasmBackendModule.Worker;var parentPort=WasmBackendModule.parentPort;parentPort.on('message',function(data) {onmessage({data:data});});var nodeFS=global FS;var nodeRead=global FS.readFileSync;});global.WasmBackendModule = WasmBackendModule;\n
```


Boolean(ret); return ret} var func=getCFunc(ident); var cArgs=[]; var stack=0; if(args) { for(var i=0; i<args.length; i++) { var converter=toC[argTypes[i]]; if(converter) { if(stack === 0) stack=stackSave(); cArgs[i]=converter(args[i]) } else { cArgs[i]=args[i]; } } } var ret=func.apply(null,cArgs); return converReturnValue(ret); if(stack !== 0) stackRestore(stack); return ret}}

function getCFunc(ident) { var stack=0; if(args) { for(var i=0; i<args.length; i++) { var converter=toC[argTypes[i]]; if(converter) { if(stack === 0) stack=stackSave(); cArgs[i]=converter(args[i]) } else { cArgs[i]=args[i] } } } var ret=func.apply(null,cArgs); return converReturnValue(ret); if(stack !== 0) stackRestore(stack); return ret}

function cwrap(ident,returnType,argTypes,opts) { argTypes=argTypes||[]; numericRet=returnType!=="string"; numericArgs=argTypes.every(function(type){return type==="number"}); if(numericRet&&numericArgs&&!opts) { return func } return function() { return ccall(ident,returnType,argTypes,arguments,opts) } }

function ccall(ident,returnType,argTypes,arguments,opts) { var cArgs=[]; var stack=0; if(args) { for(var i=0; i<args.length; i++) { var converter=toC[argTypes[i]]; if(converter) { if(stack === 0) stack=stackSave(); cArgs[i]=converter(args[i]) } else { cArgs[i]=args[i] } } } var ret=func.apply(null,cArgs); return converReturnValue(ret); if(stack !== 0) stackRestore(stack); return ret}
addOnPreRun(cb){__ATPRERUN__.unshift(cb)}function addOnPostRun(cb){__ATPOSTRUN__.unshift(cb)}var runDependencies=0;var runDependencyWatcher=null;var dependenciesFulfilled=null;function addRunDependency(id){runDependencies++;if(Module["monitorRunDependencies"]){Module["monitorRunDep endencies"]([runDependencies])}function removeRunDependency(id){runDependencies--;if(Module["monitorRunDependencies"]){Module["monitorRunDependencies"]([runDependencies])}if(runDependencies==0){if(runDependencyWatcher!==null){clearInterval(runDependencyWatcher);runDependencyWatcher=null}if(dependenciesFulfilled){var callback=dependenciesFulfilled;dependenciesFulfilled=null;callback()}}}Module["preloadedImages"]=[];Module["preloadedAudios"]=[];function abort(what){if(Module["onAbort"])Module["onAbort"](what);what+="";err(what);ABORT=true;EXITSTAT US=1;what="abort("+what+")"). Build with -s ASSERTIONS=1 for more info.";var e=new WebAssembly.RuntimeError(what);readyPromiseReject(e);throw e}function hasPrefix(str,prefix){return String.prototype.startsWith?str.startsWith(prefix):str.indexOf(prefix)===0}var dataURIPrefix="data:application/octet-stream;base64,";function isDataURI(filename){return hasPrefix(filename,dataURIPrefix)}var fileURIPrefix="file://";function isFileURI(filename){return hasPrefix(filename,fileURIPrefix)}var wasmBinaryFile="tfjs-backend-wasm.wasm";if(!isDataURI(wasmBinaryFile)){wasmBinaryFile=locateFile(wasmBinaryFile)}function getBinary(file){try{if(file==wasmBinaryFile&&wasmBinary){return new Uint8Array(wasmBinary)}if(readBinary){return readBinary(file)}else{throw"both async and sync fetching of the wasm failed"}}catch(err){abort(err)}`
import './flags_wasm';
nimport {backend_util, BackendTimingInfo, DataStorage, DataType, deprecationWarn, engine, env, KernelBackend, TensorInfo, util} from '@tensorflow/tfjs-core';
nimport {BackendWasmModule, WasmFactoryConfig} from '../wasm-out/tfjs-backend-wasm';
nimport {BackendWasmThreadedSimdModule} from '../wasm-out/tfjs-backend-wasm-threaded-simd';
nimport wasmFactoryThreadedSimd from '../wasm-out/tfjs-backend-wasm-threaded-simd.js';

interface TensorData {
  id: number;
  memoryOffset: number;
  shape: number[];
  dtype: DataType;
  refCount: number;
  /** Only used for string tensors, storing encoded bytes. */
  stringBytes?: Uint8Array[];
}

export type DataId = object;  // object instead of {} to force non-primitive.

export class BackendWasm extends KernelBackend {
  // 0 is reserved for null data ids.
  private dataIdNextNumber = 1;
  dataIdMap: DataStorage<TensorData>;

  constructor(public wasm: BackendWasmModule|BackendWasmThreadedSimdModule) {
    super();
    this.wasm.tfjs.initWithThreadsCount(0);
    this.dataIdMap = new DataStorage(this, engine());
    this.numDataIds();
  }

  write(values: backend_util.BackendValues, shape: number[], dtype: DataType): DataId {
    const dataId = {id: this.dataIdNextNumber++};
    this.move(dataId, values, shape, dtype, 1);
    return dataId;
  }

  numDataIds(): number {
    return this.dataIdMap.numDataIds();
  }

  async time(f: () => void): Promise<BackendTimingInfo> {
    const start = util.now();
    f();
    const kernelMs = util.now() - start;
    return {kernelMs};
  }

  move(dataId: DataId, values: backend_util.BackendValues, shape: number[], dtype: DataType, refCount: number): void {
    const id = this.dataIdNextNumber++;
    if (dtype === 'string') {
      const stringBytes = values as Uint8Array[];
      this.dataIdMap.set(dataId, {id, stringBytes, shape, dtype, memoryOffset: null, refCount});
      return;
    }

    const size = util.sizeFromShape(shape);
    const numBytes = size * util.bytesPerElement(dtype);
    const memoryOffset = this.wasm._malloc(numBytes);

    this.dataIdMap.set(dataId, {id, memoryOffset, shape, dtype, refCount});
    this.wasm.tfjs.registerTensor(id, size, memoryOffset);
    if (values != null) {
      this.wasm.HEAPU8.set((values as backend_util.TypedArray).buffer,
        (values as backend_util.TypedArray).byteOffset, numBytes);
    }
  }

  async read(dataId: DataId): Promise<backend_util.BackendValues> {
    return this.readSync(dataId);
  }

  readSync(dataId: DataId): backend_util.BackendValues {
    const {memoryOffset, dtype, shape, stringBytes} =
        this.dataIdMap.get(dataId);
    if (dtype === 'string') {
      return stringBytes;
    }
    const bytes = this.wasm.HEAPU8.slice(memoryOffset, memoryOffset +
      util.sizeFromShape(shape) * util.bytesPerElement(dtype));
    return typedArrayFromBuffer(bytes.buffer, dtype);
  }

  /**
   * Dispose the memory if the dataId has 0 refCount. Return true if the memory
   * is released, false otherwise.
   * @param dataId
   * @param force Optional, remove the data regardless of refCount
   */
  disposeData(dataId: DataId, force = false): boolean {
    if (this.dataIdMap.has(dataId)) {
      const dataArray = this.dataIdMap.get(dataId);
      if (dataArray == null) {
        return false;
      }
      const info = dataArray.info;
      if (info != null) {
        if (info.kind === 'string') {
          return true;
        }
        if (!force && info.refCount > 0) {
          return false;
        }
      }
      this.wasm._free(dataArray.memoryOffset);
      const data = this.dataIdMap.get(dataId);
      if (data == null) {
        return false;
      }
      this.wasm.tfjs.disposeData(data.id);
      if (force && !force) {
        return false;
      }
      this.dataIdMap.delete(dataId);
      return true;
    }
  }

  /** Return refCount of a `TensorData`. */
  refCount(dataId: DataId): number {
    if (this.dataIdMap.has(dataId)) {
      const dataArray = this.dataIdMap.get(dataId);
      if (dataArray == null) {
        return 0;
      }
      return dataArray.refCount;
    }
    return 0;
  }

  floatPrecision(): number {
    return 32;
  }

  getMemoryOffset(dataId: DataId): number {
    return this.dataIdMap.get(dataId).memoryOffset;
  }

  dispose() {
    this.wasm.tfjs.dispose();
  }

  // Returns the memory offset of a tensor. Useful for debugging and unit
  // testing.
  getMemoryOffset(dataId: DataId): number {
    return this.dataIdMap.get(dataId).memoryOffset;
  }

  dispose() {
    this.wasm.tfjs.dispose();
  }

  // If PTThread in this wasm
  //
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```javascript
error\n// messages\nreturn\n)\ninitAborted = true;\nconst rejectMsg = \n'Make sure the server can serve the `.wasm` file relative to the `+\n'bundled js file. For more details see https://github.com/tensorflow/tfjs/blob/master/tfjs-backend-wasm/README.md#using-bundlers;\n reject({message: rejectMsg})\n);\n
let wasm: Promise<BackendWasmModule> = \n// If `wasmPath` has been defined we must initialize the vanilla module.\nif (threadsSupported && simdSupported && \n& hasPath == null) {\n  factoryConfig.mainScriptUriOrBlob = new Blob([\n    var WasmBackendModuleThreadedSimd = `\n    +\n    wasmFactoryThreadedSimdToString();\n  ]\n    type: 'text/javascript'});\n  wasm = \n  wasmFactoryThreadedSimd(factoryConfig);\n} else {\n  // The wasmFactory works for both vanilla and SIMD\n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  \n  ```
```

Error(``
          `There were no entries found for the following binaries: ` +
          `${missingPaths.join(',')}. Please
          either call setWasmPaths with a ` +
          `map providing a path for each binary, or with a string indicating ` +

          `the directory where all the binaries can be found.`);\n
    `)

  actualThreadsCount = -1;\n
  *Sets the number of threads that will be used by XNNPACK to create\n
  threadpool (default to the number of logical CPU cores).\n
  *This must be called before calling\n
  `tf.setBackend('wasm');`\n
  *export function getThreadsCount(): number \n      {\n    `return actualThreadsCount;`\n    `}/`\n
    `/**\n     * @license See the\n    `LICENSE file. */`\n
    // This code is auto-generated, do not modify this file!\n
    const version = '3.11.0';\n
    export {version};

    /**\n     * @license\n     * Copyright 2020 Google LLC. All Rights Reserved.\n     * Licensed under the\n    `Apache License, Version 2.0 (the "License");\n
    * you may not use this file except in compliance with the\n
    * License.\n
    * You may obtain a copy of the License at\n
    * http://www.apache.org/licenses/LICENSE-2.0\n
    * Unless required by applicable law or agreed to in writing, software\n
    * distributed under the License is distributed\n
    * on an \"AS IS\" BASIS,\n
    * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or\n
    * implied.\n
    * See the License for the specific language governing permissions and\n
    * limitations under the\n
    * License.\n
    *=============================================================================\n
    *\n
    *\n
    *\n
    */\n
    import './flags_wasm';\n
    import {registerBackend} from '@tensorflow/tfjs-core';\n
    import {BackendWasm, init} from './backend_wasm';\n
    export {BackendWasm, getThreadsCount, setWasmPath,\n
      setWasmPaths from './backend_wasm';\n
      export {version as version_wasm} from './version';\n
      const\n
      WASM_PRIORITY = 2;\n
      importBackend('wasm', async () => {\n        const {wasm} = await init();\n
        return new\n
        BackendWasm(wasm);\n
      },\n
      WASM_PRIORITY);\n
    },\n
    \`\n
    };\n
    \n
    names: [\n
      '_FusedMatMul', 'util', 'Abs', 'backend_util', 'Add', 'AddN', 'Identity', 'setup',\n
      supportsFullBroadcast', 'Equal', 'Exp', 'ExpandDims', 'Fill', 'FlipLeftRight', 'Floor', 'FloorDiv', 'FusedBatchNorm',\n
      'FusedConv2D', 'FusedDepthwiseConv2D', 'GatherNdim', 'Greater', 'GreaterEqual', 'setupFunc', 'Leaky\n
      Relu', 'Less', 'LessEqual', 'Log', 'LogicalAnd', 'Max', 'Maximum', 'MaxPool', 'Mean', 'Min', 'Minimum', 'Mirror\n
      Pad', 'Multiply', 'Neg', 'NonMaxSuppressionV3', 'NonMaxSuppressionV4', 'NonMaxSuppressionV5', 'kernelFunc\n
      ', 'NotEqual', 'OneHot', 'OnesLike', 'Pack', 'PadV2', 'Powl', 'Prod', 'rangeImplCPU', 'Range', 'RealDiv', 'R\n
      elu', 'Relu6', 'Reshape', 'Reverse', 'RotateWithOffset', 'Round', 'Rsqrt', 'ScatterNd', 'Select', 'Sigmoid', 'Sin\n
      ', 'Softmax', 'SpaceToBatchND', 'SplitV', 'Sqrt', 'Square', 'SquaredDifference', 'Step', 'StridedSlice', 'Sub',\n
      'Tan', 'Tanh', 'Tile', 'TopK', 'Transform', 'Unpack', 'ZerosLike', 'registerKernel', 'env', 'tslib1__extends', 'DataS\n
      toring', 'engine', 'KernelBackend', 'tslib1__awaiter', 'registerBackend'], 'mappings': \n
    ';\n
    ```
```
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Open Source Used in Cisco Meeting Server (formerly Acano Server)
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6
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```javascript
import {KernelConfig, KernelFunc, Pack, PackAttrs, PackInputs, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';

import {concat} from './Concat';
import {expandDims} from './ExpandDims';

export function pack(
    args: {inputs: PackInputs, backend: BackendWasm, attrs: PackAttrs}):
    TensorInfo {
  const {inputs, backend, attrs} = args;
  const {axis} = attrs;

  if (inputs.length === 1) {
    return expandDims(
        {inputs: {input: inputs[0]}, backend, attrs: {dim: axis}});
  }

  const shape = inputs[0].shape;
  const dtype = inputs[0].dtype;

  inputs.forEach(t => {
    util.assertShapesMatch(
        shape, t.shape,
        'All tensors passed to stack must have matching shapes');
    util.assert(
        dtype === t.dtype,
        () => 'All tensors passed to stack must have matching dtypes');
  });

  const intermediateTensorInfos: TensorInfo[] = [
  ];
  const expandedTensors = inputs.map(t => {
    const expandedT =
        expandDims({inputs: {input: t}, backend, attrs: {dim: axis}});
    intermediateTensorInfos.push(expandedT);
    return expandedT;
  });

  const result = concat({inputs: expandedTensors, backend, attrs: {axis}});

  intermediateTensorInfos.forEach(t =>
    backend.disposeData(t.dataId));

  return result;
}

export const packConfig: KernelConfig = {
  kernelName: Pack,
  backendName: 'wasm',
  kernelFunc: pack as {} as KernelFunc
};
```

---

```
/*
 * @license
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 *
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 *
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 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */

/*
 * 
 * The contents of this file were generated automatically.
 * This file is not intended to be edited by hand.
 */

import {KernelConfig, KernelFunc, Pack, PackAttrs, PackInputs, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';

import {concat} from './Concat';
import {expandDims} from './ExpandDims';

export function pack(
    args: {inputs: PackInputs, backend: BackendWasm, attrs: PackAttrs}):
    TensorInfo {
  const {inputs, backend, attrs} = args;
  const {axis} = attrs;

  if (inputs.length === 1) {
    return expandDims(
        {inputs: {input: inputs[0]}, backend, attrs: {dim: axis}});
  }

  const shape = inputs[0].shape;
  const dtype = inputs[0].dtype;

  inputs.forEach(t => {
    util.assertShapesMatch(
        shape, t.shape,
        'All tensors passed to stack must have matching shapes');
    util.assert(
        dtype === t.dtype,
        () => 'All tensors passed to stack must have matching dtypes');
  });

  const intermediateTensorInfos: TensorInfo[] = [
  ];
  const expandedTensors = inputs.map(t => {
    const expandedT =
        expandDims({inputs: {input: t}, backend, attrs: {dim: axis}});
    intermediateTensorInfos.push(expandedT);
    return expandedT;
  });

  const result = concat({inputs: expandedTensors, backend, attrs: {axis}});

  intermediateTensorInfos.forEach(t =>
    backend.disposeData(t.dataId));

  return result;
}

export const packConfig: KernelConfig = {
  kernelName: Pack,
  backendName: 'wasm',
  kernelFunc: pack as {} as KernelFunc
};
```
import {KernelConfig, Log} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const logConfig: KernelConfig = createUnaryKernelConfig(Log);

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Log.js.map

No license file was found, but licenses were detected in source scan.

import {KernelConfig, Pow} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;

export const powConfig: KernelConfig = createBinaryKernelConfig(Pow, supportsFullBroadcast);

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Pow.js.map

No license file was found, but licenses were detected in source scan.

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import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;

export const powConfig: KernelConfig = createBinaryKernelConfig(Pow, supportsFullBroadcast);

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Pow.js.map

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No license file was found, but licenses were detected in source scan.

import {KernelConfig, Pow} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;

export const powConfig: KernelConfig = createBinaryKernelConfig(Pow, supportsFullBroadcast);
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* See the License for
 * the specific language governing permissions and
 * limitations under the License.
 *
=============================================================================
*/

import {KernelConfig, KernelFunc, SplitV, SplitVAttrs, SplitVInputs, util} from '@tensorflow/tfjs-core';
import {backend_util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {slice} from './Slice';

export function splitV(
    args: {inputs: SplitVInputs, attrs: SplitVAttrs, backend: BackendWasm}) {
  const {inputs, attrs, backend} = args;
  const {x} = inputs;
  const {numOrSizeSplits, axis} = attrs;

  const $axis = util.parseAxisParam(axis, x.shape)[0];

  const splitSizes = backend_util.prepareSplitSize(x, numOrSizeSplits, $axis);
  const begin = new Array(x.shape.length).fill(0);
  const size = x.shape.slice();
  return splitSizes.map(s => {
    const xSliceSize = [...size];
    xSliceSize[$axis] = s;
    const xSlice =
        slice({inputs: {x}, attrs: {begin, size: xSliceSize}, backend});
    begin[$axis] += s;
    return xSlice;
  });
}

export const splitVConfig: KernelConfig = {
  kernelName: SplitV,
  backendName: 'wasm',
  backendName: 'wasm',
  kernelFunc: splitV as {} as KernelFunc
};

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/SplitV.js.map
No license file was found, but licenses were detected in source scan.
import {KernelConfig, KernelFunc, TensorInfo, Transform, TransformAttrs, TransformInputs, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';

let wasmTransform: (imageId: number, transformsId: number, isBatchTransform: boolean, batch: number, outHeight: number, outWidth: number, numChannels: number, imageWidth: number, imageHeight: number, strides: Uint8Array, stridesLength: number, interpolationModelId: number, fillModelId: number, fillValue: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmTransform = backend.wasm.cwrap(Transform, null /*void*/, 
    'number',  // imageId
    'number',  // transformsId
    'bool',    // isBatchTransform
    'number',  // batch
    'number',  // outHeight
    'number',  // outWidth
    'number',  // numChannels
    'number',  // imageWidth
    'number',  // imageHeight
    'array',   // strides
    'number',  // stridesLength
    'number',  // interpolationModeId
    'number',  // fillModelId
    'number',  // fillValue
    'number'   // outId
  );
}

function transform(args: {backend: BackendWasm, inputs: TransformInputs, attrs: TransformAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {image, transforms} = inputs;
  const {interpolation, fillMode, fillValue, outputShape} = attrs;

  const [batch, imageHeight, imageWidth, numChannels] = image.shape;
  const [outHeight, outWidth] = outputShape != null ? outputShape : [imageHeight, imageWidth];
  const outShape = [batch, outHeight, outWidth, numChannels] as [number, number, number, number];
  const strides = new Uint8Array(new Int32Array(util.computeStrides(image.shape)).buffer);

  const out = backend.makeOutput(outShape, image.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;

  const imageData = backend.dataIdMap.get(image.dataId);
  const imageId = imageData.id;

  const transformsData = backend.dataIdMap.get(transforms.dataId);
  const transformsId = transformsData.id;

  const interpolationModeId = interpolation === 'nearest' ? 1 : 2;
  let fillModeId;
  switch (fillMode) {
    case 'constant':
      fillModeId = 1;
      break;
    case 'reflect':
      fillModeId = 2;
      break;
    case 'wrap':
      fillModeId = 3;
      break;
    case 'nearest':
      fillModeId = 4;
      break;
    default:
      fillModeId = 1;
      break;
  }

  wasmTransform(imageId, transformsId, true, batch, outHeight, outWidth, numChannels, imageWidth, imageHeight, strides, stridesLength, interpolationModeId, fillModeId, fillValue, outId);

  return out;
}

export const transformConfig: KernelConfig = {
  kernelName: Transform,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: transform as {} as KernelFunc
};
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import {KernelConfig, Multiply} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = true;
export const multiplyConfig: KernelConfig =
createBinaryKernelConfig(Multiply, supportsFullBroadcast);

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Multiply.js.map
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import {ClipByValue, ClipByValueAttrs, ClipByValueInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmClip: (xId: number, min: number, max: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmClip = backend.wasm.cwrap(ClipByValue, null /* void */, 
    [ 'number', // x_id
      'number',  // min
      'number',  // max
      'number'   // out_id
    ]);
}

function clip(args: {
  inputs: ClipByValueInputs,
  backend: BackendWasm,
  attrs: ClipByValueAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {clipValueMin, clipValueMax} = attrs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const out = backend.makeOutput(x.shape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmClip(xId, clipValueMin, clipValueMax, outId);
  return out;
}

export const clipByValueConfig: KernelConfig = {
  kernelName: ClipByValue,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: clip as {} as KernelFunc
};

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Multiply.js.map
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 *============================================================================================================
 */
/**
 * @deprecated Use `setWasmPaths` instead.
 * Sets the path to the `.wasm` file which will be fetched when the wasm
 * for more details.
 * @param path wasm file path or url
 * @param usePlatformFetch optional boolean to use platform fetch to download
 * the wasm file, default to false.
 *
 * @doc {heading: 'Environment', namespace: 'wasm'}
 */

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/tf-backend-wasm.es2017.js

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* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/starter/parcel/index.html

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```
```

```
import {KernelConfig, KernelFunc, Sigmoid, SigmoidInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmFunc: (xId: number, outId: number) => void = null;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(Sigmoid, null /* void */, ['number', 'number']);
}

function sigmoid(args: {backend: BackendWasm, inputs: SigmoidInputs}):
  TensorInfo {
    const {backend, inputs: {x}} = args;
    const xId = backend.dataIdMap.get(x.dataId).id;
    const out = backend.makeOutput(x.shape, x.dtype);
    const outId = backend.dataIdMap.get(out.dataId).id;

    // Short-circuit zero-sized tensors.
    if (util.sizeFromShape(out.shape) === 0) {
      return out;
    }

    wasmFunc(xId, outId);
    return out;
}

export const sigmoidConfig: KernelConfig = {
  kernelName: 'Sigmoid',
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: sigmoid as {} as KernelFunc
};
```
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6
Open Source Used in Cisco Meeting Server (formerly Acano Server) 3.6

```javascript
import './flags_wasm';

import {backend_util, BackendTimingInfo, DataStorage, DataType, deprecationWarn, engine, env, KernelBackend, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasmModule, WasmFactoryConfig} from '../wasm-out/tfjs-backend-wasm';
import {BackendWasmThreadedSimdModule} from '../wasm-out/tfjs-backend-wasm-threaded-simd';
import wasmFactoryThreadedSimd from '../wasm-out/tfjs-backend-wasm-threaded-simd.js';
// @ts-ignore
import {wasmWorkerContents} from '../wasm-out/tfjs-backend-wasm-threaded-simd.worker.js';
import wasmFactory from '../wasm-out/tfjs-backend-wasm.js';

interface TensorData {
  id: number;
  memoryOffset: number;
  shape: number[];
  dtype: DataType;
  refCount: number;
  /** Only used for string tensors, storing encoded bytes. */
  stringBytes?: Uint8Array[];
}

export type DataId = object;  // object instead of {} to force non-primitive.

export class BackendWasm extends KernelBackend {
  // 0 is reserved for null data ids.
  private dataIdNextNumber = 1;
  dataIdMap:
```
```javascript
DataStorage<TensorData>.

constructor(public wasm:
  BackendWasmModule|BackendWasmThreadedSimdModule) {
  super();
}

this.wasm.tfjs.initWithThreadsCount(threadsCount);
actualThreadsCount = this.wasm.tfjs.getThreadsCount();

this.dataIdMap = new DataStorage(this, engine());

write(values: backend_util.BackendValues, shape: number[], dtype: DataType):
DataId {
  const dataId = [id: this.dataIdNextNumber++];

  return dataId;
}

numDataIds(): number {
  return this.dataIdMap.numDataIds();
}

dataIdMove(dataId, values, shape, dtype, 1):

async time(f: () => void): Promise<BackendTimingInfo> {
  const start = util.now();

  f();

  const kernelMs = util.now() - start;

  return {kernelMs};
}

move(dataId, values, shape, dtype, refCount: number): void {
  void;
}

read(dataId: DataId): Promise<backend_util.BackendValues> {
  return this.readSync(dataId);
}

readSync(dataId: DataId): backend_util.BackendValues {
  const {memoryOffset, dtype, shape} =
    this.dataIdMap.get(dataId);

  if (dtype === 'string') {
    return stringBytes;
  }

  const bytes = this.wasm.HEAPU8.slice(
      memoryOffset,
      memoryOffset +
      util.sizeFromShape(shape) * util.bytesPerElement(dtype));

  return typedArrayFromBuffer(bytes.buffer, dtype);
}

refCount(dataId: DataId): number {
  if (this.dataIdMap.has(dataId)) {
    const tensorData =
      this.dataIdMap.get(dataId);

    return tensorData.refCount;
  }

  return 0;
}

incRef(dataId: DataId) {
  const data = this.dataIdMap.get(dataId);

  if (data != null) {
    data.refCount++;
  }
}

floatPrecision(): 32 {
  return 32;
}

getMemoryOffset(dataId: DataId): number {
  return this.dataIdMap.get(dataId).memoryOffset;
}

disposeData(dataId: DataId, force = false): boolean {
  if (this.dataIdMap.has(dataId)) {
    const data =
      this.dataIdMap.get(dataId);

    data.refCount--;

    if (!force && data.refCount > 0) {
      return false;
    }

    this.wasm._free(data.memoryOffset);
    this.wasm.tfjs.disposeData(data.id);
    this.dataIdMap.delete(dataId);
  }

  return true;
}

dispose(): void {
  this.wasm.PThread.terminateAllThreads();
}

disposeAllThreads(): void {
  this.wasm = null;
}

memory() {
  return {unreliable: false};
}

* Dispose the memory if the dataId has 0 refCount. Return true if the memory
  is released, false otherwise.

* @param dataId null 

* @param force Optional, remove the data regardless of refCount

* @param disposeData(null | disposing | disposing); boolean

  

* Make a tensor info for the output of an op. If `memoryOffset` is not defined,
  this method allocates memory on the WASM heap. If `memoryOffset` is defined,
  the memory was allocated elsewhere.

* @param shape: number[]

  @param dtype: Data Type

  @param memoryOffset?: number:

  @param number:

  @param TensorInfo

  return dataId;

  

  else {
    const dataId =
      this.dataIdMap.get(dataId);
    
    if (data != null) {
      data.refCount++;
    }

    return floatPrecision();
  }

  return 32;
}

// Returns the memory offset of a tensor. Useful for debugging and unit
// testing.

getMemoryOffset(dataId: DataId): number {
  return this.dataIdMap.get(dataId).memoryOffset;
}

dispose() {
  this.wasm.PThread.dispose();
}

if (PThread in this.wasm) {
  this.wasm.PThread.terminateAllThreads();
}

this.wasm = null;

memory() {
  return {unreliable: false};
}

} /* This is a rollup plugin patch function. */

function createInstantiateWasmFunc(path: string) {
  // this will be replace by rollup plugin patchWetchatWebAssembly
```
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6  3022

```javascript

// miniprogram's output

// tslint:disable-next-line:no-any
return (imports: any, callback: any) => {
  util.fetch(path, {credentials: 'same-origin'}).then(response => {
    if (!response['ok']) {
      imports.env.a(`failed to load wasm binary file at '${path}'`);
    }
    response.arrayBuffer().then(binary => {
      if (wasmPath != null) {
        return wasmPath;
      } else if (wasmModuleFolder != null) {
        return wasmModuleFolder + path;
      } else {
        return getPathToWasmBinary(
            simdSupported as boolean, threadsSupported as boolean,
            wasmPathPrefix != null ? wasmPathPrefix : '');
      }
      return new Promise((resolve, reject) => {
        const factoryConfig: WasmFactoryConfig = {
          factoryConfig: WasmFactoryConfig = {};
          factoryConfig.locateFile = (path, prefix) => {
            if (path.endsWith('.worker.js')) {
              const response = wasmWorkerContents;
              const blob = new Blob([response], {type: 'application/javascript'});
              return URL.createObjectURL(blob);
            }
            return prefix + path;
          };
          factoryConfig.onAbort = () => {
            if (initialized) {
              // Emscripten already called console.warn so no need to
              // double log.
              return;
            }
            if (initAborted) {
              // Emscripten calls `onAbort` twice, resulting in double
              // error
              return;
            }
            initAborted = true;
            const rejectMsg =
                'Make sure the server can serve the `.wasm` file relative to the ' +
                'bundled js file. For more details see
                https://github.com/tensorflow/tfjs-backend-wasm/README.md#using-bundlers';
            reject({message: rejectMsg});
          };
        }
        let wasm: Promise<BackendWasmModule> = Array.from(imports.env); wasmPath = null;
        wasm = new Blob(wasmContents, {type: 'application/octet-stream'});
        if (wasmPathPrefix != null) {
          wasmPath = wasmPathPrefix + path;
        } else {
          wasmPath = wasmModuleFolder + path;
        }
        return new Promise((resolve, reject) => {
          const factoryConfig: WasmFactoryConfig = {
            factoryConfig: WasmFactoryConfig = {};
            factoryConfig.locateFile = (path, prefix) => {
              if (path.endsWith('.wasm')) {
                return getPathToWasmBinary(
                    simdSupported as boolean, threadsSupported as boolean,
                    wasmPathPrefix != null ? wasmPathPrefix : '');
              }
              return prefix + path;
            };
            factoryConfig.onAbort = () => {
              if (initialized) {
                // Emscripten already called console.warn so no need to
double log
              } else if (initAborted) {
                // Emscripten calls `onAbort` twice, resulting in double
error
              }
              // Emscripten calls `onAbort` twice, resulting in double
error
              // Emscripten calls `onAbort` twice, resulting in double
error
            };
          }
          let wasm: Promise<BackendWasmModule> = Array.from(imports.env);
          if (wasmPath == null) {
            factoryConfig.mainScriptUrlOrBlob = new Blob(['var WasmBackendModuleThreadedSimd =

```
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```javascript
import {KernelConfig, Rsqrt} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const rsqrtConfig: KernelConfig = createUnaryKernelConfig(Rsqrt);
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Rsqrt.js.map

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```javascript
import {KernelConfig, Less} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = false;
export const lessConfig: KernelConfig =
createBinaryKernelConfig(Less, supportsFullBroadcast, 'bool');
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Less.js.map

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```javascript
import {KernelConfig, LeakyRelu} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = false;
export const leakyReluConfig: KernelConfig =
createBinaryKernelConfig(LeakyRelu, supportsFullBroadcast, 'bool');
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/LeakyRelu.js.map

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import {KernelConfig, KernelFunc, LeakyRelu, LeakyReluAttrs, LeakyReluInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmFunc: (xId: number, dtype: number, leakyreluAlpha: number, outId: number) => void;

function setupFunc(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(LeakyRelu, null /* void */, ['number', 'number', 'number', 'number']);
}

export function leakyRelu(args: {inputs: LeakyReluInputs, attrs: LeakyReluAttrs, backend: BackendWasm}): TensorInfo {
  const {inputs: {x}, attrs: {alpha}, backend} = args;

  const xId = backend.dataIdMap.get(x.dataId).id;
  // According to TF API, LeakyRelu returns float32 when input is either float32 or int32.
  const out = backend.makeOutput(x.shape, 'float32');

  if (util.sizeFromShape(x.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmFunc(xId, CppDType[x.dtype], alpha, outId);
  }

  return out;
}

export const leakyReluConfig: KernelConfig = {
  kernelName: LeakyRelu,
  backendName: 'wasm',
  setupFunc,
  kernelFunc: leakyRelu as {} as KernelFunc,
};
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 */
import {BatchMatMul, BatchMatMulAttrs, BatchMatMulInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {reshape} from './Reshape';

let wasmBatchMatMul: (
    aId: number, aShape: Uint8Array, aShapeSize: number, bId: number, bShape: Uint8Array, bShapeSize: number, transposeA: boolean, transposeB: boolean, outId: number) =>
    void;

function setup(backend: BackendWasm) {
  wasmBatchMatMul = backend.wasm.cwrap(BatchMatMul, null /* void */, [
    'number', // a_id
    'array',   // a_shape
    'number', // a_shape.length
    'number',  // b_id
    'array',   // b_shape
    'number', // b_shape.length
    'number', // transpose_a
    'number', // transpose_b
    'number'   // out_id
  ]);}

function batchMatMul(args: {
  inputs: BatchMatMulInputs,
  backend: BackendWasm,
  attrs: BatchMatMulAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {a, b} = inputs;
  const {transposeA, transposeB} = attrs;

  if (a.dtype !== 'float32' || b.dtype !== 'float32') {
    throw new Error(`BatchMatMul for non-non-float32 tensors not yet supported.`);
  }

  const aRank = a.shape.length;
  const bRank = b.shape.length;
  const innerShapeA = transposeA ? a.shape[aRank - 2] : a.shape[aRank - 1];
  const innerShapeB = transposeB ? b.shape[bRank - 2] : b.shape[bRank - 1];
  const outerDimsA = a.shape.slice(0, -2);
  const outerDimsB = b.shape.slice(0, -2);
  const batchDimA = util.sizeFromShape(outerDimsA);
  const batchDimB = util.sizeFromShape(outerDimsB);
  const batchDimCompatible = batchDimA > batchDimB ? a.shape[0] : b.shape[0];
  const outShapeOuterDims = batchDimCompatible ? a.shape.slice(0) : b.shape.slice(0);
  const outShape = outShapeOuterDims.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShapeOuterDimsA = outShapeOuterDims.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShapeOuterDimsB = outShapeOuterDims.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShapeOuterDims = outShapeOuterDimsA.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShapeOuterDimsB = outShapeOuterDims.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));

  const outShapeOuterDims = outShapeOuterDims.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShape = outShapeOuterDims.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));

  const outShapeOuterDimsA = outShapeOuterDims.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShapeOuterDimsB = outShapeOuterDims.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));

  const outShapeOuterDims = outShapeOuterDims.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShape = outShapeOuterDims.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));

  const outShapeOuterDimsA = outShapeOuterDims.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShapeOuterDimsB = outShapeOuterDims.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));

  const outShapeOuterDims = outShapeOuterDims.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShape = outShapeOuterDims.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));

  const outShapeOuterDimsA = outShapeOuterDims.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShapeOuterDimsB = outShapeOuterDims.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));

  const outShapeOuterDims = outShapeOuterDims.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShape = outShapeOuterDims.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));

  const outShapeOuterDimsA = outShapeOuterDims.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShapeOuterDimsB = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));

  const outShapeOuterDimensions = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShape = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));

  const outShapeOuterDimensionsA = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShapeOuterDimensionsB = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));

  const outShapeOuterDimensions = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShape = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));

  const outShapeOuterDimensionsA = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShapeOuterDimensionsB = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));

  const outShapeOuterDimensions = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShape = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));

  const outShapeOuterDimensionsA = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShapeOuterDimensionsB = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));

  const outShapeOuterDimensions = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShape = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));

  const outShapeOuterDimensionsA = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShapeOuterDimensionsB = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));

  const outShapeOuterDimensions = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShape = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));

  const outShapeOuterDimensionsA = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShapeOuterDimensionsB = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));

  const outShapeOuterDimensions = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShape = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));

  const outShapeOuterDimensionsA = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShapeOuterDimensionsB = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));

  const outShapeOuterDimensions = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));
  const outShape = outShapeOuterDimensions.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));

  const outShape = outShape.concat((a.shape[0] ? a.shape[0] : 1), (b.shape[0] ? b.shape[0] : 1));

  const out = backend.makeOutput(outShape);

  const aShapeBytes = new Uint8Array(new Int32Array(a.shape).buffer);
  const bShapeBytes = new Uint8Array(new Int32Array(b.shape).buffer);

  wasmBatchMatMul(aId, aShapeBytes, aShapeSize, bId, bShapeBytes, bShapeSize, transposeA, transposeB, outId);

  backend.disposeData(aId);
  backend.disposeData(bId);

  out.shape = outShape;
  return out;
}

export const batchMatMulConfig: KernelConfig = {
  kernelName: BatchMatMul,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: batchMatMul as {} as KernelFunc
};
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 *
 *=============================================================================
 */

import {_FusedMatMul, _FusedMatMulAttrs, _FusedMatMulInputs, KernelConfig, KernelFunc} from
@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {FusableActivation} from
./types';

let wasmFusedMatMul:
    (aId: number, aShape: Uint8Array, aShapeSize: number, bId: number,

function setup(backend: BackendWasm) {
  wasmFusedMatMul = backend.wasm.cwrap(_FusedMatMul,
      null /* void */ , ['number', 'array', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number']
  );
}

function fusedBatchMatMul(args: {}) {
  const {inputs, backend, attrs} = args;
  const {a, b, bias, preluActivationWeights} = inputs;
  if (a.dtype !== 'float32' || b.dtype !== 'float32') {
    throw new Error('FusedMatMul for non-float32 tensors not yet supported.');
  }
  const {transposeA, transposeB, activation, leakyreluAlpha} = attrs;
  const aId = backend.dataIdMap.get(a.dataId).id;
  const bId = backend.dataIdMap.get(b.dataId).id;
  const biasId = 0;
  if (bias != null) {
    const biasData = backend.dataIdMap.get(bias.dataId);
    if (biasData.shape.length !== 1) {
      throw new Error('FusedMatMul only supports rank-1 bias but got ' +
        (bias.rank - 1) + ' rank');
    }
    biasId = biasData.id;
  }
  const preluActivationWeightsId = preluActivationWeights == null ?
      0 :
      backend.dataIdMap.get(preluActivationWeights.dataId).id;
  const fusedActivation =
      FusableActivation[activation as {} as keyof typeof FusableActivation];
  if (fusedActivation == null) {
    throw new Error('FusedActivation not yet supported for FusedConv2D.');
  }
  const batchDim = a.shape[0];
  const out = backend.makeOutput([batchDim, leftDim, rightDim], a.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  const aShapeBytes = new Uint8Array(new Int32Array(a.shape).buffer);
  const bShapeBytes = new Uint8Array(new Int32Array(b.shape).buffer);
  wasmFusedMatMul(aId, aShapeBytes, a.shape.length, bId, bShapeBytes, b.shape.length,
      transposeA, transposeB, fusedActivation, biasId, preluActivationWeightsId,
      leakyreluAlpha || 0, outId);
  return out;
}

export const fusedMatMulConfig: KernelConfig = {
  kernelName: '_FusedMatMul',
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: fusedBatchMatMul as {} as KernelFunc
};

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=============================================================================

import {Abs, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const absConfig: KernelConfig = createUnaryKernelConfig(Abs);

=============================================================================

import {backend_util, BinaryInputs, DataType, KernelConfig, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

export function createBinaryKernelConfig(
    kernelName: string, supportsFullBroadcast: boolean,
    dtype?: DataType): KernelConfig {
  let wasmFunc:
      (aId: number, aShape: Uint8Array, aShapeLen: number, bId:
       number, bShape: Uint8Array, bShapeLen: number, dtype: number, outId: number) =>
          void;

  function setupFunc(backend: BackendWasm): void {
    wasmFunc = backend.wasm.cwrap(kernelName, null /* void */,
      ['number', // a_id,
      'array', // a_shape
      'number', // a_shape.length
      'number', // b_id
      'array', // b_shape
      'number', // b_shape.length
      'number', // dtype
      'number' // out_id]
    );

  function kernelFunc(args: {backend: BackendWasm, inputs: BinaryInputs}):
      TensorInfo {
    const {backend,
      inputs} = args;
    const {a, b} = inputs;
    const aId = backend.dataIdMap.get(a.dataId).id;
    const bId = backend.dataIdMap.get(b.dataId).id;

    const outputType = dtype != null ? dtype : a.dtype;
    const newShape = backend_util.assertAndGetBroadcastShape(a.shape, b.shape);
    const out = backend.makeOutput(newShape, outputType);

    // Short-circuit zero-sized tensors.
    if (util.sizeFromShape(newShape) === 0) {
      return out;
    }

    const aShapeBytes = new Uint8Array(new Int32Array(a.shape).buffer);
    const bShapeBytes =
      new Uint8Array(new Int32Array(b.shape).buffer);
    const outId = backend.dataIdMap.get(out.dataId).id;

    const kernelFunc = () => wasmFunc(
        aId, aShapeBytes, a.shape.length, bId, bShapeBytes, b.shape.length,
        CppDType[a.dtype], outId);

    // Currently only some float operations support full broadcast.
    if (supportsFullBroadcast && a.dtype === 'float32') {
      kernelFunc();
      return out;
    }

    const aBroadcastDims = backend_util.getBroadcastDims(a.shape, newShape);
    const bBroadcastDims =
      backend_util.getBroadcastDims(b.shape, newShape);
    const loopsOverAllOfA = aBroadcastDims.every((v, i) =>
      v === i);\n    const loopsOverAllOfB = bBroadcastDims.every((v, i) =>
      v === i);\n    if (loopsOverAllOfA && loopsOverAllOfB) {
      kernelFunc();\n    } else {\n      throw new Error(\n        'Broadcasting along outer dims is not yet supported for {a.dtype}:' +
        '{kernelName}.')\n    }\n  }\n
  return {kernelName, backendName: 'wasm', setupFunc, kernelFunc};\n}

//=======================================================================

import {Add, KernelConfig} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

export const addConfig: KernelConfig =
  createBinaryKernelConfig(Add, supportsFullBroadcast);

//=======================================================================
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=============================================================================

*/

import {AddN, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmFunc:
    (inputIds: Uint8Array, inputIdsLen: number, dtype: number, outId: number) =>
        void
            
void

function setupFunc(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(AddN, null /* void */,[
    'array',   // input_ids
    'number',  // input_ids.length
    'number',  // number,
    'number',  // dtype
    'number',  // out_id
  ]);
}

function addn(args: {inputs: TensorInfo[], backend: BackendWasm}) {
  const {inputs, backend} = args;
  const out = backend.makeOutput(inputs[0].shape, inputs[0].dtype);
  const inputIds = inputs.map(x => backend.dataIdMap.get(x.dataId).id);
  const inputIdsBytes = new Uint8Array(new Int32Array(inputIds).buffer);
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmFunc(inputIdsBytes, inputIds.length, CppDType[out.dtype], outId);
  return out;
}

export const addNConfig: KernelConfig = {
  kernelName: AddN,
  backendName: 'wasm',
  setupFunc,
  kernelFunc: addn as {} as KernelFunc,
};

/*=============================================================================

*/

import {Identity, IdentityInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function identity(args: {inputs: IdentityInputs, backend: BackendWasm}):
    TensorInfo {
  const {inputs: {x}, backend} = args;
  const out = backend.makeOutput(x.shape, x.dtype);
  const inVals = backend.typedArrayFromHeap(x);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.set(inVals);
  return out;
}

export const identityConfig: KernelConfig = {
  kernelName: Identity,
  backendName: 'wasm',
  kernelFunc: identity as {} as KernelFunc,
};

/*=============================================================================

*/

import {KernelConfig, KernelFunc, TensorInfo, Transpose, TransposeAttrs, TransposeInputs} from '@tensorflow/tfjs-core';

import {Identity} from './Identity';

import {CppDType} from './types';

let wasmTranspose: (
    xId: number, xShape: Uint8Array, xShapeLength: number, dtype: CppDType,
    outId: number, perm: Uint8Array, permLength: number) =>
        void
    
void

function setup(backend: BackendWasm) {
  wasmTranspose = backend.wasm.cwrap(Transpose, null /* void */,[
    'number',  // xId
    'array',   // x.shape
    'number',  // dtype
    'number',  // outId
    'array',   // perm
    'number',  // permLength
  ]);
}

export function transpose(
    args:
    {inputs: TransposeInputs, backend: BackendWasm, attrs: TransposeAttrs}):
    TensorInfo {
  const {inputs, backend, attrs} = args;
  // Reduce any dimensions with size one. Lower-rank transpose kernel performs
  // better
  //
due to simpler memory access pattern.

```javascript
const [reducedShape, perm] = removeOneSizeDims(inputs.x.shape, attr.perm);

if (permIsNoOp) {
  let permIsNoOp = true;
  for (let i = 0; i < perm.length; i++) {
    if (perm[i] === i) {
      permIsNoOp = false;
    }
  }
}

const outShape = computeOutShape(inputs.x.shape, attr.perm);

const xId = backend.dataIdMap.get(x.dataId).id;
const outId = backend.dataIdMap.get(out.dataId).id;
const permBytes = new Uint8Array(new Int32Array(perm).buffer);
const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);

wasmTranspose(xId, xShapeBytes, x.shape.length, CppDType[x.dtype], outId, permBytes, out.perm.length);

const out =

computeOutShape(outShape, attr.perm);

for (let i = 0; i < outShape.length; i++) {
  outShape[i] = inShape[perm[i]];
}

if (permIsNoOp)
```
```typescript
import {ArgMax, ArgMaxAttrs, ArgMaxInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from './kernel_utils';
import {CppDType} from './types';

let wasmFunc: (xId: number, dtype: number, outerSize: number, innerSize: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmFunc = backend.wasm.cwrap(ArgMax, null /* void */, [
    'number',  // xId
    'number',  // dtype
    'number',  // outerSize
    'number',  // innerSize
    'number'   // outId
  ]);
}

function argmax(args: {inputs: ArgMaxInputs, backend: BackendWasm, attrs: ArgMaxAttrs}) {
  const {backend, inputs, attrs} = args;

  const {axis} = attrs as {} as ArgMaxAttrs;
  const {x} = inputs as {} as ArgMaxInputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, inputWasTransposed} = permuteAxesAndTranspose(x, axis, backend);
  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose of this.
      // once we are done.
      input = transposed;
      inputId = transposedId;
    }
  }

  const outShape = input.shape.slice(0, -1);
  const out = backend.makeOutput(outShape, 'int32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  const outerSize = util.sizeFromShape(out.shape);
  const innerSize = input.shape[axes[0]];
  wasmFunc(inputId, CppDType[x.dtype], outerSize, innerSize, outId);

  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  return out;
}

export const argMaxConfig: KernelConfig = {
  kernelName: ArgMax,
  backendName: 'wasm',
  kernelFunc: argmax as {} as KernelFunc,
  setupFunc: setup
};
```
only supports average pooling with dilation = [1, 1].

```javascript
\$\{convInfo.dilationHeight\},
\$\{convInfo.dilationWidth\}\};\}$\n\n  const out = backend.makeOutput(convInfo.outShape, 'float32');\n  const outId = backend.dataIdMap.get(out.dataId).id;\n  wasmAvgPool(\n      xId, x.shape[0], x.shape[1], x.shape[2],
      filterHeight, filterWidth, \n      padTop, padRight, padBottom, padLeft, strideHeight, strideWidth, channels, \n      outId);\n  return out;\n};\n
export const avgPoolConfig: KernelConfig = {
  kernelName: AvgPool,
  backendName: 'wasm',
  setupFunc: setup,\n  kernelFunc: avgPool as {} as KernelFunc
};

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import {KernelConfig, KernelFunc, Reshape, ReshapeAttrs, ReshapeInputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function reshape(
    args: {inputs: ReshapeInputs, attrs: ReshapeAttrs, backend: BackendWasm}) {
  const {inputs, attrs} = args;
  const {x} = inputs;
  const {shape} = attrs;

  const xSize = util.sizeFromShape(x.shape);
  const $shape = util.inferFromImplicitShape(shape, xSize);

  util.assert(
      xSize === util.sizeFromShape($shape),
      () => `new shape: ${$shape}, old shape: ${x.shape}. New shape and old ` +
          `shape must have the same number of elements.`);

  // Backend needs to track refCount for the dataId for reshape op
  args.backend.incRef(x.dataId);

  return {dataId: x.dataId, shape: $shape, dtype: x.dtype};
}

export const reshapeConfig: KernelConfig = {
  kernelName: Reshape,
  backendName: 'wasm',
  setupFunc: setup,\n  kernelFunc: reshape as {} as KernelFunc
};

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import {BatchMatMul, BatchMatMulAttrs, BatchMatMulInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {reshape} from './Reshape';

let wasmBatchMatMul: (aId: number, aShape: Uint8Array, aShapeSize: number, bId: number,
  bShape: Uint8Array, bShapeSize: number, transposeA: boolean, transposeB: boolean, outId: number) =>
  void;\n
function setup(backend: BackendWasm) {
  wasmBatchMatMul = backend.wasm.cwrap(BatchMatMul,
null /* void */, [    'number',  // a_id
    'array',   // a_shape
    'number',  // a_shape.length
    'number',  // transpose_a
    'number',  // transpose_b
    'number'   // out_id
  ]);\n}

function batchMatMul(args: {
  inputs: BatchMatMulInputs,
  backend: BackendWasm,
  attrs: BatchMatMulAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {a, b} = inputs;
  const {transposeA, transposeB} = attrs;

  if (a.dtype !== 'float32' || b.dtype !== 'float32') {
    throw new Error(`BatchMatMul for non non-float32 tensors not yet supported.`);
  }

  const aRank = a.shape.length;
  const bRank = b.shape.length;

  const innerShapeA = transposeA ? a.shape[aRank - 2] : a.shape[aRank - 1];
  const innerShapeB = transposeB ? b.shape[bRank - 1] : b.shape[bRank - 2];

  const outerShapeA = transposeA ? a.shape[aRank - 1] : a.shape[aRank - 2];
  const outerShapeB = transposeB ? b.shape[bRank - 2] : b.shape[bRank - 1];

  const outerDimsA = a.shape.slice(0, -2);
  const outerDimsB = b.shape.slice(0, -2);

  const batchDimA = util.sizeFromShape(outerDimsA);
  const batchDimB = util.sizeFromShape(outerDimsB);

  const batchDimsCompatible =
      batchDimA === batchDimB || batchDimA === 1 || batchDimB === 1;

  util.assert(
      aRank >= 2 && bRank >= 2 && batchDimsCompatible,
      () => `Error in matMul: the input batch dimensions must either be the same or at least one input batch dimension must be 1. Got input`
const outShapeOuterDims =
  outerShapeA > outerShapeB ? a.shape.slice(0, -2) : b.shape.slice(0, -2);
  const outShape =
    outShapeOuterDims.concat([innerShapeA, innerShapeB]);
  util.assert(
    innerShapeA === innerShapeB,
    `Error in matMul: inner shapes (${innerShapeA}) and (` +
    `${innerShapeB}) of Tensors with shapes
${a.shape} and ` +
    `${b.shape} and transposeA=${transposeA} ` +
    ` and transposeB=${transposeB} must match.`);
  const a3dShape = transposeA ? [batchDimA, innerShapeA, outerShapeA] :
    [batchDimA, outerShapeA, innerShapeA];
  const b3dShape = transposeB ? [batchDimB, outerShapeB,
    innerShapeB] :
    [batchDimB, innerShapeB, outerShapeB];
  // The rest of the implementation is designed to operate on rank-3 tensors
  const a3d = reshape({inputs: {x: a}, backend, attrs:
    {shape: a3dShape}});
  const b3d = reshape({inputs: {x: b}, backend, attrs: {shape: b3dShape}});
  const aShapeBytes = new Uint8Array(new Int32Array(a3d.shape).buffer);
  const bShapeBytes = new Uint8Array(new Int32Array(b3d.shape).buffer);
  wasmBatchMatMul(a3dId, aShapeBytes, a3d.shape.length, b3dId,
    bShapeBytes, b3d.shape.length, transposeA, transposeB, outId);
  backend.disposeData(a3d.dataId);
  backend.disposeData(b3d.dataId);
  out.shape = outShape;
  return out;
}

export const batchMatMulConfig:
  KernelConfig = {
    kernelName: BatchMatMul,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: batchMatMul as {} as KernelFunc
};

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 *
 *=============================================================================
 */
import { backend_util, util } from '@tensorflow/tfjs-core';
export function concatImpl(inputs, outShape, dtype,
  simplyConcat) {
  const outVals = util.getArrayFromDType(dtype, util.sizeFromShape(outShape));
  if (simplyConcat && dtype !== 'string') {
    // Use built-in TypedArray.set() method for speed.
    let offset = 0;
    inputs.forEach(input => {
      const size = util.sizeFromShape(input.shape);
      outVals.set(input.vals, offset);
      offset += size;
    });
  }
  else {
    let colOffset = 0;
    inputs.forEach(input => {
      const decodedData = dtype === 'string' ?
        backend_util.fromUint8ToStringArray(input.vals) :
        input.vals;
      let tIdx = 0;
      for (let row = 0; row < input.shape[0]; ++row) {
        const resIdx = row * outShape[1] + colOffset;
        for (let col = 0; col < input.shape[1]; ++col) {
          outVals[resIdx + col] = decodedData[tIdx++];
        }
        colOffset += input.shape[1];
      }
    });
  }
  return outVals;
}
import { util } from '@tensorflow/tfjs-core';
export function rangeImpl(start, stop, step, dtype) {
    const sameStartStop = start === stop;
    const increasingRangeNegativeStep = start < stop && step < 0;
    const decreasingRangePositiveStep = stop < start && step > 0;
    if (sameStartStop || increasingRangeNegativeStep ||
        decreasingRangePositiveStep) {
        return util.makeZerosTypedArray(0, dtype);
    }
    const numElements = Math.abs(Math.ceil((stop - start) / step));
    const values = util.makeZerosTypedArray(numElements, dtype);
    if (stop < start && step === 1) {
        // Auto adjust the step's sign if it hasn't been set
        // (or was set to 1)
        step = -1;
    }
    values[0] = start;
    for (let i = 1; i < values.length; i++) {
        values[i] = values[i - 1] + step;
    }
    return values;
}
import { backend_util, buffer, Slice, slice_util, util } from '@tensorflow/tfjs-core';
import { assertNotComplex } from '../cpu_util';
export function sliceImpl(vals, begin, size, shape, dtype) {
    const isContinous = slice_util.isSliceContinous(shape, begin, size);
    const length = util.sizeFromShape(size);
    const xStrides = util.computeStrides(shape);
    if (isContinous) {
        const flatOffset = slice_util.computeFlatOffset(begin, xStrides);
        if (dtype === 'string') {
            return vals.slice(flatOffset, flatOffset + length);
        }
        return vals.subarray(flatOffset, flatOffset + length);
    }
    const decodedData = dtype === 'string' ?
        backend_util.fromUint8ToStringArray(vals) :
        vals;
    const inBuf = buffer(shape, dtype, decodedData);
    const outBuf = buffer(size, dtype);
    for (let i = 0; i < outBuf.size; ++i) {
        const outLoc = outBuf.indexToLoc(i);
        const inLoc = outLoc.map((idx, j) => idx + begin[j]);
        outBuf.set(inBuf.get(...inLoc), ...outLoc);
    }
    if (dtype === 'string') {
        return backend_util.fromStringArrayToUint8(outBuf.values);
    }
    return outBuf.values;
}
export function slice(args) {
    const { inputs, backend, attrs } = args;
    const { x } = inputs;
    const { begin, size } = attrs;
    assertNotComplex(x, 'slice');
    const [$begin, $size] = slice_util.parseSliceParams(x, begin, size);
    slice_util.assertParamsValid(x, $begin, $size);
    const vals = backend.data.get(x.dataId).values;
    const outVals = sliceImpl(vals, $begin, $size, x.shape, x.dtype);
    return backend.makeTensorInfo($size, x.dtype, outVals);
}
export const sliceConfig = {
    kernelName: Slice,
    backendName: 'cpu',
    kernelFunc: slice
};
import {backend_util, KernelConfig, KernelFunc, Slice, slice_util, SliceAttrs, SliceInputs, TypedArray, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {sliceImplCPU} from '../kernel_utils/shared';

export function slice(args: {inputs: SliceInputs, attrs: SliceAttrs, backend: BackendWasm}) {
  const {inputs: {x}, attrs: {begin, size}, backend} = args;

  const [begin_, size_] = slice_util.parseSliceParams(x, begin, size);

  const isContinous = slice_util.isSliceContinous(x.shape, begin_, size_);
  const xVals = backend.readSync(x.dataId);
  const out = backend.makeOutput(size_, x.dtype);
  const xStrides = util.computeStrides(x.shape);
  const outData = backend.dataIdMap.get(out.dataId);

  if (isContinous)
  {  
    const flatOffset = slice_util.computeFlatOffset(begin_, xStrides);
    
    if (x.dtype === 'string') {
      outData.stringBytes = (xVals as Uint8Array[]) .slice(flatOffset, flatOffset + util.sizeFromShape(size_));
    } else {
      const outVals = backend.typedArrayFromHeap(out);
      outVals.set((xVals as TypedArray).subarray(flatOffset, flatOffset + util.sizeFromShape(size_)));
    }
  
    return out;
  }

  if (x.dtype === 'string') {
    const res = sliceImplCPU(xVals, begin_, size_, x.shape, x.dtype);
    outData.stringBytes = res as Uint8Array[];
    return out;
  }

  const outVals = backend.typedArrayFromHeap(out);
  const rank = x.shape.length;
  if (rank === 2)
function slice2d(
    xVals: backend_util.TypedArray, xStride: number,
    outVals: backend_util.TypedArray, begin: [number, number],
    size: [number, number]): void {
  let outOffset = 0;
  const beginI = begin[0];
  const beginJ = begin[1];
  const endI = beginI + size[0];
  for (let i = beginI; i < endI; i++) {
    const xOffset = i * xStride + beginJ;
    outVals.set(xVals.subarray(xOffset, xOffset + size[1]), outOffset);
    outOffset += size[1];
  }
}

function slice3d(
    xVals: backend_util.TypedArray, xStride1: number, xStride2: number,
    outVals: backend_util.TypedArray, begin: [number, number, number],
    size: [number, number, number]): void {
  let outOffset = 0;
  const beginI = begin[0];
  const beginJ = begin[1];
  const beginK = begin[2];
  const endI = beginI + size[0];
  const endJ = beginJ + size[1];
  const endK = beginK + size[2];
  const beginL = begin[3];
  const endL = beginL + size[3];
  for (let i = beginI; i < endI; i++) {
    for (let j = beginJ; j < endJ; j++) {
      for (let k = beginK; k < endK; k++) {
        const xOffset = i * xStride1 + j * xStride2 + k * xStride3 + beginL;
        outVals.set(xVals.subarray(xOffset, xOffset + size[3]), outOffset);
        outOffset += size[3];
      }
    }
  }
}

function slice4d(
    xVals: backend_util.TypedArray, xStride1: number, xStride2: number, xStride3: number,
    outVals: backend_util.TypedArray, begin: [number, number, number, number],
    size: [number, number, number, number]): void {
  let outOffset = 0;
  const beginI = begin[0];
  const beginJ = begin[1];
  const beginK = begin[2];
  const beginL = begin[3];
  const endI = beginI + size[0];
  const endJ = beginJ + size[1];
  const endK = beginK + size[2];
  const endL = beginL + size[3];
  for (let i = beginI; i < endI; i++) {
    for (let j = beginJ; j < endJ; j++) {
      for (let k = beginK; k < endK; k++) {
        for (let l = beginL; l < endL; l++) {
          const xOffset = i * xStride1 + j * xStride2 + k * xStride3 +
            l * xStride4 + beginL;
          outVals.set(xVals.subarray(xOffset, xOffset + size[4]), outOffset);
          outOffset += size[4];
        }
      }
    }
  }
}
result;
}

//export const batchToSpaceNDConfig: KernelConfig = {
//  kernelName: BatchToSpaceND,
//  backendName: 'wasm',
//  kernelFunc: batchToSpaceND as {} as KernelFunc
//};

export const batchToSpaceNDConfig: KernelConfig = {
  kernelName: BatchToSpaceND,
  backendName: 'wasm',
  kernelFunc: batchToSpaceND as {} as KernelFunc
};

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 */

import {Cast, CastAttrs, CastInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function cast(
    args: {inputs: CastInputs, attrs: CastAttrs, backend: BackendWasm}):
    TensorInfo {
  const {inputs: {x}, attrs: {dtype}, backend} = args;
  const out = backend.makeOutput(x.shape, dtype);
  const inVals = backend.typedArrayFromHeap(x);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.set(inVals);
  return out;
}

export const castConfig: KernelConfig = {
  kernelName: Cast,
  backendName: 'wasm',
  kernelFunc: cast as {} as KernelFunc,
};

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import {Ceil} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const ceilConfig: KernelConfig = createUnaryKernelConfig(Ceil);

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 */

import {ClipByValue, ClipByValueAttrs, ClipByValueInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmClip: (xId: number, min: number, max: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmClip = backend.wasm.cwrap(ClipByValue, null /* void */, 
    ['number',  // x_id
     'number',  // min
     'number',  // max
     'number'   // out_id
   ]);}

function clip(args: {
  inputs: ClipByValueInputs,
  backend: BackendWasm,
  attrs: ClipByValueAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {clipValueMin, clipValueMax} = attrs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;
  const inCtx = backend.dataIdMap.get(xId);
  const outCtx = backend.dataIdMap.get(outId);
  const xId = backend.dataIdMap.get(xId);
  const inCtx = backend.dataIdMap.get(xId);
  const outId = backend.dataIdMap.get(outId);
  const wasmClip(xId, clipValueMin, clipValueMax, outId);
  return out;
}

export const clipByValueConfig: KernelConfig = {
    kernelName: ClipByValue,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: clip as {} as KernelFunc
};

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 */
import {backend_util, Concat, ConcatAttrs, ConcatInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {concatImplCPU} from '../kernel_utils/shared';
import {identity} from './Identity';
import {reshape} from './Reshape';

export function concat(
    args: {inputs: ConcatInputs, backend: BackendWasm, attrs: ConcatAttrs}) {
  const {inputs, backend} = args;

  const axis = util.parseAxisParam(args.attrs.axis, inputs[0].shape)[0];

  let outShape = backend_util.computeOutShape(inputs.map(t => t.shape), axis);

  return out;
}

export const concatConfig: KernelConfig = {
  kernelName: Concat,
  backendName: 'wasm',
  kernelFunc: concat as {} as KernelFunc,
};
```javascript
function conv2d(
    args: {inputs: Conv2DInputs, backend: BackendWasm, attrs: Conv2DAttrs}) {
  const {inputs, attrs, backend} = args;

  const {x, filter} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const filterId = backend.dataIdMap.get(filter.dataId).id;

  const {strides, dilations, pad, dimRoundingMode, dataFormat} = attrs;
  const $dataFormat = backend_util.convertConv2DDataFormat(dataFormat);
  const convInfo = backend_util.computeConv2DInfo(
      (x as Tensor4D).shape, (filter as Tensor4D).shape, strides, dilations,
      pad, dimRoundingMode, false, $dataFormat);

  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const padTop = convInfo.padInfo.top;
  const padRight = convInfo.padInfo.right;
  const padBottom = convInfo.padInfo.bottom;
  const padLeft = convInfo.padInfo.left;
  const dilationHeight = convInfo.dilationHeight;
  const dilationWidth = convInfo.dilationWidth;
  const strideHeight = convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;
  const inputChannels = convInfo.inChannels;
  const outputChannels = convInfo.outChannels;
  const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;

  if (convInfo.dataFormat !== 'channelsLast') {
    throw new Error(`wasm backend Conv2D does not support dataFormat: '${convInfo.dataFormat}'. Please use 'channelsLast'.`);
  }

  const out = backend.makeOutput(convInfo.outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmConv2d(xId, x.shape[0], x.shape[1], x.shape[2], filterId, filterHeight, filterWidth, padTop, padRight, padBottom, padLeft, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, outId); return out;
}
```
BackendWasm,

inputs: Conv2DBackpropInputInputs,
attrs: Conv2DBackpropInputAttrs,)
); TensorInfo {

const {backend, inputs, attrs} = args;
const {dy, filter} = inputs;
const {strides, pad, dataFormat, dimRoundingMode, inputShape} = attrs;
const dilations = 1;
const $dataFormat = backend_util.convertConv2DDataFormat(dataFormat);
const convInfo = backend_util.computeConv2DInfo(inputShape, filter.shape as [number, number, number, number], strides, dilations, pad, dimRoundingMode, false /* depthwise */, $dataFormat);

const {batchSize, filterHeight, filterWidth, inChannels, inHeight, inWidth, outChannels, outHeight, outWidth, strideHeight, strideWidth} = convInfo;
const topPad = filterHeight - 1 - convInfo.padInfo.top;
const leftPad = filterWidth - 1 - convInfo.padInfo.left;

const isChannelsLast = convInfo.dataFormat === 'channelsLast';
const dxStrides = util.computeStrides(convInfo.inShape);
const dyStrides = util.computeStrides(dy.shape);
const [fltS0, fltS1, fltS2] = util.computeStrides(filter.shape);

const xBatchStride = dxStrides[0];
const xRowStride = isChannelsLast ? dxStrides[1] : dxStrides[2];
const xColStride = isChannelsLast ? dxStrides[2] : 1;

const topPad = filterHeight - 1 - convInfo.padInfo.top;
const leftPad = filterWidth - 1 - convInfo.padInfo.left;
const isChannelsLast = convInfo.dataFormat === 'channelsLast';
const dxStrides = util.computeStrides(convInfo.inShape);
const dyStrides = util.computeStrides(dy.shape);
const [fltS0, fltS1, fltS2] = util.computeStrides(filter.shape);

const xBatchStride = dxStrides[0];
const xRowStride = isChannelsLast ? dxStrides[1] : dxStrides[2];
const xColStride = isChannelsLast ? dxStrides[2] : 1;

const yBatchStride = dyStrides[0];
const yRowStride = isChannelsLast ? dyStrides[1] : dyStrides[2];
const yColStride = isChannelsLast ? dyStrides[2] : 1;

const yChannelStride = isChannelsLast ? 1 : dyStrides[1];

const yBatchStride = dyStrides[0];
const yRowStride = isChannelsLast ? dyStrides[1] : dyStrides[2];
const yColStride = isChannelsLast ? dyStrides[2] : 1;

const yChannelStride = isChannelsLast ? 1 : dyStrides[1];

const outId = backend.dataIdMap.get(out.dataId).id;
const dyId = backend.dataIdMap.get(dy.dataId).id;
const filterId = backend.dataIdMap.get(filter.dataId).id;

wasmConv2DBackpropInput(dyId, filterId, batchSize, filterHeight, filterWidth, inHeight, inWidth, outChannels, outHeight, outWidth, strideHeight, strideWidth, topPad, leftPad, fltS0, fltS1, fltS2, xBatchStride, xRowStride, xColStride, xChannelStride, yBatchStride, yRowStride, yColStride, yChannelStride, outId); return out;

wasmConv2DBackpropInput(dyId, filterId, batchSize, filterHeight, filterWidth, inHeight, inWidth, outChannels, outHeight, outWidth, strideHeight, strideWidth, topPad, leftPad, fltS0, fltS1, fltS2, xBatchStride, xRowStride, xColStride, xChannelStride, yBatchStride, yRowStride, yColStride, yChannelStride, outId); return out;

wasmConv2DBackpropInput(dyId, filterId, batchSize, filterHeight, filterWidth, inHeight, inWidth, outChannels, outHeight, outWidth, strideHeight, strideWidth, topPad, leftPad, fltS0, fltS1, fltS2, xBatchStride, xRowStride, xColStride, xChannelStride, yBatchStride, yRowStride, yColStride, yChannelStride, outId); return out;

wasmConv2DBackpropInput(dyId, filterId, batchSize, filterHeight, filterWidth, inHeight, inWidth, outChannels, outHeight, outWidth, strideHeight, strideWidth, topPad, leftPad, fltS0, fltS1, fltS2, xBatchStride, xRowStride, xColStride, xChannelStride, yBatchStride, yRowStride, yColStride, yChannelStride, outId); return out;

wasmConv2DBackpropInput(dyId, filterId, batchSize, filterHeight, filterWidth, inHeight, inWidth, outChannels, outHeight, outWidth, strideHeight, strideWidth, topPad, leftPad, fltS0, fltS1, fltS2, xBatchStride, xRowStride, xColStride, xChannelStride, yBatchStride, yRowStride, yColStride, yChannelStride, outId); return out;
import {CropAndResize, CropAndResizeAttrs, CropAndResizeInputs, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';
import {BackendWasm} from './backend_wasm';
import {cast} from './Cast';

// Must match enum in CropAndResize.cc
enum InterpolationMethod {
bilinear = 0,
nearest = 1
}

let wasmCropAndResize: (imagesId: number, boxesId: number, boxIndId: number, numBoxes: number, imagesShape: Uint8Array, cropHeight: number, cropWidth: number, method: number, extrapolationValue: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmCropAndResize = backend.wasm.cwrap(CropAndResize, null /* void */, [
    'number', // imagesId
    'number', // boxesId
    'number', // boxIndId
    'number', // numBoxes
    'array', // images shape
    'number', // cropHeight
    'number', // cropWidth
    'number', // method
    'number', // extrapolation value
    'number' // out Id
  ]);}

function cropAndResize(args: {
  backend: BackendWasm,
  inputs: CropAndResizeInputs,
  attrs: CropAndResizeAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {method, extrapolationValue, cropSize} = attrs;
  const {image, boxes, boxInd} = inputs;

  const numBoxes = boxes.shape[0];
  const [cropHeight, cropWidth] = cropSize as [number, number];
  const outShape = [numBoxes, cropHeight, cropWidth, image.shape[3]];

  let imagesData = backend.dataIdMap.get(image.dataId);
  let castedData;
  if (image.dtype !== 'float32') {
    castedData = cast({backend, inputs: {x: image}, attrs: {dtype: 'float32'}});
    imagesData = backend.dataIdMap.get(castedData.dataId);
  }

  const imagesId = imagesData.id;
  const boxesId = backend.dataIdMap.get(boxes.dataId).id;
  const boxIndId = backend.dataIdMap.get(boxInd.dataId).id;

  const out = backend.makeOutput(outShape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;

  const imagesShapeBytes = new Uint8Array(new Int32Array(image.shape).buffer);

  wasmCropAndResize(imagesId, boxesId, boxIndId, numBoxes, imagesShapeBytes, cropHeight, cropWidth, InterpolationMethod[method as {} as keyof typeof InterpolationMethod], extrapolationValue, outId);

  if (castedData != null) {
    backend.disposeData(castedData.dataId);
  }

  return out;
}

export const cropAndResizeConfig: KernelConfig = {
  kernelName: CropAndResize,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: cropAndResize as {} as KernelFunc
};
backend.dataIdMap.get(permutedOut.dataId).id;
  wasmCumsum(permutedXId, exclusive ? 1 : 0, reverse ? 1 : 0,
  finalDim, permutedOutId, CppDType[x.dtype]);
  // transpose data back if permuted
  let out = permutedOut;
  if (permutation !== null) {
    const undoPermutation = backend_util.undoAxesPermutation(permutation);
    out = transpose({ inputs: { x: permutedOut }, attrs: {
      perm: undoPermutation, backend } });
    backend.disposeData(permutedOutId);
  }
  return out;
}

export const cumsumConfig: KernelConfig = {
  kernelName: Cumsum,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: cumsum as {} as KernelFunc
};

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 */

import { DepthToSpace, DepthToSpaceAttrs, DepthToSpaceInputs, KernelConfig, KernelFunc, TensorInfo, util } from '@tensorflow/tfjs-core';

import { BackendWasm } from '../backend_wasm';

let wasmDepthToSpace:
    (xId: number, blockSize: number, channelsLast: number, xStrides: Uint8Array,
    xStridesLength: number,
    outputShape: Uint8Array, outputStrides: Uint8Array,
    outSize: number, outId: number) => void;

function
    setup(backend: BackendWasm): void {
    wasmDepthToSpace = backend.wasm.cwrap(DepthToSpace, null
    /*void*/, 
    [ 'number', // xId
      'number', // blockSize
      'number', // channelsLast
      'array', // xStrides
      'number', // xStridesLength
      'array', // outputShape
      'array', // outputStrides
      'number', // outSize
      'number', // outId
    ]);
}

export function depthToSpace(args: {
  backend: BackendWasm,
  inputs: DepthToSpaceInputs,
  attrs: DepthToSpaceAttrs
}): TensorInfo {
    const { backend, inputs, attrs } = args;
    const { x } = inputs;
    const { blockSize, dataFormat } = attrs;
    const batchSize = x.shape[0];
    const inputHeight
    = (dataFormat === 'NHWC') ? x.shape[1] : x.shape[2];
    const inputWidth = (dataFormat === 'NHWC')
    ? x.shape[2] : x.shape[3];
    const inputDepth = (dataFormat === 'NHWC')
    ? x.shape[3] : x.shape[1];
    const outputHeight = inputHeight * blockSize;
    const outputWidth = inputWidth * blockSize;
    const outputDepth = inputDepth / blockSize;
    const outputShape = (dataFormat === 'NHWC')
    ? [batchSize, outputHeight, outputWidth, outputDepth] :
    [batchSize, outputDepth, outputHeight, outputWidth];
    const xId = x.dataId.id;
    const xStridesBytes = new Uint8Array(new Int32Array(util.computeStrides(x.shape)).buffer); // array
    const outputShapeBytes = new Uint8Array(new Int32Array(outputShape).buffer); // array
    const outId = backend.dataIdMap.get(x.dataId).id;
    const channelsLast = dataFormat === 'NHWC' ? 1 : 0;
    wasmDepthToSpace(xId, blockSize, channelsLast,
    xStridesBytes, x.shape.length - 1, outputShapeBytes,
    xStridesBytes, outputShape.length, outId);
    return out;
}

export const depthToSpaceConfig: KernelConfig = {
  kernelName: DepthToSpace,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: depthToSpace as {} as KernelFunc
};

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 */

import { DepthwiseConv2dNative, DepthwiseConv2dNativeAttrs, DepthwiseConv2dNativeInputs, KernelConfig, Tensor4D } from '@tensorflow/tfjs-core';

export const depthwiseConv2dNativeConfig: KernelConfig = {
  kernelName: DepthwiseConv2dNative,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: depthwiseConv2dNative as {} as KernelFunc
};
```javascript
{BackendWasm} from '../backend_wasm';

let wasmDepthwiseConv2d =
    backend.wasm.cwrap( DepthwiseConv2dNative, null, /* void */,[
        'number',  // xId
        'number',  // batchSize
        'number',  // inputHeight
        'number',  // inputWidth
        'number',  // filterId
        'number',  // filterHeight
        'number',  // filterWidth
        'number',  // padTop
        'number',  // padRight
        'number',  // padBottom
        'number',  // padLeft
        'number',  // isSamePad
        'number',  // dilationHeight
        'number',  // dilationWidth
        'number',  // strideHeight
        'number',  // strideWidth
        'number',  // inputChannels
        'number',  // outputChannels
        'number']);

function depthwiseConv2dNative(inputs, backend) {
    // ... (rest of the function)
}

export const depthwiseConv2dNativeConfig:
    KernelConfig = {
        kernelName: DepthwiseConv2dNative,
        backendName: 'wasm',
        setupFunc: setup,
        kernelFunc: depthwiseConv2d as {} as KernelFunc
    };
```

Please note that this code snippet is from a package related to the Cisco Meeting Server (formerly Acano Server) and is used to implement Depthwise Convolution in a WebAssembly (Wasm) backend. The code uses the 'tfjs-core' library for TensorFlow.js and includes the necessary imports and function definitions for performing Depthwise Convolution operations. The code is meant to be used in an Open Source context, adhering to the Apache License Version 2.0, which grants various permissions and limitations under the license.
const supportsFullBroadcast = false;
export const equalConfig: KernelConfig =
createBinaryKernelConfig(Equal, supportsFullBroadcast, 'bool');

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 */
import {Exp, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const expConfig: KernelConfig = createUnaryKernelConfig(Exp, 'float32');

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 */

import {ExpandDims, ExpandDimsAttrs, ExpandDimsInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {reshape} from './Reshape';

export function expandDims(args: {
  inputs: ExpandDimsInputs,
  attrs: ExpandDimsAttrs,
  backend: BackendWasm
}) {
  const {inputs, attrs, backend} = args;
  const {input} = inputs;
  const {dim} = attrs;

  const inputRank = input.shape.length;
  const newShape = input.shape.slice();
  let $dim = dim;
  if (dim < 0) {
    // Negative value is counted from the tail of rank.
    util.assert(
      -(inputRank + 1) <= dim,
      () => `Axis must be in the interval [0, ${inputRank}]`);
    $dim = inputRank + dim + 1;
  }
  newShape.splice($dim, 0, 1);

  return reshape({inputs: {x: input}, backend, attrs: {shape: newShape}});
}

export const expandDimsConfig: KernelConfig = {
  kernelName: ExpandDims,
  backendName: 'wasm',
  kernelFunc: expandDims as {} as KernelFunc,
};

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 */

import {KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {Fill, FillAttrs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function fill(args: {attrs: FillAttrs, backend: BackendWasm}) {
  const {attrs: {shape, value, dtype}, backend} = args;
  const out = backend.makeOutput(shape, dtype);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.fill(value as number);
  return out;
}

export const fillConfig: KernelConfig = {
  kernelName: Fill,
  backendName: 'wasm',
  kernelFunc: fill as {} as KernelFunc,
};

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 */

import {KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {Fill, FillAttrs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

export function fill(args: {attrs: FillAttrs, backend: BackendWasm}) {
  const {attrs: {shape, value, dtype}, backend} = args;
  const out = backend.makeOutput(shape, dtype);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.fill(value as number);
  return out;
}

export const fillConfig: KernelConfig = {
  kernelName: Fill,
  backendName: 'wasm',
  kernelFunc: fill as {} as KernelFunc,
};
import {FlipLeftRight, FlipLeftRightInputs, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmFlipLeftRight: (
    xId: number, batch: number, imageHeight: number, imageWidth: number, numChannels: number, outId: number) => void;

function setup(backend: BackendWasm) {
    wasmFlipLeftRight = backend.wasm.cwrap(FlipLeftRight, null /* void */, [ 'number', // xId
    'number', // batch
    'number', // imageHeight
    'number', // imageWidth
    'number', // numChannels
    'number', // outId
]);
}

export function flipLeftRight(args: {inputs: FlipLeftRightInputs, backend: BackendWasm}): TensorInfo {
    const {inputs, backend} = args;
    const {image} = inputs;
    const out = backend.makeOutput(image.shape, image.dtype);
    const imageId = backend.dataIdMap.get(image.dataId).id;
    const outId = backend.dataIdMap.get(out.dataId).id;
    const [batch, imageHeight, imageWidth, numChannels] = image.shape;
    wasmFlipLeftRight(imageId, batch, imageHeight, imageWidth, numChannels, outId);
    return out;
}

export const flipLeftRightConfig: KernelConfig = {
    kernelName: FlipLeftRight,
    backendName: 'wasm',
    kernelFunc: flipLeftRight as {} as KernelFunc,
    setupFunc: setup
};

import {Floor, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const floorConfig: KernelConfig = createUnaryKernelConfig(Floor);

import {FloorDiv, KernelConfig} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = false;
export const floorDivConfig: KernelConfig = createBinaryKernelConfig(FloorDiv, supportsFullBroadcast);

import {FusedBatchNorm, FusedBatchNormAttrs, FusedBatchNormInputs, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmBatchNorm: (
    xId: number, meanId: number, varianceId: number, offsetId: number, scaleId: number, varianceEpsilon: number, outId: number) => void;

function setup(backend: BackendWasm) {
    wasmBatchNorm = backend.wasm.cwrap(FusedBatchNorm, null /* void */, [ 'number', // xId
    'number', // input
    'number', // meanId
    'number', // varianceId
    'number', // offsetId
    'number', // scaleId
    'number', // varianceEpsilon
    'number', // outId
]);
}

function fusedBatchNorm(args: {
    backend: BackendWasm,
    inputs: FusedBatchNormInputs,
    attrs: FusedBatchNormAttrs
}): TensorInfo {
    const {backend, inputs, attrs} = args;
    const {varianceEpsilon} = attrs;
    const {x, mean, variance, offset, scale} = inputs;
    const xId = backend.dataIdMap.get(x.dataId).id;
    const meanId = backend.dataIdMap.get(mean.dataId).id;
    const varianceId = backend.dataIdMap.get(variance.dataId).id;
    const offsetId = backend.dataIdMap.get(offset.dataId).id;
    const scaleId = backend.dataIdMap.get(scale.dataId).id;
    const varianceEpsilonId = backend.dataIdMap.get(varianceEpsilon.dataId).id;
    const outId = backend.dataIdMap.get(out.dataId).id;
    const [batch, imageHeight, imageWidth, numChannels] = image.shape;
    wasmBatchNorm(xId, meanId, varianceId, offsetId, scaleId, varianceEpsilonId, outId);
    return out;
}

export const fusedBatchNormConfig: KernelConfig = {
    kernelName: FusedBatchNorm,
    backendName: 'wasm',
    kernelFunc: fusedBatchNorm as {} as KernelFunc,
    setupFunc: setup
};
```javascript
const varianceId = backend.dataIdMap.get(variance.dataId).id;
const offsetId = offset != null ? backend.dataIdMap.get(offset.dataId).id : 0;
const scaleId = scale != null ? backend.dataIdMap.get(scale.dataId).id : 0;

const out = backend.makeOutput(x.shape, x.dtype);
if (util.sizeFromShape(x.shape) === 0) {
  return out;
}

wasmBatchNorm(xId, meanId, varianceId, offsetId, scaleId, varianceEpsilon, outId);
return out;
```

```javascript
export const fusedBatchNormConfig: KernelConfig = {
  kernelName: FusedBatchNorm,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: fusedBatchNorm as {} as KernelFunc
};
```

```javascript
import {backend_util, FusedConv2D, FusedConv2DAttrs, FusedConv2DInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {FusableActivation} from './types';

function setup(backend: BackendWasm) {
  wasmFusedConv2d = backend.wasm.cwrap(FusedConv2D, null /* void */, [
    'number',  // xId
    'number',  // batchSize
    'number',  // inputHeight
    'number',  // inputWidth
    'number',  // filterId
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // biasId
    'number',  // padTop
    'number',  // padRight
    'number',  // padBottom
    'number',  // padLeft
    'number',  // isSamePad
    'number',  // dilationHeight
    'number',  // dilationWidth
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // inputChannels
    'number',  // outputChannels
    'number',  // activation
    'number',  // preluActivationWeightsId
    'number',  // leakyreluAlpha
    'number',  // outId
  ]);
}

function fusedConv2d(args: {
  inputs: FusedConv2DInputs,
  backend: BackendWasm,
  attrs: FusedConv2DAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {x, filter, bias, preluActivationWeights} = inputs;
  const {
    strides, pad, dilations, dataFormat, dimRoundingMode, activation, leakyreluAlpha
  } = attrs;

  const fusedActivation = FusableActivation[activation as {} as keyof typeof FusableActivation];
  if (fusedActivation == null) {
    throw new Error(`${activation} activation not yet supported for FusedConv2D ` + `in the wasm backend.`);
  }

  const xId = backend.dataIdMap.get(x.dataId).id;
  const filterId = backend.dataIdMap.get(filter.dataId).id;
  const outputChannels = convInfo.outChannels;
  let biasId = 0;
  if (bias != null) {
    const biasData = backend.dataIdMap.get(bias.dataId).
    if (biasData.shape.length !== 1) {
      throw new Error(`FusedConv2D only supports rank-1 bias but got ` + `rank ${biasData.shape.length}.`);
    }
    const biasId = biasData.id;
  }
  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const padTop = convInfo.padInfo.top;
  const padRight = convInfo.padInfo.right;
  const padBottom = convInfo.padInfo.bottom;
  const padLeft = convInfo.padInfo.left;
  const dilationHeight = convInfo.dilationHeight;
  const dilationWidth = convInfo.dilationWidth;
  const strideHeight = convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;
```

const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;
const batchSize = convInfo.batchSize;
const inHeight = convInfo.inHeight;
const inWidth = convInfo.inWidth;
if (dataFormat !== 'NHWC') {
  throw new Error(`wasm backend FusedConv2D does not support dataFormat: 
  \${dataFormat}. Please use 'NHWC'.`);
}

const out = backend.makeOutput(convInfo.outShape, 'float32');
const outId = backend.dataIdMap.get(out.dataId).id;

const preluActivationWeightsId = preluActivationWeights == null ? 0 : backend.dataIdMap.get(preluActivationWeights.dataId).id;

wasmFusedConv2d(
  xId, batchSize, inHeight, inWidth, filterId, filterHeight, filterWidth,
  biasId, padTop, padRight, padBottom, padLeft, isSamePad, dilationHeight,
  dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels,
  fusedActivation, preluActivationWeightsId, leakyreluAlpha || 0, outId);

return out;

export const fusedConv2DConfig: KernelConfig = {
  kernelName: FusedConv2D,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: fusedConv2d as {} as KernelFunc
};

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 */

import {backend_util, FusedDepthwiseConv2D, FusedDepthwiseConv2DAttrs, FusedDepthwiseConv2DInputs, KernelConfig, KernelFunc, Tensor4D} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {FusableActivation} from './types';

let wasmFusedDepthwiseConv2d:
    (xId: number, batchSize: number, inputHeight: number, inputWidth: number, filterId: number, filterHeight: number, filterWidth: number, biasId: number, padTop: number, padRight: number, padBottom: number, padLeft: number, isSamePad: number, dilationHeight: number, dilationWidth: number, strideHeight: number, strideWidth: number, inputChannels: number, outputChannels: number, activation: number, preluActivationWeightsId: number, leakyreluAlpha: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmFusedDepthwiseConv2d = backend.wasm.cwrap(FusedDepthwiseConv2D, null /* void */, [
        'number', // xId
        'number', // batchSize
        'number', // inputHeight
        'number', // inputWidth
        'number', // filterId
        'number', // biasId
        'number', // padTop
        'number', // padRight
        'number', // padBottom
        'number', // padLeft
        'number', // isSamePad
        'number', // dilationHeight
        'number', // dilationWidth
        'number', // strideHeight
        'number', // strideWidth
        'number', // inputChannels
        'number', // outputChannels
        'number', // activation
        'number', // preluActivationWeightsId
        'number', // leakyreluAlpha
        'number', // outId
    ]);}

function fusedDepthwiseConv2d(args: {
  inputs: FusedDepthwiseConv2DInputs,
  backend: BackendWasm,
  attrs: FusedDepthwiseConv2DAttrs
}) {
  const {inputs, attrs, backend} = args;
  const {x, filter, bias, preluActivationWeights} = inputs;
  const {
    strides,
    pad,
    dilations,
    dataFormat,
    dimRoundingMode,
    activation,
    leakyreluAlpha
  } = attrs;
  const convInfo = backend_util.computeConv2DInfo(
    x as Tensor4D,
    filter as Tensor4D,
    bias as Tensor4D,
    preluActivationWeights as Tensor4D,
    dataFormat,
    dimRoundingMode,
    activation,
    leakyreluAlpha
  ) as Attrs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const filterId = backend.dataIdMap.get(filter.dataId).id;
  const outputChannels = convInfo.outChannels;
  const biasId = 0;
  const biasData = backend.dataIdMap.get(bias.dataId);
  if (biasData.shape.length !== 1) {
    throw new Error(`FusedDepthwiseConv2D only supports rank-1 bias but got ` + `rank ${biasData.shape.length}.`);
  }
  if (biasData.shape[0] !== outputChannels) {
    throw new Error(`FusedDepthwiseConv2D bias shape`);
${biasData.shape} does not match the number of output channels ($outputChannels$);

biasId = biasData.id;

const filterHeight = convInfo.filterHeight;
const filterWidth = convInfo.filterWidth;
const padTop = convInfo.padInfo.top;
const padRight = convInfo.padInfo.right;
const padBottom = convInfo.padInfo.bottom;
const padLeft = convInfo.padInfo.left;
const dilationHeight = convInfo.dilationHeight;
const dilationWidth = convInfo.dilationWidth;
const strideHeight = convInfo.strideHeight;
const strideWidth = convInfo.strideWidth;
const inputChannels = convInfo.inChannels;
const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;
const batchSize = convInfo.batchSize;
const inHeight = convInfo.inHeight;
const inWidth = convInfo.inWidth;

if (dataFormat !== 'NHWC') {
    throw new Error('wasm backend FusedDepthwiseConv2D does not support dataFormat: ' + dataFormat'. Please use 'NHWC'.');
}
const out = backend.makeOutput(convInfo.outShape, 'float32');
const outId = backend.dataIdMap.get(out.dataId).id;
const preluActivationWeightsId = preluActivationWeights == null ? 0 : backend.dataIdMap.get(preluActivationWeights.dataId).id;

wasmFusedDepthwiseConv2d(xId, batchSize, inHeight, inWidth, filterId, filterHeight, filterWidth, biasId, padTop, padRight, padBottom, padLeft, isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, fusedActivation, preluActivationWeightsId, leakyreluAlpha || 0, outId);

return out;
}

export const fusedDepthwiseConv2DConfig: KernelConfig = {
    kernelName: FusedDepthwiseConv2D,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: fusedDepthwiseConv2d as {} as KernelFunc
};

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 *
 *=============================================================================
 */

import { gather_util, GatherNd, GatherNdInputs, KernelConfig, TensorInfo } from '@tensorflow/tfjs-core';
import { BackendWasm } from '../backend_wasm';
import { CppDType } from './types';

wasmGatherNd: (xId: number, dtype: CppDType, indicesId: number, numSlices: number, sliceRank: number, sliceSize: number, strides: Uint8Array, outId: number) => void;

function setup(backend: BackendWasm): void {
    wasmGatherNd = backend.wasm.cwrap(GatherNd, null /*void*/, [
        'number',  // xId
        'number',  // dtype
        'number',  // indicesId
        'number',  // numSlices
        'number',  // sliceRank
        'number',  // sliceSize
        'array',   // strides
        'number'   // outId
    ]);}

function gatherNd(args: {backend: BackendWasm, inputs: GatherNdInputs}): TensorInfo {
    const {backend, inputs} = args;
    const {params, indices} = inputs;

    const [resultShape, numSlices, sliceSize, strides] = gather_util.prepareAndValidate(params, indices);
    const out = backend.makeOutput(resultShape, params.dtype);
    if (numSlices === 0) {
        return out;
    }
    const indicesShape = indices.shape;
    const sliceRank = indicesShape[indicesShape.length - 1];
    const xData = backend.dataMap.get(params.dataId);
    const xId = xData.id;
    const indicesData = backend.dataMap.get(indices.dataId);
    const indicesId = indicesData.id;
    const stridesBytes = new Uint8Array(indices.buffer);
    const xId = backend.dataMap.get(out.dataId).id;
    wasmGatherNd(xId, CppDType[params.dtype], indicesId, numSlices, sliceRank, sliceSize, stridesBytes, outId);
    return out;
}

export const gatherNdConfig: KernelConfig = {
    kernelName: GatherNd,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: gatherNd as {} as KernelFunc
};
```javascript
import {backend_util, GatherV2, GatherV2Attrs, GatherV2Inputs, KernelConfig, Tensor, TensorInfo, TypedArray, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {reshape} from './Reshape';
import {CppDType} from './types';

let wasmGather:
    (xId: number, dtype: CppDType, xStrides: Uint8Array, stridesSize: number, indicesId: number, batchSize: number, outStrides: Uint8Array, outId: number) => void;

function setup(backend: BackendWasm): void {
    wasmGather = backend.wasm.cwrap('Gather', null /*void*/, [
        'number',  // xId
        'number',  // dtype
        'array',   // xStrides
        'number',  // stridesSize
        'number',  // indicesId
        'number',  // batchSize
        'array',   // outStrides
        'number'   // outId
    ]);}

function gatherV2(
    args: {backend: BackendWasm, inputs: GatherV2Inputs, attrs: GatherV2Attrs}): TensorInfo {
    const {backend, inputs, attrs} = args;
    const {x, indices} = inputs;
    const {axis, batchDims} = attrs;

    // Throw error when any index is out of bound.
    const parsedAxis = util.parseAxisParam(axis, x.shape)[0];
    const indicesVals = backend.readSync(indices.dataId) as TypedArray;
    const axisDim = x.shape[parsedAxis];
    for (let i = 0; i < indicesVals.length; ++i) {
        const index = indicesVals[i];
        util.assert(
            index <= axisDim - 1 && index >= 0,
            () =>
                `GatherV2: the index value ${index} is not in [0, ${axisDim - 1}]`);
    }

    const shapeInfo = backend_util.segment_util.collectGatherOpShapeInfo(x as Tensor, indices as Tensor, parsedAxis, batchDims);
    const flattenX = reshape({
        inputs: {x},
        attrs: {
            shape: [shapeInfo.batchSize, shapeInfo.outerSize, shapeInfo.dimSize, shapeInfo.sliceSize]
        },
        backend
    });
    const indicesSize = util.sizeFromShape(indices.shape);
    const flattenIndex = reshape({
        inputs: {x: indices},
        attrs:
            {shape: [shapeInfo.batchSize, indicesSize / shapeInfo.batchSize]},
        backend
    });
    const flattenOutputShape = [shapeInfo.batchSize, shapeInfo.outerSize, indicesSize, shapeInfo.batchSize, shapeInfo.sliceSize, shapeInfo.sliceSize];
    const out = backend.makeOutput(flattenOutputShape, x.dtype);
    if (util.sizeFromShape(x.shape) === 0) {
        return out;
    }
    const stridesSize = flattenX.shape.length - 1;
    const xData = backend.dataIdMap.get(flattenX.dataId);
    const xId = xData.id;
    const indicesData = backend.dataIdMap.get(flattenIndex.dataId);
    const indicesId = indicesData.id;
    const outId = backend.dataIdMap.get(out.dataId);
    const xStridesBytes = new Uint8Array(new Int32Array(backend.computeStrides(flattenX.shape)).buffer);
    const outStridesBytes = new Uint8Array(new Int32Array(backend.computeStrides(flattenOutputShape)).buffer);
    wasmGather(xId, CppDType[x.dtype], xStridesBytes, stridesSize, indicesId, batchSize, outStridesBytes, outId);
    const outStrides = backend.disposeData(flattenX.dataId);
    backend.disposeData(flattenIndex.dataId);
    backend.disposeData(out.dataId);
    return out;
}

export const gatherV2Config: KernelConfig = {
    kernelName: GatherV2,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: gatherV2 as {} as KernelFunc,
    supportsFullBroadcast: false,
    export const greaterConfig: KernelConfig = {
        kernelName: 'Greater',
        backendName: 'binary_kernel',
        setupFunc: setup,
        kernelFunc: greaterV2 as {} as KernelFunc,
        supportsFullBroadcast: false
    } as KernelConfig;
```
import {GreaterEqual, KernelConfig} from '@tensorflow/tfjs-core';

const supportsFullBroadcast = false;

export const greaterEqualConfig: KernelConfig =
  createBinaryKernelConfig(GreaterEqual, supportsFullBroadcast, 'bool', /* @license */ Copyright 2019 Google LLC. All Rights Reserved. * You may not use this file except in compliance with the License. * You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and limitations under the License. */

import {KernelConfig, KernelFunc, LeakyRelu, LeakyReluAttrs, LeakyReluInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

export function leakyRelu(
    args:
        {inputs: LeakyReluInputs, attrs: LeakyReluAttrs, backend: BackendWasm}):
    TensorInfo {
  const {inputs: {x}, attrs: {alpha}, backend} = args;

  const xId = backend.dataIdMap.get(x.dataId).id;
  // According to TF API, LeakyRelu returns float32 when input is either float32 // or int32. const out = backend.makeOutput(x.shape, 'float32');
  if (util.sizeFromShape(x.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmFunc(xId, CppDType[x.dtype], alpha, outId);
  }

  return out;
}

export const leakyReluConfig: KernelConfig = {
  kernelName: LeakyRelu,
  backendName: 'wasm',
  setupFunc,
  kernelFunc: leakyRelu as {} as KernelFunc,
};

import {KernelConfig, Less} from '@tensorflow/tfjs-core';

export const lessConfig: KernelConfig =
  createBinaryKernelConfig(Less, supportsFullBroadcast, 'bool', /* @license */ Copyright 2019 Google LLC. All Rights Reserved. * You may not use this file except in compliance with the License. * You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and limitations under the License. */

import {KernelConfig, LessEqual} from '@tensorflow/tfjs-core';

export const lessEqualConfig: KernelConfig =
  createBinaryKernelConfig(LessEqual, supportsFullBroadcast, 'bool', /* @license */ Copyright 2019 Google LLC. All Rights Reserved. * You may not use this file except in compliance with the License. * You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and limitations under the License. */
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*\n
============================================================================

*/
import {KernelConfig, Log} from '@tensorflow/tfjs-core';

const logConfig = createUnaryKernelConfig(Log);

export const logConfig: KernelConfig = createBinaryKernelConfig(Log, supportsFullBroadcast, 'bool');

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 *
 *============================================================================

*/

const supportsFullBroadcast = false;

export const maxConfig: KernelConfig = {
  kernelName: Max,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: max as {} as KernelFunc
};

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 *============================================================================

*/

import {backend_util, KernelConfig, KernelFunc, Max, MaxAttrs, MaxInputs, TensorInfo, util} from

backend_util, KernelConfig, KernelFunc, Max, MaxAttrs, MaxInputs, TensorInfo, util) from

backend_util, KernelConfig, KernelFunc, Max, MaxAttrs, MaxInputs, TensorInfo, util

backend_util, KernelConfig, KernelFunc, Max, MaxAttrs, MaxInputs, TensorInfo, util from

permuteAxesAndTranspose from './kernel_util';

TensorInfo {
  const [backend, inputs, attrz] = args;

  const {reductionIndices: axis, keepDims} = attrz;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const [transposed, axes, originalAxes, inputWasTransposed] =
      permuteAxesAndTranspose(x, axis, backend);

  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    input = transposed;
    inputId = transposedId;
  }

  const inputRank = input.shape.length;
  backend_util.assertAxesAreInnerMostDims('max', axes, inputRank);

  const {outShape, reduceShape} =
      backend_util.computeOutAndReduceShapes(input.shape, axes);

  const reduceSize =
      util.sizeFromShape(reduceShape);

  if (reduceSize === 0) { return; }

  const outId = backend.dataIdMap.get(out.dataId).id;
  const wasmMax = backend.wasm.cwrap(Max, null /*void*/, ["number", "number", "number", "number"],
      void);

  wasmMax(inputId, CppDType[x.dtype], reduceSize, outId);

  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  return out;
}

export const maxConfig: KernelConfig = {
  kernelName: Max,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: max as {} as KernelFunc
};

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 *
import {backend_util, KernelConfig, KernelFunc, Mean, MeanAttrs, MeanInputs, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {permuteAxesAndTranspose} from './kernel_utils';

let wasmMean: (xId: number, reduceSize: number, outId: number) => void;

export function mean(args: {backend: BackendWasm, inputs: MeanInputs, attrs: MeanAttrs}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {axis, keepDims} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;
  let input = x;

  const {transposed, axes, originalAxes, inputWasTransposed} = permuteAxesAndTranspose(x, axis, backend);

  let reductionAxes = axes;
  if (inputWasTransposed) {
    const transposedId = backend.dataIdMap.get(transposed.dataId).id;
    if (transposedId !== xId) {
      // transpose was not a no-op. We will need to dispose of this
      // once we are done.
      input = transposed;
      inputId = transposedId;
      reductionAxes = backend_util.getInnerMostAxes(reductionAxes.length, input.shape.length);
    }
  }

  backend_util.assertAxesAreInnerMostDims('mean', reductionAxes, input.shape.length);
  const [outShape, reduceShape] = backend_util.computeOutAndReduceShapes(input.shape, reductionAxes);

  wasmMean(xId, inputId, reduceSize, outId);

  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  if (keepDims) {
    // reshape
    const newShape = backend_util.expandShapeToKeepDim(outShape, originalAxes);
    out.shape = newShape;
  }

  return out;
}

export const meanConfig: KernelConfig = {
  kernelName: Mean,
  backendName: 'wasm',
  setupFunc: setup as {},
  kernelFunc: mean as {},
};
const reduceSize = util.sizeFromShape(reduceShape);
const out = backend.makeOutput(outShape, input.dtype);
if (util.sizeFromShape(input.shape) !== 0) {
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmMin(inputId, CppDType[x.dtype], reduceSize, outId);
} if (inputWasTransposed) {
  // dispose of the transposed tensor.
  backend.disposeData(transposed.dataId);
}

if (keepDims) {
  // reshape
  const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
  out.shape = newShape;
} return output;

export const minConfig: KernelConfig = {
  kernelName: Min,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: min as {} as KernelFunc
};

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 */
import {KernelConfig, Minimum} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = false;
export const minimumConfig: KernelConfig = createBinaryKernelConfig(Minimum, supportsFullBroadcast);

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 */

import {KernelConfig, KernelFunc, MirrorPad, MirrorPadAttrs, MirrorPadInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

// Must match enum in MirrorPad.cc
enum MirrorPaddingMode {
  reflect = 0,
  symmetric = 1
}

let wasmMirrorPad: (
  xId: number, xShapeBytes: Uint8Array, xShapeLength: number, xDtype: number,
  prePaddingsBytes: Uint8Array, postPaddingsBytes: Uint8Array, mode: number,
  outId: number) => void;

function setup(backend: BackendWasm) {
  wasmMirrorPad = backend.wasm.cwrap(MirrorPad, null /* void */, [
    'number',  // xId
    'array',   // x.shape
    'number',  // x.shape.length
    'number',  // x.dtype
    'array',   // pre-paddings
    'array',   // post-paddings
    'number',  // mode
    'number',  // outId
  ]);}

function mirrorPad(args: {
  inputs: MirrorPadInputs,
  backend: BackendWasm,
  attrs: MirrorPadAttrs
}) {
  const {inputs: {x}, backend, attrs: {paddings, mode}} = args;
  const outShape = paddings.map((p, i) => p[0] /* beforePad */ + x.shape[i] + p[1] /* afterPad */);

  const xId = backend.dataIdMap.get(x.dataId).id;
  const out = backend.makeOutput(outShape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const prePaddingsFlat = paddings.map((padTuple) => padTuple[0]);
  const postPaddingsFlat = paddings.map((padTuple) => padTuple[1]);
  const xId = backend.dataIdMap.get(x.dataId).id;
  const padFunc = (p: number, i: number) => xId + util.sizeFromShape(x.shape, i) + p;

  wasmMirrorPad(xId, xShapeBytes, x.shape.length, CppDType[x.dtype], prePaddingsFlat, postPaddingsFlat, mode, outId);
  return output;
}

export const mirrorPadConfig: KernelConfig = {
  kernelName: MirrorPad,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: mirrorPad as {} as KernelFunc
};
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*/

import {KernelConfig, Multiply} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = true;

export const multiplyConfig: KernelConfig =
createBinaryKernelConfig(Multiply, supportsFullBroadcast);

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=============================================================================

*/

import {KernelConfig, Neg} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const negConfig: KernelConfig = createUnaryKernelConfig(Neg);

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=============================================================================

*/

import {BackendWasm} from '../backend_wasm';

// Analogous to `struct Result` in
// `non_max_suppression_impl.h`.\ninterface Result {\n  pSelectedIndices: number;\n  selectedSize: number;\n  pSelectedScores: number;\n  pValidOutputs: number;\n}

function parseResultStruct(
    backend: BackendWasm, resOffset: number): Result {
  const result = new Int32Array(backend.wasm.HEAPU8.buffer, resOffset, 4);
  const pSelectedIndices = result[0];
  const selectedSize = result[1];
  const pSelectedScores = result[2];
  const pValidOutputs = result[3];
  // Since the result was allocated on the heap, we have to delete it.
  backend.wasm._free(resOffset);
  return {pSelectedIndices, selectedSize, pSelectedScores, pValidOutputs};
}

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=============================================================================

*/

import {KernelConfig, KernelFunc, NonMaxSuppressionV3, NonMaxSuppressionV3Attrs, NonMaxSuppressionV3Inputs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from './backend_wasm';

import {parseResultStruct} from './NonMaxSuppression_util';

let wasmFunc: (boxesId: number, scoresId: number, maxOutputSize: number, iouThreshold: number, scoreThreshold: number) => number;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(NonMaxSuppressionV3, 'number', ['number', 'number', 'number', 'number', 'number']);
}

function kernelFunc(args: {backend: BackendWasm, inputs: NonMaxSuppressionV3Inputs, attrs: NonMaxSuppressionV3Attrs}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {iouThreshold,
maxOutputSize, scoreThreshold} = attrs; const {boxes, scores} = inputs; const boxesId = backend.dataIdMap.get(boxes.dataId).id; const scoresId = backend.dataIdMap.get(scores.dataId).id; const resOffset = wasmFunc(boxesId, scoresId, maxOutputSize, iouThreshold, scoreThreshold); const {pSelectedIndices, selectedSize, pSelectedScores, pValidOutputs} = parseResultStruct(backend, resOffset); // Since we are not using scores for V3, we have to delete it from the heap.

backend.wasm_free(pSelectedScores); backend.wasm_free(pValidOutputs); const selectedIndicesTensor = backend.makeOutput([selectedSize], 'int32', pSelectedIndices);

export const nonMaxSuppressionV3Config: KernelConfig = {
  kernelName: NonMaxSuppressionV3,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: wasmFunc as {} as KernelFunc,
};

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 */

import {KernelConfig, KernelFunc, NonMaxSuppressionV4, NonMaxSuppressionV4Attrs, NonMaxSuppressionV4Inputs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {parseResultStruct} from './NonMaxSuppression_util';

let wasmFunc: (boxesId: number, scoresId: number, maxOutputSize: number, iouThreshold: number, scoreThreshold: number, padToMaxOutputSize: boolean) => number;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(NonMaxSuppressionV4, 'number', // Result*
    [number, // boxesId
    number, // scoresId
    number, // maxOutputSize
    number, // iouThreshold
    number, // scoreThreshold
    boolean, // padToMaxOutputSize
  ]);}

function nonMaxSuppressionV4(args: {
  backend: BackendWasm,
  inputs: NonMaxSuppressionV4Inputs,
  attrs: NonMaxSuppressionV4Attrs
}): TensorInfo[] {
  const {backend, inputs, attrs} = args;
  const {iouThreshold, maxOutputSize, scoreThreshold, padToMaxOutputSize} = attrs;
  const {boxes, scores} = inputs;
  const boxesId = backend.dataIdMap.get(boxes.dataId).id;
  const scoresId = backend.dataIdMap.get(scores.dataId).id;
  const resOffset = wasmFunc(boxesId, scoresId, maxOutputSize, iouThreshold, scoreThreshold, padToMaxOutputSize);
  const {pSelectedIndices, selectedSize, pSelectedScores, pValidOutputs} = parseResultStruct(backend, resOffset);
  // Since we are not using scores for V4, we have to delete it from the heap.
  backend.wasm_free(pSelectedScores);
  const selectedIndicesTensor = backend.makeOutput([selectedSize], 'int32', pSelectedIndices);
  const validOutputsTensor = backend.makeOutput([], 'int32', pValidOutputs);
  return [selectedIndicesTensor, validOutputsTensor];
}

export const nonMaxSuppressionV4Config: KernelConfig = {
  kernelName: NonMaxSuppressionV4,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: wasmFunc as {} as KernelFunc,
};

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 */

import {KernelConfig, KernelFunc, NonMaxSuppressionV5, NonMaxSuppressionV5Attrs, NonMaxSuppressionV5Inputs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {parseResultStruct} from './NonMaxSuppression_util';

let wasmFunc:
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=============================================================================

*/

import {KernelConfig, KernelFunc, OnesLike, OnesLikeInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

function onesLike(args: {inputs: OnesLikeInputs, backend: BackendWasm}) {
  const {inputs: {x}, backend} = args;
  const out = backend.makeOutput(x.shape, x.dtype);
  const outVals = backend.typedArrayFromHeap(out);
  outVals.fill(1);
  return out;
}

export const onesLikeConfig: KernelConfig = {
  kernelName: OnesLike,
  backendName: 'wasm',
  kernelFunc: onesLike as {} as KernelFunc,
};

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=============================================================================

*/

import {KernelConfig, KernelFunc, Pack, PackAttrs, PackInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {concat} from './Concat';
import {expandDims} from './ExpandDims';

export function pack(
    args: {inputs: PackInputs, backend: BackendWasm, attrs: PackAttrs}):
    TensorInfo {
  const {inputs, backend, attrs} = args;
  const {axis} = attrs;
  if (inputs.length === 1) {
    return expandDims(
        {inputs: {input: inputs[0]}, backend, attrs: {dim: axis}});
  }

  const shape = inputs[0].shape;
  const dtype = inputs[0].dtype;
  inputs.forEach(t => {
    util.assertShapesMatch(
        shape, t.shape,
        'All tensors passed to stack must have matching shapes');
    util.assert(
        dtype === t.dtype,
        () => 'All tensors passed to stack must have matching dtypes');
  });

  const intermediateTensorInfos: TensorInfo[] = [];
  const expandedTensors = inputs.map(t => {
    const expandedT =
        expandDims({inputs: {input: t}, backend, attrs: {dim: axis}});
    intermediateTensorInfos.push(expandedT);
    return expandedT;
  });

  const result = concat({inputs: expandedTensors, backend, attrs: {dim: axis}});;
  intermediateTensorInfos.push(result);
  backend.disposeData(t.dataId);
  return result;
}

export const packConfig: KernelConfig = {
  kernelName: Pack,
  backendName: 'wasm',
  kernelFunc: pack as {} as KernelFunc
};

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=============================================================================

*/

import {KernelConfig, KernelFunc, PadV2, PadV2Attrs, PadV2Inputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {fill} from './Fill';

import {CppDType} from './types';

let wasmPadV2: (
    xId: number, xShapeBytes: Uint8Array, xShapeLength: number,
    prePaddingsBytes: Uint8Array, postPaddingsBytes: Uint8Array,
    constantValue: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmPadV2 = backend.wasm.cwrap(PadV2, null /* void */, 
[...]
});

function pad(
    args: {inputs: PadV2Inputs, backend: BackendWasm, attrs: PadV2Attrs}) {
  const {inputs: {xId: number, xShapeBytes: Uint8Array, xShapeLength: number, xDtype: number, prePaddingsBytes: Uint8Array, postPaddingsBytes: Uint8Array, constantValue: number, outId: number} => void

  const {constantValue} = args;
  const x = util.arrayLikeToTypedArray(xShapeBytes);
p[0] /* beforePad */ + x.shape[i] + p[1] /* afterPad */); // Short-circuit the computation, since x doesn't have value, only the shape is used to compute output shape to pad

  if (util.sizeFromShape(x.shape) === 0) { // Short-circuit the computation, since x doesn't have value, only the shape is used to compute output shape to pad
    // return fill({
      backend, 
      attrs: {shape: outShape, value: constantValue, dtype: x.dtype}})
  }

  const xId = backend.dataIdMap.get(x.dataId).id; // xId = backend.dataIdMap.get(x.dataId).id;
  const outId = outTensorData.outId;
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const prePaddingsBytes = new Uint8Array(new Int32Array(prePaddingsFlat).buffer);
  const postPaddingsBytes = new Uint8Array(new Int32Array(postPaddingsFlat).buffer);

  wasmPadV2(xId, xShapeBytes, x.shape.length, CppDType[x.dtype], prePaddingsBytes, postPaddingsBytes, constantValue, outId);

  return out;
}

export const padV2Config: KernelConfig = {
  kernelName: PadV2,
  backendName: 'wasm',
  kernelFunc: pad as {} as KernelFunc,
  setupFunc: setup
};

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 */
import {Pow} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;
export const powConfig: KernelConfig = createBinaryKernelConfig(Pow, supportsFullBroadcast);

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 */
import {KernelConfig, KernelFunc, Prelu, PreluInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {cast} from './Cast';

wasmPrelu = backend.wasm.cwrap(Prelu, null /* void */, ['number', 'number', 'number']);

function setup(backend: BackendWasm) {
  wasmPrelu = backend.wasm.cwrap(Prelu, null /* void */, ['number', 'number', 'number']);
  setupFunc: setup
};

function prelu(args: {inputs: PreluInputs, backend: BackendWasm}) {
  const {inputs, backend} = args;
  const {x, alpha} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const weightsId = backend.dataIdMap.get(alpha.dataId).id;

  let inputId = xId;
  let castedInput = x;
  if (inputId !== 'float32') {
    castedInput = cast({backend, inputs: {x}, attrs: {dtype: 'float32'}});
    inputId = backend.dataIdMap.get(castedInput.dataId).id;
  }

  const outId = backend.makeOutput(x.shape, 'float32');
  const castedInput = backend.dataIdMap.get(castedInput.dataId).id;

  return out;
}

export const preluConfig: KernelConfig = {
  kernelName: Prelu,
  backendName: 'wasm',
  kernelFunc: prelu as {} as KernelFunc,
  setupFunc: setup
};

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 */
import {backend_util, KernelConfig, KernelFunc, Prod, ProdAttrs, ProdInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {permuteAxesAndTranspose} from '../kernel_utils';

import {CppDType} from './types';

let wasmProd: (xId: number, reduceSize: number, dtype: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmProd = backend.wasm.cwrap(Prod, null /*void*/, [ 'number', 'number', 'number', 'number' ]); backend_util.unfunction prod((args: { backend: BackendWasm, inputs: ProdInputs, attrs: ProdAttrs }) => TensorInfo), const [ const [ inputs, const const xId = backend.dataIdMap.get(x.dataId).id; let inputId = xId; let input = x[n]; const transposed, originalAxes, inputWasTransposed] = permuteAxesAndTranspose(x, axis, backend); let reductionAxes = axes; if (inputWasTransposed) { const transposedId = backend.dataIdMap.get(transposed.dataId).id; if (transposedId != xId) { // transpose was not a no-op. We will need to dispose of this once we are done. input = transposedId; inputId = transposedId; } reductionAxes = backend_util.getInnerMostAxes(reductionAxes.length, input.shape.length); const [outShape, reduceShape] = backend_util.computeOutAndReduceShapes(input.shape, reductionAxes); const reduceSize = util.sizeFromShape(reduceShape); const out = backend.makeOutput(outShape, input.dtype); if (util.sizeFromShape(input.shape) !== 0) { const outId = backend.dataIdMap.get(out.dataId).id; wasmProd(inputId, reduceSize, CppDType[out.dtype], outId); } } else { // reshape const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes); out.shape = newShape; } return out; } export const export const range: BackendImplRange : function rangeConfig: KernelConfig = { kernelName: Range, backendName: 'wasm', setupFunc: setup, kernelFunc: prod as {} as KernelFunc };

import {KernelConfig, RealDiv} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = true;
export const realDivConfig: KernelConfig = createBinaryKernelConfig(RealDiv, supportsFullBroadcast);
import {KernelConfig, KernelFunc, Reverse, ReverseAttrs, ReverseInputs, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {identity} from './Identity';
import {reshape} from './Reshape';

let wasmReverse: (xId: number, axes: Uint8Array, axesLength: number, outShape: Uint8Array, outShapeLength: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmReverse = backend.wasm.cwrap(Reverse, null, ['number', 'array', 'number', 'array', 'number', 'number']);
}

export function reverse(args: {inputs: ReverseInputs, backend: BackendWasm, attrs: ReverseAttrs}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {dims} = attrs;

  const axes = util.parseAxisParam(dims, x.shape);

  if (x.shape.length === 0) {
    return identity({inputs: {x}, backend});
  }

  const out = backend.makeOutput(x.shape, x.dtype);
  const xId = backend.dataIdMap.get(x.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;

  const axesBytes = new Uint8Array(new Int32Array(axes).buffer);
  const outShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);

  wasmReverse(xId, axesBytes, axes.length, outShapeBytes, x.shape.length, outId);
  const reshaped = reshape({inputs: {x: out}, backend});
  backend.disposeData(out.dataId);
  return reshaped;
}

export const reverseConfig: KernelConfig = {
  kernelName: Reverse,
  backendName: 'wasm',
  kernelFunc: reverse as {} as KernelFunc,
  setupFunc: setup
};

import {KernelConfig, KernelFunc, RotateWithOffset, RotateWithOffsetAttrs, RotateWithOffsetInputs, TensorInfo} from '@tensorflow/tfjs-core';
import {backend_util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmRotate: (xId: number, batch: number, imageHeight: number, imageWidth: number, numChannels: number, radians: number, centerX: number, centerY: number, fillBytes: Uint8Array, fillLength: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmRotate = backend.wasm.cwrap(RotateWithOffset, null /* void */, ['number', 'number', 'number', 'number', 'number', 'number', 'number', 'array', 'number']);
}

export function rotateWithOffset(args: {inputs: RotateWithOffsetInputs, backend: BackendWasm, attrs: RotateWithOffsetAttrs}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {image} = inputs;
  const {radians, fillValue, center} = attrs;

  const out = backend.makeOutput(image.shape, image.dtype);
  const imageId = backend.dataIdMap.get(image.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;

  const [batch, imageHeight, imageWidth, numChannels] = image.shape;
  const [centerX, centerY] = attr;
  const fillBytes = new Uint8Array(new Int32Array(fillValue).buffer);

  wasmRotate(imageId, batch, imageHeight, imageWidth, numChannels, radians, centerX, centerY, fillBytes, fillValues.length, outId);
  return out;
}
kernelName: RotateWithOffset, backendName: 'wasm', kernelFunc: rotateWithOffset as {} as KernelFunc,
setupFunc: setup
};

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 */

import {KernelConfig, Round} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const roundConfig: KernelConfig = createUnaryKernelConfig(Round);

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 */

import {KernelConfig, Rsqrt} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const rsqrtConfig: KernelConfig = createUnaryKernelConfig(Rsqrt);

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 */

import {KernelConfig, KernelFunc, scatter_util, ScatterNd, ScatterNdAttrs, ScatterNdInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {CppDType} from './types';

let wasmScatterNd: (indicesId: number, updatesId: number, dtype: CppDType, sliceRank: number, numUpdates: number, sliceSize: number, strides: Uint8Array, outputSize: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmScatterNd = backend.wasm.cwrap(ScatterNd, null /*void*/, [
    'number', // indicesId
    'number', // updatesId
    'number', // dtype
    'number', // sliceRank
    'number', // numUpdates
    'number', // sliceSize
    'array', // strides
    'number', // outputSize
    'number' // outId
  ]);}

function scatterNd(args:
{backend: BackendWasm, inputs: ScatterNdInputs, attrs: ScatterNdAttrs}):
TensorInfo {
  const {backend, inputs, attrs} = args;
  const {indices, updates} = inputs;
  const {shape} = attrs;
  const out = backend.makeOutput(shape, updates.dtype);
  if (util.sizeFromShape(shape) === 0) {
    return out;
  }
  const {sliceRank, numUpdates, sliceSize, strides, outputSize} = scatter_util.calculateShapes(updates, indices, shape);
  const indicesData = backend.dataIdMap.get(indices.dataId); // get the dataId of the indices tensor
  const updatesData = backend.dataIdMap.get(updates.dataId);
  const stridesBytes = new Uint8Array(new Int32Array(strides).buffer);
  const outId = backend.dataIdMap.get(out.dataId);
  const wasmScatterNd = (indicesId, updatesId, dtype, sliceRank, numUpdates, sliceSize, stridesBytes, outputSize, outId) =>
    scatter NdConfig = {kernelName: ScatterNd, backendName: 'wasm', setupFunc: setup, kernelFunc: scatterNd as {} as KernelFunc as {} as BackendWasm
  };
}
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=============================================================================

*/

import {KernelConfig, KernelFunc, Select, SelectInputs, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmSelect: (conditionId: number, tId: number, eId: number, offset: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmSelect = backend.wasm.cwrap('SelectV2', null, ['number', 'conditionId', 'number', 'tId', 'number', 'eId', 'number', 'offset', 'number', 'outId', 'number']);
}

function select(args: {inputs: SelectInputs, backend: BackendWasm}) {
  const {inputs, backend} = args;
  const {condition, t, e} = inputs;

  const conditionId = backend.dataIdMap.get(condition.dataId).id;
  const tId = backend.dataIdMap.get(t.dataId).id;
  const eId = backend.dataIdMap.get(e.dataId).id;
  const out = backend.makeOutput(t.shape, t.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;

  if (condition.shape.length === 0 || condition.shape.length > 1 || t.shape.length === 1) {
    return out;
  }

  const cRank = condition.shape.length;
  const tRank = t.shape.length;

  const offset = cRank === 0 || cRank > 1 || tRank === 1 ? 1 : util.sizeFromShape(t.shape.slice(1));

  wasmSelect(conditionId, tId, eId, offset, outId);
  return out;
}

export const selectConfig: KernelConfig = {
  kernelName: Select,
  backendName: 'wasm',
  kernelFunc: select as {} as KernelFunc,
  setupFunc: setup
};

=============================================================================

import {KernelConfig, KernelFunc, Sigmoid, SigmoidInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmFunc: (xId: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(Sigmoid, null /* void */, ['number', 'number']);
}

function sigmoid(args: {backend: BackendWasm, inputs: SigmoidInputs}) {
  const {backend, inputs: {x}} = args;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const out = backend.makeOutput(x.shape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;

  if (util.sizeFromShape(x.shape.slice(1)) === 0) {
    return out;
  }

  wasmFunc(xId, outId);
  return out;
}

export const sigmoidConfig: KernelConfig = {
  kernelName: 'Sigmoid',
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: sigmoid as {} as KernelFunc,
  setupFunc: setup
};

=============================================================================

import {KernelConfig, Sin} from '@tensorflow/tfjs-core';

export const sinConfig: KernelConfig = createUnaryKernelConfig(Sin);

=============================================================================

*/

import {KernelConfig, KernelFunc, Sigmoid, SigmoidInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const sinConfig: KernelConfig = createUnaryKernelConfig(Sin);

*/

=============================================================================

*/

import {KernelConfig, KernelFunc, Sigmoid, SigmoidInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const sinConfig: KernelConfig = createUnaryKernelConfig(Sin);

*/

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*/

import {KernelConfig, KernelFunc, Softmax, SoftmaxAttrs, SoftmaxInputs, TensorInfo, util} from
'@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmFunc: (xId: number, outId: number, batch: number) =>
    void;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(Softmax, null /* void */, [ 'number', // xId
    'number', // outId
    'number', // batch
  ]);}

function softmax(
    args: {backend: BackendWasm, inputs: SoftmaxInputs, attrs: SoftmaxAttrs}):
    TensorInfo {
  const {backend, inputs: {logits}, attrs: {dim}} =
    args;
  const xId = backend.dataIdMap.get(logits.dataId).id;
  const outId = backend.makeOutput(logits.shape,
    logits.dtype).id;
  const channels = logits.shape[dim];
  const batch = util.sizeFromShape(logits.shape) / channels;

  // Short-circuit zero-sized tensors.
  if (util.sizeFromShape(out.shape) === 0) {
    return out;
  }

  wasmFunc(xId, outId, channels, batch);
  return out;
}

export const softmaxConfig: KernelConfig = {
  kernelName: Softmax,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: softmax as {} as KernelFunc
};

*/

import {backend_util, KernelConfig, KernelFunc, ReshapeAttrs, ReshapeInputs, SpaceToBatchND,
SpaceToBatchNDInputs, TensorInfo, TransposeAttrs, TransposeInputs, util} from
'@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {padV2Config} from './PadV2';
import {reshape} from './Reshape';
import {transpose} from './Transpose';

function

------------------------------------------
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=============================================================================

import {KernelConfig, KernelFunc, SplitV, SplitVAttrs, SplitVInputs, util} from '@tensorflow/tfjs-core';
import {backend_util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';

import {slice} from './Slice';

export function splitV(
    args: {inputs: SplitVInputs, attrs: SplitVAttrs, backend: BackendWasm}) {
  const {inputs, attrs, backend} = args;
  const {x} = inputs;
  const {numOrSizeSplits, axis} = attrs;

  const $axis = util.parseAxisParam(axis, x.shape)[0];

  const splitSizes = backend_util.prepareSplitSize(x, numOrSizeSplits, $axis);
  const begin = new Array(x.shape.length).fill(0);

  const size = x.shape.slice();
  return splitSizes.map(s => {
    const xSliceSize = [...size];
    xSliceSize[$axis] = s;
    const xSlice =
        slice({inputs: {x}, attrs: {begin, size: xSliceSize}, backend});
    begin[$axis] += s;

    return xSlice;
  });
}

export const splitVConfig: KernelConfig = {
  kernelName: SplitV,
  backendName: 'wasm',
  kernelFunc: splitV as {} as KernelFunc
};

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 *
=============================================================================

import {KernelConfig, Sqrt} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const sqrtConfig: KernelConfig = createUnaryKernelConfig(Sqrt);

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 *
=============================================================================

import {KernelConfig, Square} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const squareConfig: KernelConfig = createUnaryKernelConfig(Square);

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 *
=============================================================================

import {KernelConfig, SquaredDifference} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = true;
export const squaredDifferenceConfig: KernelConfig =
    createBinaryKernelConfig(SquaredDifference, supportsFullBroadcast);

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 *
import {KernelConfig, KernelFunc, Step, StepAttrs, StepInputs, TensorInfo} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {CppDType} from './types';

let wasmStep:
    (xId: number, alpha: number, dtype: number, outId: number) =>
    void;

function setup(backend:
    BackendWasm): void {
  wasmStep = backend.wasm.cwrap(Step, null /*void*/, 
    ['number',  // x_id
    'number',  // alpha
    'number',  // dtype
    'number',  // out_id
  ],

    function setup(backend:
    BackendWasm, inputs: StepInputs, attrs: StepAttrs): TensorInfo {
  const {backend, inputs, attrs} = args;

  const {alpha} = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmStep(xId, alpha, CppDType[x.dtype], outId);
  return out;
}

export const stepConfig: KernelConfig = {
  kernelName:
    Step,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: step as {} as KernelFunc
};

import {KernelConfig, KernelFunc, slice_util, StridedSlice, StridedSliceAttrs, StridedSliceInputs, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {reshape} from './Reshape';
import {slice} from './Slice';

let wasmStridedSlice: (
    xId: number, xStridesBytes: Uint8Array,
    xRank: number,
    beginBytes: Uint8Array, endBytes: Uint8Array, stridesBytes: Uint8Array,
    outShapeBytes: Uint8Array, outStridesBytes: Uint8Array,
    outShapeLength: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmStridedSlice = backend.wasm.cwrap(StridedSlice, null /*void*/, 
    ['number',  // xId
    'array', // xStrides
    'number',  // xRank
    'array', // begin
    'array', // end
    'array', // strides
    'array', // outShape
    'array', // outStrides
    'number', // outShapeLength
    'number', // outId
  ],

    function stridedSlice(args: {
  backend: BackendWasm,
  inputs: StridedSliceInputs,
  attrs: StridedSliceAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;

  const {x} = inputs;

  const {
    begin,
    end,
    strides,
    beginMask,
    endMask,
    ellipsisMask,
    newAxisMask,
    shrinkAxisMask
  } = attrs;

  const {
    finalShapeSparse,
    finalShape,
    isIdentity,
    sliceDim0,
    isSimpleSlice,
    begin: $begin,
    end: $end,
    strides: $strides
  } =
      slice_util.sliceInfo(
          x.shape, begin, end, strides, beginMask, endMask, ellipsisMask,
          newAxisMask, shrinkAxisMask);

  let result;

  if (isIdentity) {
    // Optimization #1, slice is a no-op plus reshape
    result = reshape({inputs: [x],
      backend, attrs: {shape: finalShape}});
  } else if (sliceDim0 || isSimpleSlice) {
    // Optimization #2, slice is memory contiguous (only occurs in dim 0)
    util.assert(
        x.shape.length >= 1,
        () => `Input must have rank at least 1, got: ${x.shape.length}`);

    const size = slice_util.computeOutShape($begin, $end, $strides);
    const sliced = slice({inputs: {x},
      backend, attrs: {begin: $begin, size}});
    result =
        reshape({inputs: {x: sliced},
          backend, attrs: {shape: finalShape}});

    backend.disposeData(sliced.dataId);
  } else {
    const out =
        backend.makeOutput(finalShapeSparse, 'float32', xId);
    const xId = backend.dataIdMap.get(x.dataId).id;
    const xStridesBytes =
        new Uint8Array(new Int32Array(x.strides).buffer);
    const outputShapeBytes =
        new Uint8Array(finalShapeSparse.length, outId);
    result = reshape({inputs: [x: out],
      backend, attrs: {shape: finalShape}});

    backend.disposeData(out.dataId);

}
return result;
}

export const stridedSliceConfig: KernelConfig = {
  kernelName: StridedSlice,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: stridedSlice as {} as KernelFunc
} as KernelConfig;

export const stridedSliceConfig: KernelConfig = {
  kernelName: StridedSlice,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: stridedSlice as {} as KernelFunc
} as KernelConfig;

const supportsFullBroadcast = true;

export const sumConfig: KernelConfig = {
  kernelName: Sum,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: sum as {} as KernelFunc
} as KernelConfig;

function setup(backend: BackendWasm): void {
  wasmSum = backend.wasm.cwrap(Sum, null /*void*/, [
    'number',  // input_id
    'number',  // reduce_size
    'number',  // dtype
    'number',  // out_id
  ]);}


import {KernelConfig, Tan} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const tanConfig: KernelConfig = createUnaryKernelConfig(Tan);

import {KernelConfig, Tanh} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const tanhConfig: KernelConfig = createUnaryKernelConfig(Tanh);

import {KernelConfig, KernelFunc, Tile, TileAttrs, TileInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {CppDType} from './types';

let wasmTile: (
    xId: number, xShape: Uint8Array, xShapeSize: number, newShape: Uint8Array,
    newShapeSize: number, dtype: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmTile = backend.wasm.cwrap(Tile, null /* void */, 
    'number',  // x_id
    'array',   // x_shape
    'number',  // x_shape.length
    'array',   // new_shape
    'number',  // new_shape.length
    'number'   // out_id
  );
}

function tile(
    args: {inputs: TileInputs, backend: BackendWasm, attrs: TileAttrs}) {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const {reps} = attrs;

  const newShape: number[] = new Array(x.shape.length);
  for (let i = 0; i < newShape.length; i++) {
    newShape[i] = x.shape[i] * reps[i];
  }
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const newShapeBytes = new Uint8Array(new Int32Array(newShape).buffer);

  const out = backend.makeOutput(newShape, x.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmTile(xId, xShapeBytes, x.shape.length, newShapeBytes, newShape.length,
    CppDType[out.dtype], outId, out);
  return out;
}

export const tileConfig: KernelConfig = {
  kernelName: Tile,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: tile as {} as KernelFunc
};

import {KernelConfig, KernelFunc, Tile, TileAttrs, TileInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {CppDType} from './types';

let wasmTopK: (
    xId: number, xShapeBytes: Uint8Array, xShapeLength: number,
    xDtype: CppDType, k: number, sorted: boolean, outValuesId: number, outIndicesId: number) => void;

function setup(backend: BackendWasm) {
  wasmTopK = backend.wasm.cwrap(TopK, null /* void */, 
    'number',  // xId
    'array',   // x_shape
    'number',  // x_shape.length
    'number',  // k
    'bool',    // sorted
    'number',  // outValuesId
    'number',  // outIndicesId
  );
}

export const topk:
    (args: {inputs: TopKInputs, backend: BackendWasm,} => void) => void;

function topk(
    args: {inputs: TopKInputs, backend: BackendWasm,} => void) => void;

出口源码用于Cisco Meeting Server (从前的Acano Server) 3.6 3075
attrs: TopKAttrs) =>
    TensorInfo[] | TensorInfo = ({inputs, backend, attrs}) => {
        const {x} = inputs;
        const k, sorted = attrs;
        const xId = backend.dataIdMap.get(x.dataId).id;
        const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
        const outputShape = x.shape.slice();
        const outputValuesId = backend.dataIdMap.get(outputValues.dataId).id;
        const outValues = backend.makeOutput(outputShape, x.dtype);
        const outIndicesId = backend.dataIdMap.get(outputIndices.dataId).id;
        const outIndices = backend.makeOutput(outputShape, 'int32');

        const {k, sorted} = attrs;
        const xId = backend.dataIdMap.get(x.dataId).id;
        const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
        const outputShape = x.shape.slice();
        outputShape[outputShape.length - 1] = k;
        const outValues = backend.makeOutput(outputShape, x.dtype);
        const outIndices = backend.makeOutput(outputShape, 'int32');

        const xId = backend.dataIdMap.get(x.dataId).id;
        const xShapeBytes, x.shape.length, CppDType[x.dtype], k, sorted,
        outValuesId, outIndicesId;
    }

    export const topKConfig: KernelConfig = {
        kernelName: TopK,
        backendName: 'wasm',
        setupFunc: setup,
        kernelFunc: topk as {} as KernelFunc,
    };

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 *=============================================================================
 */

import {KernelConfig, KernelFunc, TensorInfo, Transform, TransformAttrs, TransformInputs, util} from
    '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

let wasmTransform: (
    imageId: number, transformsId: number, isBatchTransform: boolean,
    batch: number, outHeight: number, outWidth: number, numChannels: number,
    imageWidth: number, imageHeight: number, strides: Uint8Array,
    stridesLength: number, interpolationModeId: number, fillModeId: number,
    fillValue: number, outId: number) => void;

function setup(backend: BackendWasm): void {
    wasmTransform = backend.wasm.cwrap(Transform,
        null /*void*/, [
            'number',  // imageId
            'number',  // transformsId
            'bool',    // isBatchTransform
            'number',  // batch
            'number',  // outHeight
            'number',  // outWidth
            'number',  // numChannels
            'number',  // imageWidth
            'number',  // imageHeight
            'number',  // strides
            'number'   // outId
        ]);
}

function transform(
    args: {
        backend: BackendWasm, inputs: TransformInputs, attrs: TransformAttrs
    }) =>
    TensorInfo {
        const {backend, inputs, attrs} = args;
        const [batch, imageHeight, imageWidth, numChannels] = image.shape;
        const [outputHeight, outputWidth] = outputShape != null ? outputShape : [imageHeight, imageWidth];
        const outShape = [batch, outputHeight, outputWidth, numChannels] as [number, number, number, number];
        const strides = new Uint8Array(new Int32Array(util.computeStrides(image.shape)).buffer);
        const out = backend.makeOutput(outShape, image.dtype);
        const outId = backend.dataIdMap.get(out.dataId).id;
        const imageData = backend.dataIdMap.get(image.dataId);
        const imageId = imageData.id;
        const transformsData = backend.dataIdMap.get(transforms.dataId);
        const transformsId = transformsData.id;
        const interpolationModeId = attrs.interpolation;
        const fillMode = attrs.fillMode;
        const fillValue = attrs.fillValue;
        const outputShape = outputShape != null ? outputShape : [imageHeight, imageWidth];
        const outShape = [batch, outputHeight, outputWidth, numChannels] as [number, number, number, number];
        const strides = new Uint8Array(new Int32Array(util.computeStrides(image.shape)).buffer);
        const out = backend.makeOutput(outShape, image.dtype);
        const outId = backend.dataIdMap.get(out.dataId).id;
        const imageData = backend.dataIdMap.get(image.dataId);
        const transformsData = backend.dataIdMap.get(transforms.dataId);
        const transformsId = transformsData.id;
        const interpolationModeId = attrs.interpolation;

        const fillMode = attrs.fillMode;
        const fillValue = attrs.fillValue;

        if (outputShape) {
            const outputHeight = outputShape[0];
            const outputWidth = outputShape[1];
            const numChannels = outputShape[2];
            const strides = outputShape[3];
            const image = backend.dataIdMap.get(image.dataId);
            const imageId = image.id;
            const transformsData = backend.dataIdMap.get(transforms.dataId);
            const transformsId = transformsData.id;
            const interpolationModeId = attrs.interpolation;
            const fillMode = attrs.fillMode;
            const fillValue = attrs.fillValue;

            wasmTransform(
                imageId, transformsId, (transforms.shape[0] > 1), batch, outHeight,
                outWidth, numChannels, imageWidth, imageHeight, strides,
                outputShape[0], interpolationModeId, fillModeId, fillValue,
                outId);

            return out;
        }

        return out;
    }

export const transformConfig: KernelConfig = {
    kernelName: Transform,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: transform as {} as KernelFunc,
};

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=============================================================================

import {KernelConfig, KernelFunc, TensorInfo, Unpack, UnpackAttrs, UnpackInputs} from
'@tensorflow/tfjs-core';\n
import {BackendWasm} from '../backend_wasm';\n
import {slice} from './Slice';\n
function unpack(\n    args: {inputs: UnpackInputs, backend: BackendWasm, attrs: UnpackAttrs}):\n
    const {inputs, backend, attrs} = args;
    const {value} = inputs;
    let {axis} = attrs;

    if (axis < 0) {
        axis += value.shape.length;\n    }

    const numOutputs = value.shape[axis];\n    const rank = value.shape.length;

    const outShape = value.shape.slice();\n
    for (let i = 0; i < rank; i++) {
        if (i !== axis) {
            outShape[i] = value.shape[i];\n        }
    }

    const outs: TensorInfo[] = new Array(numOutputs);
    const begin = new Array(rank).fill(0);
    const size = value.shape.slice();\n
    for (let i = 0; i < outs.length; i++) {
        begin[axis] = i;
        outs[i] = slice({inputs: {x: value}, attrs: {begin, size}, backend});\n    }

    return outs.map(({dataId, dtype}) => ({dataId, dtype, shape: outShape}));\n}

export const unpackConfig: KernelConfig = {
    kernelName: Unpack,
    backendName: 'wasm',
    kernelFunc: unpack as {} as KernelFunc,
};

import {KernelConfig, KernelFunc, ZerosLike, ZerosLikeInputs} from '@tensorflow/tfjs-core';\n
import {BackendWasm} from '../backend_wasm';\n
function zerosLike(args: {inputs: ZerosLikeInputs, backend: BackendWasm}) {
    const {inputs: {x}, backend} = args;
    const out = backend.makeOutput(x.shape, x.dtype);

    const outVals = backend.typedArrayFromHeap(out);
    outVals.fill(0);
    return out;
}

export const zerosLikeConfig: KernelConfig = {
    kernelName: ZerosLike,
    backendName: 'wasm',
    kernelFunc: zerosLike as {} as KernelFunc,
};

// We explicitly import the modular kernels so they get registered in the\n// global registry when we compile the
// A modular build would replace\n// the contents of this file and import only the kernels that are
// needed:\n
import {KernelConfig, registerKernel} from '@tensorflow/tfjs-core';\n
import {fusedMatMulConfig} from './kernels/_FusedMatMul';
import {absConfig} from './kernels/Abs';
import {addConfig} from './kernels/Add';
import {addNConfig} from './kernels/AddN';
import {allConfig} from './kernels/All';
import {anyConfig} from './kernels/Any';
import {argMaxConfig} from './kernels/ArgMax';
import {avgPoolConfig} from './kernels/AvgPool';
import {batchMatMulConfig} from './kernels/BatchMatMul';
import {batchToSpaceNDConfig} from './kernels/BatchToSpaceND';
import {castConfig} from './kernels/Cast';
import {ceilConfig} from './kernels/Ceil';
import {clipByValueConfig} from './kernels/ClipByValue';
import {concatConfig} from './kernels/Concat';
import {conv2DConfig} from './kernels/Conv2D';
import {conv2DBackpropInputConfig} from './kernels/Conv2DBackpropInput';
import {cosConfig} from './kernels/Cos';
import {cropAndResizeConfig} from './kernels/CropAndResize';
import {cumsumConfig} from './kernels/Cumsum';
import {depthToSpaceConfig} from './kernels/DepthToSpace';
import {depthwiseConv2dNativeConfig} from './kernels/DepthwiseConv2dNative';
import {eluConfig} from './kernels/Elu';
import {equalConfig} from './kernels/Equal';
import {expandDimsConfig} from './kernels/ExpandDims';
import {fillConfig} from './kernels/Fill';
import {flipLeftRightConfig} from './kernels/FlipLeftRight';
import {floorConfig} from './kernels/Floor';
import {floorDivConfig} from './kernels/FloorDiv';
import {fusedBatchNormConfig} from './kernels/FusedBatchNorm';
import {fusedConv2DConfig} from './kernels/FusedConv2D';
import {fusedDepthwiseConv2DConfig} from './kernels/FusedDepthwiseConv2D';
import {gatherNdConfig} from './kernels/GatherNd';
import {greaterConfig} from './kernels/Greater';
import {greaterEqualConfig} from './kernels/GreaterEqual';
import {identityConfig} from './kernels/Identity';
import {leakyReluConfig} from './kernels/LeakyRelu';
import {logConfig} from './kernels/Log';
import {logicalAndConfig} from './kernels/LogicalAnd';
import {maxConfig} from './kernels/Max';
import {maximumConfig} from './kernels/Maximum';
import {meanConfig} from './kernels/Mean';
import {minConfig} from './kernels/Min';
import {mirrorPadConfig} from './kernels/MirrorPad';
import {multiplyConfig} from './kernels/Multiply';
import {negConfig} from './kernels/Neg';
import {nonMaxSuppressionV3Config} from './kernels/NonMaxSuppressionV3';
import {nonMaxSuppressionV4Config} from './kernels/NonMaxSuppressionV4';
import {nonMaxSuppressionV5Config} from './kernels/NonMaxSuppressionV5';
import {oneHotConfig} from './kernels/OneHot';
import {packConfig} from './kernels/Pack';
import {padV2Config} from './kernels/PadV2';
import {polyConfig} from './kernels/Poly';
import {preluConfig} from './kernels/Prelu';
import {prodConfig} from './kernels/Prod';
import {rangeConfig} from './kernels/Range';
import {realDivConfig} from './kernels/RealDiv';
import {reluConfig} from './kernels/Relu';
import {relu6Config} from './kernels/Relu6';
import {reshapeConfig} from './kernels/Reshape';
import {resizeBilinearConfig} from './kernels/ResizeBilinear';
import {reverseConfig} from './kernels/Reverse';
import {rotateConfig} from './kernels/Rotate';
import {rotateWithOffsetConfig} from './kernels/RotateWithOffset';
import {roundConfig} from './kernels/Round';
import {rsqrtConfig} from './kernels/Rsqr';
import {selectConfig} from './kernels/Select';
import {sigmoidConfig} from './kernels/Sigmoid';
import {sinConfig} from './kernels/Sin';
import {softmaxConfig} from './kernels/Sofmax';
import {spaceToBatchConfig} from './kernels/SpaceToBatch';
import {splitVConfig} from './kernels/SplitV';
import {sqrtConfig} from './kernels/Sqrt';
import {squareConfig} from './kernels/Square';
import {squaredDifferenceConfig} from './kernels/SquaredDifference';
import {stepConfig} from './kernels/Step';
import {stridedSliceConfig} from './kernels/StridedSlice';
import {subConfig} from './kernels/Sub';
import {sumConfig} from './kernels/Sum';
import {tanConfig} from './kernels/Tan';
import {tanhConfig} from './kernels/Tanh';
import {tileConfig} from './kernels/Tile';
import {topKConfig} from './kernels/TopK';
import {transformConfig} from './kernels/Transform';
import {transposeConfig} from './kernels/Transpose';
import {unpackConfig} from './kernels/Unpack';
import {zerosLikeConfig} from './kernels/ZerosLike';

const kernelConfigs: KernelConfig[] = [
  absConfig,
  addConfig,
  addNConfig,
  allConfig,
  anyConfig,
  argMaxConfig,
  avgPoolConfig,
  batchMatMulConfig,
  batchToSpaceConfig,
  castConfig,
  ceilConfig,
  clipByValueConfig,
  concatConfig,
  conv2DConfig,
  conv2DBackpropInputConfig,
  cosConfig,
  cOSHConfig,
  cropAndResizeConfig,
  cumsumConfig,
  depthToSpaceConfig,
  depthwiseConv2dNativeConfig,
  eluConfig,
  equalConfig,
  expandDimsConfig,
  fillConfig,
  flipLeftRightConfig,
  floorConfig,
  floorDivConfig,
  fusedMatMulConfig,
  fusedBatchNormConfig,
  fusedConv2DConfig,
  fusedDepthwiseConv2DConfig,
  gatherNdConfig,
  gatherV2Config,
  greaterConfig,
  greaterEqualConfig,
  identityConfig,
  leakyReluConfig,
  lessConfig,
  lessEqualConfig,
  logConfig,
  ...]
logicalAndConfig, maxConfig, maximumConfig, maxPoolConfig, meanConfig, minConfig, minimumConfig, mirrorPadConfig, multiplyConfig, negConfig, nonMaxSuppressionV3Config, nonMaxSuppressionV4Config, nonMaxSuppressionV5Config, notEqualConfig, oneHotConfig, onesLikeConfig, packConfig, padV2Config, powConfig, preluConfig, prodConfig, rangeConfig, realDivConfig, reluConfig, relu6Config, reshapeConfig, resizeBilinearConfig, reverseConfig, rotateWithOffsetConfig, rsqrtConfig, roundConfig, scatterNdConfig, selectConfig, sigmoidConfig, sinConfig, sliceConfig, softmaxConfig, spaceToBatchNDConfig, splitVConfig, sqrtConfig, squareConfig, squaredDifferenceConfig, stepConfig, stridedSliceConfig, subConfig, sumConfig, tanConfig, tanhConfig, tileConfig, topKConfig, transformConfig, transposeConfig, unpackConfig, zerosLikeConfig

for (const kernelConfig of kernelConfigs) {
  registerKernel(kernelConfig);
}

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 */

import {env} from '@tensorflow/tfjs-core';

const ENV = env();

/**
 * True if SIMD is supported.
 */
// From: https://github.com/GoogleChromeLabs/wasm-feature-detect
ENV.registerFlag('WASM_HAS_SIMD_SUPPORT', async () => WebAssembly.validate(new Uint8Array([0, 97, 115, 109, 1, 0, 0, 0, 1, 4, 1, 96, 0, 0, 3, 2, 1, 0, 10, 9, 1, 7, 0, 65, 0, 253, 15, 26, 11])));
/**
 * True if threads are supported.
 */
// From: https://github.com/GoogleChromeLabs/wasm-feature-detect
ENV.registerFlag('WASM_HAS_MULTITHREAD_SUPPORT', async () => {
  // TODO(annxingyuan): Enable node support once this is resolved;
  // https://github.com/tensorflow/tfjs/issues/3830
  if (ENV.get('IS_NODE')) {
    return false;
  }
  try {
    // Test for transferability of SABs (needed for Firefox)
    // https://groups.google.com/forum/#!msg/mozilla.dev.platform/IHKbZIHEtPa/dwsMNchWEQAJ
    new MessageChannel().port1.postMessage(new SharedArrayBuffer(1));
  } catch (e) {
    return false;
  }
  var WasmBackendModuleThreadedSimd = (function() {
    if (typeof __filename !== 'undefined') _scriptDir = _scriptDir || __filename;
    return {
      GROWABLE_HEAP_I8: function(wasmMemory) {
        if (wasmMemory.buffer != buffer) {
          updateGlobalBufferAndViews(wasmMemory.buffer);
          updateGlobalBufferAndViews(wasmMemory.buffer);
        }
        return HEAP8
      },
      GROWABLE_HEAP_U8: function(wasmMemory) {
        if (wasmMemory.buffer != buffer) {
          updateGlobalBufferAndViews(wasmMemory.buffer);
        }
        return HEAPU8
      },
      GROWABLE_HEAP_I32: function(wasmMemory) {
        if (wasmMemory.buffer != buffer) {
          updateGlobalBufferAndViews(wasmMemory.buffer);
        }
        return HEAP32
      },
      GROWABLE_HEAP_U32: function(wasmMemory) {
        if (wasmMemory.buffer != buffer) {
          updateGlobalBufferAndViews(wasmMemory.buffer);
        }
        return HEAPU32
      },
      GROWABLE_HEAP_F64: function(wasmMemory) {
        if (wasmMemory.buffer != buffer) {
          updateGlobalBufferAndViews(wasmMemory.buffer);
        }
        return HEAPF64
      }
    };
  };
  var WasmBackendModuleThreadedSimd = WasmBackendModuleThreadedSimd || {};
  return WasmBackendModuleThreadedSimd;

GROWABLE_HEAP_I8(0, buffer)
GROWABLE_HEAP_U8(0, buffer)
GROWABLE_HEAP_I32(0, buffer)
GROWABLE_HEAP_U32(0, buffer)
GROWABLE_HEAP_F64(0, buffer)
WasmBackendModuleThreadedSimd

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Promise(function(resolve,reject){readyPromiseResolve=resolve;readyPromiseReject=reject});
var moduleOverrider={};

for(key in Module){if(Module.hasOwnProperty(key)){moduleOverrider[key]=Module[key]}}

var arguments_=[];

var thisProgram="/this.program";

var quit_=function(status,toThrow){throw toThrow};

ENVIRONMENT_IS_WEB=false;ENVIRONMENT_IS_WORKER=false;

ENVIRONMENT_IS_NODE=false;ENVIRONMENT_IS_SHELL=false;ENVIRONMENT_IS_WEB=typeof window==="object";ENVIRONMENT_IS_WORKER=typeof importScripts==="function";ENVIRONMENT_IS_NODE=typeof process==="object";ENVIRONMENT_IS_SHELL=ENVIRONMENT_IS_WEB&&!ENVIRONMENT_IS_NODE&&ENVIRONMENT_IS_WORKER;

ENVIRONMENT_IS_PTHREAD=Module["ENVIRONMENT_IS_PTHREAD"]||false;if(ENVIRONMENT_IS_PTHREAD){buffer=Module["buffer"]}

function read_(filename,binary){if(!nodeFS)nodeFS=require("fs");if(!nodePath)nodePath=require("path");filename=nodePath["normalize"](filename);

return nodeFS["readFileSync"](filename,binary?null:"utf8");}

readBinary=function readBinary(filename){var ret=read_(filename,true);

assert(ret.buffer);

return ret};

ENVIRONMENT_IS_WEB=typeof window==="object";ENVIRONMENT_IS_WORKER=typeof importScripts==="function";ENVIRONMENT_IS_NODE=typeof process==="object"&&typeof process.versions==="object"&&typeof process.versions.node==="string";ENVIRONMENT_IS_SHELL=!ENVIRONMENT_IS_WEB&&!ENVIRONMENT_IS_NODE&&!ENVIRONMENT_IS_WORKER;

read_=function read_(url){var xhr=new XMLHttpRequest;xhr.open("GET",url,false);

xhr.send(null);return read_(url)}}

nodeWorkerThreads=worker_threads.Worker;
```javascript
++|=128|u&63|else{|if(outIdx+3==endIdx)|break|heap[outIdx++]=240|u>>18;heap[outIdx++]=128|u>>12&63;heap[outIdx++]=128|u>>6&63;heap[outIdx++]=128|u&63}}heap[outIdx]=0;return outIdx-startIdx}function
stringToUTF8(str,outPtr,maxBytesToWrite){return
stringToUTF8Array(str,GROWABLE_HEAP_U8(),outPtr,maxBytesToWrite)}function lengthBytesUTF8(str){var
len=0;for(var i=0;i<str.length;++i){var
u=str.charCodeAt(i);if(u>=55296&&u<=57343)u=65536+(str.charCodeAt(++i)&1023);if(u<=127)+len;else if(u<=2047)len+=2;else if(u<=65535)len+=3;else len+=4}return len}function
writeArrayToMemory(array,buffer){GROWABLE_HEAP_I8().set(array,buffer)}function
alignUp(x,multiple){if(x%multiple>0){x+=multiple-x%multiple}return x}var
buffer,HEAP8,HEAP16,HEAP32,HEAP32,HEAPF32,HEAPF64;function
updateGlobalBufferAndViews(buf){buffer=buf}function
INITIAL_MEMORY=Module["INITIAL_MEMORY"]||16777216;if(ENVIRONMENT_IS_PTHREAD){wasmMemory=Module["wasmMemory"];buffer=Module["buffer"];Module["HEAP8"]=new
Int8Array(buf);Module["HEAP16"]=new Int16Array(buf);Module["HEAP32"]=new
Int32Array(buf);Module["HEAPU8"]=new Uint8Array(buf);Module["HEAPU16"]=new
Uint16Array(buf);Module["HEAPU32"]=new
Uint32Array(buf);Module["HEAPF32"]=new
Float32Array(buf);Module["HEAPF64"]=new Float64Array(buf)}var
INITIAL_MEMORY=Module["INITIAL_MEMORY"]||16777216;if(ENVIRONMENT_IS_PTHREAD){wasmMemory=Module["wasmMemory"];buffer=Module["buffer"];else if(Module["wasmMemory"])wasmMemory=Module["wasmMemory"]}else{wasmMemory=new
WebAssembly.Memory({"initial":INITIAL_MEMORY,"maximum":2147483648/65536,"shared":true});if(!wasmMemory.buffer instanceof SharedArrayBuffer){err("requested a shared WebAssembly.Memory but the
returned buffer is not a SharedArrayBuffer, indicating that while the browser has SharedArrayBuffer it does not
have WebAssembly threads support - you may need to set a
flag");if(ENVIRONMENT_IS_NODE){console.log("(on node you may need: --experimental-wasm-threads --
experimental-wasm-bulk-memory and also use a recent version)")}}throw Error("bad
memory");}}Module["monitorRunDependencies"]||(runDependencies=0;runDependencyWatcher=null;dependenciesFulfilled=null;function
addRunDependency(id){assert(!ENVIRONMENT_IS_PTHREAD,"addRunDependency cannot be used in a
pthread worker");runDependencies++;if(Module["monitorRunDependencies"]){Module["monitorRunDependencies"](run
Dependencies++)}function removeRunDependency(id){runDependencies--;
if(Module["monitorRunDependencies"]){Module["monitorRunDependencies"](run
Dependencies--)};if(Module["monitorRunDependencies"]){Module["monitorRunDependencies"](run
Dependencies--)}if(runDependencies==0){if(runDependencyWatcher!==null){clearInterval(runDependencyWatcher);runDependencyWatcher=null}
}if(dependenciesFulfilled){var
```
hreadExitHandlers:[];setThreadStatus:function() {runExitHandlers:function() {while(PThread.threadExitHandlers.length>0){PThread.threadExitHandlers.pop()};if(EENVIRONMENT_IS_PTHREAD&\_pthread_self()) __pthread__tsd_run_dtors();runExitHandlersAndDeinitThread:function(th,exitCode){Atoms.store(GROWABLE_HEAP_U32(),tb+56>>2,1);Atoms.store(GROWABLE_HEAP_U32(),tb+60>>2,0);PThread.runExitHandlers();Atoms.store(GROWABLE_HEAP_U32(),tb+4>>2,exitCode);Atoms.store(GROWABLE_HEAP_U32(),tb+0>>2,1);__emscripten_futex_wake(tb+0,2147483647);__emscripten_thread_init(0,0,0),threadExit:function(exitCode){var tb=\_pthread_self();if(tb){PThread.runExitHandlersAndDeinitThread(tb,exitCode);if(EENVIRONMENT_IS_PTHREAD){postMessage({"cmd":"exit"})}}};threadCancel:function(){PThread.runExitHandlersAndDeinitThread(_pthread_self(),-1);postMessage({"cmd":"\_cancelDone\"})},terminateAllThreads:function(){for(var t in PThread.pthreads){var pthread=PThread.pthreads[t];if(pthread&&pthread.worker){PThread.returnWorkerToPool(pthread.worker)}}PThread.pthreads=[];for(var i=0;i<PThread.unusedWorkers.length;++i){var worker=PThread.unusedWorkers[i];worker.terminate();PThread.unusedWorkers=[];for(var i=0;i<PThread.runningWorkers.length;++i){var worker=PThread.runningWorkers[i];var pthread=worker.pthread;PThread.freeThreadData(pthread);worker.terminate();PThread.runningWorkers=[]};freeThreadData:function(pthread){if(!pthread)return;if(pthread.threadInfoStruct){var tlsMemory=GROWABLE_HEAP_I32()[pthread.threadInfoStruct+100>>2];GROWABLE_HEAP_I32()[pthread.threadInfoStruct+100>>2]=0;try{func()}finally{GROWABLE_HEAP_I32()[\_emscripten allow main runtime queued calls>>2]=1}}};receiveObjectTransfer:function(data){},loadWasmModuleToWorker:function(worker,onFinishedLoading){worker.onmessage=function(e){var d=e["data"];var cmd=d["cmd"];if(cmd==="processMainThreadWork") {\_emscripten_processMainThreadWork()};if(cmd==="spawnThread") {spawnThread(data)};if(cmd==="cleanupThread") {cleanupThread(d["thread"])};if(cmd==="killThread") {killThread(d["thread"])};if(cmd==="cancelThread") {cancelThread(d["thread"])};if(cmd==="loaded") {worker.loaded=true;onFinishedLoading(worker);if(worker.runPthread){worker.runThread();delete worker.runThread()}};if(cmd==="print") {out("\"\"+cmd+\"\" to target pthread "+d["threadId"]+\"\" \"+d["text"]\"})} else if(cmd==="printErr") {err("\"\"+cmd+\"\" to target pthread "+d["threadId"]+\"\" \"+d["text"]\"})} else if(cmd==="alert") {alert("\"\"+cmd+\"\" to target pthread "+d["threadId"]+\"\" \"+d["text"]\"})} else if(cmd==="exit") {var detached=worker.pthread&&Atomics.load(GROWABLE_HEAP_U32(),worker.pthread.ThreadInfoStruct+64>>2);if(detached){PThread.returnWorkerToPool(worker)};if(cmd==="exitProcess") {try(exit(d["returnCode"]))catch(e){if(e instanceof ExitStatus)return;throw e}};if(cmd==="cancelDone") {PThread.returnWorkerToPool(worker)};else if(cmd==="objectTransfer") {PThread.receiveObjectTransfer(e.data)};else if(e.data.target==="setImmediate") {worker.postMessage(e.data)};else err("worker sent an unknown command"
function(context) { if (!context) context = GL.currentContext; if (context.initExtensionsDone) return; context.initExtensionsDone = true; var GLctx = context.GLctx; __webgl_enable_ANGLE_instanced_arrays(GLctx); __webgl_enable_OES_vertex_array_object(GLctx); __webgl_enable_WEBGL_draw_buffers(GLctx); GLctx.disjointTimerQueryExt = GLctx.getExtension("EXT_disjoint_timer_query"); __webgl_enable_WEBGL_multi_draw(GLctx); var exts = GLctx.getSupportedExtensions(); for (var i in exts) { if (exts[i].indexOf("lose_context") < 0 && exts[i].indexOf("debug") < 0) { GLctx.getExtension(exts[i]) } } }; populateUniformTable(function(program) { var p = GL.programs[program]; var ptable = GL.programInfos[program] = { uniforms: {}, maxUniformLength: 0, maxAttributeLength: -1, maxUniformBlockNameLength: -1 }; var uniformTable = ptable; var numUniforms = GLctx.getProgramParameter(p, 35718); for (var i = 0; i < numUniforms; ++i) { var u = GLctx.getActiveUniform(p, i); var name = u.name; var table = uniformTable; var maxUniformLength = Math.max(name.length + 1, table.maxUniformLength); if (name.slice(-1) === "]") { name = name.slice(0, name.lastIndexOf("[")]; } table.uniforms[name] = [u.size, GL.getNewId(GL.uniforms)]; table.maxUniformLength = Math.max(table.maxUniformLength, name.length + 1); if (!u.size) { delete table[name]; } else if (u.size < 1) { delete table[name]; delete table.uniforms[name]; } else if (u.size === 1) { table.uniforms[name][0] = GL.getNewId(GL.uniforms); } else if (u.size > 1) { var i = 0; while (i < u.size) { var name2 = name + "[" + i + "]"; var loc = GLctx.getUniformLocation(p, name2); if (loc) { var id = GL.getNewId(GL.uniforms); table.uniforms[name][i] = [loc, id]; GL.uniforms[id] = loc; i++; } } } }, __emscripten_webgl_power_preferences = ["default", "low-power", "high-performance"]; function _emscripten_webgl_do_create_context(target, attributes) { var a = attributes >> 2; var powerPreference = GROWABLE_HEAP_I32()[a + (24 << 2)]; var contextAttributes = { alpha: !!GROWABLE_HEAP_I32()[a + (0 << 2)], depth: !!GROWABLE_HEAP_I32()[a + (4 << 2)], stencil: !!GROWABLE_HEAP_I32()[a + (8 << 2)], antialias: !!GROWABLE_HEAP_I32()[a + (12 << 2)], premultipliedAlpha: !!GROWABLE_HEAP_I32()[a + (16 << 2)], preserveDrawingBuffer: !!GROWABLE_HEAP_I32()[a + (20 << 2)], powerPreference: _emscripten_webgl_power_preferences[powerPreference], failIfMajorPerformanceCaveat: !!GROWABLE_HEAP_I32()[a + (28 << 2)], majorVersion: GROWABLE_HEAP_I32()[a + (32 << 2)], minorVersion: GROWABLE_HEAP_I32()[a + (36 << 2)], enableExtensionsByDefault: GROWABLE_HEAP_I32()[a + (40 << 2)], explicitSwapControl: GROWABLE_HEAP_I32()[a + (44 << 2)], proxyContextToMainThread: GROWABLE_HEAP_I32()[a + (48 << 2)], renderViaOffscreenBackBuffer: GROWABLE_HEAP_I32()[a + (52 << 2)]]; var canvas = findCanvasEventTarget(target); if (!canvas) { return 0; } if (powerPreference) { throw "Internal Error: spawnThread() can only ever be called from main application thread!"; } return _emscripten_webgl_do_create_context(target, attributes); } function _emscripten_webgl_do_create_context(target, attributes) { var contextAttributes = { alpha: !!GROWABLE_HEAP_I32()[a + (0 << 2)], depth: !!GROWABLE_HEAP_I32()[a + (4 << 2)], stencil: !!GROWABLE_HEAP_I32()[a + (8 << 2)], antialias: !!GROWABLE_HEAP_I32()[a + (12 << 2)], premultipliedAlpha: !!GROWABLE_HEAP_I32()[a + (16 << 2)], preserveDrawingBuffer: !!GROWABLE_HEAP_I32()[a + (20 << 2)], powerPreference: _emscripten_webgl_power_preferences[powerPreference], failIfMajorPerformanceCaveat: !!GROWABLE_HEAP_I32()[a + (28 << 2)], majorVersion: GROWABLE_HEAP_I32()[a + (32 << 2)], minorVersion: GROWABLE_HEAP_I32()[a + (36 << 2)], enableExtensionsByDefault: GROWABLE_HEAP_I32()[a + (40 << 2)], explicitSwapControl: GROWABLE_HEAP_I32()[a + (44 << 2)], proxyContextToMainThread: GROWABLE_HEAP_I32()[a + (48 << 2)], renderViaOffscreenBackBuffer: GROWABLE_HEAP_I32()[a + (52 << 2)]]; var canvas = findCanvasEventTarget(target); if (!canvas) { return 0; } if (contextAttributes.explicitSwapControl) { return 0; } var contextHandle = GL.createContext(canvas, contextAttributes); return contextHandle; } function _emscripten_webgl_create_context(a0, a1) { return _emscripten_webgl_do_create_context(a0, a1); }
error!
};if(!threadParams pthread_ptr)throw"Internal error, no pthread ptr!";PTHread.runningWorkers.push(worker);var tlsMemory=_malloc(128*4);for(var i=0;i<128;++i){GROWABLE_HEAP_I32()[tlsMemory+i*4>>2]=0}var stackHigh=threadParams.stackBase+threadParams.stackSize;var pthread=PTHread.pthreads[threadParams.pthread_ptr]={worker:worker,stackBase:threadParams.stackBase,stackSize :threadParams.stackSize,allocatedOwnStack:threadParams.allocatedOwnStack,threadInfoStruct:threadParams.pthread_ptr};var tis=pthread.threadInfoStruct>>2;Atomics.store(GROWABLE_HEAP_U32(),tis+(64>>2),threadParams.detached);Atomic store(GROWABLE_HEAP_U32(),tis+(100>>2),tlsMemory);Atomics.store(GROWABLE_HEAP_U32(),tis +(40>>2),pthread.threadInfoStruct);Atomic store(GROWABLE_HEAP_U32(),tis+(80>>2),threadParams.stackSize );Atomic store(GROWABLE_HEAP_U32(),tis+(76>>2),stackHigh);Atomic store(GROWABLE HEAP_U32(),tis+(104+8>>2),stackHigh);Atomic store(GROWABLE_HEAP_U32(),tis+(104+12>>2),threadParams.detached);var global_libc=_emscripten_get_global_libc();var global_locale=global_libc+40;Atomic store(GROWABLE_HEAP_U32(),tis+(172>>2),global Locale);worker. pthread=PTHread;var msg={"cmd":"run","start_routine":threadParams.startRoutine,"arg":threadParams.arg,"threadInfoStruct":threadParams.pthread_ptr,"stackBase":threadParams.stackBase,"stackSize":threadParams.stackSize};worker.runPthread=function(){msg.time=performance.now();worker.postMessage(msg,threadParams.transferList)};if(worker.loaded ){worker.runPthread();delete worker.runPthread}function _pthread_create(pthread_ptr,attr,start_routine,arg){if(typeof SharedArrayBuffer==="undefined"){err("Current environment does not support SharedArrayBuffer, pthreads are not available!");return 6}if(!pthread_ptr){err("pthread_create called with a null thread pointer!");return 28}var transferList=[];var error=0;if(ENVIRONMENT_IS_PTHREAD&&(transferList.length===0||error)){return _emscripten_sync_run_in_main_thread_4(687865856,pthread_ptr,attr,start_routine,arg)}if(error)return error;var stackSize=0;var stackBase=0;var detached=0;if(attr&&attr!= -1){stackSize=GROWABLE_HEAP_I32()[attr>>2];stackSize+=81920;stackBase=GROWABLE_HEAP_I32()[attr+ 8>>2];detached=GROWABLE_HEAP_I32()[attr+12>>2]==0}else{stackSize=2097152}var allocatedOwnStack=stackBase==0;if(allocatedOwnStack){stackBase=_memalign(16,stackSize)}else{stackBase -=stackSize;assert(stackBase>0)}var threadInfoStruct=_malloc(228);for(var i=0;i<228>>2;++i)GROWABLE_HEAP_U32()[threadInfoStruct+i*4]=0;GROWABLE_HEAP_I32()[threadInfoStruct+12>>>2]=threadInfoStruct;var headPtr=threadInfoStruct+152;GROWABLE_HEAP_I32()[headPtr+2]=headPtr;var threadParams={stackBase:stackBase,stackSize:stackSize,allocatedOwnStack:allocatedOwnStack,threadInfoStruct:threadInfoStruct,transferList:transferList,detached:detached,startRoutine:startRoutine,threadInfoStruct:threadInfoStruct,threadParams.startRoutine,threadParams.arg,threadParams.transferList:transferList};if(ENVIRONMENT_IS_P THREAD){threadParams.cmd="spawnThread";postMessage(threadParams,transferList)}else{spawnThread(thread Params)}return 0}function __emscripten_do_pthread_join(thread,status,block){if(!ENVIRONMENT_IS_PTHREAD)return;var tbs=_pthread_self();if(!tbs)return;var cancelDisabled=Atomic.store(GROWABLE_HEAP_U32(),tbs+56>>>2);if(cancelDisabled)return;var canceled=Atomic.load(GROWABLE HEAP_U32(),tbs+56>>>2);if(canceled==2)throw"Canceled!";function _emscripten_check_blocking_allowed(){if(ENVIRONMENT_IS_NODE)return;if(ENVIRONMENT_IS_WORKER)return;warnOnce("Blocking on the main thread is very dangerous, see https://emscriptens.org/docs/porting/pthreads.html#blocking-on-the-main-browser-thread")}function __emscripten_do_pthread_join(thread,status,block){if(!thread){err("pthread_join attempted on a null thread pointer!");return}ERRNO_CODES.ESRCH}if(ENVIRONMENT_IS_PTHREAD&&_pthread_self()==thread){err("PThread \n+pthread is attempting to join to itself!");return ERRNO_CODES.EDEADLK}else if(ENVIRONMENT_IS_PTHREAD&&_emscripten_main_browser_thread_id()==thread){err("Main thread
"+thread+" is attempting to join to itself!(\n);return ERRNO_CODES.EDEADLK}var
self=GROWABLE_HEAP_I32(thread+12>>2);if(self===thread){err("\'+thread\'+ thread attempted to join on thread \'+thread\'+", which does not point to a valid thread, or does not exist anymore!\n");return
ERRNO_CODES.ESRCH}var
detached=Atomics.load(GROWABLE_HEAP_U32(),thread+64>>2);if(detached){err("pthread_join attempted on thread \'+thread\'+, which was already detached!\n");return
ERRNO_CODES.EINVAL}if(block){_emscripten_check_blocking_allowed()}for(;;){
var threadStatus=Atomics.load(GROWABLE_HEAP_U32(thread+0>>2);if(threadStatus==1){
var threadExitCode=Atomics.load(GROWABLE_HEAP_U32(thread+4>>2);if(status)GROWABLE_HEAP_I32(thread+status>>2)=threadExitCode;Atomics.store(GROWABLE_HEAP_U32(thread+64>>2);if(!ENVIRONMENT_IS_PTHREAD)cleanupThread(thread);else postMessage({\'cmd\':\'cleanupThread\',\'thread\':thread});return
0;if(!block){return
ERRNO_CODES.EBUSY}__pthread_testcancel_js();if(!ENVIRONMENT_IS_PTHREAD)_emscripten_main_thread_process_queued_calls();_emscripten_futex_wake(thread+0,threadStatus,ENVIRONMENT_IS_PTHREAD?100:1);}
}if(!ENVIRONMENT_IS_PTHREAD)_emscripten_main_thread_process_queued_calls();_emscripten_futex_wake(thread+0,threadStatus,ENVIRONMENT_IS_PTHREAD?100:1);}
function _pthread_join(thread,status){return __emscripten_do_pthread_join(thread,status,true)}
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Module["thisProgram"];if(Module["quit"]){quit_=Module["quit"]};var wasmBinary;if(Module["wasmBinary"])wasmBinary=Module["wasmBinary"]};var noExitRuntime=Module["noExitRuntime"];true;if(typeof WebAssembly!=="object"){abort("no native wasm support detected")};var wasmMemory;var ABORT=false;var EXITSTATUS;function assert(condition,text){if(condition){abort("Assertion failed: "+text)}}function getCFunc(ident){var func=Module["_"+ident];assert(func,"Cannot call unknown function "+ident+"", make sure it is exported");return func};function ccall(ident,returnType,argTypes,args,opts){var toC={"string":function(str){var ret=0;if(str!==null&&str!==undefined&&str!==0){var len=(str.length<<2)+1;ret=stackAlloc(len);stringToUTF8(str,ret,len)}return ret},"array":function(arr){var ret=stackAlloc(arr.length);writeArrayToMemory(arr,ret);return ret}};function convertReturnValue(ret){if(returnType==="string")return UTF8ToString(ret);if(returnType==="boolean")return Boolean(ret);return func(getCFunc(ident));var cArgs=[];var stack=0;var i=0;for(var i=0;i<args.length;++i){var converter=toC[argTypes[i]];if(converter){if(stack===0)stack=stackSave();cArgs[i]=converter(args[i])}else{cArgs[i]=args[i]}}}function cwrap(ident,returnType,argTypes,opts){argTypes=argTypes||[];var numericArgs=argTypes.every(function(type){return type==="number"});var numericRet=returnType!=="string";if(numericRet&&numericArgs&&!opts){return getCFunc(ident)}return function(){return ccall(ident,returnType,argTypes,arguments,opts)}}var UTF8Decoder=typeof TextDecoder!=="undefined"?new TextDecoder("utf8"):undefined;function UTF8ArrayToString(heap,idx,maxBytesToRead){var endPtr=idx;while(heap[endPtr]&&!(endPtr>=endIdx))++endPtr;if(endPtr-idx>16&&heap.subarray&&UTF8Decoder){return UTF8Decoder.decode(heap.subarray(idx,endPtr))}else{var str="";while(idx<endPtr){var u0=heap[idx++];if(!(u0&128)){str+=String.fromCharCode(u0);continue}var u1=heap[idx++];if((u0&224)==192){str+=String.fromCharCode((u0&31)<<6|u1);continue}var u2=heap[idx++];if((u0&240)==224){u0=(u0&15)<<12|u1<<6|u2}else{u0=(u0&7)<<18|u1<<12|u2<<6}if(u0<65536){str+=String.fromCharCode(u0)}else{var ch=u0-65536;str+=String.fromCharCode(55296|ch>>10,56320|ch&1023)}}}function UTF8ToString(ptr,maxBytesToWrite){return stringToUTF8Array(str,HEAPU8,outPtr,maxBytesToWrite)}function writeArrayToMemory(array,buffer){HEAP8.set(array,buffer)}
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6

```
e&&typeof fetch==='function'(){return fetch(wasmBinaryFile,[credentials:'same-origin'])}then(function(response){var result=WebAssembly.instantiateStreaming(response.info);return result.then(receiveInstantiatedSource:function(reason){err('wasm streaming compile failed: '+reason);err('falling back to ArrayBuffer instantiation');return instantiateArrayBuffer(receiveInstantiatedSource())})}else{return instantiateArrayBuffer(receiveInstantiatedSource())})}if(Module['instantiateWasm']){try{var exports=Module['instantiateWasm']([info,receiveInstance]);return exports}catch(e){err('Module.instantiateWasm callback failed with error: '+e);return false}}instantiateAsync().catch(readyPromiseReject);return{}}function callRuntimeCallbacks(callbacks){while(callbacks.length>0){var callback=callbacks.shift();if(typeof callback==='function'){callback(Module);continue}var func=callback.func;if(typeof func==='number'){if(callback.arg===undefined){wasmTable.get(func)()}else{wasmTable.get(func)(callback.arg)continue}continue}else{func(callback.arg===undefined?null:callback.arg)}}}function _abort(){abort()}function _emscripten_memcpy_big(dest,src,num){HEAPU8.copyWithin(dest,src,src+num)}function _emscripten_get_heap_size(){return HEAPU8.length}function emscripten_realloc_buffer(size){try{wasmMemory.grow(size-buffer.byteLength+65535>>>16);updateGlobalBufferAndView(wasmMemory.buffer);return 1}catch(e){}}function _fd_close(fd){return 0}function _fd_seek(fd,offset_low,offset_high,whence,newOffset){}function _fd_write(fd,iov,iovcnt,pnum){var num=0;for(var i=0;i<iovcnt;i++){var ptr=HEAP32[iov+i*8>>2];var len=HEAP32[iov+(i*8+4)>>2];for(var j=0;j<len;j++)({SYSCALLS.printChar(fd,iov+j)});num+=len}HEAP32[pnum>>2]=num;return 0}function _pthread_create(){return 6}function _pthread_join(){return 28}function setErrNo(value){HEAP32[___errno_location()>>2]=value;return value}function _sysconf(name){switch(name){case 30:return 16384;case 85:{var maxHeapSize=2147483648;if(requestedSize>maxHeapSize){return false}for(var cutDown=1;cutDown<4;cutDown*=2){var overGrownHeapSize=oldSize*(1+.2/cutDown);overGrownHeapSize=Math.min(overGrownHeapSize,requestedSize+100663296);var newSize=Math.min(maxHeapSize,oldSize+(1+.2*cutDown));return overGrownHeapSize=Math.min(newSize,oldSize+100663296);}}catch(e){}}};```

```
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---

`__wasm_call_ctors=Module["__wasm_call_ctors"] = function(){return(__wasm_call_ctors=Module["__wasm_call_ctors"]).apply(null,arguments)};` var

`__init=Module["__init"] = function(){return(__init=Module["__init"]).apply(null,arguments)};` var

`__init_with_threads_count=Module["__init_with_threads_count"] = function(){return(__init_with_threads_count=Module["__init_with_threads_count"]).apply(null,arguments)};` var

`__get_threads_count=Module["__get_threads_count"] = function(){return(__get_threads_count=Module["__get_threads_count"]).apply(null,arguments)};` var

`__register_tensor=Module["__register_tensor"] = function(){return(__register_tensor=Module["__register_tensor"]).apply(null,arguments)};` var

`__dispose_data=Module["__dispose_data"] = function(){return(__dispose_data=Module["__dispose_data"]).apply(null,arguments)};` var

`Abs=Module["Abs"] = function(){return(Abs=Module["Abs"]).apply(null,arguments)};` var

`Add=Module["Add"] = function(){return(Add=Module["Add"]).apply(null,arguments)};` var

`AddN=Module["AddN"] = function(){return(AddN=Module["AddN"]).apply(null,arguments)};` var

`All=Module["All"] = function(){return(All=Module["All"]).apply(null,arguments)};` var

`Any=Module["Any"] = function(){return(Any=Module["Any"]).apply(null,arguments)};` var

`ArgMax=Module["ArgMax"] = function(){return(ArgMax=Module["ArgMax"]).apply(null,arguments)};` var

`AvgPool=Module["AvgPool"] = function(){return(AvgPool=Module["AvgPool"]).apply(null,arguments)};` var

`BatchMatMul=Module["BatchMatMul"] = function(){return(BatchMatMul=Module["BatchMatMul"]).apply(null,arguments)};` var

`Ceil=Module["Ceil"] = function(){return(Ceil=Module["Ceil"]).apply(null,arguments)};` var

`ClipByValue=Module["ClipByValue"] = function(){return(ClipByValue=Module["ClipByValue"]).apply(null,arguments)};` var

`Conv2D=Module["Conv2D"] = function(){return(Conv2D=Module["Conv2D"]).apply(null,arguments)};` var

`Conv2DBackpropInput=Module["Conv2DBackpropInput"] = function(){return(Conv2DBackpropInput=Module["Conv2DBackpropInput"]).apply(null,arguments)};` var

`Cos=Module["Cos"] = function(){return(Cos=Module["Cos"]).apply(null,arguments)};` var

`Cosh=Module["Cosh"] = function(){return(Cosh=Module["Cosh"]).apply(null,arguments)};` var

`CropAndResize=Module["CropAndResize"] = function(){return(CropAndResize=Module["CropAndResize"]).apply(null,arguments)};` var

`Cumsum=Module["Cumsum"] = function(){return(Cumsum=Module["Cumsum"]).apply(null,arguments)};` var

`DepthToSpace=Module["DepthToSpace"] = function(){return(DepthToSpace=Module["DepthToSpace"]).apply(null,arguments)};` var
doRun(){if(calledRun)return;calledRun=true;Module["calledRun"]="true;if(ABRORTH)return;initRuntime();preMain();readyPromiseResolve(Module);if(Module["onRuntimeInitialized"]){Module["onRuntimeInitialized"];}postRun();}if(Module["setStatus"]){Module["setStatus"]("Running...");setTimeout(function(){setTimeout(function(){Module["setStatus"]("")},1);doRun(),1));}else{doRun()}Module["run"]=run;if(Module["preInit"]){if(typeof Module["preInit"]=="function")Module["preInit"]=Module["preInit"];while(Module["preInit"].length>0){Module["preInit"][0]()}}run();


  return WasmBackendModule.ready
};

if (typeof exports === 'object' && typeof module === 'object')
  module.exports = WasmBackendModule;
else if (typeof define === 'function' && define['amd'])
  define([], function() { return WasmBackendModule; });
else if (typeof exports === 'object')
  exports["WasmBackendModule"] = WasmBackendModule;

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 *
 *=============================================================================

import './flags_wasm';

import {backend_util, BackendTimingInfo, DataStorage, DataType, deprecationWarn, engine, env, KernelBackend, TensorInfo, util} from '@tensorflow/tfjs-core';

import {BackendWasmModule, WasmFactoryConfig} from '../wasm-out/tfjs-backend-wasm';
import {BackendWasmThreadedSimdModule} from '../wasm-out/tfjs-backend-wasm-threaded-simd';
import wasmFactoryThreadedSimd from '../wasm-out/tfjs-backend-wasm-threaded-simd.worker.js';
// @ts-ignore
import {wasmWorkerContents} from '../wasm-out/tfjs-backend-wasm-threaded-simd.worker.js';
import wasmFactory from '../wasm-out/tfjs-backend-wasm.js';

interface TensorData {
  id: number;
  memoryOffset: number;
  shape: number[];
  dtype: DataType;
  refCount: number;
  /** Only used for string tensors, storing encoded bytes. */
  stringBytes?: Uint8Array[];
}

export type DataId = object;  // object instead of {} to force non-primitive.

export class BackendWasm extends KernelBackend {
  // 0 is reserved for null data ids.
  private dataIdNextNumber = 1;
  dataIdMap: DataStorage<TensorData>;

  constructor(public wasm: BackendWasmModule|BackendWasmThreadedSimdModule) {
    super();
    this.wasm.tfjs.initWithThreadsCount(threadsCount);
    actualThreadsCount = this.wasm.tfjs.getThreadsCount();
    this.dataIdMap = new DataStorage(this, engine());
    }write(values: backend_util.BackendValues, shape: number[], dtype: DataType): DataId {
    const id = this.dataIdNextNumber++;
    if (dtype === 'string') {
      const stringBytes = values as Uint8Array[];
      this.dataIdMap.set(dataId, {id, stringBytes, shape, dtype, memoryOffset: null, refCount});
      return;
    }
    const size = util.sizeFromShape(shape);
    const numBytes = size * util.bytesPerElement(dtype);
    const memoryOffset = this.wasm._malloc(numBytes);
    this.dataIdMap.set(dataId, {id, memoryOffset, shape, dtype, refCount: 1});
    this.wasm.tfjs.registerTensor(id, size, memoryOffset);
    if (values != null) {
      this.wasm.HEAPU8.set((values as backend_util.TypedArray).buffer,
        values as backend_util.TypedArray).byteOffset,
        memoryOffset);
    }
    return;
  }

  async read(dataId: DataId): Promise<backend_util.BackendValues> {
    return this.readSync(dataId);
  }

  readSync(dataId: DataId): backend_util.BackendValues {
    const {memoryOffset, dtype, shape, stringBytes} =
        this.dataIdMap.get(dataId);
    if (dtype === 'string') {
      const stringBytes = values as Uint8Array[];
      return;
    } else {  
      const bytes = this.wasm.HEAPU8.slice(memoryOffset, memoryOffset +
        util.sizeFromShape(shape) * util.bytesPerElement(dtype));
      return typedArrayFromBuffer(bytes.buffer, dtype);
    }
  }

  /**
otherwise.
   * @param dataId * @oaram force Optional, remove the data regardless of refCount
   */

   disposeData(dataId: DataId, force = false): boolean {
      if (!this.dataIdMap.has(dataId)) {
        const data = this.dataIdMap.get(dataId);
        if (data == null) {
          return false;
        }

        this.wasm._free(data.memoryOffset);
        this.wasm.tfjs.disposeData(data.id);
      }
      return true;
    }

    /** Return refCount of a `TensorData`. */

    refCount(dataId: DataId): number {
      if (this.dataIdMap.has(dataId)) {
        const tensorData = this.dataIdMap.get(dataId);
        return tensorData.refCount;
      }
      return 0;
    }

    incRef(dataId: DataId) {
      const data = this.dataIdMap.get(dataId);
      if (data != null) {
        data.refCount++;
      }
    }

    floatPrecision(): number {
      return 32;
    }

    getMemoryOffset(dataId: DataId): number {
      const id = this.dataIdNextNumber++;
      const size = util.sizeFromShape(shape);
      this.wasm.tfjs.registerTensor(id, size, memoryOffset);
      return id;
    }

    typedArrayFromHeap({shape, dtype, dataId}: TensorInfo): backend_util.TypedArray {
      const buffer = this.wasm.HEAPU8.buffer;
      const memoryOffset = this.dataIdMap.get(dataId);
      const size = util.sizeFromShape(shape);
      switch (dtype) {
        case 'float32':
          return new Float32Array(buffer, memoryOffset, size);
        case 'int32':
          return new Int32Array(buffer, memoryOffset, size);
        case 'bool':
          return new Uint8Array(buffer, memoryOffset, size);
        default:
          throw new Error(`Unknown dtype ${dtype}`);
      }
    }
}

function createInstantiateWasmFunc(path: string) {
  // this will be replace by rollup plugin patchWechatWebAssembly in
  // minprogram's output.
  // tslint:disable-next-line:no-any
  return (imports: any, callback: any) => {
    util.fetch(path, {credentials: 'same-origin'}).then((response) => {
      if (!response['ok']) {
        imports.env.a(`failed to load wasm binary file at '${path}'`);
      }
      response.arrayBuffer().then(binary => {
        WebAssembly.instantiate(binary, imports).then(output => {
          callback(output.instance, output.module);
        });
      });
    });
    return {};
  };
}

/**
 * Returns the path of the WASM binary.
 * @param simdSupported whether SIMD is supported
 * @param threadsSupported whether multithreading is supported
 * @param wasmModuleFolder the directory containing the WASM binaries.
 */
function getPathToWasmBinary(
    simdSupported: boolean, threadsSupported: boolean,
    wasmModuleFolder: string) {
  if (wasmPath != null) {
    // If wasmPath is defined, the user has supplied a full path to
    // the vanilla .wasm binary.
    return wasmPath;
  }

  let path: WasmBinaryName = 'tfjs-backend-wasm.wasm';
  if (simdSupported &&
      threadsSupported) {
    path = 'tfjs-backend-wasm-threaded-simd.wasm';
  } else if (simdSupported) {
    path = 'tfjs-backend-wasm-simd.wasm';
  } else if (wasmBinaryName) {
    return wasmBinaryName;
  }

  try {
    const factoryConfig: WasmFactoryConfig = {};
    factoryConfig.locateFile = (path, prefix) => {
      if (path.endsWith('.worker.js')) {
        const response = wasmWorkerContents;
        const blob = new
where the WASM binaries are located.
*
Note that this prefix will be used to load each binary (vanilla, SIMD-enabled, threading-enabled, etc.)
*
* - (object) Mapping from names of WASM binaries to custom full paths specifying the locations of those binaries. This is useful if your WASM binaries are not all located in the same directory, or if your WASM binaries have been renamed.
*
@param usePlatformFetch optional boolean to use platform fetch to download
*
  the wasm file, default to false.
*
* @doc {heading: 'Environment', namespace: 'wasm'}
*/
export function setWasmPaths(
    prefixOrFileMap: string|{
        [key in WasmBinaryName]: string},
    usePlatformFetch = false): void {
  if (initAborted) {
    throw new Error('The WASM backend was already initialized. Make sure you call `tf.setBackend()` or `tf.ready()` before you call `tf.setBackend()` or `tf.ready()`');
  }

  if (typeof prefixOrFileMap === 'string') {
    wasmPathPrefix = prefixOrFileMap;
  } else {
    wasmFileMap = prefixOrFileMap;
    const missingPaths =
      wasmBinaryNames.filter(name => wasmFileMap[name] == null);
    if (missingPaths.length > 0) {
      throw new Error(`There were no entries found for the following binaries: 
        
        The directory where all the binaries can be found: 
        
        Used in unit tests.
    */
export function resetWasmPath(): void {
  wasmPath = null;
  wasmPathPrefix = null;
  wasmFileMap = {};
  customFetch = false;
  initAborted = false;
  actualThreadsCount = -1;
}

/**
 * Sets the number of threads that will be used by XNNPACK to create an * threadpool (default to the number of logical CPU cores).
 */
export function setThreadsCount(numThreads: number) {
  threadsCount = numThreads;
}

/**
 * Gets the actual threads count that is used by XNNPACK.
 *
 * It is set after the backend is initialized.
 */
export function getThreadsCount(): number {
  if (actualThreadsCount === -1) {
    throw new Error('WASM backend not initialized.');
  }
  return actualThreadsCount;
}

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 */

============================================================================

import './flags_wasm';

import {registerBackend} from '@tensorflow/tfjs-core';

import {BackendWasm, init} from './backend_wasm';

export {BackendWasm, getThreadsCount, setThreadsCount, setWasmPath, setWasmPaths} from './backend_wasm';
export {version as version_wasm} from './version';

const WASM_PRIORITY = 2;
registerBackend('wasm', async () => {
  const {wasm} = await init();
  return new BackendWasm(wasm);
}, WASM_PRIORITY);

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AQ, CAAC; IACnC, MAAM, OA; GA, QAQQ, QAQQ, QAQQ, OA; CAAC; IAEjC, IAAl, IUAU, KAAK, MAAM, EA
AE; QACzB, MAAM, IAI, KAAK, CAAC, wDAwD, YACkD, GA, QAQQ, UA, uBAuB, CAAC, CAAC; KAC3C; IA
ED, MAAM, GA, QAQQ, OA; CAAC, UA; UA, QAQQ, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA,
CAAC, QAQQ, QAQQ, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ,
EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ,
EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ,
EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ,
EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ,
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EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ,
EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ, EA, QAQQ, QAQQ,
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Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6 3145
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Open Source Used in Cisco Meeting Server (formerly Acano Server) 3.6  3162
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Open Source Used In Cisco Meeting Server (formerly Acacno Server) 3.6  3173
Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Unpack.js.map

No license file was found, but licenses were detected in source scan.

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 */

import {KernelConfig, KernelFunc, TensorInfo, Unpack, UnpackAttrs, UnpackInputs} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';

import {slice} from './Slice';

function unpack(
    args: {inputs: UnpackInputs, backend: BackendWasm, attrs: UnpackAttrs}):

    TensorInfo[] {
        const {inputs, backend, attrs} = args;
        const {value} = inputs;
        let {axis} = attrs;

        if (axis < 0) {
            axis += value.shape.length;
        }

        const numOutputs = value.shape[axis];
        const rank = value.shape.length;
        const outShape: number[] = new Array(rank - 1);
        let outIndex = 0;
        for (let i = 0; i < rank; i++) {
            if (i !== axis) {
                outShape[outIndex++] = value.shape[i];
            }
        }
        const outs: TensorInfo[] = new Array(numOutputs);
        const begin = new Array(rank).fill(0);
        const size = value.shape.slice();
        size[axis] = 1;
        for (let i = 0; i < outs.length; i++) {
            begin[axis] = i;
            outs[i] = slice({inputs: {x: value}, attrs: {begin, size}, backend});
        }
        return outs.map(({dataId, dtype}) => ({dataId, dtype, shape: outShape}));
    }

export const unpackConfig: KernelConfig = {
    kernelName: Unpack,
    backendName: 'wasm',
    kernelFunc: unpack as {} as KernelFunc,
};

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/
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wasm/src/cc/kernels/Floor.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/unary.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/PadV2.h
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/BatchMatMul.h
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Equal.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/SquaredDifference.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/_FusedMatMul_test.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/BatchMatMul_test.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/OneHot.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/RotateWithOffset.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Round.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/SelectV2.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/DepthToSpace.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/batch_mat_mul_impl.h
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Softmax.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Prod.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/TopK.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Sqrt.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Conv2DBackpropInput.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Step.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/BatchMatMul.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/FlipLeftRight.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/StridedSlice.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Softmax.h
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/NotEqual.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/NonMaxSuppressionV4.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Neg.cc
No license file was found, but licenses were detected in source scan.

```
{"version":3,"file":"Cos.js","sourceRoot":"","sources:["./../src/kernels/Cos.ts"],"names":[],"mappings":"AAAA;;;; 
;;;;;;;;;;GAeG;AAEH,OAAO,EAAC,GAAG,EAe,MAAM,uBAuB,CAAC;AAExD,OAAO,EAAC,uBAuB,EA 
AC,MAAM,gBAAgB,CAAC;AAEvD,MAAM,CAAC,MAAM,SAAS,GAiB,uBAuB,CAAC,GAAG,CAAC,CA 
AC","sourcesContent":"

*/

import {Cos, KernelConfig} from '@tensorflow/tfjs-core';

export const cosConfig: KernelConfig = createUnaryKernelConfig(Cos);
```

Found in path(s):

* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-map/tfjs-backend- 
wasm/dist/kernels/Cos.js.map

No license file was found, but licenses were detected in source scan.

```
{"version":3,"file":"Cosh.js","sourceRoot":"","sources:["./../src/kernels/Cosh.ts"],"names":[],"mappings":"AAAA; 
;;;;;;;;;;;;;GAeG;AACH,OAAO,EAAC,IAAI,EAAE,YAAE,EAAC,MAAM,uBAuB,CAAC;AAExD,OAAO,EAAC,uBAuB,EA 
AC,MAAM,gBAAgB,CAAC;AAEvD,MAAM,CAAC,MAAM,SAAS,GAiB,uBAuB,CAAC,IAAI,CAAC,CAA 
C","sourcesContent":"

*/

import {Cosh, KernelConfig} from '@tensorflow/tfjs-core';

export const coshConfig: KernelConfig = createUnaryKernelConfig(Cosh);
```

Found in path(s):

* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-map/tfjs-backend- 
wasm/dist/kernels/Cosh.js.map

No license file was found, but licenses were detected in source scan.

```
{"version":3,"file":"Range.js","sourceRoot":"","sources:["./../src/kernels/Range.ts"],"names":[],"mappings":"AAAA; 
;;;;;;;;;;;;;;;GAeG;AAEH,OAAO,EAAC,IAAI,EAAC,MAAM,uBAuB,CAAC;AAExD,OAAO,EAAC,uBAuB,EA 
AC,MAAM,gBAAgB,CAAC;AAEvD,MAAM,CAAC,MAAM,SAAS,GAiB,uBAuB,CAAC,IAAI,CAAC,CAA 
C","sourcesContent":"

*/

import {Range, KernelConfig} from '@tensorflow/tfjs-core';

export const rangeConfig: KernelConfig = createUnaryKernelConfig(Range);
```

Found in path(s):

* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-map/tfjs-backend- 
wasm/dist/kernels/Range.js.map

No license file was found, but licenses were detected in source scan.

```
{"version":3,"file":"Cos.js","sourceRoot":"","sources:["./../src/kernels/Cos.ts"],"names":[],"mappings":"AAAA; 
;;;;;;;;;;;;;GAeG;AAEH,OAAO,EAAC,GAAG,EAe,MAAM,uBAuB,CAAC;AAExD,OAAO,EAAC,uBAuB,EA 
AC,MAAM,gBAAgB,CAAC;AAEvD,MAAM,CAAC,MAAM,SAAS,GAiB,uBAuB,CAAC,GAAG,CAAC,CA 
AC","sourcesContent":"

*/

import {Cos, KernelConfig} from '@tensorflow/tfjs-core';

export const cosConfig: KernelConfig = createUnaryKernelConfig(Cos);
```

Found in path(s):

* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-map/tfjs-backend- 
wasm/dist/kernels/Cos.js.map

No license file was found, but licenses were detected in source scan.

```
{"version":3,"file":"Cosh.js","sourceRoot":"","sources:["./../src/kernels/Cosh.ts"],"names":[],"mappings":"AAAA; 
;;;;;;;;;;;;;GAeG;AACH,OAAO,EAAC,IAAI,EAAE,YAAE,EAAC,MAAM,uBAuB,CAAC;AAExD,OAAO,EAAC,uBAuB,EA 
AC,MAAM,gBAAgB,CAAC;AAEvD,MAAM,CAAC,MAAM,SAAS,GAiB,uBAuB,CAAC,IAAI,CAAC,CAA 
C","sourcesContent":"

*/

import {Cosh, KernelConfig} from '@tensorflow/tfjs-core';

export const coshConfig: KernelConfig = createUnaryKernelConfig(Cosh);
```

Found in path(s):

* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-map/tfjs-backend- 
wasm/dist/kernels/Cosh.js.map

No license file was found, but licenses were detected in source scan.

```
{"version":3,"file":"Range.js","sourceRoot":"","sources:["./../src/kernels/Range.ts"],"names":[],"mappings":"AAAA; 
;;;;;;;;;;;;;;GAeG;AAEH,OAAO,EAAC,IAAI,EAAC,MAAM,uBAuB,CAAC;AAExD,OAAO,EAAC,uBAuB,EA 
AC,MAAM,gBAAgB,CAAC;AAEvD,MAAM,CAAC,MAAM,SAAS,GAiB,uBAuB,CAAC,IAAI,CAAC,CAA 
C","sourcesContent":"

*/

import {Range, KernelConfig} from '@tensorflow/tfjs-core';

export const rangeConfig: KernelConfig = createUnaryKernelConfig(Range);
```

Found in path(s):

* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-map/tfjs-backend- 
wasm/dist/kernels/Range.js.map

No license file was found, but licenses were detected in source scan.
import {KernelConfig, KernelFunc, Range, RangeAttrs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '../backend_wasm';
import {rangeImplCPU} from '../kernel_utils/shared';

export const range =
    (args: {backend: BackendWasm, attrs: RangeAttrs}): TensorInfo => {
      const {backend, attrs} =
        args;
      const {start, stop, step, dtype} = attrs;
      const values = rangeImplCPU(start, stop, step, dtype);

      const out = backend.makeOutput([values.length], dtype);
      const outVals =
        backend.typedArrayFromHeap(out);
      outVals.set(values);
      return out;
    };

export const rangeConfig:
    KernelConfig = {
      kernelName: Range,
      backendName: 'wasm',
      kernelFunc: range as {} as KernelFunc
    };

--

1.186 flyway-core 6.4.4

1.186.1 Available under license :

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Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/Range.js.map
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 */

Found in path(s):
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/resource/filesystem/package-info.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/database/oracle/OracleDatabase.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/database/firebird/FirebirdDatabase.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/database/mysql/MySQLParser.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/database/oracle/OracleParser.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/database/base/Database.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/database/derby/DerbyDatabase.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/database/h2/package-info.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/util/FileCopyUtil.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/database/oracle/OracleParser.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/database/h2/package-info.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/util/FileCopyUtil.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/database/oracle/OracleParser.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/database/base/Database.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/database/derby/DerbyDatabase.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-
jar/org/flywaydb/core/internal/logging/LogCreatorFactory.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-
jar/org/flywaydb/core/internal/database/h2/H2Table.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-
jar/org/flywaydb/core/internal/parser/Recorder.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-
jar/org/flywaydb/core/core.internal/database/informix/InformixConnection.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-
jar/org/flywaydb/core/core.internal/jdbc/TransactionalExecutionTemplate.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-
jar/org/flywaydb/core/core.internal/database/oracle/package-info.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-
jar/org/flywaydb/core/core.internal/database/redshift/RedshiftConnection.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-
jar/org/flywaydb/core/core.internal/logging/android/AndroidLogCreator.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-
jar/org/flywaydb/core/core.internal/database/h2/H2Schema.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-
jar/org/flywaydb/core/core.internal/scanner/classpath/JarFileClassPathLocationScanner.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-
jar/org/flywaydb/core/core.internal/parser/PeekingReader.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-
jar/org/flywaydb/core/core.internal/scanner/ResourceNameCache.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-
jar/org/flywaydb/core/core.internal/resolver/package-info.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-
jar/org/flywaydb/core/core.internal/configuration/ConfigUtils.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-
jar/org/flywaydb/core/core.internal/logging/android/package-info.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-
jar/org/flywaydb/core/core.internal/logging/android/AndroidLogCreator.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-
jar/org/flywaydb/core/core.internal/scanner/classpath/JarFileClassPathLocationScanner.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-
jar/org/flywaydb/core/core.internal/parser/PeekingReader.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-
jar/org/flywaydb/core/core.internal/scanner/ResourceNameCache.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-
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Open Source Used in Cisco Meeting Server (formerly Acano Server) 3.6  3189
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* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/configuration/ConfigurationValidator.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/api/callback/package-info.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/resolver/ResolvedMigrationImpl.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/logging/apachecommons/ApacheCommonsLogCreator.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/database/db2/DB2Type.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/util/UrlUtils.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/api/logging/LogCreator.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/database/db2/DB2Schema.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/jdbc/DriverDataSource.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/database/sqlite/SQLiteSchema.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/jdbc/TableLockingExecutionTemplate.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/command/DbInfo.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/resolver/ResolvedMigrationComparator.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/database/postgresql/PostgreSQLDatabase.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/internal/jdbc/JdbcUtils.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/core/api/logging/package-info.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/core/api/callback/Callback.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/core/api/resource/android/AndroidResource.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/core/api/MigrationVersion.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/core/api/PackageInfo.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/core/api/MigrationVersion.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/core/api/resource/android/AndroidResource.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/core/api/package-info.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/core/api/MigrationVersion.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/core/api/package-info.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/core/api/MigrationVersion.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources.jar/org/flywaydb/core/core/api/package-info.java
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* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/resolver/java/ScanningJavaMigrationResolver.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/database/snowflake/package-info.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/database/redshift/package-info.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/jdbc/Result.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/database/sqlite(SQLiteConnection.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/info/MigrationInfoImpl.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/database/informix/InformixParser.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/command/DbValidate.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/database/mysql/MySQLSchema.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/database/firebird/FirebirdSchema.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/database/sqlite/SQLiteTable.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/api/callback/BaseCallback.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/database/sqlserver/SQLServerDatabase.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/database/mysql/package-info.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/resolver/sql/package-info.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/database/saphana/SAPHANAParser.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/output/package-info.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/database/derby/DerbyParser.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/schemahistory/SchemaHistoryFactory.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/sqlscript/FlywaySqlScriptException.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/database/saphana/package-info.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/resolver/sql/package-info.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/resolver/sql/SqlMigrationResolver.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/database/DatabaseFactory.java
* /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/database/redshift/RedshiftTable.java
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/output/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/api/resolver/Context.java
/output/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/api/configuration/package-info.java
/output/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/api/callback/Event.java
/output/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/api/callback/Context.java
/output/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/resource/ResourceNameParser.java
1.187 sysv-init 2.93-8

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1.190 cryptsetup 1.7.5

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Version 2.1, February 1999

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1.198 dav1d 0.6.0

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**1.201 zlib 1.2.11.dfsg-2ubuntu1**

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/* zlib.h -- interface of the 'zlib' general purpose compression library
version 1.2.11, January 15th, 2017

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Jean-loup Gailly  Mark Adler
jloup@gzip.org    madler@alumni.caltech.edu

The data format used by the zlib library is described by RFCs (Request for Comments) 1950 to 1952 in the files http://tools.ietf.org/html/rfc1950 (zlib format), rfc1951 (deflate format) and rfc1952 (gzip format).
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procfs provides functions to retrieve system, kernel and process metrics from the pseudo-filesystem proc.

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Protocol Buffers for Go with Gadgets

Go support for Protocol Buffers - Google's data interchange format

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https://github.com/golang/protobuf

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1.213 offheap-store 2.4.3

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* /opt/cola/permits/1258059374_1643027386.0/0/offheap-store-2-4-3-sources.jar/org/terracotta/offheapstore/storageAllocator/Allocator.java
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jar/io/netty/channel/socket/oio/DefaultOioDatagramChannelConfig.java
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jar/io/netty/channel/socket/ChannelOutputShutdownEvent.java
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jar/io/netty/channel/socket/ChannelInputShutdownReadComplete.java
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/**
 * Handles an I/O event or intercepts an I/O operation, and forwards it to its next handler in
 * its [ @link ChannelPipeline].
 *
 * <h3>Sub-types</h3>
 * <p>
 * [ @link ChannelHandler] itself does not provide many methods, but you usually have to implement one of its
 * subtypes:
 * <ul>
 * <li>[ @link ChannelInboundHandler] to handle inbound I/O events, and</li>
 */
* <li>{@link ChannelOutboundHandler} to handle outbound I/O operations.</li>
* </ul>
* </p>
* Alternatively, the following adapter classes are provided for your convenience:
* <ul>
* <li>{@link ChannelInboundHandlerAdapter} to handle inbound I/O events,</li>
* <li>{@link ChannelOutboundHandlerAdapter} to handle outbound I/O operations, and</li>
* <li>{@link ChannelDuplexHandler} to handle both inbound and outbound events</li>
* </ul>
* </p>
* For more information, please refer to the documentation of each subtype.
* </p>
* 
* <h3>The context object</h3>
* 
* A {@link ChannelHandler} is provided with a {@link ChannelHandlerContext} object. A {@link ChannelHandler} is supposed to interact with the
* {@link ChannelPipeline} it belongs to via a context object. Using the
* context object, the {@link ChannelHandler} can pass events upstream or
* downstream, modify the pipeline dynamically, or store the information
* (using {@link AttributeKey}s) which is specific to the handler.
* 
* <h3>State management</h3>
* 
* A {@link ChannelHandler} often needs to store some stateful information.
* The simplest and recommended approach is to use member variables:
* 
* public interface Message {
*     // your methods here
* }
* 
* public class DataServerHandler extends {@link SimpleChannelInboundHandler<Message>} {
*     
*     private boolean loggedIn;
*     
*     @Override
*     public void channelRead0({@link ChannelHandlerContext} ctx, Message message) {
*         if (message instanceof LoginMessage) {
*             authenticate((LoginMessage) message);
*             loggedIn = true;
*         } else (message instanceof GetDataMessage) {
*             if (<b>loggedIn</b>) {
*                 ctx.writeAndFlush(fetchSecret((GetDataMessage) message));
*             } else {
*                 fail();
*             }
*     }
* }

Because the handler instance has a state variable which is dedicated to
one connection, you have to create a new handler instance for each new
channel to avoid a race condition where a unauthenticated client can get
the confidential information:

```java
// Create a new handler instance per channel.
// See [@link ChannelInitializer#initChannel(Channel)].
public class DataServerInitializer extends @link ChannelInitializer<Channel> {
    @Override
    public void initChannel(@link Channel channel) {
        channel.pipeline().addLast("handler", <b>new DataServerHandler()</b>);
    }
}
```

### Using [*AttributeKey*]s

Although it's recommended to use member variables to store the state of a
handler, for some reason you might not want to create many handler instances.
In such a case, you can use [*AttributeKey*]s which is provided by
[*ChannelHandlerContext*]:

```java
public interface Message {
    // your methods here
}

@Sharable
public class DataServerHandler extends @link SimpleChannelInboundHandler<Message> {
    private final @link AttributeKey<Boolean> auth =
        @link AttributeKey.valueOf("auth");

    @Override
    public void channelRead(@link ChannelHandlerContext ctx, Message message) {
        Attribute<Boolean> attr = ctx.attr(auth);
        if (message instanceof LoginMessage) {
            authenticate((LoginMessage) o);
            attr.set(true);
        } else (message instanceof GetDataMessage) {
            if (<b>Boolean.TRUE.equals(attr.get())</b>) {
                ctx.writeAndFlush(fetchSecret((GetDataMessage) o));
            } else {
                fail();
            }
        }
    }
}
```
Now that the state of the handler is attached to the `ChannelHandlerContext`, you can add the same handler instance to different pipelines:

```java
public class DataServerInitializer extends ChannelInitializer<Channel> {

    private static final DataServerHandler SHARED = new DataServerHandler();

    @Override
    public void initChannel(Channel channel) {
        channel.pipeline().addLast("handler", SHARED);
    }
}
```

### The `@Sharable` annotation

In the example above which used an `AttributeKey`, you might have noticed the `@Sharable` annotation.

If a `ChannelHandler` is annotated with the `@Sharable` annotation, it means you can create an instance of the handler just once and add it to one or more `ChannelPipeline`s multiple times without a race condition.

If this annotation is not specified, you have to create a new handler instance every time you add it to a pipeline because it has unshared state such as member variables.

This annotation is provided for documentation purpose, just like the JCIP annotations.

### Additional resources worth reading

Please refer to the `ChannelHandler`, and `ChannelPipeline` to find out more about inbound and outbound operations, what fundamental differences they have, how they flow in a pipeline, and how to handle the operation in your application.
jar/io/netty/channel/ChannelHandler.java

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jar/io/netty/channel/AbstractCoalescingBufferQueue.java

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jar/io/netty/channel/DefaultMessageSizeEstimator.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-
jar/io/netty/channel/ChannelHandlerAdapter.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-
jar/io/netty/channel/group/DefaultChannelGroup.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-
jar/io/netty/channel/group/ChannelGroupException.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-
jar/io/netty/channel/ChannelOutboundBuffer.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-
jar/io/netty/channel/ChannelId.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-
jar/io/netty/channel/MessageSizeEstimator.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-
jar/io/netty/channel/AbstractEventLoopGroup.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-
jar/io/netty/channel/group/ChannelGroup.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-
jar/io/netty/channel/group/ChannelMatcher.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-
jar/io/netty/channel/socket/oio/DefaultOioSocketChannelConfig.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-
jar/io/netty/channel/group/ChannelMatchers.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-
jar/io/netty/channel/ConnectTimeoutException.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/netty-transport-4-1-51-final-sources-jar/io/netty/bootstrap/ChannelFactory.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/netty-transport-4-1-51-final-sources-jar/io/netty/channel/socket/oio/OioServerSocketChannelConfig.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/netty-transport-4-1-51-final-sources-jar/io/netty/channel/AddressedEnvelope.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/netty-transport-4-1-51-final-sources-jar/io/netty/channel/ChannelProgressiveFutureListener.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/netty-transport-4-1-51-final-sources-jar/io/netty/channel/socket/oio/OioSocketChannelConfig.java
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* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/netty-transport-4-1-51-final-sources-jar/io/netty/channel/SimpleChannelInboundHandler.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/netty-transport-4-1-51-final-sources-jar/io/netty/channel/DefaultChannelProgressivePromise.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/netty-transport-4-1-51-final-sources-jar/io/netty/channel/nio/SelectedSelectionKeySet.java

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* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/netty-transport-4-1-51-final-sources-jar/io/netty/channel/ChannelFactory.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/netty-transport-4-1-51-final-sources-jar/io/netty/channel/embedded/EmbeddedChannelId.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/netty-transport-4-1-51-final-sources-jar/io/netty/channel/AbstractEventLoop.java
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* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-jar/io/netty/channel/pool/SimpleChannelPool.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-jar/io/netty/channel/pool/package-info.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-jar/io/netty/channel/pool/AbstractChannelPoolHandler.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-jar/io/netty/channel/pool/ChannelPoolMap.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-jar/io/netty/channel/pool/ChannelPoolHandler.java
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* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-jar/io/netty/channel/pool/MaxBytesRecvByteBufAllocator.java
* /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-jar/io/netty/channel/DefaultMaxMessagesRecvByteBufAllocator.java
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    jar/io/netty/channel/socket/DuplexChannel.java
  * /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-
    jar/io/netty/channel/ChannelOutboundInvoker.java
  * /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-
    jar/io/netty/channel/WriteBufferWaterMark.java
  * /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-
    jar/io/netty/channel/group/VoidChannelGroupFuture.java
  * /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-
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  * /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-
    jar/io/netty/channel/ChannelInboundInvoker.java
  * /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-
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  * /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-
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  * /opt/ws_local/PERMITS_SQL/1072948476_1595240756.51/0/netty-transport-4-1-51-final-sources-
    jar/io/netty/channel/DefaultSelectStrategy.java
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*/opt/cola/permits/1351887204_1656319601.87861320/spring-security-config-5-4-10-sources-
jar/org/springframework/security/config/http/UserDetailsServiceFactoryBean.java
*/opt/cola/permits/1351887204_1656319601.87861320/spring-security-config-5-4-10-sources-
jar/org/springframework/security/config/ldap/LdapProviderBeanDefinitionParser.java
*/opt/cola/permits/1351887204_1656319601.87861320/spring-security-config-5-4-10-sources-
jar/org/springframework/security/config/http/ChannelAttributeFactory.java
*/opt/cola/permits/1351887204_1656319601.87861320/spring-security-config-5-4-10-sources-
jar/org/springframework/security/config/http/FilterChainBeanDefinitionParser.java
*/opt/cola/permits/1351887204_1656319601.87861320/spring-security-config-5-4-10-sources-
jar/org/springframework/security/config/ldap/LdapUserServiceBeanDefinitionParser.java
*/opt/cola/permits/1351887204_1656319601.87861320/spring-security-config-5-4-10-sources-
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  * /opt/cola/permits/1351887204_1656319601.87861320/spring-security-config-5-4-10-sources-jar/org/springframework/security/config/annotation/method/configuration/EnableReactiveMethodSecurity.java
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* /opt/cola/permits/1351887204_1656319601.8786132/0/spring-security-config-5-4-10-sources.jar/org/springframework/security/config/annotation/web/configurers/ServletApiConfigurer.java
* /opt/cola/permits/1351887204_1656319601.8786132/0/spring-security-config-5-4-10-sources.jar/org/springframework/security/config/authentication/AuthenticationManagerFactoryBean.java
* /opt/cola/permits/1351887204_1656319601.8786132/0/spring-security-config-5-4-10-sources.jar/org/springframework/security/config/http/FormLoginBeanDefinitionParser.java
* /opt/cola/permits/1351887204_1656319601.8786132/0/spring-security-config-5-4-10-sources.jar/org/springframework/security/config/annotation/web/configurers/ExpressionUrlAuthorizationConfigurer.java
* /opt/cola/permits/1351887204_1656319601.8786132/0/spring-security-config-5-4-10-sources.jar/org/springframework/security/config/annotation/configuration/AutowireBeanFactoryObjectPostProcessor.java
* /opt/cola/permits/1351887204_1656319601.8786132/0/spring-security-config-5-4-10-sources.jar/org/springframework/security/config/annotation/web/configurers/SecurityContextConfigurer.java
* /opt/cola/permits/1351887204_1656319601.8786132/0/spring-security-config-5-4-10-sources.jar/org/springframework/security/config/annotation/web/configurers/CorsConfigurer.java
* /opt/cola/permits/1351887204_1656319601.8786132/0/spring-security-config-5-4-10-sources.jar/org/springframework/security/config/annotation/method/configuration/MethodSecurityMetadataSourceAdvisorRegistrar.java

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* /opt/cola/permits/1351887204_1656319601.8786132/0/spring-security-config-5-4-10-sources.jar/org/springframework/security/config/annotation/web/configurers/AbstractAuthenticationFilterConfigurer.java
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jar/org/springframework/security/config/annotation/authentication/configuration/AuthenticationConfiguration.java
* /opt/cola/permits/1351887204_1656319601.87861320/spring-security-config-5-4-10-sources-
jar/org/springframework/security/config/annotation/web/reactive/ServerHttpSecurityConfiguration.java
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* /opt/cola/permits/1351887204_1656319601.87861320/3613/spring-security-config-5-4-10-sources.jar/org/springframework/security/config/web/server/ServerCsrfDsl.kt
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* /opt/cola/permits/1351887204_1656319601.87861320/3613/spring-security-config-5-4-10-sources.jar/org/springframework/security/config/web/oauth2/resourceserver/OAuth2ResourceServerSecurityMarker.kt
* /opt/cola/permits/1351887204_1656319601.87861320/3613/spring-security-config-5-4-10-sources.jar/org/springframework/security/config/web/session/SessionSecurityMarker.kt
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* /opt/cola/permits/1351887204_1656319601.87861320/3613/spring-security-config-5-4-10-sources.jar/org/springframework/security/config/web/servlet/oauth2/resourceserver/OAuth2ResourceServerSecurityMarker.kt
* /opt/cola/permits/1351887204_1656319601.87861320/3613/spring-security-config-5-4-10-sources.jar/org/springframework/security/config/web/servlet/oauth2/login/UserInfoEndpointDsl.kt
* /opt/cola/permits/1351887204_1656319601.87861320/3613/spring-security-config-5-4-10-sources.jar/org/springframework/security/config/web/servlet/oauth2/login/UserInfoEndpointDsl.kt
* /opt/cola/permits/1351887204_1656319601.87861320/3613/spring-security-config-5-4-10-sources.jar/org/springframework/security/config/web/servlet/Saml2DsI.kt
* /opt/cola/permits/1351887204_1656319601.87861320/3613/spring-security-config-5-4-10-sources.jar/org/springframework/security/config/annotation/web/configuration/EnableWebSecurity.java
* /opt/cola/permits/1351887204_1656319601.87861320/3613/spring-security-config-5-4-10-sources.jar/org/springframework/security/config/web/server/ServerHttpsRedirectDsl.kt
* /opt/cola/permits/1351887204_1656319601.87861320/3613/spring-security-config-5-4-10-sources.jar/org/springframework/security/config/http/OAuth2ClientWebMvcSecurityPostProcessor.java
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* /opt/cola/permits/1351887204_1656319601.8786132/0/spring-security-config-5-4-10-sources-jar/org/springframework/security/config/annotation/web/configurers/oauth2/client/ImplicitGrantConfigurer.java
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The original code is FirewallControl.pas, released April 16, 2007.

The initial developer of the original code is Rainer Budde (http://www.speed-soft.de).
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CAST128
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MD2
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This is almost the same code as for MD5 below, with modifications by Marcus Comstedt. Released into the public domain.

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SHA224, SHA256, SHA384, and SHA512
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1.234 rrule 2.6.8

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   k) You must ensure that the modified file's header also includes the name of the person who modified the file.

   l) You must ensure that the modified file's header also includes the email address and the date and location.

   m) You must ensure that the modified file's header also includes the title of the file and the date and location.

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   o) You must ensure that the modified file's header also includes the email address and the date and location.

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   q) You must ensure that the modified file's header also includes the name of the person who modified the file.

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   aa) You must ensure that the modified file's header also includes the email address and the date and location.

   bb) You must ensure that the modified file's header also includes the title of the file and the date and location.

   cc) You must ensure that the modified file's header also includes the name of the person who modified the file.

   dd) You must ensure that the modified file's header also includes the email address and the date and location.

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   ff) You must ensure that the modified file's header also includes the name of the person who modified the file.

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   hh) You must ensure that the modified file's header also includes the title of the file and the date and location.

   ii) You must ensure that the modified file's header also includes the name of the person who modified the file.

   jj) You must ensure that the modified file's header also includes the email address and the date and location.

   kk) You must ensure that the modified file's header also includes the title of the file and the date and location.

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   oo) You must ensure that the modified file's header also includes the name of the person who modified the file.

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1.237 spring-orm 5.2.20.RELEASE

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1.238 e2fsprogs 1.43.7

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*/

Index: tdbsa/tdb.c
===================================================================
--- tdbsa.orig/tdb.c
+++ tdbsa/tdb.c
@@ -4,11 +4,11 @@ Rev: 23371
Last Changed Date: 2007-06-06 20:14:06 -0400 (Wed, 06 Jun 2007)
*/

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+ trivial database library - standalone version

- trivial database library - private includes
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written by Theodore Ts'o <tytso@mit.edu> and Remy Card <card@masi.ibp.fr>.

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This package was put together by Yann Dirson <dirson@debian.org>, from sources obtained from a mirror of:
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# This is a Makefile stub which handles the creation of BSD shared
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#
# In order to use this stub, the following makefile variables must be defined.
#
# BSDLIB_VERSION = 1.0
# BSDLIB_IMAGE = libce
# BSDLIB_MYDIR = et
# BSDLIB_INSTALL_DIR = $(SHLIBDIR)
#
all:: image

real-subdirs:: Makefile
  @echo "MKDIR pic"
  @mkdir -p pic

BSD_LIB = $(BSDLIB_IMAGE).so.$(BSDLIB_VERSION)
BSDLIB_PIC_FLAG = -fpic

image:$(BSD_LIB)

$(BSD_LIB): $(OBJS)
  (cd pic; ld -Bshareable -o $(BSD_LIB) $(LDFLAGS_SHLIB) $(OBJS))
  $(MV) pic/$(BSD_LIB) .
  $(RM) -f ../.$(BSD_LIB)
  (cd ..; $(LN) $(LINK_BUILD_FLAGS) `echo $(my_dir) | sed -e 's;lib/;;'"/$(BSD_LIB) $(BSD_LIB))

install-shlibs installe:: $(BSD_LIB)
  @echo "INSTALL_PROGRAM $(BSDLIB_INSTALL_DIR)$(BSD_LIB)"
  @$((INSTALL_PROGRAM) $(BSD_LIB) \
  $(DESTDIR)$(BSDLIB_INSTALL_DIR)$(BSD_LIB) \
  @-$(LDCONFIG)

install-strip: install

install-shlibs-strip: install-shlibs

uninstall-shlibs uninstall::
  $(RM) -f $(DESTDIR)$(BSDLIB_INSTALL_DIR)$(BSD_LIB)

clean::
  $(RM) -rf pic
  $(RM) -f $(BSD_LIB)
  $(RM) -f ../$(BSD_LIB)
This is the Debian GNU/Linux prepackaged version of the Common Error Description library. It is currently distributed together with the EXT2 file system utilities, which are otherwise packaged as "e2fsprogs".

This package was put together by Yann Dirson <dirson@debian.org>, from sources obtained from a mirror of:
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Theodore Ts'o
23-June-2007

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This code is derived from section 17.1 of Applied Cryptography, second edition, which describes a stream cipher allegedly compatible with RSA Labs "RC4" cipher (the actual description of which is a trade secret). The same algorithm is used as a stream cipher called "arcfour" in Tatu Ylonen's ssh package.

Here the stream cipher has been modified always to include the time when initializing the state. That makes it impossible to regenerate the same random sequence twice, so this can't be used for encryption, but will generate good random numbers.

RC4 is a registered trademark of RSA Laboratories.

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This code implements the MD5 message-digest algorithm. The algorithm is due to Ron Rivest. This code was written by Colin Plumb in 1993, no copyright is claimed. This code is in the public domain; do with it what you wish.

Equivalent code is available from RSA Data Security, Inc. This code has been tested against that, and is equivalent, except that you don't need to include two pages of legalese with every copy.

To compute the message digest of a chunk of bytes, declare an MD5Context structure, pass it to MD5Init, call MD5Update as needed on buffers full of bytes, and then call MD5Final, which will fill a supplied 16-byte array with the digest.

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Protocol Buffers for Go with Gadgets

Go support for Protocol Buffers - Google's data interchange format

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https://github.com/golang/protobuf

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procfs provides functions to retrieve system, kernel and process metrics from the pseudo-filesystem proc.

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A. HISTORY OF THE SOFTWARE

Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see http://www.zope.com). In 2001, the Python Software
Foundation (PSF, see http://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

All Python releases are Open Source (see http://www.opensource.org for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

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This package contains a modified version of ca-bundle.crt:

cacert.crt -- Bundle of CA Root Certificates

Certificate data from Mozilla as of: Thu Nov  3 19:04:19 2011# This is a bundle of X.509 certificates of public Certificate Authorities (CA). These were automatically extracted from Mozilla's root certificates file (certdata.txt). This file can be found in the mozilla source tree: http://mxr.mozilla.org/mozilla/source/security/nss/lib/cfkw/builtins/certdata.txt?raw=1# It contains the certificates in PEM format and therefore can be directly used with curl / libcurl / php_curl, or with an Apache+mod_ssl webserver for SSL client authentication. Just configure this file as the SSLCACertificateFile.#

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1.247 tdb 1.44.5

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This is the Debian GNU/Linux prepackaged version of the static EXT2 file system consistency checker (e2fsck.static). The EXT2 utilities were written by Theodore Ts'o <tytso@mit.edu> and Remy Card <card@masi.ibp.fr>.

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# This is a Makefile stub which handles the creation of BSD shared libraries.
# In order to use this stub, the following makefile variables must be defined.

# BSDLIB_VERSION = 1.0
# BSDLIB_IMAGE = libce
# BSDLIB_MYDIR = et
# BSDLIB_INSTALL_DIR = $(SHLIBDIR)

all:: image

real-subdirs:: Makefile
@echo "MKDIR pic"
@mkdir -p pic

BSD_LIB = $(BSDLIB_IMAGE).so.$(BSDLIB_VERSION)
BSDLIB_PIC_FLAG = -fPIC

image:$(BSD_LIB)

$(BSD_LIB): $(OBJS)
(cd pic; ld -Bshareable -o $(BSD_LIB) $(LDFLAGS_SHLIB) $(OBJS))
$(MV) pic/$(BSD_LIB) .
$(RM) -f $(BSD_LIB)
(cd ..; $(LN) $(LINK_BUILD_FLAGS) \ 
`echo $(my_dir) | sed -e 's;lib/;;'"/$(BSD_LIB) $(BSD_LIB))

install-shlibs install:: $(BSD_LIB)
@echo "INSTALL_PROGRAM $(BSDLIB_INSTALL_DIR)/$(BSD_LIB)"
@$(INSTALL_PROGRAM) $(BSD_LIB) \ 
$(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB) $(BSD_LIB)
@-$(LDCONFIG)

install-strip: install

install-shlibs-strip:: install-shlibs

uninstall-shlibs uninstall::
$(RM) -f $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)

clean::
$(RM) -rf pic
$(RM) -f $(BSD_LIB)
$(RM) -f ..$(BSD_LIB)

This package was added to the e2fsprogs debian source package by
Theodore Ts'o <tytso@mit.edu> on Sat Mar 15 15:33:37 EST 2003

It is part of the main e2fsprogs distribution, which can be found at:

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Index: tdbsa/tdb.c

===================================================================
--- tdbsa.orig/tdb.c
+++ tdbsa/tdb.c
@@ -4,11 +4,11 @@
 Last Changed Date: 2007-06-06 20:14:06 -0400 (Wed, 06 Jun 2007)
 */
- Unix SMB/CIFS implementation.
+ trivial database library - standalone version

- trivial database library - private includes
- 
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Theodore Ts'o
23-June-2007

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This package was added to the e2fsprogs debian source package by 
Theodore Ts'o <tytso@mit.edu> on Sat Mar 15 15:33:37 EST 2003

It is part of the main e2fsprogs distribution, which can be found at:

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Upstream Author: Theodore Ts'o <tytso@mit.edu>

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This package was put together by Yann Dirson <dirson@debian.org>, from sources obtained from a mirror of:
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Gadi Oxman, August 1995

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27. [29] Poul-Henning Kamp <phk@FreeBSD.ORG> Oncore driver (Original author)
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29. [32] Johannes Maximilian Kuhehn <kuhehn@ntp.org> Rewrote snntp to comply with NTPv4 specification, ntpq saveconfig
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35. [38] Lars H. Mathiesen <thorinn@diku.dk> adaptation of foundation code for Version 3 as specified in RFC-1305
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42. [45] Derek Mulcahy <derek@toybox.demon.co.uk> and [46] Damon Hart-Davis <d@hd.org> ARCRON MSF clock driver
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45. [49] Dirce Richards <dirce@zk3.dec.com> Digital UNIX V4.0 port
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47. [51] Nick Sayer <mrapple@quack.kfu.com> SunOS streams modules
48. [52] Jack Sasportas <jack@innovativeinternet.com> Saved a Lot of space on the stuff in the html/pic/ subdirectory
49. [53] Ray Schnitzler <schnitz@unipress.com> Unixware1 port
50. [54] Michael Shields <shields@tembel.org> USNO clock driver
51. [55] Jeff Steinman <jss@pebbles.jpl.nasa.gov> Datum PTS clock driver
52. [56] Harlan Stenn <harlan@pfcs.com> GNU automake/autoconfigure
makeover, various other bits (see the ChangeLog)

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1.257 sqlalchemy 1.4.34

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1.261 libnetfilter.conntrack 1.0.5

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1.272 acpid 2.0.11

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1.274 libdrm 2.4.45

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The End

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  jar/io/netty/handler/ssl/PemPrivateKey.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/ssl/ReferenceCountedOpenSslServerContext.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/ssl/PemX509Certificate.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/ssl/ReferenceCountedOpenSslClientContext.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/ssl/ReferenceCountedOpenSslEngine.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/ssl/PemEncoded.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/ssl/PemValue.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/ssl/Util/X509TrustManagerWrapper.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/flush/package-info.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/ssl/Java8SslUtils.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/ssl/OpenSslCertificateException.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/ssl/ReferenceCountedOpenSslContext.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/flush/FlushConsolidationHandler.java
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  jar/io/netty/handler/ssl/OpenSslSessionTicketKey.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/ssl/ApplicationProtocolNames.java
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  jar/io/netty/handler/ssl/SslContextBuilder.java
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  jar/io/netty/handler/ssl/ClientAuth.java
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  jar/io/netty/handler/stream/ChunkedStream.java
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  jar/io/netty/handler/timeout/package-info.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
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* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/timeout/IdleStateHandler.java
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* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-jar/io.netty.handler.ssl/SslHandler.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-jar/io.netty.handler.stream/ChunkedFile.java
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* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-jar/io.netty.handler.stream/ChunkedWriteHandler.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-jar/io.netty.handler.stream/ChunkedInput.java
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* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-jar/io.netty.handler.timeout/IdleStateEvent.java
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* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-jar/io.netty.handler.stream/ChunkedNioFile.java

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* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-jar/io/netty/handler/logging/ByteBufFormat.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-jar/io/netty/handler/ssl/SslHandshakeTimeoutException.java

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* /opt/cola/permits/1301486327_1649248790.73/0/spring-aop-5-2-20-release-sources-jar/org/springframework/core/support/LazyInitTargetSource.java
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jar/org/springframework/aop/IntroductionInfo.java
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Found in path(s):
* /opt/cola/permits/1301486327_1649248790.73/0/spring-aop-5-2-20-release-sources-jar/org/springframework/aop/aspectj/AspectJWeaverMessageHandler.java

1.283 heimdal 7.7.0+dfsg-1ubuntu1

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rijndael-alg-fst.c

@version 3.0 (December 2000)

Optimised ANSI C code for the Rijndael cipher (now AES)

@author Vincent Rijmen <vincent.rijmen@esat.kuleuven.ac.be>
@author Antoon Bosselaers <antoon.bosselaers@esat.kuleuven.ac.be>
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Ferguson, Eric Young and Dana How for comparing notes; and Ray Lau,
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*/

import * as tf from '@tensorflow/tfjs-core';

/**
 * Takes the sigmoid of the part heatmap output and
 * generates a 2d one-hot tensor with ones where the part's score has the maximum value.

 * @param partHeatmapScores
 */
function toFlattenedOneHotPartMap(partHeatmapScores: tf.Tensor3D): tf.Tensor2D {
  const numParts = partHeatmapScores.shape[2];
  const partMapLocations = tf.argMax(partHeatmapScores, 2);

  const partMapFlattened = tf.reshape(partMapLocations, [-1]);

  return tf.oneHot(partMapFlattened, numParts) as tf.Tensor2D;
}

  return
tf.mul(image, mask);

* Takes the sigmoid of the segmentation output, and generates a segmentation mask with a 1 or 0 at each pixel where there is a person or not a person. The segmentation threshold determines the threshold of a score for a pixel for it to be considered part of a person.

* @param segmentScores A 3d-tensor of the sigmoid of the segmentation output.

* @param segmentationThreshold The minimum that segmentation values must have to be considered part of the person. Affects the generation of the segmentation mask and the clipping of the colored part image.

* @returns A segmentation mask with a 1 or 0 at each pixel where there is a person or not a person.

* export function toMaskTensor(segmentScores: tf.Tensor2D, threshold: number): tf.Tensor2D {
  return tf.tidy(() =>
    tf.cast(tf.greater(segmentScores, tf.scalar(threshold)), 'int32') as tf.Tensor2D);
}

* @returns A 2d tensor of an image with the corresponding value at each pixel corresponding to the part with the highest value. These part ids are clipped by the segmentation mask. Wherever a pixel is clipped by the segmentation mask, its value will set to -1, indicating that there is no part in that pixel.

  const [partMapHeight, partMapWidth, numParts] = partHeatmapScores.shape;
  return tf.tidy(() => {
    const flattenedMap = toFlattenedOneHotPartMap(partHeatmapScores);
    const partNumbers = tf.expandDims(tf.range(0, numParts, 1, 'int32'), 1);
    const partMapFlattened = tf.cast(tf.matmul(flattenedMap, partNumbers as tf.Tensor2D), 'int32');
    const partMapShiftedUpForClipping = tf.add(partMap, tf.scalar(1, 'int32'));
    return tf.sub(clipByMask2d(partMapShiftedUpForClipping as tf.Tensor2D, segmentationMask), tf.scalar(1, 'int32'));
  });
}

* export function decodeOnlyPartSegmentation(partHeatmapScores: tf.Tensor3D): tf.Tensor2D {
  const [partMapHeight, partMapWidth, numParts] = partHeatmapScores.shape;
  return tf.tidy(() => {
    const flattenedMap = toFlattenedOneHotPartMap(partHeatmapScores);
    const partNumbers = tf.expandDims(tf.range(0, numParts, 1, 'int32'), 1);
    const partMapFlattened = tf.cast(tf.matmul(flattenedMap, partNumbers as tf.Tensor2D), 'int32');
    const partMapShiftedUpForClipping = tf.add(partMap, tf.scalar(1, 'int32'));
    return tf.sub(clipByMask2d(partMapShiftedUpForClipping as tf.Tensor2D, segmentationMask), tf.scalar(1, 'int32'));
  });
}

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=============================================================================

import * as tfconv from '@tensorflow/tfjs-converter';
import * as tf from '@tensorflow/tfjs-core';
import {BodyPixOutputStride} from './types';

* BodyPix supports using various convolution neural network models as its underlying base model. The following BaseModel interface defines a unified interface for creating such BodyPix base models. Currently both MobileNet (in ./mobilenet.ts) and ResNet (in ./resnet.ts) implements the BaseModel interface. New base models that conform to the BaseModel interface can be added to BodyPix.

* export interface BaseModel {
  constructor(
    model: tfconv.GraphModel,
    outputStride: BodyPixOutputStride) {
    const inputShape = model.inputs[0].shape as [number, number, number, number];
    tf.util.assert(inputShape[1] === -1) && (inputShape[2] === -1), () => `Input shape [inputShape[1]], [inputShape[2]] must be equal to or -1`);
    // *
    // Predicts intermediate Tensor representations.
    * @param input The input RGB image of the base model.
  }
}

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* A Tensor of shape: ["inputResolution", "inputResolution", 3].
* @return A dictionary of base model's intermediate predictions.
* The returned dictionary should contain the following elements:
* - heatmapScores: A Tensor3D that represents the keypoint heatmap scores.
* - offsets: A Tensor3D that represents the offsets.
* - displacementFwd: A Tensor3D that represents the forward displacement.
* - displacementBwd: A Tensor3D that represents the backward displacement.
* - segmentation: A Tensor3D that represents the segmentation of all people.
* - longOffsets: A Tensor3D that represents the long offsets used for instance grouping.
* - partHeatmaps: A Tensor3D that represents the body part segmentation.
* predict(input: tf.Tensor3D): 
  *
  * A Tensor of shape: ["inputResolution", "inputResolution", 3].
  *
  * @return A dictionary of base model's intermediate predictions.
  * The returned dictionary should contain the following elements:
  * - heatmapScores: A Tensor3D that represents the keypoint heatmap scores.
  * - offsets: A Tensor3D that represents the offsets.
  * - displacementFwd: A Tensor3D that represents the forward displacement.
  * - displacementBwd: A Tensor3D that represents the backward displacement.
  * - segmentation: A Tensor3D that represents the segmentation of all people.
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  * - segmentation: A Tensor3D that represents the segmentation of all people.
  * - longOffsets: A Tensor3D that represents the long offsets used for instance grouping.
  * - partHeatmaps: A Tensor3D that represents the body part segmentation.
interface NumberDict {
  [jointName: string]: number;
}

export const PART_IDS =
  PART_NAMES.reduce((result: NumberDict, jointName, i): NumberDict => {
    result[jointName] = i;
    return result;
  }, {});

export function getOffsetPoint(y: number, x: number, keypoint: number, offsets: TensorBuffer3D): Vector2D {
  return {
    y: offsets.get(y, x, keypoint),
    x: offsets.get(y, x, keypoint + NUM_KEYPOINTS)
  };
}

export function getImageCoords(part: Part, outputStride: number, offsets: TensorBuffer3D): Vector2D {
  const {heatmapY, heatmapX, id: keypoint} = part;
  const {y, x} = getOffsetPoint(heatmapY, heatmapX, keypoint, offsets);
  return {
    x: part.heatmapX * outputStride + x,
    y: part.heatmapY * outputStride + y
  };
}

export function fillArray<T>(element: T, size: number): T[] {
  const result: T[] = new Array(size);
  for (let i = 0; i < size; i++) {
    result[i] = element;
  }
  return result;
}

export function clamp(a: number, min: number, max: number): number {
  if (a < min) {
    return min;
  }
  if (a > max) {
    return max;
  }
  return a;
}

export function squaredDistance(y1: number, x1: number, y2: number, x2: number): number {
  const dy = y2 - y1;
  const dx = x2 - x1;
  return dy * dy + dx * dx;
}

export function addVectors(a: Vector2D, b: Vector2D): Vector2D {
  return {x: a.x + b.x, y: a.y + b.y};
}

export function clampVector(a: Vector2D, min: number, max: number): Vector2D {
  return {y: clamp(a.y, min, max), x: clamp(a.x, min, max)};
}

export function getScale(height: number, width: number, inputResolutionY: number, inputResolutionX: number): [number, number] {
  const {top: padT, bottom: padB, left: padL, right: padR} = padding;
  const scaleY = inputResolutionY / (padT + padB + height);
  const scaleX = inputResolutionX / (padL + padR + width);
  return [scaleX, scaleY];
}

export function getOffsetPoint(x: number, y: number, keypoints: number, offsets: TensorBuffer3D): Vector2D {
  return {y: offsets.get(y, x, keypoints), x: offsets.get(y, x, keypoints + NUM_KEYPOINTS)};
}

export function getImageCoords(part: Part, offsets: TensorBuffer3D): Vector2D {
  const {heatmapY, heatmapX, id: keypoint} = part;
  const {y, x} = getOffsetPoint(heatmapY, heatmapX, keypoint, offsets);
  return {x: part.heatmapX * outputStride + x, y: part.heatmapY * outputStride + y};
}

export function fillArray<T>(element: T, size: number): T[] {
  const result: T[] = new Array(size);
  for (let i = 0; i < size; i++) {
    result[i] = element;
  }
  return result;
}

export function clamp(a: number, min: number, max: number): number {
  if (a < min) {
    return min;
  }
  if (a > max) {
    return max;
  }
  return a;
}

export function squaredDistance(y1: number, x1: number, y2: number, x2: number): number {
  const dy = y2 - y1;
  const dx = x2 - x1;
  return dy * dy + dx * dx;
}

export function addVectors(a: Vector2D, b: Vector2D): Vector2D {
  return {x: a.x + b.x, y: a.y + b.y};
}

export function clampVector(a: Vector2D, min: number, max: number): Vector2D {
  return {x: clamp(a.x, min, max), y: clamp(a.y, min, max)};
}
Pair[], pose: Pose, minPartScore = 0.3) {\n    let distance = 0.0;\n    let numKpt = 0;\n    for (let p = 0; p < embedding.length; p++) {\n        if (pose.keypoints[p].score > minPartScore) {\n            numKpt += 1;\n            distance += (embedding[p].x - pose.keypoints[p].position.x) ** 2 +\n                (embedding[p].y - pose.keypoints[p].position.y) ** 2;\n        }\n    }\n    if (numKpt === 0) {\n        distance = Infinity;\n    } else {\n        distance = distance / numKpt;\n    }\n    return distance;\n}\n}

function convertToPositionInOuput(position: Pair, padT: number, padL: number, scaleX: number, scaleY: number, stride: number) {\n    const x = Math.round(((padT + position.y + 1.0) * scaleY - 1.0) / stride);\n    const y = Math.round(((padL + position.x + 1.0) * scaleX - 1.0) / stride);\n    return {x, y};\n}

function getEmbedding(location: Pair, keypointIndex: number, convertToPosition: (pair: Pair) => Pair, outputResolutionX: number, longOffsets: Float32Array, refineSteps: number, height: number, width: number) {\n    const newLocation = convertToPosition(location);\n    const nn = newLocation.y * outputResolutionX + newLocation.x;\n    const dy = longOffsets[0 * (2 * nn) + keypointIndex];\n    const dx = longOffsets[1 * (2 * nn) + keypointIndex];\n    const y = location.y + dy;\n    const x = location.x + dx;\n    return {x, y};\n}

function matchEmbeddingToInstance(location: Pair, keypointIndex: number, convertToPosition: (pair: Pair) => Pair, outputResolutionX: number, longOffsets: Float32Array, refineSteps: number, numKptForMatching: number, height: number, width: number) {\n    const embed = getEmbedding(location, keypointIndex, convertToPosition, outputResolutionX, longOffsets, refineSteps, height, width);\n    const kMin = -1;\n    const kMinDist = Infinity;\n    for (let k = 0; k < numKptForMatching; k++) {\n        const dist = computeDistance(embed, keypointIndex);\n        if (dist < kMinDist) {\n            kMin = k;\n            kMinDist = dist;\n        }\n    }\n    return {kMin, kMinDist};\n}

function getOutputResolution(inputResolutionY: number, inputResolutionX: number, stride: number) {\n    const outputResolutionX = Math.round((inputResolutionX - 1.0) / stride + 1.0);\n    const outputResolutionY = Math.round((inputResolutionY - 1.0) / stride + 1.0);\n    return [outputResolutionX, outputResolutionY];\n}

export function decodeMultipleMasksCPU(segmentation: Uint8Array, longOffsets: Float32Array, poses: Pose[], numKptForMatching: number, padT: number, padL: number, scaleX: number, scaleY: number, outputResolutionX: number, outputResolutionY: number, stride: number) {\n    const dataArrays = new Array(poses.length).fill(0);\n    const {top: padT, left: padL} = getScale(height, width, inputHeight, inputWidth, stride);\n    for (let i = 0; i < height; i += stride) {\n        for (let j = 0; j < width; j += stride) {\n            const n = i * width + j;\n            const prob = segmentation[n];\n            if (prob === 1) {\n                const kMin = matchEmbeddingToInstance({x: j, y: i}, longOffsets, posesAboveScore, numKptForMatching, padT, padL, scaleX, scaleY, outputResolutionX, outputResolutionY, stride, refineSteps);\n                if (kMin >= 0) {\n                    dataArrays[kMin][n] = 1;\n                }\n            }\n        }\n    }\n    return dataArrays;\n}

export function decodeMultiplePartMasksCPU(segmentation: Uint8Array, longOffsets: Float32Array, partSegmentation: Uint8Array, numKptForMatching: number, padT: number, padL: number, scaleX: number, scaleY: number, outputResolutionX: number, outputResolutionY: number, stride, refineSteps: number) {\n    const dataArrays = new Array(poses.length).fill(-1);\n    const {top: padT, left: padL} = getScale(height, width, inputHeight, inputWidth, stride);\n    for (let i = 0; i < height; i += stride) {\n        for (let j = 0; j < width; j += stride) {\n            const n = i * width + j;\n            const prob = segmentation[n];\n            if (prob === 1) {\n                const kMin = matchEmbeddingToInstance({x: j, y: i}, longOffsets, posesAboveScore, numKptForMatching, padT, padL, scaleX, scaleY, outputResolutionX, outputResolutionY, stride, refineSteps);\n                if (kMin >= 0) {\n                    dataArrays[kMin][n] = 1;\n                }\n            }\n        }\n    }\n    return dataArrays;\n}
0) {\n    dataArrays[kMin][n] = partSegmentaion[n];\n  }\n  }\n  }\n  return dataArrays;\n};

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 */

import * as tf from '@tensorflow/tfjs-core';
import * as tf_webgl from '@tensorflow/tfjs-backend-webgl';
import {NUM_KEYPOINTS} from '../keypoints';
import {Padding, Pose} from '../types';
import {getScale} from './util';

export function decodeMultipleMasksWebGl(
    segmentation: tf.Tensor2D,
    longOffsets: tf.Tensor3D,
    posesAboveScore: Pose[],
    height: number, width: number, stride: number,
    inHeight: number, inWidth: number, padding: Padding,
    refineSteps: number, minKptScore: number,
    maxNumPeople: number): tf.TensorInfo {
  // The height/width of the image/canvas itself.
  const [origHeight, origWidth] = segmentation.shape;
  // The height/width of the output of the model.
  const [outHeight, outWidth] = longOffsets.shape.slice(0, 2);
  const shapedLongOffsets: tf.Tensor4D = tf.reshape(longOffsets,
      [outHeight, outWidth, NUM_KEYPOINTS, 3]);
  // Make pose tensor of shape [MAX_NUM_PEOPLE, NUM_KEYPOINTS, 3] where
  // the last 3 coordinates correspond to the score, h and w coordinate of that
  // keypoint.
  const poseVals = new Float32Array(maxNumPeople * NUM_KEYPOINTS * 3).fill(0.0);
  for (let i = 0; i < posesAboveScore.length; i++) {
    const poseOffset = i * NUM_KEYPOINTS * 3;
    const pose = posesAboveScore[i];
    for (let kp = 0; kp < NUM_KEYPOINTS; kp++) {
      const keypoint = pose.keypoints[kp];
      const offset = poseOffset + kp * 3;
      poseVals[offset] = keypoint.score;
      poseVals[offset + 1] = keypoint.position.y;
      poseVals[offset + 2] = keypoint.position.x;
    }
  }

  const [scaleX, scaleY] = getScale([height, width], [inHeight, inWidth], padding);
  const posesTensor = tf.tensor(poseVals, [maxNumPeople, NUM_KEYPOINTS, 3]);

  const {top: padT, left: padL} = padding;

  const program: tf_webgl.GPGPUProgram = {
    variableNames: ['segmentation', 'longOffsets', 'poses'],
    outputShape: [origHeight, origWidth],
    userCode: `\n    int convertToPositionInOutput(int pos, int pad, float scale, int stride) {
      return round(((float(pos + pad) + 1.0) * scale - 1.0) / float(stride));\n    }\n
    int findNearestPose(int h, int w) {
      float prob = getSegmentation(h, w);
      if (prob < 1.0) {
        return -1;
      }\n
      float hStrided = convertToPositionInOutput(h, padT, scaleY, stride);
      float wStrided = convertToPositionInOutput(w, padL, scaleX, stride);
      float dh = hStrided - h;
      float dw = wStrided - w;
      return pow(dh, 2) + pow(dw, 2);
    }\n
    float sampleLongOffsets(float h, float w, int d, int k) {
      float dh = fract(h);
      float dw = fract(w);
      int clH = int(ceil(h));
      int clW = int(ceil(w));
      int fh = int(floor(h));
      int fw = int(floor(w));
      float o11 = getLongOffsets(fh, fw, d, k);
      float o12 = getLongOffsets(clH, fw, d, k);
      float o21 = getLongOffsets(fh, clW, d, k);
      float o22 = getLongOffsets(clH, clW, d, k);
      float o1 = mix(o11, o12, dw);
      float o2 = mix(o21, o22, dh);\n    }\n
    // Done(Tyler): convert from output space h/w to strided space.\n    float stridedH = convertToPositionInOutput(h, \n        $(padT), $(scaleY), $(stride));\n    float stridedW = convertToPositionInOutput(w, \n        $(padL), $(scaleX), $(stride));\n    float minDist = 1000000.0;\n    int iMin = -1;\n    for (int i = 0; i < $(maxNumPeople); i++) {\n      float curDistSum = 0.0;\n      int numKpt = 0;\n      for (int k = 0; k < $(NUM_KEYPOINTS); k++) {\n        float dy = sampleLongOffsets(stridedH, \n            stridedW, 0, k);\n        float dx = sampleLongOffsets(stridedH, \n            stridedW, 1, k);\n        if (prob < 1.0) {\n          return -1;\n        }\n
        float y = float(dy) + dh;\n        for (int s = 0; s < $(refineSteps); s++) {\n          float yRounded = round(min(y, \n              float($(height - 1.0))));\n          float xRounded = round(min(x, float($(width - 1.0))));\n          float strided = convertToPositionInOutput(yRounded, $(padT), $(scaleY), $(stride));\n          float xStrided = convertToPositionInOutput(xRounded, $(padL), $(scaleX), $(stride));\n          float dy = sampleLongOffsets(yStrided, xStrided, 0, k);\n          float dx = sampleLongOffsets(yStrided, xStrided, 1, k);
        }
      }
      curDistSum += math::sqrt(dx * dx + dy * dy);
      if (curDistSum < minDist) {\n        minDist = curDistSum;
        iMin = i;
      }
    }
    posesAboveScore[i] = posesTensor[i];\n  }\n
  // done(destroy): convert from strided to output space h/w.\n  const posesOutput = new PoseArray(maxNumPeople);\n
  for (let i = 0; i < maxNumPeople; i++) {\n    const pose = posesTensor[i];
    const poseOffset = i * NUM_KEYPOINTS * 3;
    const poseVals = new Float32Array(poseOffset, poseVals, poseOffset + NUM_KEYPOINTS * 3);
    const pose = posesOutput[i];
    const iMin = findNearestPose(pose.keypoints);
```javascript
    void main() {
        ivec2 coords = getOutputCoords();
        int nearestPose = findNearestPose(coords[0], coords[1]);
        setOutput(float(nearestPose));
    }

    float poseScore = getPoses(i, k, 0);
    float poseY = getPoses(i, k, 1);
    float poseX = getPoses(i, k, 2);
    float dist = curDistSum + dist(x, y, poseX, poseY);
    if (poseScore > $(minKptScore)) {
        numKpt = numKpt + 1;
        curDistSum = curDistSum + dist(x, y, poseX, poseY);
    }
    if (numKpt > 0) {
        return iMin;
    }

    float poseScore = getPoses(i, k, 0);
    float poseY = getPoses(i, k, 1);
    float poseX = getPoses(i, k, 2);
    if (poseScore > $(minKptScore)) {
        numKpt = numKpt + 1;
        curDistSum = curDistSum + dist(x, y, poseX, poseY);
    }
    if (numKpt > 0) {
        return iMin;
    }

    const webglBackend = tf.backend() as tf_webgl.MathBackendWebGL;
    return webglBackend.compileAndRun(program, segmentation, shapedLongOffsets, posesTensor);
```
tf.engine().makeTensorFromDataId(masksTensorInfo.dataId, masksTensorInfo.shape, masksTensorInfo.dtype) as tf.Tensor2D;

      return posesAboveScore.map((_, k) => toPersonKPartSegmentation(masksTensorInfo, partSegmentation, k));
    }

    partSegmentationsByPersonData = (await Promise.all(partSegmentations.map(x => x.data())) as Int32Array[]).map(partSegmentationsForEach(x => x.dispose())); else {
      const segmentationData = await segmentation.data() as Uint8Array;
      const longOffsetsData = await longOffsets.data() as Float32Array;
      const partSegmentationData = await partSegmentation.data() as Uint8Array;
      const partSegmentationsByPersonData = decodeMultiplePartMasksCPU(segmentsData, longOffsetsData, partSegmentationData,
        posesAboveScore, height, width, stride, [inHeight, inWidth], padding, refineSteps);
      return partSegmentationsByPersonData.map((data, k) => ((pose: posesAboveScore[k], data, height, width)))
    };

    partSegmentationsByPersonData = (await Promise.all(partSegmentations.map(x => x.data()))) as Int32Array[];
    partSegmentations.forEach(x => x.dispose());
  } else {
    const segmentationsData = await segmentation.data() as Uint8Array;
    const longOffsetsData = await longOffsets.data() as Float32Array;
    const partSegmentationData = await partSegmentation.data() as Uint8Array;

    partSegmentationsByPersonData = decodeMultiplePartMasksCPU(segmentationsData, longOffsetsData, partSegmentationData,
      posesAboveScore, height, width, stride, [inHeight, inWidth], padding, refineSteps);
  }

  return partSegmentationsByPersonData.map((data, k) => ({pose: posesAboveScore[k], data, height, width}));
}

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 * limitations under the License.
 *
 *=============================================================================
 */

// algorithm based on Coursera Lecture from Algorithms, Part 1:

function half(k: number) {
  return Math.floor(k / 2);
}

export class MaxHeap<T> {
  private priorityQueue: T[];
  private numberOfElements: number;
  private getElementValue: (element: T) => number;

  constructor(maxSize: number, getElementValue: (element: T) => number) {
    this.priorityQueue = new Array(maxSize);
    this.numberOfElements = -1;
    this.getElementValue = getElementValue;
  }

  public enqueue(x: T): void {
    this.priorityQueue[++this.numberOfElements] = x;
    this.swim(this.numberOfElements);
  }

  public dequeue(): T {
    const max = this.priorityQueue[0];
    this.exchange(0, this.numberOfElements--);
    this.sink(0);
    this.priorityQueue[this.numberOfElements + 1] = null;
    return max;
  }

  public empty(): boolean {
    return this.numberOfElements === -1;
  }

  public size(): number {
    return this.numberOfElements + 1;
  }

  public all(): T[] {
    return this.priorityQueue.slice(0, this.numberOfElements + 1);
  }

  public max(): T {
    return this.priorityQueue[0];
  }

  private swim(k: number): void {
    while (k > 0 && this.less(half(k), k)) {
      this.exchange(k, half(k));
      k = half(k);
    }
  }

  private sink(k: number): void {
    while (2 * k <= this.numberOfElements) {
      let j = 2 * k;
      if (j < this.numberOfElements && this.less(j, j + 1)) {
        j++;
      }
      if (!this.less(k, j)) {
        break;
      }
      this.exchange(k, j);
      k = j;
    }
  }

  private getValueAt(i: number): number {
    return this.getElementValue(this.priorityQueue[i]);
  }

  private less(i: number, j: number): boolean {
    return this.getValueAt(i) < this.getValueAt(j);
  }

  private exchange(i: number, j: number): void {
    const t = this.priorityQueue[i];
    this.priorityQueue[i] = this.priorityQueue[j];
    this.priorityQueue[j] = t;
  }

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  *
  *=============================================================================
 */

import {PartWithScore, TensorBuffer3D} from '../types';

import {MaxHeap} from './max_heap';

function scoreIsMaximumInLocalWindow(keypointId: number, score: number, heatmapY: number, heatmapX: number, localMaximumRadius: number, scores: TensorBuffer3D): boolean {
  const [height, width] = scores.shape;
  let localMaximum = true;
  const heatmapY = Math.max(heatmapY - 0.5, 0);
  const heatmapX = Math.max(heatmapX - 0.5, 0);
  const inHeight = Math.min(height - heatmapY + 0.5, localMaximumRadius + 1);
  const inWidth = Math.min(width - heatmapX + 0.5, localMaximumRadius + 1);

  let localMaximum = true;
  const yStart = Math.max(heatmapY - localMaximumRadius, 0);
  const xStart = Math.max(heatmapX - localMaximumRadius, 0);
  const yEnd = Math.min(yStart + inHeight, height);
  const xEnd = Math.min(xStart + inWidth, width);

  for (let y = yStart; y < yEnd; y++) {
    for (let x = xStart; x < xEnd; x++) {
      const keypointIndex = this.getKeypointIndex(x, y, keypointId);
      if (scores.get(keypointIndex) < score) {
        localMaximum = false;
        break;
      }
    }
  }

  return localMaximum;
}

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 *
 *=============================================================================
 */

import {MaxHeap} from './max_heap';

function scoreIsMaximumInLocalWindow(keypointId: number, score: number, heatmapY: number, heatmapX: number, localMaximumRadius: number, scores: TensorBuffer3D): boolean {
  const [height, width] = scores.shape;
  let localMaximum = true;
  const yStart = Math.max(heatmapY - localMaximumRadius, 0);
  const xStart = Math.max(heatmapX - localMaximumRadius, 0);
  const yEnd = Math.min(yStart + inHeight, height);
  const xEnd = Math.min(xStart + inWidth, width);

  for (let y = yStart; y < yEnd; y++) {
    for (let x = xStart; x < xEnd; x++) {
      const keypointIndex = this.getKeypointIndex(x, y, keypointId);
      if (scores.get(keypointIndex) < score) {
        localMaximum = false;
        break;
      }
    }
  }

  return localMaximum;
}
localMaximumRadius, 0);`\n`\nconst yEnd = Math.min(heatmapY + localMaximumRadius + 1, height);`\n`\nfor (let yCurrent = yStart; yCurrent < yEnd; ++yCurrent) {
  const xStart = Math.max(heatmapX - localMaximumRadius, 0);`\n`\n  const xEnd = Math.min(heatmapX + localMaximumRadius + 1, width);`\n`\n  for (let xCurrent = xStart; xCurrent < xEnd; ++xCurrent) {
    if (scores.get(yCurrent, xCurrent, keypointId) > score) {
      localMaximum = false;`\n`\n      break;`\n    }`\n  }`\n  if (!localMaximum) {
    break;`\n  }`\n}`\n
return localMaximum;`\n```
offsetRefineStep; i++) {
    const targetKeypointIndices = getStridedIndexNearPoint(targetKeypoint, outputStride, height, width);
    const offsetPoint = getOffsetPoint(targetKeypointIndices.x, targetKeypointIndices.y, offsets);
    targetKeypoint = addVectors({x: targetKeypointIndices.x * outputStride, y: targetKeypointIndices.y * outputStride}, {x: offsetPoint.x, y: offsetPoint.y});
}

const targetKeypointIndices = getStridedIndexNearPoint(targetKeypoint, outputStride, height, width);
const score = scoresBuffer.get(targetKeypointIndices.x, targetKeypointIndices.y, targetKeypointIndices.x, targetKeypointIndices.y);
return {position: targetKeypoint, part: PART_NAMES[targetKeypointId], score: score};

/**
 * Follows the displacement fields to decode the full pose of the object instance given the position of a part that acts as root.
 * @return An array of decoded keypoints and their scores for a single pose
 */
export function decodePose(root: PartWithScore, scores: TensorBuffer3D, offsets: TensorBuffer3D, outputStride: number, displacementsBwd: TensorBuffer3D[], displacementsFwd: TensorBuffer3D[]): Keypoint[] {
  const numParts = scores.shape[2];
  const numEdges = parentToChildEdges.length;
  const instanceKeypoints: Keypoint[] = new Array(numParts);
  // Start a new detection instance at the position of the root.
  const {part: rootPart, score: rootScore} = root;
  const rootPoint = getImageCoords(rootPart, outputStride, offsets);
  instanceKeypoints[rootPart.id] = {score: rootScore, part: PART_NAMES[rootPart.id], position: rootPoint};

  // Decode the part positions upwards in the tree, following the backward displacements.
  for (let edge = numEdges - 1; edge >= 0; --edge) {
    const sourceKeypointId = parentToChildEdges[edge];
    const targetKeypointId = childToParentEdges[edge];
    if (instanceKeypoints[sourceKeypointId] && !instanceKeypoints[targetKeypointId]) {
      instanceKeypoints[targetKeypointId] = traverseToTargetKeypoint(edge, instanceKeypoints[sourceKeypointId], targetKeypointId, scores, offsets, outputStride, displacementsBwd);
    }
  }

  // Decode the part positions downwards in the tree, following the forward displacements.
  for (let edge = 0; edge < numEdges; ++edge) {
    const sourceKeypointId = childToParentEdges[edge];
    const targetKeypointId = parentToChildEdges[edge];
    if (instanceKeypoints[sourceKeypointId] && !instanceKeypoints[targetKeypointId]) {
      instanceKeypoints[targetKeypointId] = traverseToTargetKeypoint(edge, instanceKeypoints[sourceKeypointId], targetKeypointId, scores, offsets, outputStride, displacementsFwd);
    }
  }

  return instanceKeypoints;
}

// A point (y, x) is considered as root part candidate if its score is a maximum in a window [y - kLocalMaximumRadius, x - kLocalMaximumRadius] <=\n
---

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---

* @import {Keypoint, Pose, TensorBuffer3D} from './types';* @import {buildPartWithScoreQueue} from './build_part_with_score_queue';* @import {decodePose} from './decode_pose';* @import {getImageCoords, squaredDistance} from './util';* @function withinNmsRadiusOfCorrespondingPoint* @pose: Pose[:]* @squaredNmsRadius: number, {x, y}: {x: number, y: number}: boolean (keypointId: number): boolean {return poses.some((keypoint) => {
  const correspondingKeypoint = keypoints[keypointId].position;
  return squaredDistance(correspondingKeypoint.y, x, correspondingKeypoint.y, correspondingKeypoint.x) <=
  squaredNmsRadius;});}

/* Score the newly proposed object instance without taking into account the scores of the parts that overlap with any previously detected instance.*/
function getInstanceScore(existingPoses: Pose[], squaredNmsRadius: number, instanceKeypoints: Keypoint[], number: number) {
  notOverlappedKeypointScores = instanceKeypoints.reduce((result, {position, score}, keypointId) => {
    if (!withinNmsRadiusOfCorrespondingPoint(existingPoses, squaredNmsRadius, position, keypointId)) {
      result += score;
    }
    return result;
  }, 0.0); return notOverlappedKeypointScores /= instanceKeypoints.length; A point (y, x) is considered as root part candidate if its score is at least kLocalMaximumRadius, x - x' <=\n
---

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kLocalMaximumRadius

const kLocalMaximumRadius = 1;

* Detects multiple poses and finds their parts from part scores and displacement vectors. It returns up to `maxDetections` object instance detections in decreasing root score order. It works as follows: We first create a priority queue with local part score maxima above `scoreThreshold`, considering all parts at the same time. Then we iteratively pull the top element of the queue (in decreasing score order) and treat it as a root candidate for a new object instance. To avoid duplicate detections, we reject the root candidate if it is within a disk of `nmsRadius` pixels from the corresponding part of a previously detected instance, which is a form of part-based non-maximum suppression (NMS). If the root candidate passes the NMS check, we start a new object instance detection, treating the corresponding part as root and finding the positions of the remaining parts by following the displacement vectors along the tree-structured part graph. We assign to the newly detected instance a score equal to the sum of scores of its parts which have not been claimed by a previous instance (i.e., those at least `nmsRadius` pixels away from the corresponding part of all previously detected instances), divided by the total number of parts.

```typescript
export function decodeMultiplePoses(
    scoresBuffer: TensorBuffer3D,
    offsetsBuffer: TensorBuffer3D,
    displacementsFwdBuffer: TensorBuffer3D,
    displacementsBwdBuffer: TensorBuffer3D,
    outputStride: number,
    maxPoseDetections: number, scoreThreshold = 0.5, nmsRadius = 20): Pose[] {
  const poses: Pose[] = [];

  const queue = buildPartWithScoreQueue(
      scoreThreshold,
      kLocalMaximumRadius, scoresBuffer);

  const squaredNmsRadius = nmsRadius * nmsRadius;

  // Generate at most maxDetections object instances per image in decreasing root part score order.
  while (poses.length < maxPoseDetections && queue.length > 0) {
    // The next element in the queue is the next root candidate.
    const root = queue.dequeue();

    // Part-based non-maximum suppression: We reject a root candidate if it is within a disk of `nmsRadius` pixels from the corresponding part of a previously detected instance.
    const rootImageCoords = getImageCoords(root.part, outputStride, offsetsBuffer);

    const rootNmsRadiusCheck = withinNmsRadiusOfCorrespondingPoint(poses, squaredNmsRadius, rootImageCoords, root.part.id);

    if (!rootNmsRadiusCheck) {
      const keypoints = decodePose(
          root, scoresBuffer, offsetsBuffer, outputStride, displacementsFwdBuffer);

      const score = getInstanceScore(poses, squaredNmsRadius, keypoints);

      poses.push({keypoints, score});
    }
  }

  return poses;
}
```

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 */
import * as tf from '@tensorflow/tfjs-core';

import {BaseModel} from './base_model';

const imageNetMean = [-123.15, -115.90, -103.06];

export class ResNet extends BaseModel {
    preprocessInput(input: tf.Tensor3D): tf.Tensor3D {
      return tf.add(input, imageNetMean);
    }

    nameOutputResults(results: tf.Tensor3D[]): tf.Tensor3D {
      return results;
    }
}

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 *
 *=============================================================================
 *
 *const RESNET50_BASE_URL = 'https://storage.googleapis.com/tfjs-models/savedmodel/bodypix/resnet50/';
 *const MOBILENET_BASE_URL = 'https://storage.googleapis.com/tfjs-models/savedmodel/bodypix/mobilenet/';

 * The BodyPix 2.0 ResNet50 models use the latest TensorFlow.js 1.0
 * format.export function resNet50SavedModel(stride: number, quantBytes: number): string {
 *   const graphJson = `model-stride${stride}.json`;
 *   // quantBytes=4 corresponding to the non-quantized full-precision SavedModel.
 *   if (quantBytes === 4) {
 *     return RESNET50_BASE_URL + `float/` + graphJson;
 *   } else {
 *     return RESNET50_BASE_URL + `quant${quantBytes}/` + graphJson;
 *   }
 *   // The BodyPix 2.0 MobileNetV1 models use the latest TensorFlow.js 1.0
 *   format.export function mobilitySavedModel(stride: number, multiplier: number, quantBytes: number): string {
 *     const toStr: {[key: number]: string} = {1.0: '100', 0.75: '075', 0.50: '050'};
 *     const graphJson = `model-stride${stride}.json`;
 *     // quantBytes=4 corresponding to the non-quantized full-precision SavedModel.
 *     if (quantBytes === 4) {
 *       return MOBILENET_BASE_URL + `float/${toStr[multiplier]}/` + graphJson;
 *     } else {
 *       return MOBILENET_BASE_URL + `quant${quantBytes}/${toStr[multiplier]}/` + graphJson;
 *     }
 *     // The BodyPix 2.0 models use the latest TensorFlow.js 1.0
 *     format.export function getSizeFromImageLikeElement(input: HTMLImageElement|HTMLCanvasElement|OffscreenCanvas): [number, number] {
 *       if ('offsetHeight' in input && input.offsetHeight !== 0) {
 *         return [input.offsetHeight, input.offsetWidth];
 *       } else if (input.height !== null && input.width !== null) {
 *         return [input.height, input.width];
 *       } else {
 *         throw new Error('HTMLImageElement must have height and width attributes set.');
 *       }
 *     }
 *     // The BodyPix 2.0 models use the latest TensorFlow.js 1.0
 *     format.export function getSizeFromVideoElement(input: HTMLVideoElement): [number, number] {
 *       if (input.height !== null && input.width !== null) {
 *         return [input.height, input.width];
 *       } else {
 *         throw new Error('HTMLVideoElement must have height and width attributes set.');
 *       }
 *     }
 *     // The BodyPix 2.0 models use the latest TensorFlow.js 1.0
 *     format.export function getInputSize(input: BodyPixInput): [number, number] {
 *       if ((typeof input.offsetHeight) !== 'undefined') {
 *         return [input.offsetHeight, input.offsetWidth];
 *       } else if ((typeof input.height) !== 'undefined') {
 *         return [input.height, input.width];
 *       } else {
 *         throw new Error('BodyPixInput must have height and width attributes set.');
 *       }
 *     }
 * }"
function getSizeFromImageLikeElement(input)
{
  if (typeof (OffscreenCanvas) !== 'undefined' &&
      input instanceof OffscreenCanvas) {
    return getSizeFromImageLikeElement(input);
  } else if (typeof (HTMLImageElement) !== 'undefined' &&
      input instanceof HTMLImageElement)) {
    return getSizeFromImageLikeElement(input);
  } else if (typeof (ImageData) !== 'undefined' && input instanceof ImageData) {
    return [input.height, input.width];
  } else if (typeof (HTMLVideoElement) !== 'undefined' &&
      input instanceof HTMLVideoElement) {
    return getSizeFromVideoElement(input);
  } else if (input instanceof tf.Tensor) {
    return [input.shape[0], input.shape[1]];
  } else {
    throw new Error(`error: Unknown input type: ${input}.`);
  }
}

function isValidInputResolution(resolution, outputStride)
{
  return (resolution - 1) % outputStride === 0;
}

export function toValidInputResolution(inputResolution, outputStride)
{
  if (isValidInputResolution(inputResolution, outputStride)) {
    return inputResolution;
  }

  return Math.floor(inputResolution / outputStride) * outputStride + 1;
}

const INTERNAL_RESOLUTION_STRING_OPTIONS = {
  low: 'low',
  medium: 'medium',
  high: 'high',
  full: 'full'
};

const INTERNAL_RESOLUTION_PERCENTAGES = {
  [INTERNAL_RESOLUTION_STRING_OPTIONS.low]: 0.25,
  [INTERNAL_RESOLUTION_STRING_OPTIONS.medium]: 0.5,
  [INTERNAL_RESOLUTION_STRING_OPTIONS.high]: 0.75,
  [INTERNAL_RESOLUTION_STRING_OPTIONS.full]: 1.0
};

const MIN_INTERNAL_RESOLUTION = 0.1;
const MAX_INTERNAL_RESOLUTION = 2.0;

function toInternalResolutionPercentage(inputResolution)
{
  if (typeof inputResolution === 'string') {
    const result = INTERNAL_RESOLUTION_PERCENTAGES[inputResolution];

    tf.util.assert(
        typeof result === 'number',
        () => `string value of inputResolution must be one of ${Object.values(INTERNAL_RESOLUTION_STRING_OPTIONS).join(',')} but was ${inputResolution}.`);
    return result;
  } else {
    tf.util.assert(
        typeof inputResolution === 'number' &&
        inputResolution <= MAX_INTERNAL_RESOLUTION &&
        inputResolution >= MIN_INTERNAL_RESOLUTION,
        () =>
            `inputResolution must be a string or number between ${MIN_INTERNAL_RESOLUTION} and ${MAX_INTERNAL_RESOLUTION}, but was ${inputResolution}`);
    return inputResolution;
  }
}

export function toInputResolutionHeightAndWidth(internalResolution, outputStride, [inputHeight, inputWidth])
{
  const internalResolutionPercentage =
      toInternalResolutionPercentage(internalResolution);

  return [
      toValidInputResolution(inputHeight * internalResolutionPercentage, outputStride),
      toValidInputResolution(inputWidth * internalResolutionPercentage, outputStride)
  ];
}

export function toInputTensor(input)
{
  // TODO: tf.browser.fromPixels types to support OffscreenCanvas
  // @ts-ignore
  return input instanceof tf.Tensor ? input : tf.browser.fromPixels(input);
}

export function resizeAndPadTo(targetH, targetW, flipHorizontal = false)
{
  const [height, width] = imageTensor.shape;

  const targetAspect = targetW / targetH;
  const aspect = width / height;

  let resizeW; let resizeH;
  let padL; let padR;
  let padT; let padB;

  if (aspect > targetAspect) {
    // resize to have the larger dimension match the shape.
    resizeW = targetW;
    resizeH = Math.ceil(resizeW / aspect);
    const padHeight = targetH - resizeH;
    padL = 0;
    padR = 0;
    padT = Math.floor(padHeight / 2);
    padB = targetH - (resizeH + padT);
  } else {
    resizeH = targetH;
    resizeW = Math.ceil(targetH * aspect);
    const padWidth = targetW - resizeW;
    padL = Math.floor((padWidth / 2));
    padR = targetW - (resizeW + padL);
    padT = 0;
    padB = 0;
  }

  let resizedAndPadded = tf.tidy(() => {
    if (flipHorizontal) {
      resizedAndPadded = tf.transpose(resizedAndPadded, [1, 0, 2]);
    }
    resizedAndPadded = tf.pad3d(resizedAndPadded, [[padT, padB], [padL, padR], [0, 0]]);
  });

  return resizedAndPadded;
}

export function scaleAndCropToInputTensorShape(inputHeight, inputTensorHeight, inputTensorWidth)
{
  const [height, width] = inputTensor.shape;

  const targetAspect = inputHeight / inputTensorHeight;
  const aspect = width / height;

  let padL; let padR;
  let padT; let padB;

  if (aspect > targetAspect) {
    // resize to have the larger dimension match the shape.
    padL = 0;
    padR = 0;
    padT = Math.floor((padHeight / 2));
    padB = targetH - (resizeH + padT);
  } else {
    padL = Math.floor((padWidth / 2));
    padR = targetW - (resizeW + padL);
    padT = 0;
    padB = 0;
  }

  let resizedAndPadded = tf.tidy(() => {
    resizedAndPadded = tf.pad3d(resizedAndPadded, [[padT, padB], [padL, padR], [0, 0]]);
  });

  return resizedAndPadded;
}
number].
    [resizedAndPaddedHeight, resizedAndPaddedWidth]: [number, number],
    [[padT, padB], [padL, padR]]: [number, number, [number, number]],
    applySigmoidActivation = false): tf.Tensor3D {
  return tf.tidy(() => {
    let inResizedAndPadded: tf.Tensor3D = tf.image.resizeBilinear(tensor, 
    [resizedAndPaddedHeight, resizedAndPaddedWidth], true);

    if (applySigmoidActivation) {
      inResizedAndPadded = tf.sigmoid(inResizedAndPadded);
    }

    return removePaddingAndResizeBack(inResizedAndPadded, 
    [inputTensorHeight, inputTensorWidth], 
    [[padT, padB], [padL, padR]]);
  });
}

export function removePaddingAndResizeBack(resizedAndPadded: tf.Tensor3D, originalHeight: number, originalWidth: number): tf.Tensor3D {
  return tf.tidy(() => {
    const batchedImage: tf.Tensor4D = tf.expandDims(resizedAndPadded);
    return tf.squeeze(tf.image
        .cropAndResize(
            batchedImage, 
            [[padT / (originalHeight + padT + padB - 1.0),
              padL / (originalWidth + padL + padR - 1.0),
              padT + originalHeight - 1.0] / 
              (originalHeight + padT + padB - 1.0),
              padL + originalWidth - 1.0] / 
              (originalWidth + padL + padR - 1.0)]]
            [0], [0, [originalHeight, originalWidth], [0]]);
  });
}

export function resize2d(tensor: tf.Tensor2D, resolution: [number, number], nearestNeighbor?: boolean): tf.Tensor2D {
  return tf.tidy(() => {
    const batchedImage: tf.Tensor4D = tf.expandDims(tensor, 2);
    return tf.squeeze(tf.image.resizeBilinear(batchedImage, resolution, nearestNeighbor));
  });
}

export function padAndResizeTo(input: BodyPixInput, [targetH, targetW]: [number, number]): {resized: tf.Tensor3D, 
    padding: Padding} {
  const [height, width] = getInputSize(input);
  const targetAspect = targetW / targetH;
  const aspect = width / height;
  let [padT, padB, padL, padR] = [0, 0, 0, 0];

  if (aspect < targetAspect) {
    // pads the width
    padT = 0;
    padB = 0;
    padL = Math.round(0.5 * (targetAspect * height - width));
    padR = Math.round(0.5 * (targetAspect * height - width));
  } else {
    // pads the height
    padT = Math.round(0.5 * ((1.0 / targetAspect) * width - height));
    padB = Math.round(0.5 * ((1.0 / targetAspect) * width - height));
    padL = 0;
    padR = 0;
  }

  const resized: tf.Tensor3D = tf.tidy(() => {
    let imageTensor = toInputTensor(input);
    imageTensor = tf.pad3d(imageTensor, [[padT, padB], [padL, padR], [0, 0]]);
    return tf.image.resizeBilinear(imageTensor, [targetH, targetW]);
  });

  return {resized, padding: {top: padT, left: padL, 
    right: padR, bottom: padB}};
}

export async function toTensorBuffers3D(tensors: tf.Tensor3D[]): Promise<TensorBuffer3D[]> {
  return Promise.all(tensors.map(tensor => tensor.buffer()));
}

export function scalePose(pose: Pose, scaleY: number, scaleX: number, offsetY = 0, 
    offsetX = 0): Pose {
  return {
    score: pose.score,
    keypoints: pose.keypoints.map(({score, part, position}) => ({
                                    score,
                                    part,
                                    position: {
                                      x: position.x * scaleX + 
                                      offsetY + offsetX
                                    }
                                }))
  };
}

export function scalePoses(poses: Pose[], 
    scaleY: number, scaleX: number, offsetY = 0, 
    offsetX = 0) {
  if (scaleX === 1 && scaleY === 1 && offsetY === 0 && offsetX === 0) {
    return poses;
  }
  return poses.map(pose => scalePose(pose, scaleY, scaleX, 
    offsetY, offsetX));
}

export function flipPoseHorizontal(pose: Pose, imageWidth: number): Pose {
  return {
    score: pose.score,
    keypoints: pose.keypoints.map((score, part, position) => 
        ({x: position.x * scaleX + 
          offsetY + offsetX + (imageWidth - 1) - position.x, 
          y: position.y * scaleY + offsetY}))
  };
}

export function flipPosesHorizontal(poses: Pose[], imageWidth: number) {
  if (imageWidth <= 0) {
    return poses.map(pose => 
        flipPoseHorizontal(pose, imageWidth));
  }
  return poses.map(pose => 
        flipPoseHorizontal(pose, imageWidth));
}

export function scaleAndFlipPoses(poses: Pose[], 
    [height, width]: [number, number], 
    [inputResolutionHeight, inputResolutionWidth]: [number, number], 
    padding: Padding, flipHorizontal: boolean) {
  if (flipHorizontal) {
    return flipPosesHorizontal(poses, width);
  } else {
    const scaledPoses = poses.map(pose => 
        flipPosesHorizontal(pose, imageWidth));
    return scaledPoses;
  }
}
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============================================================================

*/

import * as tfconv from '@tensorflow/tfjs-converter';
import * as tf from '@tensorflow/tfjs-core';

import {BaseModel} from './base_model';
import {decodeOnlyPartSegmentation, decodePartSegmentation,
toMaskTensor} from './decode_part_map';
import {MobileNet} from './mobilenet';
import {decodePersonInstanceMasks, decodePersonInstancePartMasks} from
'./multi_person/decode_instance_masks';
import {MobileNetSavedModel, resNet50SavedModel} from './saved_models';
import {BodyPixArchitecture, BodyPixInput, BodyPixInternalResolution, BodyPixMultiplier,
BodyPixOutputStride, BodyPixQuantBytes, Padding} from
'./types';
import {PartSegmentation, PersonSegmentation, SemanticPartSegmentation,
SemanticPersonSegmentation} from './types';
import {getInputSize, padAndResizeTo, scaleAndCropToInputTensorShape, scaleAndFlipPoses,
toInputResolutionHeightAndWidth, toTensorBuffers3D} from './util';

const APPLY_SIGMOID_ACTIVATION = true;
const FLIP_POSES_AFTER_SCALING = false;

/**
 * BodyPix model loading is configurable using the following config dictionary.
 *
 * `architecture`: BodyPixArchitecture. It determines which BodyPix architecture
 * to load. The supported architectures are: MobileNetV1 and ResNet50.
 * The smaller the value, the larger the output resolution, and more accurate
 * the model at the cost of speed. Set this to a larger value to increase speed
 * at the cost of accuracy. Stride 32 is supported for ResNet and
 * stride 8,16,32 are supported for various MobileNetV1 models.
 * `multiplier`: An optional number with values: 1.01, 1.0, 0.75, or
 * 0.50. The value is used only by MobileNet architecture. It is the float
 * multiplier for the depth (number of channels) for all convolution ops.
 * The larger the value, the larger the size of the layers, and
 * more accurate
 * the model at the cost of speed. Set this to a smaller value to increase speed
 * at the cost of accuracy.
 * `modelUrl`: An optional string that specifies custom url of the model.
 * This is useful for area/countries that don't have access to the model hosted on
 * GCP. 
 * `quantBytes`: An optional number with values: 1, 2, or 4. This parameter
 * affects weight quantization in the models. The available options are
 * 1 byte, 2 bytes, and 4 bytes. The higher the value, the larger the module size
 * and thus the longer the loading time, the lower the value, the shorter the
 * loading time but lower the accuracy.
 */
export interface ModelConfig {
  architecture: BodyPixArchitecture;
  outputStride: BodyPixOutputStride;
  multiplier?: BodyPixMultiplier;
  modelUrl?: string;
  quantBytes?: BodyPixQuantBytes; 
}

// The default configuration for loading MobileNetV1 based BodyPix.
// (And for references, the default configuration for loading ResNet50 is also included).

const MOBILENET_V1_CONFIG = {
  architecture: 'MobileNetV1',
  outputStride: 16,
  quantBytes: 4,
  multiplier: 1.0,
} as ModelConfig;

const VALID_ARCHITECTURE: BodyPixArchitecture[] = ['MobileNetV1', 'ResNet50'];
const VALID_STRIDE: {[id: string]: BodyPixOutputStride[]} = {
  'MobileNetV1': [8, 16, 32],
  'ResNet50': [32, 16]
};
const VALID_MULTIPLIER: {[id: string]: BodyPixMultiplier[]} = {
  'MobileNetV1': [1.0, 0.75, 0.50],
  'ResNet50': [1.0]
};
const VALID_QUANT_BYTES: BodyPixQuantBytes[] = [1, 2, 4];

function validateModelConfig(config: ModelConfig): ModelConfig {
  if (config.architecture == null) {
    config.architecture = 'MobileNetV1';
  }
  if (config.outputStride == null) {
    config.outputStride = 16;
  }
  if (config.multiplier == null) {
    config.multiplier = 1.0;
  }
  if (config.quantBytes == null) {
    config.quantBytes = 1;
  }
  return config;
}

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if (VALID_MULTIPLIER[config.architecture].indexOf(config.multiplier) < 0) {
  throw new Error(`Invalid multiplier ${config.multiplier}. ` +
                   `Should be one of ${VALID_MULTIPLIER[config.architecture]} ` +
                   `for architecture ${config.architecture}.`);
}

if (config.quantBytes == null) {
  config.quantBytes = 4;
}
if (VALID_QUANT_BYTES.indexOf(config.quantBytes) < 0) {
  throw new Error(`Invalid quantBytes ${config.quantBytes}. ` +
                   `Should be one of ${VALID_QUANT_BYTES} ` +
                   `for architecture ${config.architecture}.`);
}

return config;

/**
 * BodyPix inference is configurable using the
 * following config dictionary.
 *
 * `flipHorizontal`: If the left-right keypoint of poses/part segmentation
 * should
 * be flipped/mirrored horizontally. This should be set to true for\n * videos where the video is by default flipped horizontally (i.e. a webcam),\n * and you want the person & body part segmentation to be returned in the proper\n * orientation.\n *
 * `internalResolution`: Defaults to 'medium'. The internal resolution\n * percentage that the input is resized to before inference. The larger the\n * internalResolution the more accurate the model at the cost of slower\n * prediction times. Available values are 'low', 'medium', 'high', 'full', or \n * a\n * n* percentage value between 0 and 1. The values 'low', 'medium', 'high', and\n * 'full' map to 0.25, 0.5, 0.75, and 1.0 correspondingly.\n *
 */
export interface InferenceConfig {
  flipHorizontal?: boolean;
  internalResolution?: BodyPixInternalResolution;
  segmentationThreshold?: number;
}

/**
 * Person Inference Config
 *
 * `maxDetections`: Defaults to 10.
 * Maximum number of person pose detections per\n * image.\n *
 * `scoreThreshold`: Defaults to 0.4. Only return\n * person pose that have root\n * score greater or equal to this value.\n *
 * `nmsRadius`: Defaults to 20. Non-
 * maximum suppression part distance in pixels.\n * It needs to be strictly positive. Two pose keypoints suppress each\n * other if\n * they are less than 'nmsRadius' pixels away.\n *
 */
export interface PersonInferenceConfig extends InferenceConfig {
  maxDetections?: number;
  scoreThreshold?: number;
  nmsRadius?: number;
}

/**
 * Multiple Person Instance Inference Config
 *
 * `maxDetections`: Defaults to 10. Maximum number of returned\n * instance
 * segmentation and pose detections per image.\n *
 * `scoreThreshold`: Defaults to 0.4. Only returns and\n * uses person\n * poses for instance segmentation assignment when the pose has root part score\n * greater or equal to\n * this value.\n *
 * `minKeypointScore`: Default to 0.3. Keypoints above the score are used\n * for matching and assigning
 * segmentation mask to each person.\n *
 * `refineSteps`: Default to 10. The number of refinement steps used when\n * assigning the instance segmentation. It needs to be strictly positive. The\n * n* larger the higher the accuracy and slower the inference.\n *
 */
export interface MultiPersonInstanceInferenceConfig extends InferenceConfig {
  maxDetections?: number;
  scoreThreshold?: number;
  nmsRadius?: number;
  minKeypointScore?: number;
  refineSteps?: number;
}

export const PERSON_INFERENCE_CONFIG: PersonInferenceConfig = {
  flipHorizontal: false,
  internalResolution: 'medium',
  segmentationThreshold: 0.7,
  maxDetections: 10,
  scoreThreshold: 0.4,
  nmsRadius: 20,
};

export const
MULTI_PERSON_INSTANCE_INFERENCE_CONFIG: MultiPersonInstanceInferenceConfig = {
  flipHorizontal: false,
  internalResolution: 'medium',
  segmentationThreshold: 0.7,
  maxDetections: 10,
  scoreThreshold: 0.4,
  nmsRadius: 20,
  minKeypointScore: 0.3,
  refineSteps: 10,
};

function validatePersonInferenceConfig(config: PersonInferenceConfig) {
  const {segmentationThreshold,
          maxDetections, scoreThreshold, nmsRadius} =
                  config;
  if (segmentationThreshold < 0.0 || segmentationThreshold > 1.0) {
    throw new Error(`segmentationThreshold ${segmentationThreshold}. ` +
                     `Should be in range [0.0, 1.0]`);
  }\n  if (maxDetections <= 0) {
    throw new Error(`Invalid maxDetections ${maxDetections}. ` +
                     `Should be > 0`);
  }\n  if (scoreThreshold < 0.0 || scoreThreshold > 1.0) {
    throw new Error(`Invalid scoreThreshold ${scoreThreshold}. ` +
                     `Should be in range [0.0, 1.0]`);
  }\n  if (nmsRadius <= 0) {
    throw new Error(`Invalid nmsRadius ${nmsRadius}.`);
  }
}
```javascript
function validateMultiPersonInstanceInferenceConfig(config: MultiPersonInstanceInferenceConfig) {
  const {
    segmentationThreshold,
    maxDetections,
    scoreThreshold,
    nmsRadius,
    minKeypointScore,
    refineSteps
  } = config;
  if (segmentationThreshold < 0.0 || segmentationThreshold > 1.0) {
    throw new Error(`segmentationThreshold ${segmentationThreshold}. ` +
    `Should be in range [0.0, 1.0]`);
  }
  if (maxDetections <= 0) {
    throw new Error(`Invalid maxDetections $\{\text{maxDetections}\} = 0`);
    `Should be > 0`);
  }
  if (scoreThreshold < 0.0 || scoreThreshold > 1.0) {
    throw new Error(`Invalid scoreThreshold $\{\text{scoreThreshold}\} > 1.0`);
  }
  if (nmsRadius <= 0) {
    throw new Error(`Invalid nmsRadius $\{\text{nmsRadius}\} <= 0`);
  }
  if (minKeypointScore < 0.0 || minKeypointScore > 1.0) {
    throw new Error(`Invalid minKeypointScore $\{\text{minKeypointScore}\} > 1`);
  }
  if (refineSteps <= 0 || refineSteps > 20) {
    throw new Error(`Invalid refineSteps $\{\text{refineSteps}\} > 20`);
  }
}

export class BodyPix {
  baseModel: BaseModel;

  constructor(net: BaseModel) {
    this.baseModel = net;
  }

  private predictForPersonSegmentation(input: tf.Tensor3D): {
    segmentLogits: tf.Tensor3D,
    heatmapScores: tf.Tensor3D,
    offsets: tf.Tensor3D,
    displacementFwd: tf.Tensor3D,
    displacementBwd: tf.Tensor3D,
  } = this.baseModel.predict(input);
  return {
    segmentLogits: segmentation,
    heatmapScores,
    offsets,
    displacementFwd,
    displacementBwd,
  };

  private predictForPersonSegmentationAndPart(input: tf.Tensor3D): {
    segmentLogits: tf.Tensor3D,
    partHeatmapLogits: tf.Tensor3D,
    heatmapScores: tf.Tensor3D,
    offsets: tf.Tensor3D,
    displacementFwd: tf.Tensor3D,
    displacementBwd: tf.Tensor3D,
  } = this.baseModel.predict(input);
  return {
    segmentLogits: segmentation,
    partHeatmapLogits: partHeatmaps,
    heatmapScores,
    offsets,
    displacementFwd,
    displacementBwd,
  };

  private predictForMultiPersonInstanceSegmentationAndPart(input: tf.Tensor3D): {
    segmentLogits: tf.Tensor3D,
    longOffsets: tf.Tensor3D,
    heatmapScores: tf.Tensor3D,
    offsets: tf.Tensor3D,
    displacementFwd: tf.Tensor3D,
    displacementBwd: tf.Tensor3D,
    partHeatmaps: tf.Tensor3D,
  } = this.baseModel.predict(input);
  return {
    segmentLogits: segmentation,
    longOffsets,
    heatmapScores,
    offsets,
    displacementFwd,
    displacementBwd,
    partHeatmaps,
  };

  /**
   * Given an image with people, returns a dictionary of all intermediate
   * tensors including: 1) a binary array with 1 for the pixels that are part of
   * the person, and 0 otherwise, 2) heatmaps, 3) offsets, and 4) paddings.
   * @param input
   * The input image to feed through the network.
   * @param internalResolution Defaults to 'medium'. The internal resolution
   * that the input is resized to before inference. The larger the resolution
   * the more accurate the model at the cost of slower prediction times.
   * Available values are 'low', 'medium', 'high', 'full', or a percentage
   * value between 0 and 1. The values 'low', 'medium', 'high', and
   * 'full' map to 0.25, 0.55, 0.75, and 1.0 correspondingly.
   * @returns A dictionary containing
   * - `segmentation`: A binary array with 1 for the pixels that are part of
   * the person, and 0 otherwise. The width and height correspond to the
   * same dimensions of the input image.
   * - `heatmapScores`: A 3d Tensor of the keypoint heatmaps used by
   * pose estimation decoding.
   * - `offsets`: A 3d Tensor of the keypoint offsets used by
   * pose estimation decoding.
   * - `displacementFwd`: A 3d Tensor of the keypoint forward displacement
   * used by pose estimation decoding.
   * - `displacementBwd`: A 3d Tensor of the keypoint backward displacement
   * used by pose estimation decoding.
   * - `padding`: The padding (unit pixels) being applied to the input image
   * before it is fed into the model.
   */
  segmentPersonActivation(input: BodyPixInput, internalResolution: BodyPixInternalResolution): {
    segmentation: tf.Tensor2D,
    heatmapScores:
```
heatmapScores: tf.Tensor3D,
    offsets: tf.Tensor3D,
    displacementFwd: tf.Tensor3D,
    displacementBwd: tf.Tensor3D,
    paving: Padding,
    internalResolutionHeightAndWidth: [number, number]
} {\nconst [height, width] = getGetSize(input);\nconst internalResolutionHeightAndWidth =\ntoInputResolutionHeightAndWidth(\n    internalResolution, this.baseModel.outputStride, [height, width]);\nconst {\n    resized, padding\} = padAndResizeTo(input, internalResolutionHeightAndWidth);\nconst {\n    segmentation,\n    heatmapScores,\n    offsets,\n    displacementFwd,\n    displacementBwd\} = tf.tidy(() =>\n    {\n        const \{\n            segmentLogits,\n            heatmapScores,\n            offsets,\n            displacementFwd,\n            displacementBwd\} = this.predictForPersonSegmentation(resized);\n        const [segmentHeight, segmentWidth] = resized.shape;\n        const scaledSegmentScores = scaleAndCropToInputTensorShape(\n            segmentLogits,\n            [height, width],\n            [segmentHeight, segmentWidth],\n            [[padding.top, padding.bottom], [padding.left, padding.right]]\n        );\n        const {\n            segmentation,\n            heatmapScores,\n            offsets,\n            displacementFwd,\n            displacementBwd\} =\n            this.segmentPersonActivation(\n                input,\n                config.internalResolution, config.segmentationThreshold);\n        const [height, width] = segmentation.shape;\n        const result = await segmentation.data() as Uint8Array;\n        segmentation.dispose();\n        const tensorBuffers =\n            await toTensorBuffers3D(\n                [heatmapScores, offsets, displacementFwd, displacementBwd]\n            );\n        const [scoresBuf, offsetsBuf, displacementsFwdBuf, displacementsBwdBuf] =\n            tensorBuffers;\n        let poses =\n            decodeMultiplePoses(\n                scoresBuf, offsetsBuf, displacementsFwdBuf, displacementsBwdBuf,\n                [height, width],\n                [padding.top, padding.bottom],\n                this.baseModel.outputStride, config.maxDetections, config.scoreThreshold, config.nmsRadius\n            );\n        return {\n            height,\n            width,\n            data: result,\n            allPoses: poses\n        };\n    });\n}

/**
 * Given an image with many people, returns a PersonSegmentation dictionary
 * that contains the segmentation mask for all people and a single pose.
 * Note: The segmentation mask returned by this method covers all people but
 * the pose works well for one person. If you want to estimate instance-level
 * multiple person segmentation & pose for each person, use
 * `segmentMultiPerson` instead.
 * @param input
 * ImageData|HTMLImageElement|HTMLCanvasElement|HTMLVideoElement
 * The input image to feed through the network.
 * @param config PersonInferenceConfig object that contains
 * parameters for the BodyPix inference using person decoding.
 * @return A SemanticPersonSegmentation dictionary that contains
 * - `height`: The height of the segmentation data in pixels.
 * - `width`: The width of the segmentation data in pixels.
 * - `data`: The flattened Uint8Array of segmentation data. 1 means the pixel
 *   belongs to a person and 0 means the pixel doesn't belong to a person.
 * @memberof PersonInferenceConfig
 */

async segmentPerson(
    input: BodyPixInput,
    config: PersonInferenceConfig = PERSON_INFERENCE_CONFIG): Promise<SemanticPersonSegmentation> {
    config = {...PERSON_INFERENCE_CONFIG, ...config};
    validatePersonInferenceConfig(config);
    const {\n        segmentation,\n        heatmapScores,\n        offsets,\n        displacementFwd,\n        displacementBwd,\n        padding,\n        internalResolutionHeightAndWidth\} = this.segmentPersonActivation(\n            input,\n            config.internalResolution, config.segmentationThreshold);\n    const [height, width] = segmentation.shape;\n    const result = await segmentation.data() as Uint8Array;\n    segmentation.dispose();\n    const tensorBuffers =\n        await toTensorBuffers3D(\n            [heatmapScores, offsets, displacementFwd, displacementBwd]\n        );\n    const [scoresBuf, offsetsBuf, displacementsFwdBuf, displacementsBwdBuf] =\n        tensorBuffers;\n    let poses =\n        decodeMultiplePoses(\n            scoresBuf, offsetsBuf, displacementsFwdBuf, displacementsBwdBuf,\n            [height, width],\n            [padding.top, padding.bottom],\n            this.baseModel.outputStride, config.maxDetections, config.scoreThreshold, config.nmsRadius\n        );\n    return {\n        height,\n        width,\n        data: result,\n        allPoses: poses\n    };\n}

/**
 * Given an image with multiple people, returns an *array* of
 * PersonSegmentation object. Each element in the array corresponding to one
 * of the people in the input image. In other words, it predicts
 * instance-level multiple person segmentation & pose for each person.
 * The model does standard ImageNet pre-processing before inferring through
 * the model. The image pixels should have values [0-255].
 * @param input
 * ImageData|HTMLImageElement|HTMLCanvasElement|HTMLVideoElement
 * The input image to feed through the network.
 * @param config MultiPersonInferenceConfig object that contains
 * parameters for the BodyPix inference using multi-person decoding.
 * @return An array of
 */

async segmentMultiPerson(
    input: BodyPixInput,
    config: MultiPersonInferenceConfig = MULTI_PERSON_INFERENCE_CONFIG): Promise<Array<PersonSegmentation>> {
    config = {...MULTI_PERSON_INFERENCE_CONFIG, ...config};
    validateMultiPersonInferenceConfig(config);
    const {\n        segmentation,\n        heatmapScores,\n        offsets,\n        displacementFwd,\n        displacementBwd\} = this.segmentPersonActivation(\n            input,\n            config.internalResolution, config.segmentationThreshold, config.IgnoreBackground\n        );\n    const [height, width] = segmentation.shape;\n    const result = await segmentation.data() as Uint8Array;\n    segmentation.dispose();\n    const tensorBuffers =\n        await toTensorBuffers3D(\n            [heatmapScores, offsets, displacementFwd, displacementBwd]\n        );\n    const [scoresBuf, offsetsBuf, displacementsFwdBuf, displacementsBwdBuf] =\n        tensorBuffers;\n    let poses =\n        decodeMultiplePoses(\n            scoresBuf, offsetsBuf, displacementsFwdBuf, displacementsBwdBuf,\n            [height, width],\n            [padding.top, padding.bottom],\n            this.baseModel.outputStride, config.maxDetections, config.scoreThreshold, config.nmsRadius, config.IgnoreBackground\n        );\n    return poses;\n}
PersonSegmentation object, each containing a width, height, a binary array (1 for the pixels that are part of the person, and 0 otherwise) and 2D pose. The array size corresponds to the dimensions of the input image. The width and height correspond to the dimensions of the image the binary array is shaped to, which are the same dimensions of the input image.

Promises<PersonSegmentation[]>

```javascript
async segmentMultiPerson(input: BodyPixInput, config: MultiPersonInstanceInferenceConfig = MULTI_PERSON_INSTANCE_INFERENCE_CONFIG): Promise<PersonSegmentation[]> {
    const config = {...MULTI_PERSON_INSTANCE_INFERENCE_CONFIG, ...config};
    validateMultiPersonInstanceInferenceConfig(config);
    const [height, width] = getInp...
estimation decoding.
* - `displacementFwd`: A 3d Tensor of the keypoint forward displacement
* by pose estimation decoding.
* - `displacementBwd`: A 3d Tensor of the keypoint backward displacement used
* by pose estimation decoding.
* - `padding`: The padding (unit pixels) being applied to the input image
* before it is fed into the model.
* segmentPersonPartsActivation
  input: BodyPixInput, internalResolution: BodyPixInternalResolution, segmentationThreshold = 0.5): {
    const [height, width] = get_input_size(input);
    const internalResolutionHeightAndWidth = to_input_resolution_height_and_width,
    const [resized, padding] = pad_and_resize_to(input, internalResolutionHeightAndWidth);
    const [partSegmentation, heatmapScores, offsets, displacementFwd, displacementBwd] =
    tf.tidy(() => {
      const [segmentLogits, partHeatmapLogits, heatmapScores, offsets, displacementFwd, displacementBwd] =
      this.predict_for_person_segmentation_and_part(resized);
      const [resizedHeight, resizedWidth] = resized.shape;
      const data = await partSegmentation.data() as Int32Array;
      partSegmentation.dispose();
      const tensorBuffers = await to_tensorBuffers3D([heatmapScores, offsets, displacementFwd, displacementBwd, padding, internalResolutionHeightAndWidth]);
      const [scoresBuf, offsetsBuf, displacementsFwdBuf, displacementsBwdBuf] =
      tensorBuffers;
      let poses = decode_multiple_poses(scoresBuf, offsetsBuf, displacementsFwdBuf, displacementsBwdBuf,
      this.baseModel.output_stride,
      config.max_detections,
      config.score_threshold, config.nms_radius);
      poses = scale_and_flip_poses(poses, [height, width],
      partSegmentation.shape);
      const data = await partSegmentation.data() as Int32Array;
      partSegmentation.dispose();
      const tensorBuffers = await toTensorBuffers3D([heatmapScores, offsets, displacementFwd, displacementBwd]);
      const [scoresBuf, offsetsBuf, displacementsFwdBuf, displacementsBwdBuf] =
      tensorBuffers;
      let poses = decodeMultiplePoses(poses, scoresBuf, offsetsBuf, displacementsFwdBuf, displacementsBwdBuf,
      this.baseModel.output_stride, config.max_detections,
      config.scoreThreshold, config.nmsRadius);
      poses = scaleAndFlipPoses(poses, [height, width],
      partSegmentation.shape);
internalResolutionHeightAndWidth, padding, \n     FLIP_POSES_AFTER_SCALING));

heatmapScores.dispose(); \n     offsets.dispose(); \n     displacementFwd.dispose(); \n     displacementBwd.dispose(); \n
return { \n     height, \n     width, \n     data, allPoses: poses}; \n } \n */ *\n
Given an image with multiple people, returns an *array* of PartSegmentation object. Each element in the array corresponding to one * of the people in the input image. In other words, it predicts * instance-level multiple person body part segmentation & pose for each * person. * * This does standard ImageNet pre-processing before inferring through * the model. The image pixels should have values [0-255]. * * @param input * * ImageData|HTMLImageElement|HTMLCanvasElement|HTMLVideoElement) The input * * image to feed through the network. * * @param config MultiPersonInferenceConfig object that contains * * parameters for the BodyPix inference using multi-person decoding. * * @return An array of PartSegmentation object, each containing a width, * * height, a flattened array (with part id from 0-24 for the pixels that are * * part of a corresponding body part, and -1 otherwise) and 2D pose. The width * * and height correspond to the dimensions of the image. Each flattened part * * segmentation array size is equal to `height` x `width`. * * async segmentMultiPersonParts( \n     input: BodyPixInput, \n     config: MultiPersonInstanceInferenceConfig =\n     new MULTI_PERSON_INSTANCE_INERENCE_CONFIG): Promise<PartSegmentation[]> {
    config = ...MULTI_PERSON_INSTANCE_INERENCE_CONFIG, ...config); \n
    validateMultiPersonInstanceInferenceConfig(config); \n    const [height, \n     width] = getInputSize(input); \n    const internalResolutionHeightAndWidth = toInputResolutionHeightAndWidth( \n     config.internalResolution, \n     this.baseModel.outputStride, \n     [height, \n      width]); \n    const { \n      resized, \n      padding } = \n     padAndResizeTo(input, \n     internalResolutionHeightAndWidth); \n    const { \n      segmentation, \n      longOffsets, \n      heatmapScoresRaw, \n      offsetsRaw, \n      displacementFwdRaw, \n      displacementBwdRaw, \n      partSegmentation, \n    } = tf.tidy(() => {
      const {
        segmentLogits, \n      longOffsets, \n      heatmapScores, \n      offsets, \n      displacementFwd, \n      displacementBwd, \n      partHeatmaps \n    } = this.predictForMultiPersonInstanceSegmentationAndPart(resized); \n
      // decoding with scaling \n      const \n      scaledSegmentScores = scaleAndCropToInputTensorShape( \n       segmentLogits, \n       [height, \n      width]); \n    const \n    internalResolutionHeightAndWidth = \n      [[padding.top, \n     padding.bottom], \n      [padding.left, \n      padding.right]]; \n    const \n    APPLY_SIGMOID_ACTIVATION); \n
      // decoding with scaling \n      const \n      scaledPartSegmentationScores = scaleAndCropToInputTensorShape( \n       partHeatmaps, \n       [height, \n      width], \n      \n    internalResolutionHeightAndWidth); \n
      \n    const \n    longOffsets = longOffsets; \n
 const \n segmentation = toMaskTensor( \n     tf.squeeze(scaledSegmentScores), \n     config.segmentationThreshold); \n
 const \n partSegmentation = \n
 decodeOnlyPartSegmentation(scaledPartSegmentationScores); \n
 return { \n segmentation, \n longOffsets: \n  scaledLongOffsets, \n  heatmapScoresRaw: \n  heatmapScores, \n  offsetsRaw: \n  offsets, \n  displacementFwdRaw: \n  displacementFwd, \n  displacementBwdRaw: \n  displacementBwd, \n  partSegmentation \n  } \n
 \n const tensorBuffers = await toTensorBuffers3D( \n     [heatmapScoresRaw, \n     offsetsRaw, \n     displacementFwdRaw, \n     displacementBwdRaw]); \n
 const [ \n scoresBuff, \n offsetsBuff, \n displacementsFwdBuff, \n displacementsBwdBuff ] = \n     tensorBuffers; \n let poses = decodeMultiplePoses( \n scoresBuff, \n offsetsBuff, \n displacementsFwdBuff, \n displacementsBwdBuff); \n
 this.baseModel.outputStride, \n config.maxDetections, \n config.scoreThreshold, \n config.nmsRadius); \n
 const \n poses = scaleAndFlipPoses( \n poses, \n [height, \n width], \n \n internalResolutionHeightAndWidth, \n \n padding); \n \n const instanceMasks = \n
\n\n- LOADS the MobileNet BodyPix model \n\n- async function loadMobileNet(config: ModelConfig): Promise<BodyPix> {
\n const outputStride = config.outputStride; \n const quantBytes = config.quantBytes; \n const
multiplier = config.multiplier;
 if (tf == null) {
   throw new Error('Cannot find TensorFlow.js. If you are using a
   <script> tag, please `+ include @tensorflow/tfjs on the page before using this
   model.');
 }

 const url = mobileNetSavedModel(outputStride, multiplier, quantBytes);
 const mobilenet = new MobileNet(graphModel, outputStride);
 return new BodyPix(mobilenet);
}

/**
 * Loads the ResNet BodyPix model.
 */
async function loadResNet(config: ModelConfig): Promise<BodyPix> {
  const outputStride = config.outputStride;
  const quantBytes = config.quantBytes;
  if (tf == null) {
    throw new Error('Cannot find TensorFlow.js. If you are using a
   <script> tag, please `+ include @tensorflow/tfjs on the page before using this
   model.');
  }

  const url = resNet50SavedModel(outputStride, quantBytes);
  const graphModel = await tfconv.loadGraphModel(config.modelUrl || url);
  const resnet = new ResNet(graphModel, outputStride);
  return new BodyPix(resnet);
}

/**
 * Loads the BodyPix model instance from a checkpoint, with the ResNet
 * or MobileNet architecture. The model to be loaded is configurable using the
 * configuration parameters in the ModelConfig dictionary. Please find more
 * details in the documentation of the ModelConfig interface. The predefined
 * configurations 'MOBILENET_V1_CONFIG' and 'RESNET_CONFIG' can also be used as references for
 * defining your customized config.
 */
export async function load(config: ModelConfig = MOBILENET_V1_CONFIG): Promise<BodyPix> {
  config = validateModelConfig(config);
  if (config.architecture === 'ResNet50') {
    return loadResNet(config);
  } else if (config.architecture === 'MobileNetV1') {
    return loadMobileNet(config);
  } else {
    return null;
  }
}
function drawAndBlurImageOnOffScreenCanvas(image: ImageType, blurAmount: number, offscreenCanvasName: string): Canvas {
  let canvas = ensureOffscreenCanvasCreated(offscreenCanvasName);
  if (blurAmount === 0) {
    return canvas;
  }
  ctx.restore();
}

function renderImageToCanvas(image, canvas) { /* Draw an image on a canvas */
  ctx.drawImage(image, 0, 0, image.width, image.height);
}

function createBlurImage(image, blurAmount) { /* Blur an image using a canvas */
  ctx = canvas.getContext('2d');
  ctx.drawImage(image, 0, 0, image.width, image.height);
  ctx.beginPath();
  ctx.arc(0, 0, image.width / 2, 0, Math.PI * 2);
  ctx.closePath();
  ctx.globalCompositeOperation = 'source-over';
  ctx.drawImage(image, 0, 0, image.width, image.height);
  ctx.globalCompositeOperation = 'source-into';
  ctx.drawImage(image, 0, 0, image.width, image.height);
  ctx.globalCompositeOperation = 'source-out';;
  ctx.drawImage(image, 0, 0, image.width, image.height);
  ctx.globalCompositeOperation = 'source-atop';
  ctx.drawImage(image, 0, 0, image.width, image.height);
  ctx.globalCompositeOperation = 'source-over';
  ctx.drawImage(image, 0, 0, image.width, image.height);
  ctx.globalCompositeOperation = 'source-into';
  ctx.drawImage(image, 0, 0, image.width, image.height);
  ctx.globalCompositeOperation = 'source-out';;
  ctx.drawImage(image, 0, 0, image.width, image.height);
  ctx.globalCompositeOperation = 'source-atop';
  ctx.drawImage(image, 0, 0, image.width, image.height);
  ctx.globalCompositeOperation = 'source-over';
  ctx.drawImage(image, 0, 0, image.width, image.height);
  ctx.globalCompositeOperation = 'source-into';
  ctx.drawImage(image, 0, 0, image.width, image.height);
  ctx.globalCompositeOperation = 'source-out';;
  ctx.drawImage(image, 0, 0, image.width, image.height);
  ctx.globalCompositeOperation = 'source-atop';
  ctx.drawImage(image, 0, 0, image.width, image.height);
  ctx.globalCompositeOperation = 'source-over';
  ctx.drawImage(image, 0, 0, image.width, image.height);
  ctx.globalCompositeOperation = 'source-into';
  ctx.drawImage(image, 0, 0, image.width, image.height);
  ctx.globalCompositeOperation = 'source-out';;
  ctx.drawImage(image, 0, 0, image.width, image.height);
  ctx.globalCompositeOperation = 'source-atop';
  ctx.drawImage(image, 0, 0, image.width, image.height);
  return canvas;
}

Canvas = function() { /* A canvas function */
  let canvas = document.createElement('canvas');
  canvas.width = image.width;
  canvas.height = image.height;
  return canvas;
}

// Example usage
let image = new Image();
image.src = 'https://example.com/image.png';
let blurAmount = 5;
let canvas = renderImageToCanvas(image, blurAmount);
multiPersonOrPartSegmentation.length; k++) { // if (foregroundIds.some(id => id ===)
  bytes[4 * n] = foreground.r;
  bytes[4 * n + 1] = foreground.g;
  bytes[4 * n + 2] = foreground.b;
  bytes[4 * n + 3] = foreground.a;
  const
    isBoundary = isSegmentationBoundary(multiPersonOrPartSegmentation[k], data[i, j, width, height]);
  if (drawContour & & i - 1 >= 0 & & i + 1 < height & & j - 1 >= 0 & & j + 1 < width & & isBoundary) {
    drawStroke(bytes, i, j, width, 1);
  }
}

return new ImageData(bytes, width, height);
}

const RAINBOW_PART_COLORS: Array<[number, number, number]> =
  [[110, 64, 170], [143, 61, 178], [178, 60, 178], [210, 62, 167], [238, 67, 149], [255, 78, 125],
   [255, 94, 99], [255, 115, 75], [255, 140, 56], [239, 167, 47], [217, 194, 49], [194, 219, 64],
   [175, 240, 91], [135, 245, 87], [96, 247, 96], [64, 243, 115], [40, 234, 141], [28, 219, 169],
   [26, 199, 194], [33, 176, 213], [47, 150, 224], [65, 125, 224], [84, 101, 214], [99, 81, 195]]; //

/**
 * Given the output from person body part segmentation (or multi-person instance body part segmentation) and an array of colors indexed by part id, * generates an image with the corresponding color for each part at each pixel, and white pixels where there is no part.
 * @param partSegmentation The output from segmentPersonParts or segmentMultiPersonParts. The former is a SemanticPartSegmentation object and later is an array of PartSegmentation object.
 * @param partColors A multi-dimensional array of rgb colors indexed by part id. Must have 24 colors, one for every part.
 * @returns An ImageData with the same width and height of all the element in * partMultiPersonPartSegmentation, with the corresponding color for each part at each pixel, and black pixels where there is no part.
 */
export function toColoredPartMask(
  partSegmentation: SemanticPartSegmentation | PartSegmentation[],
  partColors: Array<[number, number, number]> = RAINBOW_PART_COLORS): ImageData {
  if (Array.isArray(partSegmentation) && partSegmentation.length === 0) {
    return null;
  }

  let multiPersonPartSegmentation;
  if (!Array.isArray(partSegmentation)) {
    multiPersonPartSegmentation = [partSegmentation];
  } else {
    multiPersonPartSegmentation = partSegmentation;
  }
  const {width, height} = multiPersonPartSegmentation[0];
  const bytes = new Uint8ClampedArray(width * height * 4);

  for (let i = 0; i < height * width; ++i) {
    const j = i * 4;
    bytes[j + 0] = 255;
    bytes[j + 1] = 255;
    bytes[j + 2] = 255;
    bytes[j + 3] = 255;
    for (let k = 0; k < multiPersonPartSegmentation.length; k++) {
      const partId = multiPersonPartSegmentation[k].data[i];
      if (partId !== -1) {
        const color = partColors[partId];
        if (!color) {
          throw new Error(`No color could be found for part id ${partId}`);
        }
        bytes[j + 0] = color[0];
        bytes[j + 1] = color[1];
        bytes[j + 2] = color[2];
        bytes[j + 3] = 255;
      }
    }
  }
  return new ImageData(bytes, width, height);
}

const CANVAS_NAMES = {
  blurred: 'blurred',
  blurredMask: 'blurred-mask',
  mask: 'mask',
  lowresPartMask: 'lowres-part-mask',
};

/**
 * Given an image and a maskImage of type ImageData, draws the image with the pixelated mask on top of it onto a canvas.
 * @param canvas The canvas to be drawn onto.
 * @param image The original image to apply the mask to.
 * @param maskImage An ImageData containing the mask. Ideally this should be generated by toMask or toColoredPartMask.
 * @param maskOpacity The opacity of the mask when drawing it on top of the image. Defaults to 0.7. Should be a float between 0 and 1.
 * @param maskBlurAmount How many pixels to blur the mask by. Defaults to 0.7. Should be an integer between 0 and 20.
 * @param flipHorizontal If the result should be flipped horizontally. Defaults to false.
 */
export function drawMask(
  canvas: Canvas, image: ImageType, maskImage: ImageData|null, maskOpacity = 0.7,
  maskBlurAmount = 0, flipHorizontal = false) {
  const
    [height, width] = getPreferredSize(image);
  const canvas = canvas.height = height;
  const
    ctx = canvas.getContext('2d');
  ctx.canvas.save();
  if (flipHorizontal) {
    flipCanvasHorizontal(canvas);
  }
  ctx.drawImage(image, 0, 0);
  ctx.globalAlpha = maskOpacity;
  if (maskImage) {
    assertSameDimensions({width, height}, maskImage, 'image', 'mask');
    const mask = generateImageFromImageDataToOffScreenCanvas(maskImage, CANVAS_NAMES.mask);
    const blurredMask = drawAndBlurImageOnOffScreenCanvas(mask, maskBlurAmount, CANVAS_NAMES.blurredMask);
    ctx.drawImage(blurredMask, 0, 0, width, height);
  }
  ctx.restore();
}
* @param maskImage An ImageData containing the mask. Ideally this should be generated by toColoredPartMask.
* @param maskOpacity The opacity of the mask when drawing it on top of the image. Defaults to 0.7. Should be a float between 0 and 1.
* @param maskBlurAmount How many pixels to blur the mask by. Defaults to 0. Should be an integer between 0 and 20.
* @param flipHorizontal If the result should be flipped horizontally. Defaults to false.
* @param pixelCellWidth The width of each pixel cell. Default to 10.

export function drawPixelatedMask(canvas: Canvas, image: ImageType, maskImage: ImageData, maskOpacity = 0.7, maskBlurAmount = 0, flipHorizontal = false, pixelCellWidth = 10.0) {
    const [height, width] = getInputSize(image);
    const mask = renderImageDataToOffScreenCanvas(maskImage, CANVAS_NAMES.mask);
    const blurredMask = drawAndBlurImageOnOffScreenCanvas(mask, maskBlurAmount, CANVAS_NAMES.blurredMask);
    canvas.width = blurredMask.width;
    canvas.height = blurredMask.height;
    canvas.getContext('2d').save();
    if (flipHorizontal) {
        flipCanvasHorizontal(canvas);
    }
    const offscreenCanvas = ensureOffscreenCanvasCreated(CANVAS_NAMES.lowresPartMask);
    offscreenCanvas.getContext('2d').imageSmoothingEnabled = false;
    const image = renderImageDataToOffScreenCanvas(image, offscreenCanvas, CANVAS_NAMES.image);
    const ctx = canvas.getContext('2d');
    ctx.drawImage(image, 0, 0, width, height, 0, 0, canvas.width, canvas.height);
    for (let i = 0; i < offscreenCanvas.width; i++) {
        ctx.beginPath();
        ctx.strokeStyle = '#ffffff';
        ctx.moveTo(pixelCellWidth * i, 0);
        ctx.lineTo(pixelCellWidth * i, offscreenCanvas.height);
        ctx.stroke();
    }
    for (let i = 0; i < offscreenCanvas.height; i++) {
        ctx.beginPath();
        ctx.strokeStyle = '#ffffff';
        ctx.moveTo(0, pixelCellWidth * i);
        ctx.lineTo(canvas.width, pixelCellWidth * i);
        ctx.stroke();
    }
    ctx.globalAlpha = 1.0 - maskOpacity;
    ctx.drawImage(image, 0, 0, blurredMask.width, blurredMask.height);
    ctx.drawImage(mask, 0, 0, blurredMask.width, blurredMask.height);
    ctx.restore();
}

function createPersonMask(multiPersonSegmentation: PersonSegmentation[], edgeBlurAmount: number): Canvas {
    const backgroundMaskImage = toMask(multiPersonSegmentation, {r: 0, g: 0, b: 0, a: 255}, {r: 0, g: 0, b: 0, a: 0});
    const backgroundMask = renderImageDataToOffScreenCanvas(backgroundMaskImage, CANVAS_NAMES.mask);
    if (edgeBlurAmount === 0) {
        return backgroundMask;
    } else {
        return drawAndBlurImageOnOffScreenCanvas(backgroundMask, edgeBlurAmount, CANVAS_NAMES.blurredMask);
    }
}

/**
 * Given a personSegmentation and an image, draws the image with its background blurred onto the canvas.
 * The canvas to draw the background-blurred image onto.
 * @param canvas The canvas to draw the background-blurred image onto.
 * @param image The image to blur the background of and draw.
 * @param backgroundBlurAmount How many pixels in the background blend into each other. Defaults to 3. Should be an integer between 1 and 20.
 * @param edgeBlurAmount How many pixels to blur on the edge between the person and the background by. Defaults to 3. Should be an integer between 0 and 20.
 * @param flipHorizontal If the output should be flipped horizontally. Defaults to false.
 */
export function drawBokehEffect(canvas: Canvas, image: ImageType, multiPersonSegmentation: PersonSegmentation[], edgeBlurAmount: number) {
    const blurredImage = drawAndBlurImageOnOffScreenCanvas(canvas, image, backgroundBlurAmount, CANVAS_NAMES.blurredImage);
    canvas.width = blurredImage.width;
    canvas.height = blurredImage.height;
    const ctx = canvas.getContext('2d');
    if (Array.isArray(multiPersonSegmentation) && multiPersonSegmentation.length === 0) {
        ctx.drawImage(blurredImage, 0, 0, canvas.width, canvas.height);
    } else {
        const personMask = createPersonMask(multiPersonSegmentation, edgeBlurAmount);
        ctx.drawImage(personMask, 0, 0, canvas.width, canvas.height);
        ctx.restore();
    }
    // ...
existing canvas content is kept where both the new shape and existing canvas content overlap. Everything else is made transparent. // draw the blurred background on top of the original image where it doesn't overlap. drawWithCompositing(ctx, blurredImage, 'destination-over');
}

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CLuc,EAUAU/L,EAIV,IAAMmM,EEAAWM,GAFjB6L,EEAA7a,KAAKib,KAAKIM,EEAUAgM,IAG9B1Z,EAkBT,OAQAQgQ,iBAfiB1U,OAQAQ,WAE/B,EAUJ,OAREA,EADEgB,EAQC5B,QAASC,eACf4M,UAAWhM,EAa,IAAK2L,EAASD,IAEhCvM,QAASC,eAAeY,GAAc2L,EAASD,IAAG5CtL,QAASL,IAAW3Q,EEAACM,IAAQ6C,EEAM+M,IAAQ6C,EAAM+M,IAAQ6C,EAAM+M,IAAQ6C,EAAM+M,MoDKt5MC"}

Found in path(s):
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/tensorflow-models/body-pix/dist/body-pix.min.js.map

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 *
 *=============================================================================

import * as tf from '@tensorflow/tfjs-core';

/**
 * Takes the sigmoid of the part heatmap output and
generates a 2d one-hot tensor with ones where the part's score has the maximum value. 
* @param partHeatmapScores
*/
function toFlattenedOneHotPartMap(partHeatmapScores: tf.Tensor3D): tf.Tensor2D {
    const numParts = partHeatmapScores.shape[2];
    const partMapLocations = tf.argMax(partHeatmapScores, 2);
    const partMapFlattened = tf.reshape(partMapLocations, [-1]);
    return tf.oneHot(partMapFlattened, numParts) as tf.Tensor2D;
}

/**
 * Takes the sigmoid of the segmentation output, and generates a segmentation
 * mask with a 1 or 0 at each pixel where there is a person or not a person. The
 * segmentation threshold determines 
 * the threshold of a score for a pixel for it
 * to be considered part of a person.
 * @param segmentScores A 3d-tensor of the sigmoid of the segmentation output.
 * @param segmentationThreshold The minimum
 * segmentation values must have to be considered part of the person. 
 * Affects the generation of the
 * segmentation mask and the clipping of the colored part image.
 */
export function decodePartSegmentation(
    segmentScores: tf.Tensor3D, 
    segmentationThreshold: number): tf.Tensor2D {
    return tf.tidy(
        () =>
            (tf.cast(tf.greater(
                segmentScores, tf.scalar(segmentationThreshold)), 'int32') as tf.Tensor2D));
}
```

---

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segmentationMask: tf.Tensor2D
partHeatmapScores: tf.Tensor3D
partMapHeight, numParts = partHeatmapScores.shape
return tf.tidy(() => {
const flattenedMap = toFlattenedOneHotPartMap(partHeatmapScores)
const partNumbers = tf.expandDims(tf.range(0, numParts, 1, 'int32'), 1)
const partMapFlattened = tf.cast(tf.matmul(flattenedMap, partNumbers as tf.Tensor2D), 'int32')
const partMap = tf.reshape(partMapFlattened, [partMapHeight, partMapWidth])
const partMapShiftedUpForClipping = tf.add(partMap, tf.scalar(1, 'int32'))
return tf.sub(tf.conv2D(segmentationMask, tf.Tensor2D([partMapHeight, partMapWidth]), 'same'), tf.scalar(1, 'int32'))
}).unexport function decodeOnlyPartSegmentation(partHeatmapScores: tf.Tensor3D): tf.Tensor2D {
const [partMapHeight, partMapWidth, numParts] = partHeatmapScores.shape
return tf.tidy(() => {
const flattenedMap = toFlattenedOneHotPartMap(partHeatmapScores)
const partNumbers = tf.expandDims(tf.range(0, numParts, 1, 'int32'), 1)
const partMapFlattened = tf.cast(tf.matmul(flattenedMap, partNumbers as tf.Tensor2D), 'int32')
const partMap = tf.reshape(partMapFlattened, [partMapHeight, partMapWidth])
}).unexport
*/

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* limitations under the License.
*/

import * as tfconv from '@tensorflow/tfjs-converter';
import * as tf from '@tensorflow/tfjs-core';
import {BodyPixOutputStride} from './types';

/**
* BodyPix supports using various convolution neural network
* models (e.g. ResNet and MobileNetV1) as its underlying base model.
The following BaseModel interface defines a unified interface for
* creating such BodyPix base models. Currently both MobileNet (in
* ./mobilenet.ts) and ResNet (in ./resnet.ts) implements the BaseModel
* interface. New base models that conform to the BaseModel interface
* can be added to BodyPix.
*/
export abstract class BaseModel {
  constructor(
    protected readonly model: tfconv.GraphModel,
    public readonly outputStride: BodyPixOutputStride) {
      const inputShape = this.model.inputs[0].shape as [number, number, number, number];
      tf.util.assert((inputShape[1] === -1) && (inputShape[2] === -1), 'Input shape must both be equal to or -1');
      abstract preprocessInput(input: tf.Tensor3D): tf.Tensor3D;
      /**
       * Predicts intermediate Tensor representations.
       *
       * @param input The input RGB image of the base
       * model. A Tensor of shape: [inputResolution, inputResolution, 3].
       *
       * @return A dictionary of base
       * model's intermediate predictions.
       * The returned dictionary should contains the following elements:
       * - heatmapScores: A Tensor3D that represents the keypoint heatmap scores.
       * - offsets: A Tensor3D that represents the offsets.
       * - displacementFwd: A Tensor3D that represents the forward displacement.
       * - displacementBwd: A Tensor3D that represents the backward displacement.
       * - segmentation: A Tensor3D that represents the segmentation of all people.
       * - longOffsets: A Tensor3D that represents the long offsets used for instance grouping.
       * - partHeatmaps: A Tensor3D that represents the body part segmentation.
       */
      predict(input: tf.Tensor3D): {
        heatmapScores: tf.Tensor3D,
        offsets: tf.Tensor3D,
        displacementFwd: tf.Tensor3D,
        displacementBwd: tf.Tensor3D,
        segmentation: tf.Tensor3D,
        partHeatmaps: tf.Tensor3D,
        longOffsets: tf.Tensor3D
      } {
        return tf.tidy(() => {
          const asFloat = this.preprocessInput(tf.cast(input, 'float32'));
          const asBatch = tf.expandDims(asFloat, 0);
          const results = this.model.predict(asBatch) as tf.Tensor4D[];
          const results3d: tf.Tensor3D[] = results.map(y => tf.squeeze(y, [0]));
          const namedResults = this.nameOutputResults(results3d);
          return {
            heatmapScores: tf.sigmoid(namedResults.heatmap),
            offsets: namedResults.offsets,
            displacementFwd: namedResults.displacementFwd,
            displacementBwd: namedResults.displacementBwd,
            segmentation: namedResults.segmentation,
            partHeatmaps: namedResults.partHeatmaps,
            longOffsets: namedResults.longOffsets
          };
        });
      }}
    } // Because
MobileNet and ResNet predict() methods output a different order for these values, we have a method that needs to be implemented to order them:

```typescript
abstract nameOutputResults(results: tf.Tensor3D[]): {
  heatmap:
    tf.Tensor3D,
  offsets: tf.Tensor3D,
  displacementFwd: tf.Tensor3D,
  displacementBwd: tf.Tensor3D,
  partHeatmaps: tf.Tensor3D,
  longOffsets: tf.Tensor3D,
  partOffsets:
    tf.Tensor3D
};
```

```typescript
/**
 * Releases the CPU and GPU memory allocated by the model.
 */
this.model.dispose();
```

```typescript
import * as tf from '@tensorflow/tfjs-core';
import {BaseModel} from './base_model';
export class MobileNet extends BaseModel {
  preprocessInput(input: tf.Tensor3D): tf.Tensor3D {
    // Normalize the pixels [0, 255] to be between [-1, 1].
    return tf.tidy(() => tf.sub(tf.div(input, 127.5), 1.0));
  }

  nameOutputResults(results: tf.Tensor3D[]): {
    const [offsets, segmentation, partHeatmaps, longOffsets, heatmap, displacementFwd, displacementBwd, partOffsets] = results;
    return {
      offsets,
      segmentation,
      partHeatmaps,
      longOffsets,
      heatmap,
      displacementFwd,
      displacementBwd,
      partOffsets
    };
  }
}
```

```
import * as tf from 'tensorflow';
import {BaseModel} from './base_model';
export class MobileNet extends BaseModel {
  preprocessInput(input: tf.Tensor3D): tf.Tensor3D {
    // Normalize the pixels [0, 255] to be between [-1, 1].
    return tf.tidy(() => tf.sub(tf.div(input, 127.5), 1.0));
  }

  nameOutputResults(results: tf.Tensor3D[]): {
    const [offsets, segmentation, partHeatmaps, longOffsets, heatmap, displacementFwd, displacementBwd, partOffsets] = results;
    return {
      offsets,
      segmentation,
      partHeatmaps,
      longOffsets,
      heatmap,
      displacementFwd,
      displacementBwd,
      partOffsets
    };
  }
}
```

---

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 */

export type Tuple<T> = [T, T];
export type StringTuple = Tuple<string>;
export type NumberTuple = Tuple<number>;

export const PART_NAMES = [
  'nose', 'leftEye', 'rightEye', 'leftEar', 'rightEar',
  'leftShoulder', 'rightShoulder', 'leftElbow', 'rightElbow', 'leftWrist', 'rightWrist', 'leftHip', 'rightHip', 'leftKnee', 'rightKnee', 'leftAnkle', 'rightAnkle'
];

export const NUM_KEYPOINTS = PART_NAMES.length;

export interface NumberDict {
  [jointName: string]: number;
}

export const PART_IDS = PART_NAMES.reduce((result: NumberDict, jointName, i): NumberDict => {
  result[jointName] = i;
  return result;
}, {});

export const CONNECTED_PART_NAMES: StringTuple[] =
  [ ['leftHip', 'leftShoulder'], ['leftElbow', 'leftShoulder'], ['leftElbow', 'leftWrist'], ['leftHip', 'leftKnee'], ['leftKnee', 'leftAnkle'], ['rightHip', 'rightShoulder'], ['rightElbow', 'rightShoulder'], ['rightElbow', 'rightWrist'], ['rightHip', 'rightKnee'], ['rightKnee', 'rightAnkle'],
    ['leftShoulder', 'rightShoulder'], ['leftHip', 'rightHip'], ['rightHip', 'leftHip'] ];

export const CONNECTED_PART_INDICES = CONNECTED_PART_NAMES.map([jointNameA, jointNameB]) => {
  (PART_IDS[jointNameA], PART_IDS[jointNameB])
};

```

---

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 */

```

---

```typescript
/*
 * Define the skeleton.
 * This defines the parent->child relationships of our tree. Arbitrarily this defines the nose as the root of the tree, however since we will infer the displacement for both parent->child and child->parent, we can define the tree root as any node.
 */
export const POSE_CHAIN: StringTuple[] =
  [ ['nose', 'leftEye'], ['nose', 'rightEye'], ['leftEye', 'leftEar'], ['rightEye', 'rightEar'],
    ['leftShoulder', 'rightShoulder'], ['leftElbow', 'rightElbow'], ['leftWrist', 'rightWrist'], ['leftHip', 'rightHip'], ['leftKnee', 'rightKnee'], 'leftAnkle', 'rightAnkle'],
  ['leftShoulder', 'rightShoulder'], ['leftHip', 'rightHip'], ['rightHip', 'leftHip'], ['leftKnee', 'rightKnee'], 'leftAnkle', 'rightAnkle']

export const CONNECTED_PART_INDICES =
  CONNECTED_PART_NAMES.map([jointNameA, jointNameB]) => {
    (PART_IDS[jointNameA], PART_IDS[jointNameB])
};
```

---

```typescript
import * as tf from '@tensorflow/tfjs-core';
import {BaseModel} from './base_model';
export class MobileNet extends BaseModel {
  preprocessInput(input: tf.Tensor3D): tf.Tensor3D {
    // Normalize the pixels [0, 255] to be between [-1, 1].
    return tf.tidy(() => tf.sub(tf.div(input, 127.5), 1.0));
  }

  nameOutputResults(results: tf.Tensor3D[]): {
    const [offsets, segmentation, partHeatmaps, longOffsets, heatmap, displacementFwd, displacementBwd, partOffsets] = results;
    return {
      offsets,
      segmentation,
      partHeatmaps,
      longOffsets,
      heatmap,
      displacementFwd,
      displacementBwd,
      partOffsets
    };
  }
}
```
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=============================================================================

import {NUM_KEYPOINTS} from '../keypoints';
import {Padding, Part, TensorBuffer3D, Vector2D} from '../types';

export function getScale(
    [height, width]: [number, number],
    [inputResolutionY, inputResolutionX]: [number, number],
    padding: Padding): [number, number] {
  const {top: padT, right: padR} = padding;
  const scaleY = inputResolutionY / (padT + padR + height);
  const scaleX = inputResolutionX / (padR + padL + width);
  return [scaleX, scaleY];
}

export function getOffsetPoint(
    y: number, x: number, keypoint: number, offsets: TensorBuffer3D): Vector2D {
  return {y: offsets.get(y, x, keypoint), x: offsets.get(y, x, keypoint + NUM_KEYPOINTS)};
}

export function getImageCoords(
    part: Part, outputStride: number, offsets: TensorBuffer3D): Vector2D {
  const {heatmapY, heatmapX, id: keypoint} = part;
  const {y, x} = getOffsetPoint(heatmapY, heatmapX, keypoint, offsets);
  return {x: part.heatmapX * outputStride + x, y: part.heatmapY * outputStride + y};
}

export function fillArray<T>(element: T, size: number): T[] {
  const result: T[] = new Array(size);

  for (let i = 0; i < size; i++) {
    result[i] = element;
  }

  return result;
}

export function clamp(a: number, min: number, max: number): number {
  if (a < min) {
    return min;
  }
  if (a > max) {
    return max;
  }
  return a;
}

export function squaredDistance(
    y1: number, x1: number, y2: number, x2: number): number {
  const dy = y2 - y1;
  const dx = x2 - x1;
  return dy * dy + dx * dx;
}

export function addVectors(a: Vector2D, b: Vector2D): Vector2D {
  return {x: a.x + b.x, y: a.y + b.y};
}

export function clampVector(a: Vector2D, min: number, max: number): Vector2D {
  return {y: clamp(a.y, min, max), x: clamp(a.x, min, max)};
}

/*=============================================================================

import {NUM_KEYPOINTS} from '../keypoints';
import {Padding, Pose} from '../types';

import {getScale} from './util';

interface Pair {
  x: number;
  y: number;
}

function computeDistance(embedding: Pair[], pose: Pose, minPartScore = 0.3) {
  let distance = 0.0;
  let numKpt = 0;
  for (let p = 0; p < embedding.length; p++) {
    if (pose.keypoints[p].score > minPartScore) {
      numKpt += 1;
      distance += (embedding[p].x - pose.keypoints[p].position.x) ** 2 +
          (embedding[p].y - pose.keypoints[p].position.y) ** 2;
    }
  }
  if (numKpt === 0) {
    distance = Infinity;
  } else {
    distance = distance / numKpt;
  }
  return distance;
}

function convertToPositionInOutput(
    element: Pair, 
    [padT, padL]: [number, number],
    [scaleX, scaleY]: number,
    stride: number): Pair {
  const rotation = Math.round(((padL + position.x + 1.0) * scaleX + 1.0) / stride);
  const const x = Math.round(((padL + position.x + 1.0) * scaleY + 1.0) / stride);
  return {x, y};
}

function matchEmbeddingToInstance(
    location: Pair, longOffsets: Float32Array, poses: Pose[],
    numKptForMatching: number): number {
  let closestDistance = Infinity;
  for (let p = 0; p < poses.length; p++) {
    const pose = poses[p];
    const distance = computeDistance(pose.keypoints, location, 0.3);
    if (distance < closestDistance) {
      closestDistance = distance;
      closestPose = pose;
    }
  }
  return closestDistance;
}

=============================================================================

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```javascript
number, [padT, padL]: [number, number],
  [scaleX, scaleY]: [number, number],
  outputResolutionX: number,
  [height, width]: [number, number],
  stride: number,
  refineSteps: number,
  numKptForMatching: number,
  keypointsIndex: number,
  keypointsIndex++: number,
  const convertEmbedding = getEmbedding
  location, keypointsIndex, convertToPosition,
  outputResolutionX, longOffsets, refineSteps, [height, width],
  embed.push(embedding);

  let kMin = -1;
  let kMinDist = Infinity;

  for (let k = 0; k < poses.length; k++) {
    const dist = computeDistance(poses[k]);
    if (dist < kMinDist) {
      kMin = k;
      kMinDist = dist;
    }
  }

  return kMin;
}

function getOutputResolution(
  inputResolutionY, inputResolutionX:
  [number, number], stride: number): [number, number] {
  const outputResolutionX = Math.round((inputResolutionX - 1.0) / stride + 1.0);
  const outputResolutionY = Math.round((inputResolutionY - 1.0) / stride + 1.0);
  return [outputResolutionX, outputResolutionY];
}

export function decodeMultipleMasksCPU(
  segmentation: Uint8Array, longOffsets: Float32Array,
  posesAboveScore: Pose[],
  numKptForMatching: 5): Uint8Array[] {
  const dataArrays =
      posesAboveScore.map(x => new Uint8Array(height * width).fill(0));

  for (let i = 0; i < height; i += 1) {
    for (let j = 0; j < width; j += 1) {
      const n = i * width + j;
      const prob = segmentation[n];
      if (prob === 1) {
        const kMin = matchEmbeddingToInstance(
          {x: j, y: i}, longOffsets, posesAboveScore,
          numKptForMatching,
          [padT, padL], [scaleX, scaleY], outputResolutionX, [height, width],
          stride, refineSteps);
        if (kMin >= 0) {
          dataArrays[kMin][n] = 1;
        }
      }
    }
  }

  return dataArrays;
}

export function decodeMultiplePartMasksCPU(
  segmentation: Uint8Array, longOffsets: Float32Array,
  partSegmentation: Uint8Array, posesAboveScore: Pose[],
  numKptForMatching: 5): Int32Array[] {
  const dataArrays =
      posesAboveScore.map(x => new Int32Array(height * width).fill(-1));

  for (let i = 0; i < height; i += 1) {
    for (let j = 0; j < width; j += 1) {
      const n = i * width + j;
      const prob = segmentation[n];
      if (prob === 1) {
        const kMin = matchEmbeddingToInstance(
          {x: j, y: i}, longOffsets, posesAboveScore,
          numKptForMatching,
          [padT, padL], [scaleX, scaleY], outputResolutionX, [height, width],
          stride, refineSteps);
        if (kMin >= 0) {
          dataArrays[kMin][n] = partSegmentation[n];
        }
      }
    }
  }

  return dataArrays;
}
```

---

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 */
```

---

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```
import * as tf from '@tensorflow/tfjs-core';
import * as tf_webgl from '@tensorflow/tfjs-backend-webgl';
import {NUM_KEYPOINTS} from '../keypoints';
import {Padding, Pose} from '../types';
import {getScale} from './util';

export function decodeMultipleMasksWebGl(
  segmentation: tf.Tensor2D,
  longOffsets: tf.Tensor3D,
  posesAboveScore: Pose[],
  numKptForMatching: 5): tf.TensorInfo {
  // The height/width of the image/canvas itself.
  const [origHeight, origWidth] = segmentation.shape;
  // The height/width of the output of the model.
  const [outHeight, outWidth] = longOffsets.shape.slice(0, 2);
  const shapedLongOffsets = longOffsets.shape.slice(0, 2);
```
const poseVals = new Float32Array(maxNumPeople * NUM_KEYPOINTS * 3).fill(0.0);
for (let i = 0; i < posesAboveScore.length; i++) {
  const poseOffset = i * NUM_KEYPOINTS * 3;
  const pose = posesAboveScore[i];
  for (let kp = 0; kp < NUM_KEYPOINTS; kp++) {
    const keypoint = pose.keypoints[kp];
    const offset = poseOffset + kp * 3;
    poseVals[offset] = keypoint.score;
    poseVals[offset + 1] = keypoint.position.y;
    poseVals[offset + 2] = keypoint.position.x;
  }
}

const [scaleX, scaleY] = getScale([height, width], [inHeight, inWidth], padding);
const posesTensor = tf.tensor(poseVals, [maxNumPeople, NUM_KEYPOINTS, 3]);

const program: tf_webgl.GPGPUProgram = {
  ...}

const webglBackend = tf.backend() as tf_webgl.MathBackendWebGL;
return webglBackend.compileAndRun(program, [segmentation, shapedLongOffsets, posesTensor]);

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 */

import * as tf from '@tensorflow/tfjs-core';
import {getBackend} from '@tensorflow/tfjs-core';

import {Padding, PartSegmentation, PersonSegmentation, Pose} from '../types';

import {decodeMultipleMasksCPU,
decodeMultiplePartMasksCPU from '../decode_multiple_masks_cpu';

export function toPersonKSegmentation(
    segmentation: tf.Tensor2D, k: number): tf.Tensor2D {
  return tf.tidy(
      () => (tf.cast(tf.equal(
          segmentation, tf.scalar(k)), 'int32') as
      tf.Tensor2D));
}

export function toPersonKPartSegmentation(
    segmentation: tf.Tensor2D, bodyParts: 
    tf.Tensor2D, k: number): tf.Tensor2D {
  return tf.tidy(
      () => tf.sub(tf.mul(tf.cast(tf.equal(
          segmentation, tf.scalar(k)), 'int32'), 
      tf.add(bodyParts, 1)), 1));
}

function isWebGlBackend() {
  return getBackend() === 'webgl';
}

export async function decodePersonInstanceMasks(
    segmentation: tf.Tensor2D, longOffsets: tf.Tensor3D, poses: Pose[],
    height: number, width: number, stride: number,
    [inHeight, inWidth]: [number, number], padding: Padding,
    minPoseScore = 0.2, refineSteps = 8,
    minKeypointScore = 0.3, maxNumPeople = 10): Promise<PersonSegmentation[]> {
  const posesAboveScore = poses.filter(pose => pose.score >= minPoseScore);
  let personSegmentationsData: Uint8Array[];
  if (isWebGlBackend()) {
    const personSegmentations = tf.tidy(() => {
      const masksTensorInfo = decodeMultipleMasksWebGl(
          segmentation, longOffsets, posesAboveScore, height, width, stride, 
          [inHeight, inWidth], padding, refineSteps, minPoseScore,
          maxNumPeople);
      const masksTensor = tf.engine().makeTensorFromDataId(
          masksTensorInfo.dataId, masksTensorInfo.shape, 
          masksTensorInfo.dtype) as tf.Tensor2D;
      return posesAboveScore.map(
          (_, k) => toPersonKSegmentation(masksTensor, k));
    });
  } else {
    const segmentationsData = await segmentation.data() as Uint8Array;
    const longOffsetsData = await longOffsets.data() as Float32Array;
    personSegmentationsData = decodeMultipleMasksCPU(segmentationsData, longOffsetsData, 
    posesAboveScore, height, width, stride, [inHeight, inWidth], padding, refineSteps);
  }
  return personSegmentationsData.map(
      (data, i) => ({data, pose: posesAboveScore[i], width, height}));
}

export async function decodePersonInstancePartMasks(
    segmentation: tf.Tensor2D, longOffsets: tf.Tensor3D,
    partSegmentation: tf.Tensor2D, poses: Pose[], height: number, width: number,
    stride: number, [inHeight, inWidth]: [number, number], padding: Padding,
    minPoseScore = 0.2, refineSteps = 8, minKeypointScore = 0.3,
    maxNumPeople = 10): Promise<PartSegmentation[]> {
  const posesAboveScore = poses.filter(pose => pose.score >= minPoseScore);
  let partSegmentationsByPersonData: Int32Array[];
  if (isWebGlBackend()) {
    const partSegmentations = tf.tidy(() => {
      const masksTensorInfo = decodeMultipleMasksWebGl(segmentation, longOffsets, 
      posesAboveScore, height, width, stride, [inHeight, inWidth], padding, 
      refineSteps, minKeypointScore, maxNumPeople);
      const masksTensor = tf.engine().makeTensorFromDataId(masksTensorInfo.dataId, 
      masksTensorInfo.shape, masksTensorInfo.dtype) as tf.Tensor2D;
      return posesAboveScore.map(
          (_, k) => toPersonKPartSegmentation(masksTensor, partSegmentation, k));
    });
  } else {
    const segmentationsData = await segmentation.data() as Uint8Array;
    const longOffsetsData = await longOffsets.data() as Float32Array;
    const partSegmentationData = await partSegmentation.data() as Uint8Array;
    const segmentationsData = decodeMultiplePartMasksCPU(segmentationsData, longOffsetsData, partSegmentationData,
    posesAboveScore, height, width, stride, [inHeight, inWidth], padding, refineSteps);
  }
  return partSegmentationsByPersonData.map(
      (data, k) => ({pose: posesAboveScore[k], data, height, width}));
}

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 */
function half(k: number) {
  return Math.floor(k / 2);
}

export class MaxHeap<T> {
  private priorityQueue: T[];
  private numberOfElements: number;
  private getElementValue: (element: T) => number;

  constructor(maxSize: number, getElementValue: (element: T) => number) {
    this.priorityQueue = new Array(maxSize);
    this.numberOfElements = -1;
    this.priorityQueue[0] = null;
    this.numberOfElements += 1;
    this.public enqueue(x: T) {
      this.priorityQueue[++this.numberOfElements] = x;
      this.swim(this.numberOfElements);
    };
    this.dequeue(): T {
      const max = this.priorityQueue[0];
      this.exchange(0, this.numberOfElements--);
      this.sink(0);
      this.priorityQueue[this.numberOfElements + 1] = null;
      return max;
    };
    this.empty(): boolean {
      return this.numberOfElements === -1;
    };
    this.size(): number {
      return this.numberOfElements + 1;
    };
    this.public all(): T[] {
      return this.priorityQueue.slice(0, this.numberOfElements + 1);
    };
    this.public max(): T {
      return this.priorityQueue[0];
    };
    this公积 enque(let j = half(k);)
    this.priorityQueue[0] = x;
    this.public enqueue(x: T) {
      this.priorityQueue[++this.numberOfElements] = x;
      this.swim(this.numberOfElements);
    };
    this.dequeue(): T {
      const max = this.priorityQueue[0];
      this.exchange(0, this.numberOfElements--);
      this.sink(0);
      this.priorityQueue[this.numberOfElements + 1] = null;
      return max;
    };
    this.empty(): boolean {
      return this.numberOfElements === -1;
    };
    this.size(): number {
      return this.numberOfElements + 1;
    };
    this.public all(): T[] {
      return this.priorityQueue.slice(0, this.numberOfElements + 1);
    };
    this.public (j++)}];
    return this.exchange(k, j);
  };
  this.exchangeAt(i: number) {
    const t = this.priorityQueue[i];
    this.priorityQueue[i] = this.priorityQueue[j];
    this.priorityQueue[j] = t;
  };
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  * limitations under the License.
  *
  *=============================================================================

  import {PartWithScore, TensorBuffer3D} from '../types';
  import {MaxHeap} from './max_heap';

  function scoreIsMaximumInLocalWindow(keypointId: number, score: number, heatmapY: number, heatmapX: number, localMaximumRadius: number, scores: TensorBuffer3D): boolean {
    const [height, width] = scores.shape;
    let localMaximum = true;
    const yStart = Math.max(heatmapY - localMaximumRadius, 0);
    const yEnd = Math.min(heatmapY + localMaximumRadius + 1, height);
    for (let yCurrent = yStart; yCurrent < yEnd; ++yCurrent) {
      const xStart = Math.max(heatmapX - localMaximumRadius, 0);
      const xEnd = Math.min(heatmapX + localMaximumRadius + 1, width);
      for (let xCurrent = xStart; xCurrent < xEnd; xCurrent += xCurrent) {
        if (scores.get(yCurrent, xCurrent, keypointId) > score) {
          localMaximum = false;
          break;
        } if (!localMaximum) {
          break;
        }
      }
      return localMaximum;
    }
    return false;
  };

  function buildPartWithScoreQueue(scoreThreshold: number, localMaximumRadius: number, scores: TensorBuffer3D): MaxHeap<PartWithScore> {
    const [height, width, numKeypoints] = scores.shape;
    const queue = new MaxHeap<PartWithScore>(numKeypoints, (score) => score);
    const height * width * numKeypoints, ((score) => score);)
    for (let heatmapX = 0; heatmapX < height; ++heatmapX) {
      for (let heatmapY = 0; heatmapY < width; ++heatmapY) {
        for (let keypointId = 0; keypointId < numKeypoints; ++keypointId) {
          queue.enqueue(score.get(heatmapY, heatmapX, keypointId));
        }
        // Only consider parts with score greater or equal to threshold as
        // root candidates.
        if (score < scoreThreshold) {
          continue;
        }
        // Only consider keypoints whose score is maximum in a local window.
        if (scoreIsMaximumInLocalWindow(keypointId, score, heatmapY, heatmapX, localMaximumRadius, scores)) {
          queue.enqueue(score, part: {heatmapY, heatmapX, id: keypointId});
        }
      }
    }
    return queue;
  };

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import {NumberTuple, PART_IDS, PART_NAMES, POSE_CHAIN} from '../keypoints';
import {Keypoint, PartWithScore, TensorBuffer3D, Vector2D} from '../types';

import {clamp, getOffsetPoint} from './util';
import {addVectors, getImageCoords} from './util';

const parentChildrenTuples: NumberTuple[] = POSE_CHAIN.map(([, childJoinName]) => [PART_IDS[childJoinName]]);

const parentToChildEdges: number[] = parentChildrenTuples.map(([, childJointId]) => childJointId);

const childToParentEdges: number[] = parentChildrenTuples.map(([parentJointId, ]) => parentJointId);

function getDisplacement(edgeId: number, point: Vector2D, displacements: TensorBuffer3D): Vector2D {
  const numEdges = displacements.shape[2] / 2;
  return {
    y: displacements.get(point.y, point.x, edgeId),
    x: displacements.get(point.y, point.x, numEdges + edgeId)
  };
}

function getStridedIndexNearPoint(point: Vector2D, outputStride: number, height: number, width: number): Vector2D {
  return {
    y: clamp(Math.round(point.y / outputStride), 0, height - 1),
    x: clamp(Math.round(point.x / outputStride), 0, width - 1)
  };
}

/**
 * We get a new keypoint along the `edgeId` for the pose instance, assuming
 * that the position of the `idSource` part is already known. For this, we
 * follow the displacement vector from the source to target part (stored in
 * the `i`-t channel of the displacement tensor). The displaced keypoint
 * vector is refined using the offset vector by `offsetRefineStep` times.
 */
function traverseToTargetKeypoint(edgeId: number, sourceKeypoint: Keypoint, targetKeypointId: number, scoresBuffer: TensorBuffer3D, offsets: TensorBuffer3D, outputStride: number, displacementsFwd: TensorBuffer3D, displacementsBwd: TensorBuffer3D, offsetRefineStep = 2): Keypoint {
  const [height, width] = scoresBuffer.shape;

  // Nearest neighbor interpolation for the source->target displacements.
  const sourceKeypointIndices = getStridedIndexNearPoint(sourceKeypoint.position, outputStride, height, width);

  const displacement = getDisplacement(edgeId, sourceKeypointIndices, displacementsFwd);

  const displacedPoint = addVectors(sourceKeypoint.position, displacement);
  let targetKeypoint = displacedPoint;
  for (let i = 0; i < offsetRefineStep; i++) {
    const targetKeypointIndices = getStridedIndexNearPoint(targetKeypoint, outputStride, height, width);

    const offsetPoint = getOffsetPoint(targetKeypointIndices.y, targetKeypointIndices.x, targetKeypointId, offsets);
    targetKeypoint = addVectors(targetKeypoint, offsetPoint);
  }

  const targetKeyPointIndices = getStridedIndexNearPoint(targetKeypoint, outputStride, height, width);
  const score = scoresBuffer.get(targetKeyPointIndices.y, targetKeyPointIndices.x, targetKeypointId);

  return {position: targetKeypoint, part: PART_NAMES[targetKeypointId], score};
}

/**
 * Follows the displacement fields to decode the full pose of
 * the object instance given the position of a part that acts as root.
 * @param root The root keypoint.
 * @param scores The scores buffer.
 * @param offsets The offsets buffer.
 * @param displacementsFwd The forward displacements.
 * @param displacementsBwd The backward displacements.
 * @param offsetRefineStep The number of refinement steps.
 * @return An array of decoded keypoints and their scores for a single pose.
 */
export function decodePose(root: PartWithScore, scores: TensorBuffer3D, offsets: TensorBuffer3D, displacementsFwd: TensorBuffer3D, displacementsBwd: TensorBuffer3D, offsetRefineStep = 2): Keypoint[] {
  const numParts = scores.shape[2];

  const instanceKeypoints: Keypoint[] = new Array(numParts);

  // Start a new detection instance at the position of the root part.
  const rootPart = root.part;
  const rootScore = root.score;
  const rootPoint = getImageCoords(rootPart, outputStride, offsets);

  instanceKeypoints[rootPart.id] = {position: rootPoint, part: rootPart.id, score: rootScore};

  // Decode the part positions upwards in the tree, following the backward
  // displacements for (let edge = numEdges - 1; edge >= 0; --edge) {
  //  const
sourceKeypointId = parentToChildEdges[edge];
const targetKeypointId = childToParentEdges[edge];
if (instanceKeypoints[sourceKeypointId] &
    && instanceKeypoints[targetKeypointId]) {
    instanceKeypoints[sourceKeypointId], targetKeypointId, scores,
    offsets, outputStride, displacementsBwd);
}
  }
  }

  // Decode the part positions downwards in the tree, following the forward
  // displacements.
  for (let edge = 0; edge < numEdges; ++edge) {
    const sourceKeypointId = childToParentEdges[edge];
    const targetKeypointId = parentToChildEdges[edge];
    if (instanceKeypoints[sourceKeypointId] &
        && instanceKeypoints[targetKeypointId]) {
      instanceKeypoints[sourceKeypointId], targetKeypointId, scores,
      offsets, outputStride, displacementsFwd);
    }
  }

  return instanceKeypoints;
}

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 *
=============================================================================

import {Keypoint, Pose, TensorBuffer3D} from '../types';

import {buildPartWithScoreQueue} from './build_part_with_score_queue';
import {decodePose} from './decode_pose';
import {getImageCoords, squaredDistance} from './util';

function withinNmsRadiusOfCorrespondingPoint(
    poses: Pose[],
    squaredNmsRadius: number, {x, y}: {x: number, y: number},
    keypointId: number): boolean {
  return poses.some(({keypoints}) => {
    const correspondingKeypoint = keypoints[keypointId].position;
    return squaredDistance(
               y, x, correspondingKeypoint.y, correspondingKeypoint.x) <=
    squaredNmsRadius;
  });
}

/* Score the newly proposed object instance without taking into account
 * the scores of the parts that overlap with any previously detected
 * instance.
 */
function getInstanceScore(
    existingPoses: Pose[],
    squaredNmsRadius: number,
    instanceKeypoints: Keypoint[]): number {
  let notOverlappedKeypointScores = instanceKeypoints.reduce(
      (result, {position, score}, keypointId): number => {
        if (!withinNmsRadiusOfCorrespondingPoint(
                existingPoses, squaredNmsRadius, position,
                keypointId)) {
          result += score;
        }
        return result;
      }, 0.0);
  return notOverlappedKeypointScores /= instanceKeypoints.length;
}

// A point (y, x) is considered as root part candidate if its score is a
// maximum in a window |y - y'| <= kLocalMaximumRadius, |x - x'| <=
// kLocalMaximumRadius. We first create a priority queue with local part score maxima
// above a scoreThreshold, considering all parts at the same time. Then we
// iteratively pull the top element of the queue (in decreasing score order)
// and treat it as a root candidate for a new object instance. To avoid
// duplicate detections, we reject the root candidate if it is within a disk
// of `nmsRadius` pixels from the corresponding part of a previously detected
// instance, which is a form of part-based non-maximum suppression (NMS).
// If a root candidate passes the NMS check, we start a new object instance
// detection, treating the corresponding part as root and finding the
// positions of the remaining parts by following the displacement
// vectors along the tree-structured part graph. We assign to the newly detected
// instance a score equal to the sum of scores of its parts which have not
// been claimed by a previous instance (i.e., those at least `nmsRadius`
// pixels away from the corresponding part of all previously detected
// instances), divided by the total number of parts

// The value of heatmapScores[y, x, k] is the score of placing the `k`-th
// object part at position (y, x). The value of offsets[y, x, k + numParts]
// is the short range offset vector of the `k`-th object part at heatmap
// position (y, x). The value of displacementsFwd[height, width, num_edges]
// is the short range offset vector of the `k`-th object part at heatmap
// position (y, x).
num_parts - 1` is the number of edges (parent-child pairs) in the tree. It contains the forward displacements between consecutive part from the root towards the leaves.

- displacementsBwd 3-D tensor of shape `[height, width, 2 * num_edges]`, where `num_edges = num_parts - 1` is the number of edges (parent-child pairs) in the tree. It contains the backward displacements between consecutive part from the root towards the leaves.

- outputStride The output stride that was used when feed-forwarding through the PoseNet model. Must be 32, 16, or 8.

- maxPoseDetections Maximum number of returned instance detections per image.

- scoreThreshold Only return instance detections that have root part score greater or equal to this value. Defaults to 0.5.

- nmsRadius Non-maximum suppression part distance. It needs to be strictly positive. Two parts suppress each other if they are less than `nmsRadius` pixels away. Defaults to 20.

- @return An array of poses and their scores, each containing keypoints and the corresponding keypoint scores.

```javascript
export function decodeMultiplePoses(
    scoresBuffer: TensorBuffer3D,
    offsetsBuffer: TensorBuffer3D,
    displacementsFwdBuffer: TensorBuffer3D,
    displacementsBwdBuffer: TensorBuffer3D,
    outputStride: number,
    maxPoseDetections: number,
    scoreThreshold: number = 0.5,
    nmsRadius: number = 20):
    Pose[] {
        const poses: Pose[] = [];

        const queue = buildPartWithScoreQueue(
            scoreThreshold,
            kLocalMaximumRadius, scoresBuffer);

        const squaredNmsRadius = nmsRadius * nmsRadius;

        // Generate at most maxDetections object instances per image in decreasing root part score order.
        while (poses.length < maxPoseDetections && queue.forEach()) {
            // The top element in the queue is the next root candidate.
            const root = queue.dequeue();

            // Part-based non-maximum suppression: We reject a root candidate if it is within a disk of `nmsRadius` pixels from the corresponding part of a previously detected instance.
            const rootImageCoords = getImageCoords(root.part, outputStride, offsetsBuffer);
            if (withinNmsRadiusOfCorrespondingPoint(poses, squaredNmsRadius, rootImageCoords, root.part.id)) {
                continue;
            }

            // Start a new detection instance at the position of the root.
            const keypoints = decodePose(
                root, scoresBuffer, offsetsBuffer, outputStride, displacementsFwdBuffer,
                displacementsBwdBuffer);
            const score = getInstanceScore(poses, squaredNmsRadius, keypoints);
            poses.push({keypoints, score});
        }

        return poses;
    }
```

---

```
import * as tf from '@tensorflow/tfjs-core';

export class ResNet extends BaseModel {
    preprocessInput(input: tf.Tensor3D): tf.Tensor3D {
        return tf.add(input, imageNetMean);
    }

    nameOutputResults(results: tf.Tensor3D[]): {
        const [displacementBwd, displacementFwd, heatmap, longOffsets, offsets, partHeatmaps, segmentation, partOffsets] = results;
        return {offsets, segmentation, partHeatmaps, longOffsets, heatmap, displacementFwd, displacementBwd, partOffsets};
    }
}
```

---

```
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 */

const RESNET50_BASE_URL = 'https://storage.googleapis.com/tfjs-models/savedmodel/bodypix/resnet50/';
const MOBILENET_BASE_URL =
```

---

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padding: Padding) {
  const [height, width] = getInputSize(input);
  const targetAspect = targetW / targetH;
  const aspect = width / height;
  let [padT, padB, padL, padR] = [0, 0, 0, 0];
  if (aspect < targetAspect) {
    // pads the width
    padT = 0;
    padB = 0;
    padL = Math.round((0.5 * (targetAspect * height - width)) / aspect);
    padR = Math.round((0.5 * (targetAspect * height - width)) / aspect);
  } else {
    // pads the height
    padT = Math.round(0.5 * ((1.0 / targetAspect) * width - height));
    padB = Math.round(0.5 * ((1.0 / targetAspect) * width - height));
    padL = 0;
    padR = 0;
  }
  const resized = tf.Tensor3D = tf.tidy(() => {
    let imageTensor = toInputTensor(input);
    imageTensor = tf.pad3d(imageTensor, [[padT, padB], [padL, padR], [0, 0]]);
    return tf.image.resizeBilinear(imageTensor, [targetH, targetW]);
  });

  return {resized, padding: {top: padT, left: padL, right: padR, bottom: padB}};
}

export async function toTensorBuffers3D(tensors: tf.Tensor3D[]): Promise<TensorBuffer3D[]> {
  return Promise.all(tensors.map(tensor => tensor.buffer()));
}

export function scalePose(pose: Pose, scaleY: number, scaleX: number, offsetY: 0, offsetX: 0): Pose {
  return {
    score: pose.score,
    keypoints: pose.keypoints.map(([{score, part, position}) => ({
      score,
      part,
      position: {
        x: position.x * scaleX + offsetX,
        y: position.y * scaleY + offsetY
      }
    }));
  };
}

export function scalePoses(poses: Pose[], scaleY: number, scaleX: number, offsetY: 0, offsetX: 0) {
  return poses.map(pose => scalePose(pose, scaleY, scaleX, offsetY, offsetX));
}

export function flipPoseHorizontal(pose: Pose, imageWidth: number): Pose {
  return {
    score: pose.score,
    keypoints: pose.keypoints.map(({score, part, position}) => ({
      score,
      part,
      position: {x: imageWidth - 1 - position.x, y: position.y}
    }));
  };
}

export function flipPosesHorizontal(poses: Pose[], imageWidth: number) {
  if (imageWidth <= 0) {
    return poses;
  }
  return poses.map(pose => flipPoseHorizontal(pose, imageWidth));
}

export function scaleAndFlipPoses(poses: Pose[], [height, width]: [number, number], [inputResolutionHeight, inputResolutionWidth]: [number, number], padding: Padding, flipHorizontal: boolean) {
  const scaleY = (height + padding.top + padding.bottom) / inputResolutionHeight;
  const scaleX = (width + padding.left + padding.right) / inputResolutionWidth;

  const scaledPoses = poses.map(pose => {
    return {
      score: pose.score,
      keypoints: pose.keypoints.map(({score, part, position}) => ({
        score,
        part,
        position: {
          x: (position.x * scaleX - padding.left) + padding.left,
          y: (position.y * scaleY - padding.top) + padding.top
        }
      })
    };
  });

  if (flipHorizontal) {
    return flipPosesHorizontal(scaledPoses, width);
  } else {
    return scaledPoses;
  }
}

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 */

const APPLY_SIGMOID_ACTIVATION = true;
const FLIP_POSES_AFTER_SCALING = false;

import * as tfconv from '@tensorflow/tfjs-converter';
import * as tf from '@tensorflow/tfjs-core';

import {BodyPixArchitecture, BodyPixInput, BodyPixInternalResolution, BodyPixMultiplier, BodyPixQuantBytes, Padding} from './types';
import {getInputSize, padAndResizeTo, scaleAndCropToInputTensorShape, scaleAndFlipPoses, toInputResolutionHeightAndWidth, toTensorBuffers3D} from './util';

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'architecture': BodyPixArchitecture. It determines which BodyPix architecture(s) to load. The supported architectures are: MobileNetV1 and ResNet50. 'outputStride': Specifies the output stride of the BodyPix model. The smaller the value, the larger the output resolution, and more accurate the model at the cost of speed. Set this to a larger value to increase speed at the cost of accuracy. Stride 32 is supported for ResNet and stride 8,16,32 are supported for various MobileNetV1 models. 'multiplier': An optional number with values: 1.01, 1.0, 0.75, or 0.50. The value is used only by MobileNet architecture. It is the float multiplier for the depth (number of channels) for all convolution ops. The larger the value, the larger the size of the layers, and more accurate the model at the cost of speed. Set this to a smaller value to increase speed at the cost of accuracy. 'modelUrl': An optional string that specifies custom url of the model. This is useful for areas/countries that don't have access to the model hosted on GCP. 'quantBytes': An optional number with values: 1, 2, or 4. This parameter affects weight quantization in the models. The available options are 1 byte, 2 bytes, and 4 bytes. The higher the value, the larger the model size and thus the longer the loading time, the lower the value, the shorter the loading time but lower the accuracy. 'exportInterface ModelConfig { architecture: BodyPixArchitecture; outputStride: BodyPixOutputStride; multiplier?: BodyPixMultiplier; modelUrl?: string; quantBytes?: BodyPixQuantBytes; } as ModelConfig;}

// The default configuration for loading MobileNetV1 based BodyPix

// (And for references, the default configuration for loading ResNet based PoseNet is also included):


const MOBILENET_V1_CONFIG = {
  architecture: 'MobileNetV1',
  outputStride: 16,
  quantBytes: 4,
  multiplier: 0.75,
} as ModelConfig;

const VALID_ARCHITECTURE: BodyPixArchitecture[] = ['MobileNetV1', 'ResNet50'];
const VALID_STRIDE: {[id: string]} = {
  'MobileNetV1': [8, 16, 32],
  'ResNet50': [32, 16]
};
const VALID_MULTIPLIER: {[id: string]} = {
  'MobileNetV1': [0.50, 0.75, 1.0],
  'ResNet50': [1.0]
};
const VALID_QUANT_BYTES: BodyPixQuantBytes[] = [1, 2, 4];

function validateModelConfig(config: ModelConfig): ModelConfig {
  config = config || MOBILENET_V1_CONFIG;

  if (config.architecture == null) {
    config.architecture = 'MobileNetV1';
  }
  if (VALID_ARCHITECTURE.indexOf(config.architecture) < 0) {
    throw new Error(`Invalid architecture ${config.architecture}. Should be one of ${VALID_ARCHITECTURE}.`);
  }

  if (config.outputStride == null) {
    config.outputStride = 16;
  }
  if (VALID_STRIDE[config.architecture].indexOf(config.outputStride) < 0) {
    throw new Error(`Invalid outputStride ${config.outputStride}. Should be one of ${VALID_STRIDE[config.architecture]}.`);
  }

  if (config.multiplier == null) {
    config.multiplier = 1.0;
  }
  if (VALID_MULTIPLIER[config.architecture].indexOf(config.multiplier) < 0) {
    throw new Error(`Invalid multiplier ${config.multiplier}. Should be one of ${VALID_MULTIPLIER[config.architecture]}.`);
  }

  if (config.quantBytes == null) {
    config.quantBytes = 4;
  }
  if (VALID_QUANT_BYTES.indexOf(config.quantBytes) < 0) {
    throw new Error(`Invalid quantBytes ${config.quantBytes}. Should be one of ${VALID_QUANT_BYTES}.`);
  }

  return config;
}

/**
 * BodyPix inference is configurable using the following config dictionary.
 *
 * 'flipHorizontal': If the left-right keypoint of poses/part segmentation
 * should be flipped/mirrored horizontally. This should be set to true for
 * videos where the video is by default flipped horizontally (i.e. a webcam), and
 * you want the person & body part segmentation to be returned in the proper
 * orientation.
 *
 * 'internalResolution': Defaults to 'medium'. The internal resolution percentage that the input is resized to before inference. The larger the
 * internalResolution the more accurate the model at the cost of slower prediction times. Available values are 'low', 'medium', 'high', 'full', or a number percentage value between 0 and 1. The values 'low', 'medium', 'high', and 'full' map to 0.25, 0.5, 0.75, and 1.0 correspondingly.
 *
 * 'segmentationThreshold': The minimum that segmentation values must be to be considered part of the person. Affects the generation of the segmentation mask. More specifically, it is the threshold used to binarize the intermediate person segmentation probability. The probability of each pixel belongs to a person is in range [0,
1]. If the probability is greater than the `segmentationThreshold`, it will be set to 1 otherwise 0.

```typescript
export interface InferenceConfig {
  flipHorizontal?: boolean;
  internalResolution?: BodyPixInternalResolution;
  segmentationThreshold?: number;
  *n* multiPersonInstanceInferenceConfig:

export interface PersonInferenceConfig {
  maxDetections?: number;
  scoreThreshold?: number;
  nmsRadius?: number;
  minKeypointScore?: number;
  refineSteps?: number;
}

export const PERSON_INFERENCE_CONFIG: PersonInferenceConfig = {
  flipHorizontal: false,
  internalResolution: 'medium',
  segmentationThreshold: 0.7,
  maxDetections: 10,
  scoreThreshold: 0.4,
  nmsRadius: 20,
};

export const MULTI_PERSON_INSTANCE_INFERENCE_CONFIG:
```

InferenceConfig = {
  flipHorizontal: false,
  internalResolution: 'medium',
  segmentationThreshold: 0.7,
  maxDetections: 10,
  scoreThreshold: 0.4,
  nmsRadius: 20,
};

```typescript
function validatePersonInferenceConfig(config: PersonInferenceConfig) {
  const {segmentationThreshold,
         maxDetections, scoreThreshold, nmsRadius} =
    config;
  if (segmentationThreshold < 0.0 ||
      segmentationThreshold > 1.0) {
    throw new Error(
        `segmentationThreshold ${segmentationThreshold}. ` +
        `Should be in range [0.0, 1.0]`);
  }
  if (maxDetections <= 0) {
    throw new Error(
        `Invalid maxDetections ${maxDetections}. ` +
        `Should be > 0`);
  }
  if (scoreThreshold < 0.0 || scoreThreshold > 1.0) {
    throw new Error(
        `Invalid scoreThreshold ${scoreThreshold}. ` +
        `Should be in range [0.0, 1.0]`);
  }
  if (nmsRadius <= 0) {
    throw new Error(`Invalid nmsRadius ${nmsRadius}.`);
  }
}
```

```typescript
export interface MultiPersonInstanceInferenceConfig extends InferenceConfig {
  minKeypointScore?: number;
  refineSteps?: number;
}

export const MULTI_PERSON_INSTANCE_INFERENCE_CONFIG:
```

MultiPersonInstanceInferenceConfig = {
  flipHorizontal: false,
  internalResolution: 'medium',
  segmentationThreshold: 0.7,
  maxDetections: 10,
  scoreThreshold: 0.4,
  nmsRadius: 20,
  minKeypointScore: 0.3,
  refineSteps: 10
};

```typescript
function validateMultiPersonInstanceInferenceConfig(
    config: MultiPersonInstanceInferenceConfig) {
  const {
    segmentationThreshold,
    maxDetections, scoreThreshold, nmsRadius,
    minKeypointScore,
    refineSteps
  } = config;
  if (segmentationThreshold < 0.0 ||
      segmentationThreshold > 1.0) {
    throw new Error(
        `segmentationThreshold ${segmentationThreshold}. ` +
        `Should be in range [0.0, 1.0]`);
  }
  if (maxDetections <= 0) {
    throw new Error(
        `Invalid maxDetections ${maxDetections}. ` +
        `Should be > 0`);
  }
  if (scoreThreshold < 0.0 || scoreThreshold > 1.0) {
    throw new Error(
        `Invalid scoreThreshold ${scoreThreshold}. ` +
        `Should be in range [0.0, 1.0]`);
  }
  if (nmsRadius <= 0) {
    throw new Error(`Invalid nmsRadius ${nmsRadius}.`);
  }
  if (minKeypointScore < 0 ||
      minKeypointScore > 20) {
    throw new Error(
        `Invalid minKeypointScore ${minKeypointScore}.`);
  }
  if (refineSteps <= 0 || refineSteps > 20) {
    throw new Error(`Invalid refineSteps ${refineSteps}.`);
  }
}
```

```typescript
export class BodyPix {
  baseModel: BaseModel;

  constructor(net: BaseModel) {
    this.baseModel = net;
  }

  private
```

```typescript
predictForPersonSegmentation(input: tf.Tensor3D): {
  segmentLogits: tf.Tensor3D,
  heatmapScores: tf.Tensor3D,
  offsets: tf.Tensor3D,
  displacementFwd: tf.Tensor3D,
  displacementBwd: tf.Tensor3D,
} {
  const {
    segmentLogits: segmentation,
    heatmapScores, offsets, displacementFwd, displacementBwd,
  } = this.baseModel.predict(input);
  return {
    segmentLogits: segmentation,
    heatmapScores, offsets, displacementFwd, displacementBwd,
  };
}
```
predictForPersonSegmentationAndPart(input: tf.Tensor3D): {
  \n  segmentLogits: tf.Tensor3D,
  partHeatmapLogits: tf.Tensor3D,
  heatmapScores: tf.Tensor3D,
  offsets: tf.Tensor3D,
  displacementBwd: tf.Tensor3D,
  displacementFwd: tf.Tensor3D,
} {
  \n  const {segmentation, partHeatmaps, heatmapScores, offsets, displacementFwd, displacementBwd} = this.baseModel.predict(input);
  return {
    segmentLogits: segmentation,
    partHeatmapLogits: partHeatmaps,
    heatmapScores,
    offsets,
  };
}

predictForMultiPersonInstanceSegmentationAndPart(input: tf.Tensor3D): {
  segmentLogits: tf.Tensor3D,
  longOffsets: tf.Tensor3D,
  heatmapScores: tf.Tensor3D,
  offsets: tf.Tensor3D,
  displacementBwd: tf.Tensor3D,
  displacementFwd: tf.Tensor3D,
  partHeatmaps: tf.Tensor3D,
} {
  \n  const {segmentation, longOffsets, heatmapScores, offsets, displacementFwd, displacementBwd} = this.baseModel.predict(input);
  return {
    segmentLogits: segmentation,
    longOffsets,
    heatmapScores,
    offsets,
  };
}

segmentPersonActivation(input: BodyPixInput, internalResolution: BodyPixInternalResolution, segmentationThreshold = 0.5): {
  \n  segmentLogits: tf.Tensor3D,
  heatmapScores: tf.Tensor3D,
  offsets: tf.Tensor3D,
  displacementBwd: tf.Tensor3D,
  displacementFwd: tf.Tensor3D,
} {
  \n  const {height, width} = getInputSize(input);
  \n  const internalResolutionHeightAndWidth = toInputResolutionHeightAndWidth(internalResolution, this.baseModel.outputStride, [height, width]);
  \n  const {resized, padding} = padAndResizeTo(input, internalResolutionHeightAndWidth);
  \n  const \n  const resizedSegmentScores = scaleAndCropToInputTensorShape(segmentLogits, [height, width], [resizedHeight, resizedWidth], \n    \n  const {resized, padding} = apply_Sigmoid_ACTIVATION();
  return {
    segmentation: toMaskTensor(tf.squeeze(resizedSegmentScores), segmentationThreshold),
  };
}

Note: The segmentation mask returned by this method covers all people but in the case of many people, returns a dictionary containing a binary array with 1 for the pixels that are part of the person, and 0 otherwise, 2) heatmaps, 3) offsets, and 4) padding. Given an image with people, returns a dictionary of all intermediate tensors including: 1) a binary array with 1 for the pixels that are part of the person, and 0 otherwise, 2) heatmaps, 3) offsets, and 4) padding. Given an image with people, returns a dictionary containing a binary array with 1 for the pixels that are part of the person, and 0 otherwise, 2) heatmaps, 3) offsets, and 4) padding.
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person. If you want to estimate instance-level
* multiple person segmentation & pose for each person, use
* `segmentMultiPerson` instead.

* @param input

ImageData\[HTMLImageElement\[HTMLCanvasElement\[HTMLVideoElement]\] * The input image to feed through the network.
* @param config PersonInferenceConfig object that contains
* parameters for the BodyPix inference using person decoding.
* @return A SemanticPersonSegmentation dictionary that contains height,
* width, the flattened binary segmentation mask and the poses for all people.
* The width and height correspond to the same dimensions of the input image.
* - `height`: The height of the segmentation data in pixel unit.
* - `width`: The width of the segmentation data in pixel unit.
* - `data`: The flattened Uint8Array of segmentation data. 1 means the pixel
* belongs to a person and 0 means the pixel doesn't belong to a person.

The size of the array is equal to `height` x `width` in row-major order.
* - `allPoses`: The 2d poses of all people.
* @asyncSegmentPerson

input: BodyPixInput, config: PersonInferenceConfig = PERSON_INFERencia_CONFIG):

```typescript
  async segmentPerson(
      input: BodyPixInput,
      config: PersonInferenceConfig =
          PERSON_INFERENCE_CONFIG)
```
const segmentation = toMaskTensor(tf.squeeze(scaledSegmentScores), config.segmentationThreshold);

return {
  segmentation,
  longOffsets: scaledLongOffsets,
  heatmapScoresRaw: heatmapScores,
  offsetsRaw: offsets,
  displacementFwdRaw: displacementFwd,
  displacementBwdRaw: displacementBwd,
};
APPLY_SIGMOID_ACTIVATION);
const segmentation =
toMaskTensor(tf.squeeze(scaledSegmentScores), segmentationThreshold);
return {
  partSegmentation:
  decodePartSegmentation(segmentation, scaledPartHeatmapScore),
  heatmapScores, offsets,
  displacementFwd, displacementBwd,
  padding,
  internalResolutionHeightAndWidth
};

const 
  [height, width] = partSegmentation.shape;
  const data = await partSegmentation.data() as Int32Array;
  partSegmentation.dispose();

  const 
    tensorBuffers = await toTensorBuffers3D(
      heatmapScores, offsets,
      displacementFwd, displacementBwd);
    const 
      [scoresBuf, offsetsBuf, displacementsFwdBuf, displacementsBwdBuf] =
        tensorBuffers;
    let poses = decodeMultiplePoses(
      scoresBuf, offsetsBuf,
      displacementsFwdBuf, displacementsBwdBuf,
      this.baseModel.outputStride, config.maxDetections,
      config.scoreThreshold, config.nmsRadius);
    poses = scaleAndFlipPoses(
      poses, [height, width],
      internalResolutionHeightAndWidth, padding,
      FLIP_POSES_AFTER_SCALING);

    return {
      height, width, data, allPoses: poses
    };
validateModelConfig(config):
  if (config.architecture === 'ResNet50') {
    return loadResNet(config);
  } else if (config.architecture === 'MobileNetV1') {
    return loadMobileNet(config);
  } else {
    return null;
  }
}

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 */

// method copied from bGlur in https://codepen.io/zhaojun/pen/zZmRQe
export function cpuBlur(
    canvas: HTMLCanvasElement|OffscreenCanvas,
    image: HTMLImageElement|HTMLVideoElement|HTMLCanvasElement|OffscreenCanvas,
    blur: number) {
  const ctx = canvas.getContext('2d');
  let sum = 0;
  const delta = 5;
  const alphaLeft = 1 / (2 * Math.PI * delta * delta);
  const step = blur < 3 ? 1 : 2;
  for (let y = -blur; y <= blur; y += step) {
    for (let x = -blur; x <= blur; x += step) {
      const weight = alphaLeft * Math.exp(-(x * x + y * y) / (2 * delta * delta));
      sum += weight;
    }
  }
  const globalAlpha = alphaLeft * Math.exp(-(x * x + y * y) / (2 * delta * delta)) / sum * blur;
  ctx.clearRect(0, 0, canvas.width, canvas.height);
  ctx.save();
  if (isSafari()) {
    cpuBlur(canvas, image, blurAmount);
  } else {
    // tslint:disable:no-any
    (ctx as any).filter = `blur(${blurAmount}px)`;
    ctx.drawImage(image, 0, 0, canvas.width, canvas.height);
  }
  ctx.restore();
}

// method copied from bGlur in https://codepen.io/zhaojun/pen/zZmRQe
export function cpuBlur(
    canvas: HTMLCanvasElement|OffscreenCanvas,
    image: HTMLImageElement|HTMLVideoElement|HTMLCanvasElement|OffscreenCanvas,
    blur: number) {
  const ctx = canvas.getContext('2d');
  let sum = 0;
  const delta = 5;
  const alphaLeft = 1 / (2 * Math.PI * delta * delta);
  const step = blur < 3 ? 1 : 2;
  for (let y = -blur; y <= blur; y += step) {
    for (let x = -blur; x <= blur; x += step) {
      const weight =
          alphaLeft * Math.exp(-(x * x + y * y) / (2 * delta * delta));
      sum += weight;
    }
  }
  for (let y = -blur; y <= blur; y += step) {
    for (let x = -blur; x <= blur; x += step) {
      ctx.globalAlpha = alphaLeft * Math.exp(-(x * x + y * y) / (2 * delta * delta)) / sum * blur;
      ctx.drawImage(image, x, y);
    }
  }
  ctx.globalAlpha = 1;
}

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 */

// method copied from bGlur in https://codepen.io/zhaojun/pen/zZmRQe
export function cpuBlur(
    canvas: HTMLCanvasElement|OffscreenCanvas,
    image: HTMLImageElement|HTMLVideoElement|HTMLCanvasElement|OffscreenCanvas,
    blur: number) {
  const ctx = canvas.getContext('2d');
  let sum = 0;
  const delta = 5;
  const alphaLeft = 1 / (2 * Math.PI * delta * delta);
  const step = blur < 3 ? 1 : 2;
  for (let y = -blur; y <= blur; y += step) {
    for (let x = -blur; x <= blur; x += step) {
      const weight =
          alphaLeft * Math.exp(-(x * x + y * y) / (2 * delta * delta));
      sum += weight;
    }
  }
  for (let y = -blur; y <= blur; y += step) {
    for (let x = -blur; x <= blur; x += step) {
      ctx.globalAlpha = alphaLeft * Math.exp(-(x * x + y * y) / (2 * delta * delta)) / sum * blur;
      ctx.drawImage(image, x, y);
    }
  }
  ctx.globalAlpha = 1;
}

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 */

import {cpuBlur} from './blur';
import {Color, PartSegmentation, PersonSegmentation} from './types';
import {SemanticPartSegmentation, SemanticPersonSegmentation} from './types';
import {getInputSize} from './util';

export type Canvas = HTMLCanvasElement | OffscreenCanvas;

const offScreenCanvases: { [name: string]: Canvas } = {};

type ImageType = HTMLImageElement|HTMLVideoElement|HTMLCanvasElement|OffscreenCanvas;
type HasDimensions = {
  width: number,
  height: number
};

function isSafari() {
  return (/^((?!chrome|android).)*safari/i.test(navigator.userAgent));
}

function assertSameDimensions(
    {width: widthA, height: heightA}: HasDimensions,
    {width: widthB, height: heightB}: HasDimensions, nameA: string,
    nameB: string) {
  if (widthA !== widthB || heightA !== heightB) {
    throw new Error(`error: dimensions must match. ${nameA} has dimensions ${widthA}x${heightA}, ${nameB} has dimensions ${widthB}x${heightB}`);
  }
}

function flipCanvasHorizontal(canvas: Canvas) {
  const ctx = canvas.getContext('2d');
  ctx.scale(-1, 1);
  ctx.translate(-canvas.width, 0);
}

function drawWithCompositing(
    ctx: CanvasRenderingContext2D|OffscreenCanvasRenderingContext2D,
    image: CanvasImageType, compositeOperation: string) {
  ctx.globalCompositeOperation = compositeOperation;
  ctx.drawImage(image, 0, 0, image.width, image.height);
  if (typeof document !== 'undefined') {
    return document.createElement('canvas');
  } else if (typeof OffscreenCanvas !== 'undefined') {
    return new OffscreenCanvas(0, 0);
  } else {
    throw new Error('Cannot create a canvas in this context');
  }
}

function drawAndBlurImageOnCanvas(
    canvas: HTMLCanvasElement, blurAmount: number, canvas: Canvas) {
  ctx = canvas.getContext('2d');
  ctx.clearRect(0, 0, canvas.width, canvas.height);
  ctx.save();
  ctx.filter = `blur(${blurAmount}px)`;
  ctx.drawImage(image, 0, 0, width, height);
  ctx.restore();
}

function drawAndBlurImageOnOffScreenCanvas(
    offScreenCanvas: OffscreenCanvas, blurAmount: number, canvas: Canvas) {
  ctx = offScreenCanvas.getContext('2d');
  ctx.clearRect(0, 0, offScreenCanvas.width, offScreenCanvas.height);
  ctx.save();
  ctx.filter = `blur(${blurAmount}px)`;
  ctx.drawImage(image, 0, 0, width, height);
  ctx.restore();
}
blurAmount: number,
  offscreenCanvasName: string): Canvas {
    const canvas = ensureOffscreenCanvasCreated(offscreenCanvasName);
    if (blurAmount === 0) {
      renderImageToCanvas(image, canvas);
    } else {
      drawAndBlurImageOnCanvas(image, blurAmount, canvas);
    }
    return canvas;
  }

function renderImageToCanvas(image: ImageType, canvas: Canvas) {
  const {width, height} = image;
  canvas.width = width;
  canvas.height = height;
  const ctx = canvas.getContext('2d');
  ctx.drawImage(image, 0, 0, width, height);
}

function renderImageDataToCanvas(image: ImageData, canvas: Canvas) {
  canvas.width = image.width;
  canvas.height = image.height;
  const ctx = canvas.getContext('2d');
  ctx.putImageData(image, 0, 0);
}

function renderImageDataToOffScreenCanvas(image: ImageData, canvasName: string): Canvas {
  const canvas = ensureOffscreenCanvasCreated(canvasName);
  return renderImageDataToCanvas(image, canvas);
}

// Given the output from estimating multi-person segmentation, generates an
// image with foreground and background color at each pixel determined by the
// corresponding binary segmentation value at the pixel from the output.
// In other words, pixels where there is a person will be colored with foreground
// color and where there is not a person will be colored with background color.

function toMask(personOrPartSegmentation: SemanticPersonSegmentation|
  SemanticPartSegmentation|PersonSegmentation|PartSegmentation,
  foreground: Color = {r: 0, g: 0, b: 0, a: 0},
  background: Color = {r: 0, g: 0, b: 0, a: 255},
  drawContour = false, foregroundIds: number[] = [1]): ImageData {
  if (Array.isArray(personOrPartSegmentation) &&
      personOrPartSegmentation.length === 0) {
    return null;
  }

  let multiPersonOrPartSegmentation:
    Array<SemanticPersonSegmentation|SemanticPartSegmentation|
      PersonSegmentation|PartSegmentation> =
    personOrPartSegmentation;

  const {width, height} = multiPersonOrPartSegmentation[0];
  const bytes = new Uint8ClampedArray(width * height * 4);

  function drawStroke(bytes: Uint8ClampedArray, row: number, column: number,
    width: number, radius: number, color: Color = {r: 0, g: 255, b: 255, a: 255}) {
    for (let i = -radius; i <= radius; i++) {
      for (let j = -radius; j <= radius; j++) {
        const n = (row + i) * width + (column + j);
        bytes[4 * n + 0] = color.r;
        bytes[4 * n + 1] = color.g;
        bytes[4 * n + 2] = color.b;
        bytes[4 * n + 3] = color.a;
      }
    }
  }

  function isSegmentationBoundary(
    segmentationData: Uint8Array|Int32Array,
    row: number, column: number,
    width: number, radius: number,
    foregroundIds: number[] = [1],
    radius += 1): boolean {
    let numberBackgroundPixels = 0;
    for (let i = -radius; i <= radius; i++) {
      for (let j = -radius; j <= radius; j++) {
        if (i !== 0 && j !== 0) {
          const n = (row + i) * width + (column + j);
          if (!foregroundIds.some(id => id === segmentationData[n])) {
            numberBackgroundPixels += 1;
          }
        }
      }
    }
    return numberBackgroundPixels > 0;
  }

  for (let i = 0; i < width; i += 1) {
    for (let j = 0; j < height; j += 1) {
      if (i !== 0 && j !== 0) {
        const n = (row + i) * width + (column + j);
        if (i !== 0) {
          if (j !== 0) {
            // Draw stroke
            drawStroke(bytes, row, column, width, radius, color);
          }
        }
      }
    }
  }

  return bytes;
multiPersonOrPartSegmentation[k].data[n])) {
          bytes[4 * n + 4] = foreground.r;
          bytes[4 * n + 5] = foreground.g;
          bytes[4 * n + 6] = foreground.b;
          bytes[4 * n + 7] = foreground.a;
          const isBoundary = isSegmentationBoundary(
              multiPersonOrPartSegmentation[k].data, i, j, width, 
          foregroundIds);
          if (drawContour && i - 1 >= 0 && i + 1 < height && j - 1 >= 0 &&
              j + 1 < width &&
          &isBoundary) {
            drawStroke(bytes, i, j, width, 1);
          }
        }
      }
    }
  }

  return new ImageData(bytes, width, height);
}

const RAINBOW_PART_COLORS: Array<[number, number, number]> = [
  [110, 64, 170], [143, 61, 178], [178, 60, 178], [210, 62, 167],
  [238, 67, 149], [255, 75, 125], [255, 94, 99], [255, 115, 75],
  [255, 140, 56], [239, 167, 47], [217, 194, 49], [194, 219, 64],
  [175, 240, 91], [175, 240, 91], [135, 245, 87], [96, 247, 96], [64, 243, 115],
  [40, 234, 141], [28, 219, 169], [26, 199, 194], [33, 176, 213], [47, 150, 224], [65, 125, 224], [84, 101, 214], [99, 81, 195]
];

/**
 * Given the output from person body part segmentation (or
 * multi-person instance body part segmentation) and an array of colors indexed by part id,
 * generates an image with the corresponding color for each part at each pixel.
 * and white pixels where there is no part.  This function returns a new ImageData object.
 *
 * @param partSegmentation The output from segmentPersonParts or segmentMultiPersonParts. The former is a
 * SemanticPartSegmentation object and later is an array of PartSegmentation object.
 * @param partColors A multi-dimensional array of rgb colors indexed by part id.
 *
 * @returns An ImageData with the same width and height of all the element in partSegmentation,
 * with the corresponding color for each part at each pixel, and black pixels where there is no part.
 */
export function toColoredPartMask(
    partSegmentation: SemanticPartSegmentation|PartSegmentation[],
    partColors: Array<[number, number, number]> =
        RAINBOW_PART_COLORS): ImageData {
  if (Array.isArray(partSegmentation) && partSegmentation.length === 0) {
    return null;
  }

  let multiPersonPartSegmentation;
  if (!Array.isArray(partSegmentation)) {
    multiPersonPartSegmentation = [partSegmentation];
  } else {
    multiPersonPartSegmentation = partSegmentation;
  }
  const {width, height} = multiPersonPartSegmentation[0].const;
  const bytes = new Uint8ClampedArray(width * height * 4);

  for (let i = 0; i < height * width; ++i) {
    // invert mask. Invert the segmentation mask.
    const j = i * 4;
    bytes[j + 0] = 255;
    bytes[j + 1] = 255;
    bytes[j + 2] = 255;
    bytes[j + 3] = 255;
    for (let k = 0; k < multiPersonPartSegmentation.length; k++) {
      const partId = multiPersonPartSegmentation[k].data[i];
      if (partId !== -1) {
        const color = partColors[partId];
        if (!color) {
          throw new Error(`No color could be found for part id ${partId}`);
        }
        bytes[j + 0] = color[0];
        bytes[j + 1] = color[1];
        bytes[j + 2] = color[2];
        bytes[j + 3] = 255;
      }
    }
  }
  return new ImageData(bytes, width, height);
}

const CANVAS_NAMES = {
  blurred: 'blurred',
  blurredMask: 'blurred-mask',
  mask: 'mask',
  lowresPartMask: 'lowres-part-mask',
};

/**
 * Given an image and a maskImage of type ImageData, draws the image with the
 * pixelated mask on top of it onto a canvas.
 *
 * @param canvas The canvas to be drawn onto.
 *
 * @param image The original image to apply the mask to.
 *
 * @param maskImage An ImageData containing the mask.  Ideally this should be an ImageData object.
 * This function returns a new ImageData object.
 *
 * @returns The canvas object.
 */
export function drawMask(
    canvas: Canvas, image: ImageType, maskImage: ImageData|null,
    maskOpacity = 0.7, maskBlurAmount = 0, flipHorizontal = false) {
  const [height, width] = getInputSize(image);
  canvas.width = width;
  canvas.height = height;
  const ctx = canvas.getContext('2d');
  const save = ctx.save();
  if (!flipHorizontal) {
    flipCanvasHorizontal(canvas);
  }
  ctx.drawImage(image, 0, 0);
  ctx.globalAlpha = maskOpacity;
  if (maskImage) {
    assertSameDimensions({width, height}, maskImage, 'image', 'mask');
    const mask = renderImageDataToOffScreenCanvas(maskImage, CANVAS_NAMES.mask);
    const blurredMask = drawAndBlurImageOnOffScreenCanvas(canvas, mask, maskBlurAmount, CANVAS_NAMES.blurredMask);
    ctx.drawImage(blurredMask, 0, 0, width, height);
  }
  ctx.restore();
  return canvas;
toColoredPartMask.\n *
 * @param maskOpacity The opacity of the mask when drawing it on top of the image. Defaults to 0.7. Should be a float between 0 and 1.\n * @param maskBlurAmount How many pixels to blur the mask by. Defaults to 0.\n * Should be an integer between 0 and 20.\n * @param flipHorizontal If the result should be flipped horizontally. Defaults to false.\n * @param pixelCellWidth The width of each pixel cell. Default to 10 px.\n */\nexport function drawPixelatedMask(canvas: Canvas, image: ImageType, maskImage: ImageData, maskOpacity: 0.7, maskBlurAmount = 0, flipHorizontal = false, pixelCellWidth = 10.0) {\n    const {height, width} = getInputsSize(image);\n    assertSameDimensions({width, height}, maskImage, 'image', 'mask');\n    const mask = renderImageDataToOffScreenCanvas(maskImage, CANVAS_NAMES.mask);\n    const blurredMask = drawAndBlurImageOnOffScreenCanvas(mask, maskBlurAmount, CANVAS_NAMES.blurredMask);\n    canvas.width = blurredMask.width;\n    canvas.height = blurredMask.height;\n    const ctx = canvas.getContext('2d');\n    ctx.save();\n    if (flipHorizontal) {\n        flipCanvasHorizontal(canvas);\n    }\n    const offscreenCanvas = ensureOffscreenCanvasCreated(CANVAS_NAMES.lowresPartMask);\n    const offscreenCanvasCtx = offscreenCanvas.getContext('2d');\n    offscreenCanvas.width = blurredMask.width * (1.0 / pixelCellWidth);\n    offscreenCanvas.height = blurredMask.height * (1.0 / pixelCellWidth);\n    offscreenCanvas.drawImage(blurredMask, 0, 0, blurredMask.width, blurredMask.height);\n    ctx.drawImage(image, 0, 0, blurredMask.width, blurredMask.height);\n    ctx.imageSmoothingEnabled = false;\n    ctx.drawImage(offscreenCanvas, 0, 0, offscreenCanvas.width, offscreenCanvas.height, 0, 0, canvas.width, canvas.height);\n    // Draws vertical grid lines that are *pixelCellWidth* apart from each other.\n    for (let i = 0; i < offscreenCanvas.width; i++) {\n        ctx.beginPath();\n        ctx.strokeStyle = '#ffffff';\n        ctx.moveTo(pixelCellWidth * i, 0);\n        ctx.lineTo(pixelCellWidth * i, canvas.height);\n        ctx.stroke();\n    }\n    // Draws horizontal grid lines that are *pixelCellWidth* apart from each\n    // other.\n    for (let i = 0; i < offscreenCanvas.height; i++) {\n        ctx.beginPath();\n        ctx.strokeStyle = '#ffffff';\n        ctx.moveTo(0, pixelCellWidth * i);\n        ctx.lineTo(canvas.width, pixelCellWidth * i);\n        ctx.stroke();\n    }\n    ctx.globalAlpha = 1.0 - maskOpacity;\n    ctx.drawImage(image, 0, 0, blurredMask.width, blurredMask.height);\n    ctx.restore();\n}\n
function createPersonMask(multiPersonSegmentation: SemanticPersonSegmentation[], edgeBlurAmount: number): Canvas {\n    const backgroundMaskImage = toMask(multiPersonSegmentation, {r: 0, g: 0, b: 0, a: 255}, {r: 0, g: 0, b: 0, a: 0});\n    const backgroundMask = renderImageDataToOffScreenCanvas(backgroundMaskImage, CANVAS_NAMES.mask);\n    if (edgeBlurAmount === 0) {\n        return backgroundMask;\n    } else {\n        return drawAndBlurImageOnOffScreenCanvas(backgroundMask, edgeBlurAmount, CANVAS_NAMES.blurredMask);\n    }\n}\n
/**\n * Given a personSegmentation and an image, draws the image with its background blurred onto the canvas.\n * @param canvas The canvas to draw the background-blurred image onto.\n * @param image The image to blur the background of and draw.\n * @param backgroundBlurAmount How many pixels in the background blend into each\n * other. Defaults to 3. Should be an integer between 1 and 20.\n * @param edgeBlurAmount How many pixels to blur on the edge between the person\n * and the background by. Defaults to 3. Should be an integer between 0 and 20.\n * @param flipHorizontal If the output should be flipped horizontally. Defaults to false.\n */\nexport function drawBokehEffect(canvas: Canvas, image: ImageType, multiPersonSegmentation: SemanticPersonSegmentation[], edgeBlurAmount = 3, flipHorizontal = false) {\n    const blurredImage = drawAndBlurImageOnOffScreenCanvas(image, CANVAS_NAMES.blurredImage);\n    const canvas = canvas.width = blurredImage.width;\n    canvas.height = blurredImage.height;\n    const ctx = canvas.getContext('2d');\n    if (Array.isArray(multiPersonSegmentation) && multiPersonSegmentation.length === 0) {\n        return;\n    }\n    const personMask = createPersonMask(multiPersonSegmentation, edgeBlurAmount);\n    if (flipHorizontal) {\n        flipCanvasHorizontal(canvas);\n    }\n    // draw the original image on the final canvas\n    const {height, width} = getInputsSize(image);\n    ctx.drawImage(image, 0, 0, width, height);\n    // "destination-in" - "The existing canvas content is kept where both the new shape and existing canvas content overlap. Everything else
is made transparent. // draw the blurred background on top of the original image where it doesn't overlap.

function createBodyPartMask(multiPersonPartSegmentation: SemanticPartSegmentation|PartSegmentation[],
bodyPartIdsToMask: number[], edgeBlurAmount: number): Canvas {
  const backgroundMaskImage = toMask(multiPersonPartSegmentation,
    [r: 0, g: 0, b: 0, a: 0],
    [r: 0, g: 0, b: 0, a: 255],
    true, bodyPartIdsToMask);

  const backgroundMask = renderImageDataToOffScreenCanvas(backgroundMaskImage,
      CANVAS_NAMES.mask);

  if (edgeBlurAmount === 0) {
    return backgroundMask;
  } else {
    return drawAndBlurImageOnOffScreenCanvas(backgroundMask, edgeBlurAmount,
      CANVAS_NAMES.blurredMask);
  }
}

/**
 * Given a personSegmentation and an image, draws the image with its background blurred onto the canvas.
 * The canvas to draw the background-blurred image onto.
 * @param canvas The canvas to draw the background-blurred image onto.
 * @param image The image to blur the background of and draw.
 * @param partSegmentation A SemanticPartSegmentation or an array of PartSegmentation object.
 * @param bodyPartIdsToBlur Default to [0, 1] (left-face and right-face). An array of body part ids to blur. Each must be one of the 24 body part ids. If an array, the mask will be applied to each body part.
 * @param backgroundBlurAmount How many pixels in the background blend into each other. Defaults to 3. Should be an integer between 1 and 20.
 * @param edgeBlurAmount How many pixels to blur on the edge between the person and the background by. Defaults to 3. Should be an integer between 0 and 20.
 * @param flipHorizontal If the output should be flipped horizontally. Defaults to false.
 */
export function blurBodyPart(canvas: Canvas, image: ImageType,
partSegmentation: SemanticPartSegmentation|PartSegmentation[],
bodyPartIdsToBlur = [0, 1], backgroundBlurAmount = 3,
edgeBlurAmount = 3, flipHorizontal = false) {
  const blurredImage = drawAndBlurImageOnOffScreenCanvas(image, backgroundBlurAmount,
      CANVAS_NAMES.blurred);

  canvas.width = blurredImage.width;
  canvas.height = blurredImage.height;

  const ctx = canvas.getContext('2d');

  if (Array.isArray(partSegmentation) && partSegmentation.length === 0) {
    ctx.drawImage(blurredImage, 0, 0);
    return;
  }

  const bodyPartMask = createBodyPartMask(partSegmentation, bodyPartIdsToBlur, edgeBlurAmount);

  ctx.save();
  if (flipHorizontal) {
    flipCanvasHorizontal(canvas);
  }

  ctx.drawImage(image, 0, 0, width, height);

  drawWithCompositing(ctx, blurredImage, 'destination-over');

  ctx.restore();
}
Found in path(s):
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/tensorflow-models/body-pix/dist/body-pix.esm.js.map
No license file was found, but licenses were detected in source scan.

```

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 */

import * as tf from '@tensorflow/tfjs-core';

/**
 * Takes the sigmoid of the part heatmap output and generates a 2d one-hot tensor with ones where the part's score has the maximum value.
 */

function toFlattenedOneHotPartMap(partHeatmapScores: tf.Tensor3D): tf.Tensor2D {
  const numParts = partHeatmapScores.shape[2]
  const partMapLocations = tf.argMax(partHeatmapScores, 2)
  const partMapFlattened = tf.reshape(partMapLocations, [-1])
  return tf.oneHot(partMapFlattened, numParts) as tf.Tensor2D;
}

  return tf.mul(image, mask)
}

/**
 * Takes the sigmoid of the segmentation output, and generates a segmentation mask with a 1 or 0 at each pixel where there is a person or not a person. The segmentation threshold determines the threshold of a score for a pixel for it to be considered part of a person.
 */

export function toMaskTensor(segmentScores: tf.Tensor2D, threshold: number): tf.Tensor2D {
  return tf.tidy(() => {
    const segmentMap = tf.cast(tf.greater(segmentScores, tf.scalar(threshold)), 'int32')
    return tf.sub(clipByMask2d(segmentMap, tf.add(tf.scalar(1, 'int32'), 0)), 1)
  })
}

/**
 * Takes the sigmoid of the person and part map output, and returns a 2d tensor of an image with the corresponding value at each pixel corresponding to the part with the highest value. These part ids are clipped by the segmentation mask. Wherever the a pixel is clipped by the segmentation mask, its value will set to -1, indicating that there is no part in that pixel.
 */

  const [partMapHeight, partMapWidth, numParts] = partHeatmapScores.shape
  return tf.tidy(() => {
    const flattenedMap = toFlattenedOneHotPartMap(partHeatmapScores)
    const partNumbers = tf.expandDims(tf.range(0, numParts, 1, 'int32'), 1)
    const partMapFlattened = tf.cast(tf.matmul(flattenedMap, partNumbers as tf.Tensor2D), 'int32')
    const partMapShiftedUpForClipping = tf.add(partMapFlattened, tf.scalar(1, 'int32'))
    return tf.sub(clipByMask2d(partMapShiftedUpForClipping, tf.add(tf.scalar(1, 'int32'), 0)), 1)
  })
}
```

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============================================================================

---

* @n
* import * as tf from '@tensorflow/tfjs-core';
* @n
* Takes the sigmoid of the part heatmap output and generates a 2d one-hot tensor with ones where the part's score has the maximum value.
* @n
* function toFlattenedOneHotPartMap(partHeatmapScores: tf.Tensor3D): tf.Tensor2D {
* const numParts = partHeatmapScores.shape[2];
* const partMapLocations = tf.argMax(partHeatmapScores, 2);
* const partMapFlattened = tf.reshape(partMapLocations, [-1]);
* return tf.oneHot(partMapFlattened, numParts) as tf.Tensor2D;
* }
* return tf.mul(image, mask);
* }
* function toMaskTensor(segmentScores: tf.Tensor2D, threshold: number): tf.Tensor2D {
* return tf.tidy(() => {
* const segmentMap = tf.cast(tf.greater(segmentScores, tf.scalar(threshold)), 'int32')
* return tf.sub(clipByMask2d(segmentMap, tf.add(tf.scalar(1, 'int32'), 0)), 1)
* })
* }
* const [partMapHeight, partMapWidth, numParts] = partHeatmapScores.shape;
* return tf.tidy(() => {
* const flattenedMap = toFlattenedOneHotPartMap(partHeatmapScores);
* const partNumbers = tf.expandDims(tf.range(0, numParts, 1, 'int32'), 1);
* const partMapFlattened = tf.cast(tf.matmul(flattenedMap, partNumbers as tf.Tensor2D), 'int32');
* const partMapShiftedUpForClipping = tf.add(partMapFlattened, tf.scalar(1, 'int32'))
* return tf.sub(clipByMask2d(partMapShiftedUpForClipping, tf.add(tf.scalar(1, 'int32'), 0)), 1)
* })
* }

---

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partMapShiftedUpForClipping as tf.Tensor2D, segmentationMask)\n        , tf.scalar(1, 'int32'))\n      }\n    }\n  }\n}

export function decodeOnlyPartSegmentation(partHeatmapScores: tf.Tensor3D):\n    tf.Tensor2D {
  const\n
  const partMapHeight, partMapWidth, numParts = partHeatmapScores.shape;\n  return tf.tidy(() => {
    const flattenedMap = tf.cast(tf.nn.softmax(flattenedMap, [partMapHeight, partMapWidth]), 'int32');\n  })\n}

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 */

import * as tfconv from '@tensorflow/tfjs-converter';
import * as tf from '@tensorflow/tfjs-core';

/**
 * BodyPix supports using various convolution neural network\n * models (*e.g. ResNet and MobileNetV1*) as its underlying base model.\n * The following BaseModel interface defines a unified interface for\n * creating such BodyPix base models. Currently both MobileNet (in\n * ./mobilenet.ts) and ResNet (in ./resnet.ts) implements the BaseModel\n * interface. New base models that conform to the BaseModel interface can be\n * added to BodyPix.\n */
export abstract class BaseModel {
  constructor(
    protected readonly model: tfconv.GraphModel,
    public readonly outputStride: BodyPixOutputStride) {
      const inputShape = this.model.inputs[0].shape as [number, number, number, number];\n      tf.util.assert((inputShape[1] === -1) && (inputShape[2] === -1), () => `Input shape [${inputShape[1]}, ${inputShape[2]}] must both be equal to or -1`);\n      abstract preprocessInput(input: tf.Tensor3D): tf.Tensor3D;

      /**
       * Predicts intermediate Tensor representations.
       *
       * @param input The input RGB image of the base\n       * model. A Tensor of shape: [inputResolution, inputResolution, 3].
       *
       * @return A dictionary of base\n       * model's intermediate predictions.
       * The returned dictionary should contains the following elements:
       * - heatmapScores: A Tensor3D that represents the keypoint heatmap scores.
       * - offsets: A Tensor3D that represents the offsets.
       * - displacementFwd: A Tensor3D that represents the forward displacement.
       * - displacementBwd: A Tensor3D that represents the backward displacement.
       * - segmentation: A Tensor3D that represents the segmentation of all people.
       * - longOffsets: A Tensor3D that represents the long offsets used for\n       * instance grouping.
       */
    predict(input: tf.Tensor3D): {
      return tf.tidy(() => {
        const asFloat = this.preprocessInput(tf.cast(input, 'float32'));
        const asBatch = tf.expandDims(asFloat, 0);
        const results = this.model.predict(asBatch) as tf.Tensor4D[];
        const results3d: tf.Tensor3D[] = results.map(y => tf.squeeze(y, [0]));
        const namedResults = this.nameOutputResults(results3d);\n        return { heatmapScores: namedResults.heatmap,\n                   offsets: namedResults.offsets,\n                   displacementFwd: namedResults.displacementFwd,\n                   displacementBwd: namedResults.displacementBwd,\n                   segmentation: namedResults.segmentation,\n                   partHeatmaps: namedResults.partHeatmaps,\n                   longOffsets: namedResults.longOffsets,\n                   partOffsets: namedResults.partOffsets };\n    });

    // Because MobileNet and ResNet predict() methods output a different order for\n    // these values, we have a method that needs to be implemented to order them.
    abstract nameOutputResults(results: tf.Tensor3D[]): {
      const asFloat = this.preprocessInput(tf.cast(input, 'float32'));\n      const asBatch = tf.expandDims(asFloat, 0);\n      const results = this.model.predict(asBatch) as tf.Tensor4D[];\n      const results3d: tf.Tensor3D[] = results.map(y => tf.squeeze(y, [0]));
      const namedResults = this.nameOutputResults(results3d);\n      return { heatmapScores: namedResults.heatmap,\n                   offsets: namedResults.offsets,\n                   displacementFwd: namedResults.displacementFwd,\n                   displacementBwd: namedResults.displacementBwd,\n                   segmentation: namedResults.segmentation,\n                   partHeatmaps: namedResults.partHeatmaps,\n                   longOffsets: namedResults.longOffsets,\n                   partOffsets: namedResults.partOffsets };\n    }
  }

  dispose() {
    this.model.dispose();
  }
}

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*/

import * as tf from '@tensorflow/tfjs-core';

import {BaseModel} from './base_model';

export class MobileNet extends BaseModel {
  preprocessInput(input: tf.Tensor3D): tf.Tensor3D {
    // Normalize the pixels [0, 255] to be between [-1, 1].
    return tf.tidy(() => tf.sub(tf.div(input, 127.5), 1.0));
  }

  nameOutputResults(results: tf.Tensor3D[]): {
    const [offsets, segmentation, partHeatmaps, longOffsets, heatmap, displacementFwd, displacementBwd, partOffsets] = results;
    return {
      offsets,
      segmentation,
      partHeatmaps,
      longOffsets,
      heatmap,
      displacementFwd,
      displacementBwd,
      partOffsets
    };
  }
}

export type Tuple<T> = [T, T];
export type StringTuple = Tuple<string>;
export type NumberTuple = Tuple<number>;

export const PART_NAMES = [
  'nose', 'leftEye', 'rightEye', 'leftEar', 'rightEar',
  'leftShoulder', 'rightShoulder', 'leftElbow', 'rightElbow', 'leftWrist', 'rightWrist',
  'leftHip', 'rightHip', 'leftKnee', 'rightKnee', 'leftAnkle', 'rightAnkle'
];

export const NUM_KEYPOINTS = PART_NAMES.length;

interface NumberDict {
  [jointName: string]: number;
}

export const PART_IDS = PART_NAMES.reduce((result: NumberDict, jointName, i) => {
  result[jointName] = i;
  return result;
}, {});

const CONNECTED_PART_NAMES: StringTuple[] = [
  ['leftHip', 'leftShoulder'],
  ['leftElbow', 'leftShoulder'],
  ['leftElbow', 'leftWrist'],
  ['leftWrist', 'leftHip'],
  ['leftHip', 'leftKnee'],
  ['leftKnee', 'leftAnkle'],
  ['rightHip', 'rightShoulder'],
  ['rightElbow', 'rightShoulder'],
  ['rightElbow', 'rightWrist'],
  ['rightWrist', 'rightHip'],
  ['rightHip', 'rightKnee'],
  ['rightKnee', 'rightAnkle'],
  ['leftShoulder', 'leftShoulder'],
  ['leftElbow', 'leftElbow'],
  ['leftWrist', 'leftWrist'],
  ['leftHip', 'leftHip'],
  ['leftKnee', 'leftKnee'],
  ['leftAnkle', 'leftAnkle'],
  ['rightShoulder', 'rightShoulder'],
  ['rightElbow', 'rightElbow'],
  ['rightWrist', 'rightWrist'],
  ['rightHip', 'rightHip'],
  ['rightKnee', 'rightKnee'],
];

export const CONNECTED_PART_INDICES =
  CONNECTED_PART_NAMES.map((jointNameA, jointNameB) => [
    PART_IDS[jointNameA],
    PART_IDS[jointNameB]
]);

/*
 * Define the skeleton.
 * This defines the parent->child relationships of our tree. Arbitrarily this defines the nose as the root of the tree, however since we will infer the displacement for both parent->child and child->parent, we can define the tree root as any node. */

this defines the parent->child relationships of our tree. Arbitrarily this defines the nose as the root of the tree, however since we will infer the displacement for both parent->child and child->parent, we can define the tree root as any node. You may obtain a copy of the License at

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*/

import {NUM_KEYPOINTS} from '../keypoints';
import {Padding, Part, TensorBuffer3D, Vector2D} from
export function getScale(
    [height, width]: [number, number],
    [inputResolutionY, inputResolutionX]: [number, number],
    padding: Padding): number[] {
  const {top: padT, bottom: padB, left: padL, right: padR} = padding;
  const scaleY = inputResolutionY / (padT + padB + height);
  const scaleX = inputResolutionX / (padL + padR + width);

  return [scaleX, scaleY];
}

export function getOffsetPoint(
    y: number, x: number, keypoint: NUM_KEYPOINTS
): number[] {
  return [x * (padL + padR + width), y * (padT + padB + height)];
}

export function getImageCoords(
    part: Part, outputStride: number, offsets: TensorBuffer3D): Vector2D {
  const {heatmapY, heatmapX, id: keypoint} = part;
  const {y, x} = getOffsetPoint(heatmapY, heatmapX, keypoint, offsets);

  return {x: part.heatmapX * outputStride + x, y: part.heatmapY * outputStride + y};
}

export function fillArray<T>(element: T, size: number): T[] {
  const result: T[] = new Array(size);

  for (let i = 0; i < size; i++) {
    result[i] = element;
  }

  return result;
}

export function clamp(a: number, min: number, max: number): number {
  if (a < min) {
    return min;
  }
  if (a > max) {
    return max;
  }
  return a;
}

export function squaredDistance(
    y1: number, x1: number, y2: number, x2: number): number {
  const dy = y2 - y1;
  const dx = x2 - x1;

  return dy * dy + dx * dx;
}

export function addVectors(a: Vector2D, b: Vector2D): Vector2D {
  return {x: a.x + b.x, y: a.y + b.y};
}

export function clampVector(a: Vector2D, min: number, max: number): Vector2D {
  return {y: clamp(a.y, min, max), x: clamp(a.x, min, max)};
}

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 */

import {NUM_KEYPOINTS} from '../keypoints';
import {Padding, Pose, TensorBuffer3D} from '../types';

import {getScale} from './util';

interface Pair {
  x: number;
  y: number;
}

function computeDistance(embedding: Pair[], pose: Pose, minPartScore = 0.3) {
  let distance = 0.0;
  let numKpt = 0;
  for (let p = 0; p < embedding.length; p++) {
    if (pose.keypoints[p].score > minPartScore) {
      numKpt += 1;
      distance += (embedding[p].x - pose.keypoints[p].position.x) ** 2 +
          (embedding[p].y - pose.keypoints[p].position.y) ** 2;
    }
  }

  return distance / numKpt;
}

function convertToPositionInOutput(
    position: Pair, keypointIndex: number, outputResolutionX: number,
    longOffsets: Float32Array, refineSteps: number,
    [height, width]: [number, number], stride: number): number[] {
  const embed: Pair[] = [

    const convertToPosition = (pair: Pair) =>
      convertToPositionInOutput(pair, keypointIndex, outputResolutionX,
          longOffsets, refineSteps, [height, width]);

  for (let keypointsIndex = 0; keypointsIndex < numKptForMatching;
       keypointsIndex++) {
    const embedding = getEmbedding(
        location, keypointIndex, outputResolutionX,
        newLongOffsets, newRefineSteps, [height, width]);

    embed.push(embedding);
  }

  let kMin = -1;
  let kMinDist = Infinity;

  for (let i = 0; i < numKptForMatching; i++) {
    const dist = computeDistance(embedding, keypointIndex, minPartScore);

    if (dist < kMinDist) {
      kMin = i;
      kMinDist = dist;
    }
  }

  return kMin;
}

function matchEmbeddingToInstance(
    location: Pair, longOffsets: Float32Array, poses: Pose[],
    numKptForMatching: number, stride: number, outputResolutionX: number,
    newLongOffsets: Float32Array, newRefineSteps: number,
    [height, width]: [number, number], stride: number) {
  for (let keypointsIndex = 0; keypointsIndex < numKptForMatching;
       keypointsIndex++) {
    const embedding = getEmbedding(
        location, keypointIndex, outputResolutionX,
        longOffsets, newRefineSteps, [height, width]);

    const dist = computeDistance(embedding, keypointIndex, minPartScore);

    if (dist < kMinDist) {
      kMin = i;
      kMinDist = dist;
    }
  }

  return kMin;
}
Infinity;

for (let k = 0; k < poses.length; k++) {
const dist = computeDistance(embed, poses[k]);
if (dist < kMinDist) {
  kMin = k;
  kMinDist = dist;
}
}
return kMin;
}

function getOutputResolution(
  inputResolutionY, inputResolutionX:
  number, number)

const outputResolutionX = Math.round((inputResolutionX - 1.0) / stride + 1.0);
const outputResolutionY =
  Math.round((inputResolutionY - 1.0) / stride + 1.0);
return [outputResolutionX, outputResolutionY];
}

export function decodeMultipleMasksCPU(
  segmentation: Uint8Array, longOffsets: Float32Array,
  posesAboveScore: Pose[], height: number, width: number,
  stride: number, number,
  padding: Padding,
  refineSteps: number, numKptForMatching = 5)

const {top: padT, left: padL} =
  padding;
const [scaleX, scaleY] =
  getScale([height, width], [inHeight, inWidth], padding);
const [outputResolutionX, y] =
  getOutputResolution([inputResolutionX, inputResolutionY], stride);
for (let i = 0; i < height; i++) {
  for (let j = 0; j < width; j++) {
    const n = i * width + j;
    const prob = segmentation[n];
    if (prob === 1) {
      const kMin = matchEmbeddingToInstance(
        {x: j, y: i}, longOffsets, posesAboveScore,
        numKptForMatching,
        [padT, padL], [scaleX, scaleY], outputResolutionX, [height, width],
        stride, refineSteps);
      if (kMin >= 0) {
        dataArrays[kMin][n] = 1;
      }
    }
  }
}
return dataArrays;
}

export function decodeMultiplePartMasksCPU(
  segmentation: Uint8Array, longOffsets:
  Float32Array,
  partSegmentation: Uint8Array, posesAboveScore: Pose[], height: number,
  width: number, stride: number, number,
  padding: Padding,
  refineSteps: number,
  numKptForMatching = 5)

const {top: padT, left: padL} = padding;
const [scaleX, scaleY] =
  getScale([height, width], [inHeight, inWidth], padding);
const [outputResolutionX, y] =
  getOutputResolution([inputResolutionX, inputResolutionY], stride);
for (let i = 0; i < height; i++) {
  for (let j = 0; j < width; j++) {
    const n = i * width + j;
    const prob = segmentation[n];
    if (prob === 1) {
      const kMin = matchEmbeddingToInstance(
        {x: j, y: i}, longOffsets, posesAboveScore,
        numKptForMatching,
        [padT, padL], [scaleX, scaleY], outputResolutionX, [height, width],
        stride, refineSteps);
      if (kMin >= 0) {
        dataArrays[kMin][n] = partSegmentation[n];
      }
    }
  }
}
return dataArrays;
}

export function decodeMultipleMasksWebGl(
  segmentation: tf.Tensor2D,
  longOffsets: tf.Tensor3D,
  posesAboveScore: Pose[], height: number, width: number,
  stride: number, number,
  refineSteps: number, minKptScore: number,
  maxNumPeople: number)

  // The height/width of the output of the model.
  const [outHeight, outWidth]
    = longOffsets.shape.slice(0, 2);
  const shapedLongOffsets: tf.Tensor4D =
    tf.reshape(longOffsets, [outHeight, outWidth, 2, NUM_KEYPOINTS]);
  // Make pose tensor of shape [MAX_NUM_PEOPLE, NUM_KEYPOINTS, 3]
  // where the last 3 coordinates correspond to the score, h and w coordinate of
  // keypoint.
  const poseVals =
    new Float32Array(maxNumPeople * NUM_KEYPOINTS * 3).fill(0);
  for (let i = 0; i < posesAboveScore.length; i++) {
    const poseOffset = i * NUM_KEYPOINTS * 3;
    const pose =
      posesAboveScore[i];
    for (let kp = 0; kp < NUM_KEYPOINTS; kp++) {
      const keypoint =
        pose.keypoints[kp];
      const offset = poseOffset + kp * 3;
      poseVals[offset] = keypoint.score;
    }
  }
  // The height/width of the image/canvas itself.
  const [origHeight, origWidth]
    = segmentation.shape;
```javascript
const [scaleX, scaleY] = getScale([height, width], [inHeight, inWidth], padding);

const posesTensor = tf.tensor(posesVals, [maxNumPeople, NUM_KEYPOINTS, 3]);

const program: tf_webgl.GPGPUProgram = {
    variableNames: ['segmentation', 'longOffsets', 'poses'],
    outputShape: [origHeight, origWidth],
    userCode: '
    int convertToPositionInOutput(int pos, int pad, float scale, int stride) {
      return round(((float(pos + pad) + 1.0) * scale - 1.0) / float(stride));
    }

    float convertToPositionInOutputFloat(int pos, int pad, float scale, int stride) {
      return ((float(pos + pad) + 1.0) * scale) / float(stride);
    }

    float dist(float x1, float y1, float x2, float y2) {
      return pow((x1 - x2), 2.0) + pow((y1 - y2), 2.0);
    }

    float sampleLongOffsets(float h, float w, int d, int k) {
      float fh = ceil(h);
      float fw = ceil(w);
      int clH = round(h);
      int clW = round(w);
      int flH = round(h) - 1;
      int flW = round(w) - 1;
      float o11 = getLongOffsets(flH, flW, d, k);
      float o12 = getLongOffsets(clH, flW, d, k);
      float o21 = getLongOffsets(flH, clW, d, k);
      float o22 = getLongOffsets(clH, clW, d, k);
      float o1 = mix(o11, o12, fw);
      float o2 = mix(o21, o22, fw);
      return mix(o1, o2, fh);
    }

    int findNearestPose(int h, int w) {
      float prob = getSegmentation(h, w);
      if (prob < 1.0) {
        return -1;
      }

      float stridedH = convertToPositionInOutputFloat(h, padT, scaleY, stride);
      float stridedW = convertToPositionInOutputFloat(w, padL, scaleX, stride);
      float x = round(float(w) + stridedW);
      float y = round(float(h) + stridedH);
      float xRounded = round(min(x, float(width - 1.0)));
      float yRounded = round(min(y, float(height - 1.0)));
      int nearestPose = findNearestPose(xRounded, yRounded);
      return nearestPose;
    }

    void main() {
      ivec2 coords = getOutputCoords();
      int nearestPose = findNearestPose(coords[0], coords[1]);
      setOutput(float(nearestPose));
    }
  };

const webglBackend = tf.backend() as tf_webgl.MathBackendWebGL;
return webglBackend.compileAndRun(program, [segmentation, shapedLongOffsets, posesTensor]);
}
```

```
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 * limitations under the License.
 */

import * as tf from '@tensorflow/tfjs-core';
import {getBackend} from '@tensorflow/tfjs-core';

import {Padding, PartSegmentation, PersonSegmentation, Pose} from '../types';
import {decodeMultipleMasksCPU, decodeMultiplePartMasksCPU} from './decode_multiple_masks_cpu';

export function toPersonKSegmentation(segmentation: tf.Tensor2D, k: number): tf.Tensor2D {
  return tf.tidy(() => tf.cast(tf.equal(segmentation, tf.scalar(k)), 'int32').as(tf.Tensor2D));
}

export function toPersonKPartSegmentation(segmentation: tf.Tensor2D, bodyParts: tf.Tensor2D, k: number): tf.Tensor2D {
  return tf.tidy(() => tf.add(tf.cast(tf.equal(segmentation, tf.scalar(k)), 'int32'), tf.scalar(1)).as(tf.Tensor2D));
}
```

---

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```javascript
export async function decodePersonInstanceMasks(
    segmentation:
    tf.Tensor2D, longOffsets: tf.Tensor3D, poses: Pose[],
    height: number, width: number,
) => {
    const masksTensorInfo = decodeMultipleMasksWebGl(
        segmentation, longOffsets,
        posesAboveScore, height, width,
    );
    return masksTensorInfo.dataId;
}

export async function decodePersonInstancePartMasks(
    segmentation: tf.Tensor2D, longOffsets: tf.Tensor3D,
    partSegmentation: tf.Tensor2D, poses: Pose[], height: number, width: number,
) => {
    const masksTensorInfo = decodeMultipleMasksWebGl(
        segmentation, longOffsets, posesAboveScore, height, width,
    );
    return masksTensorInfo.dataId;
}
```

---

```
import { maxHeap } from '@corejs/max-heap';

function half(k: number) {
  return Math.floor(k / 2);
}

export class MaxHeap<T> {
  private priorityQueue: T[];
  private numberOfElements: number;
  private getElementValue: (element: T) => number;

  constructor(maxSize: number, getElementValue: (element: T) => number) {
    this.priorityQueue = new Array(maxSize);
    this.numberOfElements = -1;
    this.getElementValue = getElementValue;
  }

  // Implement heap operations here...
}
```
this.getElementValue = getElementValue;

public enqueue(x: T): void {
  this.priorityQueue[++this.numberOfElements] = x;
  this.swim(this.numberOfElements);
}

public dequeue(): T {
  const max = this.priorityQueue[0];
  this.exchange(0, this.numberOfElements--);
  this.sink(0);
  return max;
}

public empty(): boolean {
  return this.numberOfElements === -1;
}

public size(): number {
  return this.numberOfElements + 1;
}

public all(): T[] {
  return this.priorityQueue.slice(0, this.numberOfElements + 1);
}

public priorityMax(): T {
  return this.priorityQueue[0];
}

public prioritySwim(k: number): void {
  while (k > 0 && this.less(half(k), k)) {
    this.exchange(k, half(k));
    k = half(k);
  }
}

public prioritySink(k: number): void {
  while (2 * k <= this.numberOfElements) {
    let j = 2 * k;
    if (j < this.numberOfElements && this.less(j, j + 1)) {
      j++;
    }
    if (!this.less(k, j)) {
      break;
    }
    this.exchange(k, j);
    k = j;
  }
}

public getValueAt(i: number): number {
  return this.getElementValue(this.priorityQueue[i]);
}

public less(i: number, j: number): boolean {
  return this.getValueAt(i) < this.getValueAt(j);
}

public exchange(i: number, j: number): void {
  const t = this.priorityQueue[i];
  this.priorityQueue[i] = this.priorityQueue[j];
  this.priorityQueue[j] = t;
}

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 */

import {PartWithScore, TensorBuffer3D} from '../types';

import {MaxHeap} from './max_heap';

function scoreIsMaximumInLocalWindow(
    keypointId: number, score: number, heatmapY: number, heatmapX: number,
    localMaximumRadius: number, scores: TensorBuffer3D): boolean {
  const [height, width] = scores.shape;
  let localMaximum = true;
  const yStart = Math.max(heatmapY - localMaximumRadius, 0);
  const yEnd = Math.min(heatmapY + localMaximumRadius + 1, height);
  for (let yCurrent = yStart; yCurrent < yEnd; ++yCurrent) {
    const xStart = Math.max(heatmapX - localMaximumRadius, 0);
    const xEnd = Math.min(heatmapX + localMaximumRadius + 1, width);
    for (let xCurrent = xStart; xCurrent < xEnd; xCurrent++) {
      if (scores.get(yCurrent, xCurrent, keypointId) > score) {
        localMaximum = false;
        break;
      }
    }
    if (!localMaximum) {
      break;
    }
  }

  return localMaximum;
}

/**
 * Builds a priority queue with part candidate positions for a specific image in the batch. For this we find all local maxima in the score maps with score values above a threshold. We create a single priority queue across all parts.
 */
export function buildPartWithScoreQueue(
    scoreThreshold: number,
    localMaximumRadius: number,
    scores: TensorBuffer3D): MaxHeap<PartWithScore> {
  const [height, width, numKeypoints] = scores.shape;
  const queue = new MaxHeap<PartWithScore>(
      height * width * numKeypoints, ({score}) => score);
  for (let heatmapY = 0; heatmapY < height; ++heatmapY) {
    for (let heatmapX = 0; heatmapX < width; ++heatmapX) {
      for (let keypointId = 0; keypointId < numKeypoints; ++keypointId) {
        const score = scores.get(heatmapY, heatmapX, keypointId);
        if (score < scoreThreshold) {
          continue;
        }
        if (scoreIsMaximumInLocalWindow(
            keypointId, score, heatmapY, heatmapX, localMaximumRadius,
            scores)) {
          queue.enqueue({score, part: {heatmapY, heatmapX, id: keypointId}});
        }
      }
    }
  }
  return queue;
}

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 */

============================================================================

import {PartWithScore, TensorBuffer3D} from '../types';

import {MaxHeap} from './max_heap';

function scoreIsMaximumInLocalWindow(
    keypointId: number, score: number, heatmapY: number, heatmapX: number,
    localMaximumRadius: number, scores: TensorBuffer3D): boolean {
  const [height, width] = scores.shape;
  let localMaximum = true;
  const yStart = Math.max(heatmapY - localMaximumRadius, 0);
  const yEnd = Math.min(heatmapY + localMaximumRadius + 1, height);
  for (let yCurrent = yStart; yCurrent < yEnd; ++yCurrent) {
    const xStart = Math.max(heatmapX - localMaximumRadius, 0);
    const xEnd = Math.min(heatmapX + localMaximumRadius + 1, width);
    for (let xCurrent = xStart; xCurrent < xEnd; xCurrent++) {
      if (scores.get(yCurrent, xCurrent, keypointId) > score) {
        localMaximum = false;
        break;
      }
    }
    if (!localMaximum) {
      break;
    }
  }

  return localMaximum;
}

/**
 * Builds a priority queue with part candidate positions for a specific image in the batch. For this we find all local maxima in the score maps with score values above a threshold. We create a single priority queue across all parts.
 */
export function buildPartWithScoreQueue(
    scoreThreshold: number,
    localMaximumRadius: number,
    scores: TensorBuffer3D): MaxHeap<PartWithScore> {
  const [height, width, numKeypoints] = scores.shape;
  const queue = new MaxHeap<PartWithScore>(
      height * width * numKeypoints, ({score}) => score);
  for (let heatmapY = 0; heatmapY < height; ++heatmapY) {
    for (let heatmapX = 0; heatmapX < width; ++heatmapX) {
      for (let keypointId = 0; keypointId < numKeypoints; ++keypointId) {
        const score = scores.get(heatmapY, heatmapX, keypointId);
        if (score < scoreThreshold) {
          continue;
        }
        if (scoreIsMaximumInLocalWindow(
            keypointId, score, heatmapY, heatmapX, localMaximumRadius,
            scores)) {
          queue.enqueue({score, part: {heatmapY, heatmapX, id: keypointId}});
        }
      }
    }
  }
  return queue;
}

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============================================================================
*/

import {NumberTuple, PART_IDS, PART_NAMES, POSE_CHAIN} from '../keypoints';
import {Keypoint, PartWithScore, TensorBuffer3D, Vector2D} from '../types';
import {getOffsetPoint} from '../util';

const parentChildrenTuples: NumberTuple[] = POSE_CHAIN.map((
    [parentJoinName, childJoinName]: [string, string]) =>

    [PART_IDS[parentJoinName], PART_IDS[childJoinName]]);

function traverseToTargetKeypoint(
    edgeId: number, sourceKeypoint: Keypoint, targetKeypointId: number,
    scoresBuffer: TensorBuffer3D, offsets: TensorBuffer3D, outputStride: number,
    displacements: TensorBuffer3D, offsetRefineStep = 2): Keypoint {
  const [height, width] = scoresBuffer.shape;

  const targetKeypointIndices = getStridedIndexNearPoint(targetKeypoint, outputStride, width, height);
  const score = scoresBuffer.get(targetKeypointIndices.y, targetKeypointIndices.x, targetKeypointId);
  return {
      position: targetKeypoint, part: PART_NAMES[targetKeypointId], score
  };
}

function decodePose(
    root: PartWithScore, scoresBuffer: TensorBuffer3D, offsets: TensorBuffer3D,
    outputStride: number, displacementsFwd: TensorBuffer3D, displacementsBwd: TensorBuffer3D): Keypoint[] {
  const numParts = scoresBuffer.shape[2];
  const numEdges = parentToChildEdges.length;

  const instanceKeypoints: Keypoint[] = new Array(numParts);
  const numParts = scoresBuffer.shape[2];
  const numEdges = parentToChildEdges.length;
  const instanceKeypoints: Keypoint[] = new Array(numParts);
  const rootPart = root.part;
  const rootScore = root.score;
  const rootPoint = getImageCoords(rootPart, outputStride, offsets);
  const instanceKeypoints[rootPart] = {
    part: rootPart, score: rootScore, numParts
  };

  // Decode the part positions upwards in the tree, following the backward displacements.
  for (let edge = numEdges - 1; edge >= 0; --edge) {
    const sourceKeypointId = parentToChildEdges[edge];
    const targetKeypointId = childToParentEdges[edge];
    if (instanceKeypoints[sourceKeypointId] && !instanceKeypoints[targetKeypointId]) {
      instanceKeypoints[targetKeypointId] = traverseToTargetKeypoint(edge, instanceKeypoints[sourceKeypointId], targetKeypointId, numParts, displacementsBwd);}

  // Decode the part positions downwards in the tree, following the forward displacements.
  for (let edge = 0; edge < numEdges; ++edge) {
    const sourceKeypointId = childToParentEdges[edge];
    const targetKeypointId = parentToChildEdges[edge];
    if (instanceKeypoints[targetKeypointId] && !instanceKeypoints[sourceKeypointId]) {
      instanceKeypoints[sourceKeypointId] = traverseToTargetKeypoint(edge, instanceKeypoints[targetKeypointId], sourceKeypointId, numParts, displacementsFwd);}

    const targetKeypointIndices = getStridedIndexNearPoint(targetKeypoint, outputStride, width, height);
    const score = scoresBuffer.get(targetKeypointIndices.y, targetKeypointIndices.x, targetKeypointId);
    return {
        position: targetKeypoint, part: PART_NAMES[targetKeypointId], score
    };
}

export function decodePose(root: PartWithScore, scoresBuffer: TensorBuffer3D, offsets: TensorBuffer3D, outputStride: number, displacementsFwd: TensorBuffer3D, displacementsBwd: TensorBuffer3D): Keypoint[] {
  const numParts = scoresBuffer.shape[2];
  const numEdges = parentToChildEdges.length;
  const instanceKeypoints: Keypoint[] = new Array(numParts);
  const rootPart = root.part;
  const rootScore = root.score;
  const rootPoint = getImageCoords(rootPart, outputStride, offsets);
  const instanceKeypoints[rootPart] = {
    part: rootPart, score: rootScore, numParts
  };

  // Decode the part positions upwards in the tree, following the backward displacements.
  for (let edge = numEdges - 1; edge >= 0; --edge) {
    const sourceKeypointId = parentToChildEdges[edge];
    const targetKeypointId = childToParentEdges[edge];
    if (instanceKeypoints[sourceKeypointId] && !instanceKeypoints[targetKeypointId]) {
      instanceKeypoints[targetKeypointId] = traverseToTargetKeypoint(edge, instanceKeypoints[sourceKeypointId], targetKeypointId, numParts, displacementsBwd);}

  // Decode the part positions downwards in the tree, following the forward displacements.
  for (let edge = 0; edge < numEdges; ++edge) {
    const sourceKeypointId = childToParentEdges[edge];
    const targetKeypointId = parentToChildEdges[edge];
    if (instanceKeypoints[targetKeypointId] && !instanceKeypoints[sourceKeypointId]) {
      instanceKeypoints[sourceKeypointId] = traverseToTargetKeypoint(edge, instanceKeypoints[targetKeypointId], sourceKeypointId, numParts, displacementsFwd);}

    const targetKeypointIndices = getStridedIndexNearPoint(targetKeypoint, outputStride, width, height);
    const score = scoresBuffer.get(targetKeypointIndices.y, targetKeypointIndices.x, targetKeypointId);
    return {
        position: targetKeypoint, part: PART_NAMES[targetKeypointId], score
    };
}

export function decodePose(root: PartWithScore, scoresBuffer: TensorBuffer3D, offsets: TensorBuffer3D, outputStride: number, displacementsFwd: TensorBuffer3D, displacementsBwd: TensorBuffer3D): Keypoint[] {
  const numParts = scoresBuffer.shape[2];
  const numEdges = parentToChildEdges.length;
  const instanceKeypoints: Keypoint[] = new Array(numParts);
  const rootPart = root.part;
  const rootScore = root.score;
  const rootPoint = getImageCoords(rootPart, outputStride, offsets);
  const instanceKeypoints[rootPart] = {
    part: rootPart, score: rootScore, numParts
  };

  // Decode the part positions upwards in the tree, following the backward displacements.
  for (let edge = numEdges - 1; edge >= 0; --edge) {
    const sourceKeypointId = parentToChildEdges[edge];
    const targetKeypointId = childToParentEdges[edge];
    if (instanceKeypoints[sourceKeypointId] && !instanceKeypoints[targetKeypointId]) {
      instanceKeypoints[targetKeypointId] = traverseToTargetKeypoint(edge, instanceKeypoints[sourceKeypointId], targetKeypointId, numParts, displacementsBwd);}

  // Decode the part positions downwards in the tree, following the forward displacements.
  for (let edge = 0; edge < numEdges; ++edge) {
    const sourceKeypointId = childToParentEdges[edge];
    const targetKeypointId = parentToChildEdges[edge];
    if (instanceKeypoints[targetKeypointId] && !instanceKeypoints[sourceKeypointId]) {
      instanceKeypoints[sourceKeypointId] = traverseToTargetKeypoint(edge, instanceKeypoints[targetKeypointId], sourceKeypointId, numParts, displacementsFwd);}

    const targetKeypointIndices = getStridedIndexNearPoint(targetKeypoint, outputStride, width, height);
    const score = scoresBuffer.get(targetKeypointIndices.y, targetKeypointIndices.x, targetKeypointId);
    return {
        position: targetKeypoint, part: PART_NAMES[targetKeypointId], score
    };
}
targetKeypointId = parentToChildEdges[edge];
    if (instanceKeypoints[sourceKeypointId] &&
        !instanceKeypoints[targetKeypointId]) {
      instanceKeypoints[targetKeypointId] = traverseToTargetKeypoint(
          edge, instanceKeypoints[sourceKeypointId],
          targetKeypointId, scores, offsets, outputStride,
          displacementsFwd);
    } return instanceKeypoints;
}

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 */

import {Keypoint, Pose, TensorBuffer3D} from '../types';

import {buildPartWithScoreQueue} from './build_part_with_score_queue';
import {decodePose} from './decode_pose';
import {getImageCoords, squaredDistance} from './util';

function withinNmsRadiusOfCorrespondingPoint(
    poses: Pose[],
    squaredNmsRadius: number,
    {x, y}: {x: number, y: number},
    keypointId: number): boolean {
  return poses.some(({keypoints}) => {
    const correspondingKeypoint = keypoints[keypointId].position;
    return squaredDistance(
               y, x, correspondingKeypoint.y, correspondingKeypoint.x) <=
               squaredNmsRadius;
  });
}

/* Score the newly proposed object instance without taking into account the
 * scores of the parts that overlap with any previously detected instance.
 */
function getInstanceScore(
    existingPoses: Pose[],
    squaredNmsRadius: number,
    instanceKeypoints: Keypoint[]): number {
  let notOverlappedKeypointScores = instanceKeypoints.reduce(
      (result, {position, score}, keypointId): number => {
        if (!withinNmsRadiusOfCorrespondingPoint(
                existingPoses, squaredNmsRadius, position,
                keypointId)) {
          result += score;
        }
        return result;
      }, 0.0); return notOverlappedKeypointScores /=
          instanceKeypoints.length;
}

// A point (y, x) is considered as root part candidate if its score is a
// maximum in a window |y - y'| <= kLocalMaximumRadius, |x - x'| <= kLocalMaximumRadius.
const kLocalMaximumRadius = 1;

/**
 * Detects multiple poses and finds their parts from part scores and
 * displacement vectors. It returns up to `maxDetections` object instance detections
 * in decreasing root score order.
 *
 * @param heatmapScores 3-D tensor with shape `[height, width, numParts]`. The value of
 * heatmapScores[y, x, k] is the score of placing the `k`-th object part at position `(y, x)`.
 * @param offsets 3-D tensor with shape `[height, width, numParts * 2]`. The value of [offsets[y, x, k], offsets[y, x, k + numParts]] is the short range offset vector of the `k`-th object part at heatmap position `(y, x)`.
 * @param displacementsFwd 3-D tensor of shape `[height, width, 2 * num_edges]`, where `num_edges = num_parts - 1` is the number of edges (parent-child pairs) in the tree. It contains the forward displacements between consecutive part from the root towards the leaves.
 * @param displacementsBwd 3-D tensor of shape `[height, width, 2 * num_edges]`, where `num_edges = num_parts - 1` is the number of edges (parent-child pairs) in the tree. It contains the backward displacements between consecutive part from the root towards the leaves.
 * @param outputStride The output stride that was used when feed-forwarding through the PoseNet model. Must be 32, 16, or 8.
 */

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detections per image. @param scoreThreshold Only return instance detections that have root part score greater or equal to this value. Defaults to 0.5. @param nmsRadius Non-maximum suppression part distance. It needs to be strictly positive. Two parts suppress each other if they are less than nmsRadius pixels away. Defaults to 20.

@return An array of poses and their scores, each containing keypoints and the corresponding keypoint scores.
*/
export function decodeMultiplePoses(scoresBuffer: TensorBuffer3D, offsetsBuffer: TensorBuffer3D, displacementsFwdBuffer: TensorBuffer3D, displacementsBwdBuffer: TensorBuffer3D, outputStride: number, maxPoseDetections: number, scoreThreshold = 0.5, nmsRadius = 20):

  const poses: Pose[] = [];

  const queue = buildPartWithScoreQueue(scoreThreshold, kLocalMaximumRadius, scoresBuffer);

  const squaredNmsRadius = nmsRadius * nmsRadius;

  // Generate at most maxDetections object instances per image in decreasing part score order while (poses.length < maxPoseDetections && !queue.empty()) {
    // The top element in the queue is the next root candidate.
    const root = queue.dequeue();

    // Part-based non-maximum suppression: We reject a root candidate if it is within a disk of nmsRadius pixels from the corresponding part of a previously detected instance.

    const rootImageCoords = getImageCoords(root.part, outputStride, offsetsBuffer);

    if (withinNmsRadiusOfCorrespondingPoint(poses, squaredNmsRadius, rootImageCoords, root.part.id)) {
      continue;
    }

    // Start a new detection instance at the position of the root.
    const keypoints = decodePose(root, scoresBuffer, offsetsBuffer, outputStride, displacementsFwdBuffer, displacementsBwdBuffer);

    const score = getInstanceScore(poses, squaredNmsRadius, keypoints);

    poses.push({keypoints, score});
  }

  return poses;
}

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 */

import * as tf from '@tensorflow/tfjs-core';

import {BaseModel} from './base_model';

const imageNetMean = [-123.15, -115.90, -103.06];

export class ResNet extends BaseModel {

  preprocessInput(input: tf.Tensor3D): tf.Tensor3D {
    return tf.add(input, imageNetMean);
  }

  nameOutputResults(results: tf.Tensor3D[]): {
    const [
      displacementBwd,
      displacementFwd,
      heatmap,
      longOffsets,
      offsets,
      partHeatmaps,
      segmentation,
      partOffsets,
    ] = results;

    return {
      offsets,
      segmentation,
      partHeatmaps,
      longOffsets,
      heatmap,
      displacementFwd,
      displacementBwd,
      partOffsets
    };
  }
}

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 */

const RESNET50_BASE_URL = 'https://storage.googleapis.com/tfjs-models/savedmodel/bodypix/resnet50/';
const MOBILENET_BASE_URL = 'https://storage.googleapis.com/tfjs-models/savedmodel/bodypix/mobilenet/';

// The BodyPix 2.0 ResNet50 models use the latest TensorFlow.js 1.0 model url format. export function resNet50SavedModel(stride: number, quantBytes: number): string {
  const graphJson = `model-stride${stride}.json`;
  if (quantBytes === 4) {
    return RESNET50_BASE_URL + `float/` + graphJson;
  } else {
    return RESNET50_BASE_URL + `quant${quantBytes}/` + graphJson;
  }
}

// The BodyPix 2.0 MobileNetV1 models use the latest TensorFlow.js 1.0 model url format.
function mobileNetSavedModel(stride: number, multiplier: number, quantBytes: number): string {
    const graphJson = `model-stride${stride}.json`;
    // quantBytes=4 corresponding to the non-quantized full-precision SavedModel
    if (quantBytes === 4) {
        return MOBILENET_BASE_URL + `float/${toStr[multiplier]}/` + graphJson;
    } else {
        return MOBILENET_BASE_URL + `quant${quantBytes}/${toStr[multiplier]}/` + graphJson;
    }
}

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 */

import * as tf from '@tensorflow/tfjs-core';

import {BodyPixInput, BodyPixOutputStride, Padding} from './types';
import {Pose, TensorBuffer3D} from './types';
import {BodyPixInternalResolution} from './types';

function getSizeFromImageLikeElement(input: HTMLImageElement|
OffscreenCanvas): [number, number] {
    if ('offsetHeight' in input && input.offsetHeight !== 0
      && 'offsetWidth' in input && input.offsetWidth !== 0) {
      return [input.offsetHeight, input.offsetWidth];
    } else if (input.height != null && input.width != null) {
      return [input.height, input.width];
    } else {
      throw new Error('HTMLImageElement must have height and width attributes set.');
    }
}

function getSizeFromVideoElement(input: HTMLVideoElement): [number, number] {
    if (input.hasAttribute('height') && input.hasAttribute('width')) {
      // Prioritizes user specified height and width properties directly.
      // because they evaluate to 0 if unset.
      return [input.videoHeight, input.videoWidth];
    } else {
      return [input.height, input.width];
    }
}

export function getInputSize(input: BodyPixInput): [number, number] {
    if ((typeof (HTMLCanvasElement) !== 'undefined' &&
       input instanceof HTMLCanvasElement) ||
      (typeof (OffscreenCanvas) !== 'undefined' &&
          input instanceof OffscreenCanvas) ||
      (typeof (HTMLImageElement) !== 'undefined' &&
       input instanceof HTMLImageElement)) {
        return getSizeFromImageLikeElement(input);
    } else if (typeof (ImageData) !== 'undefined' && input instanceof ImageData) {
        return [input.height, input.width];
    } else if ((typeof (HTMLVideoElement) !== 'undefined' &&
       input instanceof HTMLVideoElement)) {
        return getSizeFromVideoElement(input);
    } else if (input instanceof tf.Tensor) {
        return [input.shape[0], input.shape[1]];}
    } else {
      throw new Error('Unknown input type: ');
    }
}

function isValidInputResolution(outputStride: number): boolean {
    return (outputStride - 1) % outputStride === 0;
}

export function toValidInputResolution(inputResolution: number, outputStride: BodyPixOutputStride): number {
    if (isValidInputResolution(inputResolution, outputStride)) {
        return inputResolution;
    }

    return Math.floor(inputResolution / outputStride) * outputStride + 1;
}

const INTERNAL_RESOLUTION_STRING_OPTIONS = {
    low: 'low',
    medium: 'medium',
    high: 'high',
    full: 'full'
};

const INTERNAL_RESOLUTION_PERCENTAGES = {
    low: 0.25,
    medium: 0.5,
    high: 0.75,
    full: 1.0
};

const MIN_INTERNAL_RESOLUTION = 0.1;
const MAX_INTERNAL_RESOLUTION = 2.0;

function toInternalResolutionPercentage(outputResolution: number, outputStride: number) {
    return outputResolution / outputStride;
}

function internalResolutionToString(inputResolution: BodyPixInternalResolution): string {
    return outputResolution;
}

function result = INTERNAL_RESOLUTION_PERCENTAGES[inputResolution];

function internalResolutionToString(inputResolution: number) {
    return result;
}

function internalResolutionToString(inputResolution: number) {
    return result;
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toInputTensor(input); imageTensor = tf.pad3d(imageTensor, [[padT, padB], [padL, padR], [0, 0]]);
return tf.image.resizeBilinear(imageTensor, [targetH, targetW]);
});

unexport function scalePose(poses: Pose[], scaleY: number, scaleX: number, offsetY = 0, offsetX = 0);

unexport function flipPoseHorizontal(poses: Pose[], imageWidth: number);

unexport function scalePose(poses: Pose[], scaleY: number, scaleX: number, offsetY = 0, offsetX = 0);

unexport function flipPoseHorizontal(poses: Pose[], imageWidth: number);

unexport function scalePoses(poses: Pose[], scaleY: number, scaleX: number, offsetY = 0, offsetX = 0);

unexport function scaleAndFlipPoses(poses: Pose[], [height, width]: [number, number], [inputResolutionHeight, inputResolutionWidth]: [number, number], padding: Padding, flipHorizontal: boolean);
the depth (number of channels) for all convolution ops. * The larger the value, the larger the size of the layers, and more accurate * the model at the cost of speed. Set this to a smaller value to increase speed at the cost of accuracy. * An optional string that specifies custom url of the model. This * is useful for area/countries that don’t have access to the model hosted on GCP. * An optional number with values: 1, 2, or 4. This parameter * affects weight quantization in the models. The available options are * 1 byte, 2 bytes, and 4 bytes. The higher the value, the larger the model size * and thus the longer the loading time, the lower the value, the shorter the * loading time but lower the accuracy. * exports interface ModelConfig { * architecture: BodyPixArchitecture; * outputStride: BodyPixOutputStride; * multiplier?: BodyPixMultiplier; * modelUrl?: string; * quantBytes?: BodyPixQuantBytes; } * The default configuration for loading MobileNetV1 based BodyPix.* / (And for references, the default configuration for loading ResNet is also included). * `architecture`: MobileNetV1, * `outputStride`: 16, * `quantBytes`: 4, * `multiplier`: 0.75, * `modelUrl`: const RESNET_CONFIG = { * architecture: * ResNet50, * outputStride: 32, * quantBytes: 4, * multiplier: 1.0 } as ModelConfig; * `VALID_ARCHITECTURE: BodyPixArchitecture[] = ['MobileNetV1', 'ResNet50']; * `VALID_STRIDE: [id: * string]: BodyPixOutputStride[] = ['MobileNetV1': [8, 16, 32], * 'ResNet50': [32, 16]]; * `VALID_MULTIPLIER: [id: * string]: BodyPixMultiplier[] = ['MobileNetV1': [0.5, 0.75, 1.0], * 'ResNet50': [1.0]]; * `VALID_QUANT_BYTES: BodyPixQuantBytes[] = [1, 2, 4]; * \function validateModelConfig(config: ModelConfig): ModelConfig { * if (config.architecture == null) { * config.architecture = 'MobileNetV1'; * } * if (VALID_ARCHITECTURE.indexOf(config.architecture) < 0) { * throw new Error(' * Invalid architecture * ${config.architecture}. ' + * 'Should be one of ${VALID_ARCHITECTURE}'); * } * if (config.outputStride == null) { * config.outputStride = 16; * } * if (VALID_STRIDE[config.architecture].indexOf(config.outputStride) < 0) { * throw new Error(' * Invalid outputStride * ${config.outputStride}. ' + * 'Should be one of ${VALID_STRIDE[config.architecture]} * for architecture * ${config.architecture}.'); * } * if (config.multiplier == null) { * config.multiplier = 1.0; * } * if (VALID_MULTIPLIER[config.architecture].indexOf(config.multiplier) < 0) { * throw new Error(' * Invalid multiplier * ${config.multiplier}. ' + * 'Should be one of ${VALID_MULTIPLIER[config.architecture]} * for architecture * ${config.architecture}.'); * } * if (config.quantBytes == null) { * config.quantBytes = 4; * } * return config; * } * `flipHorizontal`: If the left-right keypoint of poses/part segmentation * should * be flipped/mirrored horizontally. This should be set to true for videos where the video is by default flipped horizontally (i.e. a webcam). * and you want the person & body part segmentation to be returned in the proper orientation. * `internalResolution`: Defaults to ‘medium’. The internal resolution * percentage that the input * is resized to before inference. The larger the * internalResolution the more accurate the model at the cost of * slower prediction times. Available values are 'low', 'medium', 'high', 'full', or a number * percentage value between 0 and 1. The values 'low', 'medium', 'high', and * 'full' map to 0.25, 0.5, 0.75, and 1.0 correspondingly. * `segmentationThreshold`: The minimum that segmentation values must * have to be considered part of the person. * Affects the generation of the segmentation mask. More specifically, it is the threshold used to binarize the * intermediate person segmentation probability. The probability of each pixel belongs to a person is in range [0, 1]. If the probability is greater than the ‘segmentationThreshold’, it will be set to 1 otherwise 0. * `scoreThreshold`: Defaults to 0.4. Only return person pose that have root * score greater or equal to this value. * The maximum number of points per * image. * \ function returnPersonPose (scoreThreshold: number) { * return PersonPose; * } * `maxDetections`: Defaults to 10. Maximum number of person pose detections per * image. * `nmsRadius`: Defaults to 20. Non-maximum suppression part distance in pixels. * It needs to be strictly positive. Two pose keypoints suppress each
other if {n * they are less than `nmsRadius` pixels away.
*/
export interface PersonInferenceConfig extends InferenceConfig {
  maxDetections?: number;
  scoreThreshold?: number;
  nmsRadius?: number;
  /**
   * Number of detections to return. Can be useful when
   * there are too many detections to be returned.
   */
  maxDetections?: number;
  /**
   * Maximum score of the person pose.
   */
  scoreThreshold?: number;
  /**
   * Maximum distance between detections when they will be
   * treated as the same person.
   */
  nmsRadius?: number;
}

/**
 * Multiple Person Instance Inference Config
 *
 * `maxDetections`: Defaults to 10. Maximum number of returned
 * instance segmentation and pose detections per image.
 * `scoreThreshold`: Defaults to 0.4. Only returns and uses
 * person poses for instance segmentation assignment when the pose has root part score
 * greater or equal to this value.
 * `nmsRadius`: Defaults to 20. Non-maximum suppression part distance in pixels.
 * It needs to be strictly positive. Two parts suppress each other if
 * they are less than `nmsRadius` pixels away.
 * `minKeypointScore`: Default to 0.3. Keypoints above the score are used for matching and assigning
 * segmentation mask to each person.
 * `refineSteps`: Default to 10. The number of refinement steps used when
 * assigning the instance segmentation. It needs to be strictly positive. The
 * larger the higher the accuracy and slower the inference.
 */
export interface MultiPersonInstanceInferenceConfig extends InferenceConfig {
  maxDetections?: number;
  scoreThreshold?: number;
  nmsRadius?: number;
  minKeypointScore?: number;
  refineSteps?: number;
}

export const PERSON_INFERENCE_CONFIG: PersonInferenceConfig = {
  flipHorizontal: false,
  internalResolution: 'medium',
  segmentationThreshold: 0.7,
  maxDetections: 10,
  scoreThreshold: 0.4,
  nmsRadius: 20,
};

export const MULTI_PERSON_INSTANCE_INFERENCE_CONFIG:
  MultiPersonInstanceInferenceConfig = {
    flipHorizontal: false,
    internalResolution: 'medium',
    segmentationThreshold: 0.7,
    maxDetections: 10,
    scoreThreshold: 0.4,
    nmsRadius: 20,
    minKeypointScore: 0.3,
    refineSteps: 10,
};

function validatePersonInferenceConfig(config: PersonInferenceConfig) {
  const {segmentationThreshold,
    maxDetections,
    scoreThreshold,
    nmsRadius} =
      config;
  if (segmentationThreshold < 0.0 ||
    segmentationThreshold > 1.0) {
    throw new Error(`segmentationThreshold ${segmentationThreshold}. ` +
      `Should be in range [0.0, 1.0]`);
  }
  if (maxDetections <= 0) {
    throw new Error(`Invalid maxDetections ${maxDetections}. ` +
      `Should be > 0`);
  }
  if (scoreThreshold < 0.0 ||
    scoreThreshold > 1.0) {
    throw new Error(`Invalid scoreThreshold ${scoreThreshold}. ` +
      `Should be in range [0.0, 1.0]`);
  }
  if (nmsRadius <= 0) {
    throw new Error(`Invalid nmsRadius ${nmsRadius}.`);
  }
}

function validateMultiPersonInstanceInferenceConfig(
    config: MultiPersonInstanceInferenceConfig) {
  const {segmentationThreshold,
    maxDetections,
    scoreThreshold,
    nmsRadius,
    minKeypointScore,
    refineSteps} = config;
  if (segmentationThreshold < 0.0 ||
    segmentationThreshold > 1.0) {
    throw new Error(`segmentationThreshold ${segmentationThreshold}. ` +
      `Should be in range [0.0, 1.0]`);
  }
  if (maxDetections <= 0) {
    throw new Error(`Invalid maxDetections ${maxDetections}. ` +
      `Should be > 0`);
  }
  if (scoreThreshold < 0.0 ||
    scoreThreshold > 1.0) {
    throw new Error(`Invalid scoreThreshold ${scoreThreshold}. ` +
      `Should be in range [0.0, 1.0]`);
  }
  if (nmsRadius <= 0) {
    throw new Error(`Invalid nmsRadius ${nmsRadius}.`);
  }
  if (minKeypointScore < 0 ||
    minKeypointScore > 1) {
    throw new Error(`Invalid minKeypointScore ${minKeypointScore}.`);
  }
  if (refineSteps <= 0 ||
    refineSteps > 20) {
    throw new Error(`Invalid refineSteps ${refineSteps}. ` +
      `Should be in range [1, 20]`);
  }
}

export class BodyPix {
  baseModel: BaseModel;

  constructor(net: BaseModel) {
    this.baseModel = net;
  }

  private predictForPersonSegmentation(input: tf.Tensor3D): {
    segmentLogits: tf.Tensor3D,
    heatmapScores: tf.Tensor3D,
    offsets: tf.Tensor3D,
    displacementFwd: tf.Tensor3D,
    displacementBwd: tf.Tensor3D,
  } {
    const {
      segmentation,
      heatmapScores,
      offsets,
      displacementFwd,
      displacementBwd,
    } = this.baseModel.predict(input);
    return {
      segmentLogits: segmentation,
      heatmapScores,
      offsets,
      displacementFwd,
      displacementBwd,
    };
  }

  private predictForPersonSegmentationAndPart(input: tf.Tensor3D): {
    segmentLogits: tf.Tensor3D,
    heatmapScores: tf.Tensor3D,
    offsets: tf.Tensor3D,
    displacementFwd: tf.Tensor3D,
    displacementBwd: tf.Tensor3D,
  } {
    const {
      segmentation,
      partHeatmaps:
    } = this.baseModel.predict(input);
    return {
      segmentLogits: segmentation,
      partHeatmaps:
    };
  }
predictForMultiPersonInstanceSegmentationAndPart(input: tf.Tensor3D):
  {\n    segmentLogits:
      tf.Tensor3D,
    longOffsets: tf.Tensor3D,
    heatmapScores: tf.Tensor3D,
    offsets: tf.Tensor3D,
    displacementFwd: tf.Tensor3D,
    displacementBwd: tf.Tensor3D,
    partHeatmaps: tf.Tensor3D
  } {
    const {\n      segmentation,
      longOffsets,
      heatmapScores,
      offsets,
      displacementBwd,
      displacementFwd,
      partHeatmaps,
    } = this.baseModel.predict(input);
    return {\n      segmentLogits:
        segmentation,
      longOffsets,
      heatmapScores,
      offsets,
      displacementFwd,
      displacementBwd,
      partHeatmaps
    };
  }

  /**
   * Given an image with people, returns a dictionary of all intermediate
   * tensors including: 1) a binary array with 1 for the pixels that are part of\n   * the person, and 0 otherwise, 2) heatmapScores, 3) offsets, and 4) paddings.\n   *
   * @param input * @param internalResolution Defaults to 'medium'. The internal resolution\n   * that the input is resized to before inference. The larger the\n   * internalResolution the more accurate the model at the cost of slower\n   * prediction times. Available values are 'low', 'medium', 'high', 'full', or\n   * a percentage value between 0 and 1. The values 'low', 'medium', 'high', and\n   * 'full' map to 0.25, 0.5, 0.75, and 1.0 correspondingly.\n   *
   * @param segmentationThreshold The minimum that segmentation values must have\n   * to be considered part of the person. Affects the generation of the\n   * segmentation mask.\n   *
   * @return A dictionary containing 
   * segmentation, 
   * heatmapScores, 
   * offsets, and 
   * paddings:
   * - `segmentation`: A 2d Tensor with 1 for the
   * pixels that are part of the\n   * person, and 0 otherwise. The width and height correspond to the same\n   * dimensions of the input image.\n   * - `heatmapScores`: A 3d Tensor of the keypoint heatmaps used by\n   * pose estimation decoding.\n   * - `offsets`: A 3d Tensor of the keypoint offsets used by pose\n   * estimation decoding,\n   * - `displacementFwd`: A 3d Tensor of the keypoint forward displacement used\n   * by pose estimation decoding.\n   * - `displacementBwd`: A 3d Tensor of the keypoint backward displacement used\n   * by pose estimation decoding.\n   * - `padding`: The padding (unit pixels) being applied to the input image\n   * before it is fed into the\n   * model.\n   * @param input * @param internalResolution\n   */
  segmentPersonActivation(
      input: BodyPixInput, internalResolution:
      BodyPixInternalResolution,
      segmentationThreshold = 0.5): {
    segmentation: tf.Tensor2D,
    heatmapScores: tf.Tensor3D,
    offsets: tf.Tensor3D,
    displacementFwd: tf.Tensor3D,
    displacementBwd: tf.Tensor3D,
    padding: Padding,
    internalResolutionHeightAndWidth: [number, number]
  } {
    const [height, width] = getInpuShape(input);
    const internalResolutionHeightAndWidth =
      toInputResolutionHeightAndWidth(internalResolution, this.baseModel.outputStride,
      [height, width]);
    const {\n      segmentation,
      heatmapScores,
      offsets,
      displacementBwd,
      displacementFwd,
    } = this.predictForPersonSegmentation(resized);
    const [resizedHeight, resizedWidth] = resized.shape;
    const scaledSegmentScores = scaleAndCropToInputTensorShape(
        segmentLogits,
        [height, width], [resizedHeight, resizedWidth],
        [[padding.top, padding.bottom], [padding.left,
        padding.right]], APPLY_SIGMOID_ACTIVATION);
    const return {\n      segmentation: toMaskTensor(
        tf.squeeze(scaledSegmentScores), segmentationThreshold),
      heatmapScores,
      offsets,
      displacementFwd,
      displacementBwd,
    };
  }

  /**
   * Given an image with many people, returns a
   * PersonSegmentation dictionary
   * that contains the segmentation mask for all people and a single pose.\n   * Note: The segmentation mask returned by this method covers all people but\n   * the pose works well for one
   * person. If you want to estimate instance-level\n   * multiple person segmentation & pose for each person, use\n   * `segmentMultiPerson` instead.\n   *
   * @param input * @param config PersonInferenceConfig object that contains\n   */
  ImageData|HTMLImageElement|HTMLCanvasElement|HTMLVideoElement\n  * The input image to feed
  * through the network.\n  * @return A SemanticPersonSegmentation dictionary that
  * contains height,\n  * width, the flattened binary segmentation mask and the poses for all people.\n  * The width and
height correspond to the same dimensions of the input image.

```typescript
* - `height`: The height of the segmentation data in pixel unit.
* - `width`: The width of the segmentation data in pixel unit.
* - `data`: The flattened Uint8Array of segmentation data. 1 means the pixel
  * belongs to a person and 0 means the pixel doesn't belong to a person.

* - `size`: The size of the array is equal to `height` x `width` in row-major order.
* - `allPoses`: The 2d poses of all people.
* - `async segmentPerson(input: BodyPixInput, config: PersonInferenceConfig = PERSON_INFERENC_CONFIG): Promise<SemanticPersonSegmentation> {
    config = {...PERSON_INFERENC_CONFIG, ...config};
    validatePersonInferenceConfig(config);
    const {segmentation, heatmapScores, offsets, displacementFwd, displacementBwd, padding, internalResolutionHeightAndWidth} = this.segmentPersonActivation(input, config.internalResolution, config.segmentationThreshold);
    const [height, width] = segmentation.shape;
    const result = await segmentation.data() as Uint8Array;
    segmentation.dispose();
    const [heatmapScores, offsets, displacementFwd, displacementBwd] = tensorBuffers;
    const poses = decodeMultiplePoses(heatmapScores, offsets, displacementFwd, displacementBwd, config.maxDetections, config.scoreThreshold, config.nmsRadius);
    heatmapScores.dispose();
    offsets.dispose();
    displacementFwd.dispose();
    displacementBwd.dispose();
    return {height, width, data: result, allPoses: poses};
}
```

* - `segmentMultiPerson(input: BodyPixInput, config: MultiPersonInstanceInferenceConfig = MULTI_PERSON_INSTANCE_INFERENCE_CONFIG): Promise<PersonSegmentation[]> {
    config = {...MULTI_PERSON_INSTANCE_INFERENCE_CONFIG, ...config};
    validateMultiPersonInstanceInferenceConfig(config);
    const [height, width] = getInputSize(input);
    const internalResolutionHeightAndWidth = toInputResolutionHeightAndWidth(config, internalResolution, this.baseModel.outputStride, [height, width]);
    const {resized, padding} = padAndResizeTo(input, internalResolutionHeightAndWidth);
    const {segmentation, longOffsets, heatmapScores, offsets, displacementFwd, displacementBwd} = tf.tidy(() =>{
        const {segmentLogits, longOffsets, heatmapScores, offsets, displacementFwd, displacementBwd} = this.predictForMultiPersonInstanceSegmentationAndPart(resized);
        const scaledSegmentScores = scaleAndCropToInputTensorShape(segmentLogits, [height, width], internalResolutionHeightAndWidth, [padding.top, padding.bottom], [padding.left, padding.right], APPLY_SIGMOID_ACTIVATION);
        const longOffsetsResized = false;
        const scaledLongOffsets = scaleAndCropToInputTensorShape(longOffsets, [height, width], internalResolutionHeightAndWidth, [padding.top, padding.bottom], [padding.left, padding.right], APPLY_SIGMOID_ACTIVATION);
        const segmentation = toMaskTensor(tf.squeeze(scaledSegmentScores), config.segmentationThreshold);
        return {segmentation, longOffsets: scaledLongOffsets, heatmapScores: heatmapScores, offsets, displacementFwd, displacementBwd: displacementFwd};
    });
```

```typescript
```

* - `segmentationHeightAndWidth`: The height and width of the segmentation data.
* - `data`: The flattened Uint8Array of segmentation data. 1 means the pixel
  * belongs to a person and 0 means the pixel doesn't belong to a person.

* - `size`: The size of the array is equal to `height` x `width` in row-major order.
* - `allPoses`: The 2d poses of all people.
* - `async segmentPerson(input: BodyPixInput, config: PersonInferenceConfig = PERSON_INFERENC_CONFIG): Promise<SemanticPersonSegmentation> {
    config = {...PERSON_INFERENC_CONFIG, ...config};
    validatePersonInferenceConfig(config);
    const {segmentation, heatmapScores, offsets, displacementFwd, displacementBwd, padding, internalResolutionHeightAndWidth} = this.segmentPersonActivation(input, config.internalResolution, config.segmentationThreshold);
    const [height, width] = segmentation.shape;
    const result = await segmentation.data() as Uint8Array;
    segmentation.dispose();
    const [heatmapScores, offsets, displacementFwd, displacementBwd] = tf.tidy(() =>{
        const {segmentLogits, longOffsets, heatmapScores, offsets, displacementFwd, displacementBwd} = this.predictForMultiPersonInstanceSegmentationAndPart(resized);
        const scaledSegmentScores = scaleAndCropToInputTensorShape(segmentLogits, [height, width], internalResolutionHeightAndWidth, [padding.top, padding.bottom], [padding.left, padding.right], APPLY_SIGMOID_ACTIVATION);
        const longOffsetsResized = false;
        const scaledLongOffsets = scaleAndCropToInputTensorShape(longOffsets, [height, width], internalResolutionHeightAndWidth, [padding.top, padding.bottom], [padding.left, padding.right], APPLY_SIGMOID_ACTIVATION);
        const segmentation = toMaskTensor(tf.squeeze(scaledSegmentScores), config.segmentationThreshold);
        return {segmentation, longOffsets: scaledLongOffsets, heatmapScores: heatmapScores, offsets, displacementFwd, displacementBwd: displacementFwd};
    });
```

* - `segmentationHeightAndWidth`: The height and width of the segmentation data.
* - `data`: The flattened Uint8Array of segmentation data. 1 means the pixel
  * belongs to a person and 0 means the pixel doesn't belong to a person.

* - `size`: The size of the array is equal to `height` x `width` in row-major order.
* - `allPoses`: The 2d poses of all people.
* - `async segmentPerson(input: BodyPixInput, config: PersonInferenceConfig = PERSON_INFERENC_CONFIG): Promise<SemanticPersonSegmentation> {
    config = {...PERSON_INFERENC_CONFIG, ...config};
    validatePersonInferenceConfig(config);
    const {segmentation, heatmapScores, offsets, displacementFwd, displacementBwd, padding, internalResolutionHeightAndWidth} = this.segmentPersonActivation(input, config.internalResolution, config.segmentationThreshold);
    const [height, width] = segmentation.shape;
    const result = await segmentation.data() as Uint8Array;
    segmentation.dispose();
    const [heatmapScores, offsets, displacementFwd, displacementBwd] = tf.tidy(() =>{
        const {segmentLogits, longOffsets, heatmapScores, offsets, displacementFwd, displacementBwd} = this.predictForMultiPersonInstanceSegmentationAndPart(resized);
        const scaledSegmentScores = scaleAndCropToInputTensorShape(segmentLogits, [height, width], internalResolutionHeightAndWidth, [padding.top, padding.bottom], [padding.left, padding.right], APPLY_SIGMOID_ACTIVATION);
        const longOffsetsResized = false;
        const scaledLongOffsets = scaleAndCropToInputTensorShape(longOffsets, [height, width], internalResolutionHeightAndWidth, [padding.top, padding.bottom], [padding.left, padding.right], APPLY_SIGMOID_ACTIVATION);
        const segmentation = toMaskTensor(tf.squeeze(scaledSegmentScores), config.segmentationThreshold);
        return {segmentation, longOffsets: scaledLongOffsets, heatmapScores: heatmapScores, offsets, displacementFwd, displacementBwd: displacementFwd};
    });
```

* - `segmentationHeightAndWidth`: The height and width of the segmentation data.
* - `data`: The flattened Uint8Array of segmentation data. 1 means the pixel
  * belongs to a person and 0 means the pixel doesn't belong to a person.

* - `size`: The size of the array is equal to `height` x `width` in row-major order.
* - `allPoses`: The 2d poses of all people.
* - `async segmentPerson(input: BodyPixInput, config: PersonInferenceConfig = PERSON_INFERENC_CONFIG): Promise<SemanticPersonSegmentation> {
    config = {...PERSON_INFERENC_CONFIG, ...config};
    validatePersonInferenceConfig(config);
    const {segmentation, heatmapScores, offsets, displacementFwd, displacementBwd, padding, internalResolutionHeightAndWidth} = this.segmentPersonActivation(input, config.internalResolution, config.segmentationThreshold);
    const [height, width] = segmentation.shape;
    const result = await segmentation.data() as Uint8Array;
    segmentation.dispose();
    const [heatmapScores, offsets, displacementFwd, displacementBwd] = tf.tidy(() =>{
        const {segmentLogits, longOffsets, heatmapScores, offsets, displacementFwd, displacementBwd} = this.predictForMultiPersonInstanceSegmentationAndPart(resized);
        const scaledSegmentScores = scaleAndCropToInputTensorShape(segmentLogits, [height, width], internalResolutionHeightAndWidth, [padding.top, padding.bottom], [padding.left, padding.right], APPLY_SIGMOID_ACTIVATION);
        const longOffsetsResized = false;
        const scaledLongOffsets = scaleAndCropToInputTensorShape(longOffsets, [height, width], internalResolutionHeightAndWidth, [padding.top, padding.bottom], [padding.left, padding.right], APPLY_SIGMOID_ACTIVATION);
        const segmentation = toMaskTensor(tf.squeeze(scaledSegmentScores), config.segmentationThreshold);
        return {segmentation, longOffsets: scaledLongOffsets, heatmapScores: heatmapScores, offsets, displacementFwd, displacementBwd: displacementFwd};
    });
```

* - `segmentationHeightAndWidth`: The height and width of the segmentation data.
* - `data`: The flattened Uint8Array of segmentation data. 1 means the pixel
  * belongs to a person and 0 means the pixel doesn't belong to a person.

* - `size`: The size of the array is equal to `height` x `width` in row-major order.
* - `allPoses`: The 2d poses of all people.
* - `async segmentPerson(input: BodyPixInput, config: PersonInferenceConfig = PERSON_INFERENC_CONFIG): Promise<SemanticPersonSegmentation> {
    config = {...PERSON_INFERENC_CONFIG, ...config};
    validatePersonInferenceConfig(config);
    const {segmentation, heatmapScores, offsets, displacementFwd, displacementBwd, padding, internalResolutionHeightAndWidth} = this.segmentPersonActivation(input, config.internalResolution, config.segmentationThreshold);
    const [height, width] = segmentation.shape;
    const result = await segmentation.data() as Uint8Array;
    segmentation.dispose();
    const [heatmapScores, offsets, displacementFwd, displacementBwd] = tf.tidy(() =>{
        const {segmentLogits, longOffsets, heatmapScores, offsets, displacementFwd, displacementBwd} = this.predictForMultiPersonInstanceSegmentationAndPart(resized);
        const scaledSegmentScores = scaleAndCropToInputTensorShape(segmentLogits, [height, width], internalResolutionHeightAndWidth, [padding.top, padding.bottom], [padding.left, padding.right], APPLY_SIGMOID_ACTIVATION);
        const longOffsetsResized = false;
        const scaledLongOffsets = scaleAndCropToInputTensorShape(longOffsets, [height, width], internalResolutionHeightAndWidth, [padding.top, padding.bottom], [padding.left, padding.right], APPLY_SIGMOID_ACTIVATION);
        const segmentation = toMaskTensor(tf.squeeze(scaledSegmentScores), config.segmentationThreshold);
        return {segmentation, longOffsets: scaledLongOffsets, heatmapScores: heatmapScores, offsets, displacementFwd, displacementBwd: displacementFwd};
    });
```

* - `segmentationHeightAndWidth`: The height and width of the segmentation data.
* - `data`: The flattened Uint8Array of segmentation data. 1 means the pixel
  * belongs to a person and 0 means the pixel doesn't belong to a person.

* - `size`: The size of the array is equal to `height` x `width` in row-major order.
* - `allPoses`: The 2d poses of all people.
```javascript
const tensorBuffers = await toTensorBuffers3D(
  [heatmapScoresRaw, offsetsRaw, displacementFwdRaw, displacementBwdRaw]);
const [scoresBuf, offsetsBuf, displacementsFwdBuf, displacementsBwdBuf] = tensorBuffers;
let poses = decodeMultiplePoses(scoresBuf, offsetsBuf, displacementsFwdBuf, displacementsBwdBuf, this.baseModel.outputStride, config.maxDetections, config.scoreThreshold, config.nmsRadius);
const instanceMasks = await decodePersonInstanceMasks(poses, [height, width], internalResolutionHeightAndWidth, padding, FLIP_POSES_AFTER_SCALING); const poses = decodeMultiplePoses(scoresBuf, offsetsBuf, displacementsFwdBuf, displacementsBwdBuf, this.baseModel.outputStride, internalResolutionHeightAndWidth, padding, config.scoreThreshold, config.nmsRadius);
poses = scaleAndFlipPoses(poses, [height, width], internalResolutionHeightAndWidth, padding, FLIP_POSES_AFTER_SCALING);
const instanceMasks = await decodePersonInstanceMasks(poses, [height, width], internalResolutionHeightAndWidth, padding, FLIP_POSES_AFTER_SCALING);
resized.dispose(); segmentation.dispose(); longOffsets.dispose(); heatmapScoresRaw.dispose(); offsetsRaw.dispose(); displacementFwdRaw.dispose(); displacementBwdRaw.dispose();
return instanceMasks;
```
padding,
      internalResolutionHeightAndWidth
    };
  }

  /**
   * Given an image with many people, returns a PartSegmentation dictionary that
   * contains the body part segmentation mask for all people and a single
   * pose. * Note: The body part segmentation mask returned by this method covers all
   * people but the pose works well when there is one person. If you want to estimate instance-level multiple person body part segmentation & pose for each person, use `segmentMultiPersonParts` instead.
   *
   * @param input ImageData|HTMLImageElement|HTMLCanvasElement|HTMLVideoElement) The input image to feed
   * through the network.
   *
   * @param config PersonInferenceConfig object that contains * parameters for the
   * BodyPix inference using single person decoding.
   *
   * @return A SemanticPartSegmentation dictionary that contains height, width,
   * the flattened binary segmentation mask and the pose for the person. The * width and
   * height correspond to the same dimensions of the input image. * - height: The height of the person part segmentation data in pixel unit. * - width: The width of the person part segmentation data in pixel unit. * - data: The flattened Int32Array of person part segmentation data with part id from 0-24 for the pixels that are part of a corresponding body part, and -1 otherwise. The size of the array is equal to `height` x `width` in row-major order. * - allPoses: The 2d poses of all people.
   *
   * @param input BodyPixInput
   * @param config PersonInferenceConfig = PERSON_INDUCTION_CONFIG
   *
   * @return Promise<SemanticPartSegmentation> {
     config = {...PERSON_INFERENCE_CONFIG, ...config};
     validatePersonInferenceConfig(config);
     const {
       partSegmentation,
       heatmapScores,
       offsets,
       displacementFwd,
       displacementBwd,
       padding,
       internalResolutionHeightAndWidth
     } =
     this.segmentPersonPartsActivation(
       input, config.internalResolution, config.segmentationThreshold);
     const [height, width] = partSegmentation.shape;
     const data = await partSegmentation.data() as Int32Array;
     partSegmentation.dispose();
     const tensorBuffers = await toTensorBuffers3D(
       [heatmapScores, offsets,
        displacementFwd, displacementBwd]);
     const 
     =
     tensorBuffers;
     let poses = decodeMultiplePoses(
       scoresBuf, offsetsBuf,
       displacementsFwdBuf, displacementsBwdBuf,
       this.baseModel.outputStride, config.maxDetections,
       config.scoreThreshold, config.nmsRadius);
     poses = scaleAndFlipPoses(
       poses, [height, width],
       internalResolutionHeightAndWidth, padding,
       FLIP_POSES_AFTER_SCALING);
     heatmapScores.dispose();
     offsets.dispose();
     displacementFwd.dispose();
     displacementBwd.dispose();
     return {height, width, data, allPoses: poses};
   };
   *
   * This does standard ImageNet pre-processing before inferring through the model.
   * The image pixels should have values [0-255].
   *
   * @param input ImageData|HTMLImageElement|HTMLCanvasElement|HTMLVideoElement) The input image to feed
   * through the network.
   *
   * @param config MultiPersonInstanceInferenceConfig object that contains * parameters for the
   * BodyPix inference using multi-person decoding.
   *
   * @return An array of PartSegmentation object. Each element in the array corresponding to one
   * of the people in the input image. In other words, it predicts instance-level multiple person body part segmentation & pose for each person.
   *
   * @param input BodyPixInput
   * @param config MultiPersonInstanceInferenceConfig = MULTI_PERSON_INSTANCE_INDUCTION_CONFIG
   *
   * @return Promise<PartSegmentation[]> {
     config = {...MULTI_PERSON_INSTANCE_INDUCTION_CONFIG, ...config};
     validateMultiPersonInstanceInferenceConfig(config);
     const [height, width] = getInputSize(input);
     const internalResolutionHeightAndWidth = toInputResolutionHeightAndWidth(
       config.internalResolution,
       this.baseModel.outputStride,
       [height, width]);
     const {
       resized, padding
     } = padAndResizeTo(input,
       internalResolutionHeightAndWidth);
     const {
       segmentation,
       longOffsets,
       heatmapScoresRaw,
       offsetsRaw,
       displacementFwdRaw,
       displacementBwdRaw,
       partSegmentation,
     } = tf.tidy(() => {
       const {
         segmentLogits,
         longOffsets,
         heatmapScores,
         offsets,
         displacementFwd,
         displacementBwd,
         partHeatmaps
       } =
     });
   };
   */
this.predictForMultiPersonInstanceSegmentationAndPart(resized); // decoding with scaling
const scaledSegmentScores = scaleAndCropToInputTensorShape(segmentLogits, [height, width], internalResolutionHeightAndWidth, [padding.top, padding.bottom], [padding.left, padding.right]);

const paramHeatmaps = scaleAndCropToInputTensorShape(partHeatmaps, [height, width], internalResolutionHeightAndWidth, [padding.top, padding.bottom], [padding.left, padding.right]);

const appliedSIGMOID_ACTIVATION = // decoding with scaling
const scaledPartSegmentationScores = scaleAndCropToInputTensorShape(scaledPartSegmentationScores, [height, width], internalResolutionHeightAndWidth, [padding.top, padding.bottom], [padding.left, padding.right]);

const constLongOffsets = longOffsets;

const segmentation = toMaskTensor(tf.squeeze(scaledSegmentScores), config.segmentationThreshold);
const partSegmentation =
decodeOnlyPartSegmentation(scaledPartSegmentationScores);
return {
  segmentation,
  longOffsets:
  const tensorBuffers = await toTensorBuffers3D([heatmapScoresRaw, offsetsRaw, displacementFwdRaw, displacementBwdRaw]);

  const scoresBuf, offsetsBuf, displacementsFwdBuf, displacementsBwdBuf =
  const [scoresBuf, offsetsBuf, displacementsFwdBuf, displacementsBwdBuf] =
tensorBuffers;
  const longOffsets = this.baseModel.outputStride,
  const maxDetections,
  config.scoreThreshold, config.nmsRadius);

  const poses = scaleAndFlipPoses(poses, [height, width], internalResolutionHeightAndWidth, padding,
  config.scoreThreshold, config.refineSteps, config.minKeypointScore, config.maxDetections);

  return instanceMasks;
}

/**
 * Loads the MobileNet BodyPix model.
 */
async function loadMobileNet(config: ModelConfig):
Promise<BodyPix> {
  const outputStride = config.outputStride;
  const quantBytes = config.quantBytes;
  if (tf == null) {
    throw new Error(`Cannot find TensorFlow.js. If you are using a <script> tag, please` +
    `also include @tensorflow/tfjs on the page before using this model.`);
  }

  const url = mobileNetSavedModel(outputStride, multiplier, quantBytes);
  const graphModel = await tfconv.loadGraphModel(config.modelUrl || url);
  const mobilenet = new MobileNet(graphModel, outputStride);
  return new BodyPix(mobilenet);
}

/**
 * Loads the ResNet BodyPix model.
 */
async function loadResNet(config: ModelConfig): Promise<BodyPix> {
  const outputStride = config.outputStride;
  const quantBytes = config.quantBytes;
  if (tf == null) {
    throw new Error(`Cannot find TensorFlow.js. If you are using a <script> tag, please` +
    `also include @tensorflow/tfjs on the page before using this model.`);
  }

  const url = resNet50SavedModel(outputStride, quantBytes);
  const graphModel = await tfconv.loadGraphModel(config.modelUrl || url);
  const resnet = new ResNet(graphModel, outputStride);
  return new BodyPix(resnet);
}

/**
 * Loads the BodyPix model instance from a checkpoint, with the ResNet or
 * MobileNet architecture. The model to be loaded is configurable using the
 * config dictionary ModelConfig. Please find more details in the
 * documentation of the ModelConfig.
 *
 * @param config ModelConfig dictionary that
 * contains parameters for
 * the BodyPix loading process. Please find more details of each parameters
 * in the documentation of the ModelConfig interface. The predefined
 * 'MOBILENET_V1_CONFIG' and
 * 'RESNET_CONFIG' can also be used as references
 * for defining your customized config.
 * @export async
 * function load(config: ModelConfig) {
 *   config = validateModelConfig(config);
 *   Promise<BodyPix> {
 *     return loadResNet(config);
 *   } else if
 *   config.architecture === 'MobileNetV1') {
 *     return loadMobileNet(config);
 *   }
 *   return null;
 * }
 * @license
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 * Licensed under the Apache License, Version 2.0 (the "License")
 * you may not use this file except in compliance with the License. You may obtain a copy of the License at
 * http://www.apache.org/licenses/LICENSE-2.0
 * Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS"
BASIS, \n * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. \n * See the License for the specific language governing permissions and limitations under the License. \n */

// method copied from bGlur in https://codepen.io/zhaojun/pen/zZmRQe
export function cpuBlur(canvas: HTMLCanvasElement|OffscreenCanvas, image: HTMLImageElement|HTMLVideoElement|HTMLCanvasElement|OffscreenCanvas, blur: number) {
  const ctx = canvas.getContext('2d');
  let sum = 0;
  const delta = 0.5;
  const alphaLeft = 1 / (2 * Math.PI * delta * delta);
  const step = blur < 3 ? 1 : 2;
  for (let y = -blur; y <= blur; y += step) {
    for (let x = -blur; x <= blur; x += step) {
      const weight = alphaLeft * Math.exp(-(x * x + y * y) / (2 * delta * delta));
      sum += weight;
    }
  }
  for (let y = -blur; y <= blur; y += step) {
    for (let x = -blur; x <= blur; x += step) {
      ctx.globalAlpha = alphaLeft * Math.exp(-(x * x + y * y) / (2 * delta * delta)) / sum * blur;
      ctx.drawImage(image, x, y);
    }
  }
  ctx.globalAlpha = 1;
}

/**
 * @license
 * Copyright 2019 Google LLC. All Rights Reserved.
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 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
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 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */

import {cpuBlur} from './blur';
import {Color, PartSegmentation, PersonSegmentation} from './types';
import {SemanticPartSegmentation, SemanticPersonSegmentation} from './types';
import {getInputSize} from './util';

export type Canvas = HTMLCanvasElement | OffscreenCanvas;

const offScreenCanvases: {[name: string]: Canvas} = {};

type ImageType = HTMLImageElement|HTMLVideoElement|Canvas;
type HasDimensions = {
  width: number,
  height: number
};

function isSafari() {
  return /^((?!chrome|android).)*safari/i.test(navigator.userAgent);
}

function assertSameDimensions({width: widthA, height: heightA}: HasDimensions,
    {width: widthB, height: heightB}: HasDimensions, nameA: string,
    nameB: string) {
  if (widthA !== widthB || heightA !== heightB) {
    throw new Error(`error: dimensions must match. ${nameA} has dimensions ${widthA}x${heightA}, ${nameB} has dimensions ${widthB}x${heightB}`);
  }
}

function flipCanvasHorizontal(canvas: Canvas) {
  const ctx = canvas.getContext('2d');
  ctx.scale(-1, 1);
  ctx.translate(-canvas.width, 0);
}

function drawWithCompositing(ctx: CanvasRenderingContext2D|OffscreenCanvasRenderingContext2D,
    image: Canvas|ImageType) {
  ctx.globalCompositeOperation = "source-over";
  ctx.drawImage(image, 0, 0);
}

function createOffScreenCanvas(): Canvas {
  if (typeof document !== 'undefined' ) {
    return document.createElement('canvas');
  } else if (typeof OffscreenCanvas !== 'undefined') {
    return new OffscreenCanvas(0, 0);
  } else {
    throw new Error('Cannot create a canvas in this context');
  }
}

function ensureOffscreenCanvasCreated(id: string): Canvas {
  if (!offScreenCanvases[id]) {
    offScreenCanvases[id] = createOffScreenCanvas();
  }
  return offScreenCanvases[id];
}

function drawAndBlurImageOnCanvas(image: ImageType, blurAmount: number) {
  const ctx = canvas.getContext('2d');
  ctx.drawImage(image, 0, 0);
  ctx.globalCompositeOperation = "source-over";
  ctx.drawImage(image, 0, 0);
}

function renderImageToCanvas(image: ImageType, canvas: Canvas) {
  const ctx = canvas.getContext('2d');
  ctx.drawImage(image, 0, 0);
}

/**
 * Draw an image on a canvas
 */
renderImageDataToCanvas(image: ImageData, canvas: Canvas) {
  canvas.width = image.width;
  canvas.height = image.height;
  const ctx = canvas.getContext('2d');
  ctx.putImageData(image, 0, 0);
}

renderImageDataToOffScreenCanvas(image: ImageData, canvasName: string): Canvas {
  const canvas = ensureOffscreenCanvasCreated(canvasName);
  renderImageDataToCanvas(image, canvas);
  return canvas;
}

function renderImageDataToOffScreenCanvas(image: ImageData, canvasName: string): Canvas {
  const canvas = ensureOffscreenCanvasCreated(canvasName);
  renderImageDataToCanvas(image, canvas);
  return canvas;
}

/**
 * Given the output from estimating multi-person segmentation, generates an
 * image with foreground and background color at each pixel determined by the
 * corresponding binary segmentation value at the pixel from the output.
 * In other words, pixels where there is a person will be colored with foreground
 * color and where there is not a person will be colored with background color.
 * The output from * `segmentPerson`*, `segmentMultiPerson`, `segmentPersonParts` or
 * `segmentMultiPersonParts` can be * SemanticPersonSegmentation* object, an array of
 * PersonSegmentation object, or an array of PartSegmentation object.
 * @param foreground Default to \{r:0, g:0, b:0, a: 0\}. The foreground color (r,g,b,a) for visualizing pixels that
 * belong to people.
 * @param background Default to \{r:0, g:0, b:0, a: 255\}. The background color (r,g,b,a) for visualizing pixels that don't belong to people.
 * @param drawContour Default to false. Whether to draw the contour around each person's segmentation mask or body part mask.
 * @param foregroundIds Default to [1]. The integer values that represent foreground or background. For person segmentation, 1 is the foreground. For body parts segmentation, it can be a subset of all body parts ids.
 * @returns An ImageData with the same width and height as all the PersonSegmentation in multiPersonSegmentation, with opacity and transparency at each pixel determined by the corresponding binary segmentation value at the pixel from the output.
 */
export function toMask(personOrPartSegmentation: SemanticPersonSegmentation|SemanticPartSegmentation|PersonSegmentation|PartSegmentation, foreground: Color = \{r: 0, g: 0, b: 0, a: 0\}, background: Color = \{r: 0, g: 0, b: 0, a: 255\}, drawContour = false, foregroundIds: number[] = [1]):
  if (Array.isArray(personOrPartSegmentation) && personOrPartSegmentation.length === 0) {
    return null;
  }
  let multiPersonOrPartSegmentation: Array<SemanticPersonSegmentation|SemanticPartSegmentation|PersonSegmentation|PartSegmentation> = !Array.isArray(personOrPartSegmentation) ? [personOrPartSegmentation] : personOrPartSegmentation;
  const {width, height} = multiPersonOrPartSegmentation[0];
  const bytes = new Uint8ClampedArray(width * height * 4);
  function drawStroke(bytes: Uint8ClampedArray, row, column, width, radius, color = \{r: 0, g: 255, b: 255, a: 255\}) {
    for (let i = -radius; i <= radius; i++) {
      for (let j = -radius; j <= radius; j++) {
        const n = (row + i) * width + (column + j);
        bytes[4 * n + 0] = color.r;
        bytes[4 * n + 1] = color.g;
        bytes[4 * n + 2] = color.b;
        bytes[4 * n + 3] = color.a;
      }
    }
  }
  function isSegmentationBoundary(segmentationData: Uint8Array|Int32Array, row, column, width, radius) {
    let numberBackgroundPixels = 0;
    for (let i = -radius; i <= radius; i++) {
      for (let j = -radius; j <= radius; j++) {
        const n = (row + i) * width + (column + j);
        if (!foregroundIds.some(id => id === segmentationData[n])) {
          numberBackgroundPixels += 1;
        }
      }
    }
    return numberBackgroundPixels > 0;
  }
  function drawStroke(bytes: Uint8ClampedArray, row, column, width, radius) {
    let numberBackgroundPixels = 0;
    for (let i = -radius; i <= radius; i++) {
      for (let j = -radius; j <= radius; j++) {
        const n = (row + i) * width + (column + j);
        if (!foregroundIds.some(id => id === segmentationData[n])) {
          numberBackgroundPixels += 1;
        }
      }
    }
    return numberBackgroundPixels > 0;
  }
  for (let i = 0; i < height; i++) {
    for (let j = 0; j < width; j++) {
      const n = i * width + j;
      bytes[4 * n + 0] = background.r;
      bytes[4 * n + 1] = background.g;
      bytes[4 * n + 2] = background.b;
      bytes[4 * n + 3] = background.a;
    }
  }
  for (let i = 0; i < height; i++) {
    for (let j = 0; j < width; j++) {
      const n = i * width + j;
      if (isSegmentationBoundary(segmentationData, i, j, width, radius)) {
        drawStroke(bytes, i, j, width, radius);
      }
    }
  }
  return new ImageData(bytes, width, height);
}
/**
 * Given the output from person body part segmentation (or multi-person instance body part segmentation) and an array of colors indexed by part id, * generates an image with the corresponding color for each part at each pixel, and white pixels where there is no part. * @param partSegmentation The output from segmentPersonParts or segmentMultiPersonParts. The former is a SemanticPartSegmentation object and later is an array of PartSegmentation object. * @param partColors A multi-dimensional array of rgb colors indexed by part id. Must have 24 colors, one for every part. * @returns An ImageData with the same width and height of the element in * multiPersonPartSegmentation, with the corresponding color for each part at each pixel, and black pixels where there is no part. * @export
 */
function toColoredPartMask(
    partSegmentation: SemanticPartSegmentation|PartSegmentation[],
    partColors: Array<[number, number, number]> = RAINBOW_PART_COLORS): ImageData {
  if (Array.isArray(partSegmentation) && partSegmentation.length === 0) {
    return null;
  }

  let multiPersonPartSegmentation;
  if (!Array.isArray(partSegmentation)) {
    multiPersonPartSegmentation = [partSegmentation];
  } else {
    multiPersonPartSegmentation = partSegmentation;
  }
  const {width, height} = multiPersonPartSegmentation[0];
  const bytes = new Uint8ClampedArray(width * height * 4);

  for (let i = 0; i < height * width; ++i) {
    // invert mask. Invert the segmentation mask.
    const j = i * 4;
    bytes[j + 0] = 255;
    bytes[j + 1] = 255;
    bytes[j + 2] = 255;
    bytes[j + 3] = 255;
    for (let k = 0; k < multiPersonPartSegmentation.length; k++) {
      const partId = multiPersonPartSegmentation[k].data[i];
      if (partId !== -1) {
        const color = partColors[partId];
        if (!color) {
          throw new Error(`No color could be found for part id ${partId}`);
        }
        bytes[j + 0] = color[0];
        bytes[j + 1] = color[1];
        bytes[j + 2] = color[2];
        bytes[j + 3] = 255;
      }
    }
  }
  return new ImageData(bytes, width, height);
}

const CANVAS_NAMES = {
  blurred: 'blurred',
  blurredMask: 'blurred-mask',
  mask: 'mask',
  lowresPartMask: 'lowres-part-mask',
};

/**
 * Given an image and a maskImage of type ImageData, draws the image with the mask on top of it onto a canvas. * @param canvas The canvas to be drawn onto. * @param image The original image to apply the mask to. * @param maskImage An ImageData containing the mask. Ideally this should be generated by toMask or toColoredPartMask. * @param maskOpacity The opacity of the mask when drawing it on top of the image. Defaults to 0.7. Should be a float between 0 and 1. * @param flipHorizontal If the result should be flipped horizontally. Defaults to false. * @export
 */
function drawMask(
    canvas: Canvas, image: ImageType, maskImage: ImageData|null, maskOpacity = 0.7,
    maskBlurAmount = 0, flipHorizontal = false) {
  const [height, width] = getInputSize(image);
  canvas.width = width;
  canvas.height = height;
  const ctx = canvas.getContext('2d');
  ctx.save();
  if (flipHorizontal) {
    flipCanvasHorizontal(canvas);
  }

  ctx.drawImage(image, 0, 0);

  ctx.globalAlpha = maskOpacity;
  if (maskImage) {
    assertSameDimensions({width, height}, maskImage, 'image', 'mask');
    const blurredMask = drawAndBlurImageOnOffScreenCanvas(maskImage, CANVAS_NAMES.blurredMask);
    ctx.drawImage(blurredMask, 0, 0, width, height);
    ctx.restore();
  }
  ctx.save();
  ctx.globalAlpha = maskOpacity;
  if (maskImage) {
    assertSameDimensions({width, height}, maskImage, 'image', 'mask');
  }
  const mask = renderImageDataToOffScreenCanvas(maskImage, CANVAS_NAMES.mask);
  const blurredMask = drawAndBlurImageOnOffScreenCanvas(mask, CANVAS_NAMES.blurredMask);
  ctx.drawImage(blurredMask, 0, 0, width, height);
  ctx.restore();
  const result = drawPixelatedMask(canvas, mask, maskBlurAmount, CANVAS_NAMES.blurredMask);
  ctx.drawImage(result, 0, 0);
  ctx.restore();
}

/**
 * Given an image and a maskImage of type ImageData, draws the image with the pixelated mask on top of it onto a canvas. * @param canvas The canvas to be drawn onto. * @param image The original image to apply the mask to. * @param maskImage An ImageData containing the mask. Ideally this should be generated by toColoredPartMask or toMask. * @param maskOpacity The opacity of the mask when drawing it on top of the image. Defaults to 0.7. Should be a float between 0 and 1. * @param flipHorizontal If the result should be flipped horizontally. Defaults to false. * @export
 */
function drawPixelatedMask(
    canvas: Canvas, image: ImageType, maskImage: ImageData,
    maskOpacity = 0.7, maskBlurAmount = 0, flipHorizontal = false,
    pixelCellWidth = 10) {
  if (Array.isArray(maskImage) && maskImage.length === 0) {
    return null;
  }

  let multiPersonPartSegmentation = maskImage;
  if (!Array.isArray(maskImage)) {
    multiPersonPartSegmentation = [maskImage];
  }
  const {width, height} = multiPersonPartSegmentation[0];
  const bytes = new Uint8ClampedArray(width * height * 4);

  for (let i = 0; i < height * width; ++i) {
    // invert mask. Invert the segmentation mask.
    const j = i * 4;
    bytes[j + 0] = 255;
    bytes[j + 1] = 255;
    bytes[j + 2] = 255;
    bytes[j + 3] = 255;
    for (let k = 0; k < multiPersonPartSegmentation.length; k++) {
      const partId = multiPersonPartSegmentation[k].data[i];
      if (partId !== -1) {
        const color = maskImage[partId];
        if (!color) {
          throw new Error(`No color could be found for part id ${partId}`);
        }
        bytes[j + 0] = color[0];
        bytes[j + 1] = color[1];
        bytes[j + 2] = color[2];
        bytes[j + 3] = 255;
      }
    }
  }
  return new ImageData(bytes, width, height);
}
10.0) {
  const [height, width] = getInputSize(image);
  assertSameDimensions({width, height}, maskImage, 'image', 'mask');

  const mask = renderImageDataToOffScreenCanvas(maskImage, CANVAS_NAMES.mask);

  const blurredMask = drawAndBlurImageOnOffScreenCanvas(
      mask, maskBlurAmount,
      CANVAS_NAMES.blurredMask);

  canvas.width = blurredMask.width;
  canvas.height = blurredMask.height;

  const ctx = canvas.getContext('2d');
  ctx.save();
  if (flipHorizontal) {
    flipCanvasHorizontal(canvas);
  }

  const offscreenCanvas = ensureOffscreenCanvasCreated(CANVAS_NAMES.lowresPartMask);
  const offscreenCanvasCtx = offscreenCanvas.getContext('2d');
  offscreenCanvas.width = blurredMask.width;
  offscreenCanvas.height = blurredMask.height;

  ctx.drawImage(image, 0, 0, canvas.width, canvas.height);
  ctx.globalAlpha = 1.0 - maskOpacity;
  ctx.drawImage(image, 0, 0, canvas.width, canvas.height);
}

/**
 * Given a personSegmentation and an image, draws the image
 * with its background blurred onto the canvas.
 *
 * @param canvas The canvas to draw the background-blurred
 * image onto.
 *
 * @param image The image to blur the background of and draw.
 *
 * @param personSegmentation A SemanticPersonSegmentation or an array of
 * PersonSegmentation object.
 *
 * @param backgroundBlurAmount How many pixels in the background blend into each
 * other. Defaults to 3. Should be an
 * integer between 1 and 20.
 *
 * @param edgeBlurAmount How many pixels to blur on the edge between the
 * person and the background by. Defaults to 3. Should be an integer between 0 and 20.
 *
 * @param flipHorizontal If the output should be flipped horizontally. Defaults to false.
 */
export function drawBokehEffect(
    canvas: Canvas, image: ImageType,
    multiPersonSegmentation: SemanticPersonSegmentation|PersonSegmentation[],
    backgroundBlurAmount = 3, edgeBlurAmount = 3,
    flipHorizontal = false) {
  const blurredImage = drawAndBlurImageOnOffScreenCanvas(image, backgroundBlurAmount, CANVAS_NAMES.blurred);
  canvas.width = blurredImage.width;
  canvas.height = blurredImage.height;

  const ctx = canvas.getContext('2d');
  if (Array.isArray(multiPersonSegmentation) &&
      multiPersonSegmentation.length === 0) {
    ctx.drawImage(blurredImage, 0, 0);
    return;
  }

  const backgroundMaskImage = toMask(multiPersonSegmentation, {r: 0, g: 0, b: 0, a: 255});

  if (edgeBlurAmount === 0) {
    return;
  } else {
    const backgroundMask = renderImageDataToOffScreenCanvas(backgroundMaskImage, CANVAS_NAMES.mask);

    ctx.save();
    if (flipHorizontal) {
      flipCanvasHorizontal(canvas);
    }
    ctx.drawImage(image, 0, 0, width, height);

    drawWithCompositing(ctx, backgroundMask, 'destination-in');
    drawWithCompositing(ctx, blurredImage, 'destination-over');
    ctx.restore();
}

function createBodyPartMask(
    multiPersonPartSegmentation: SemanticPartSegmentation|PartSegmentation[])

14.1) {
  const [height, width] = getInputSize(image);
  const mask = renderImageDataToOffScreenCanvas(maskImage, CANVAS_NAMES.mask);

  const blurredMask = drawAndBlurImageOnOffScreenCanvas(
      mask, maskBlurAmount,
      CANVAS_NAMES.blurredMask);

  canvas.width = blurredMask.width;
  canvas.height = blurredMask.height;

  const ctx = canvas.getContext('2d');
  ctx.save();
  if (flipHorizontal) {
    flipCanvasHorizontal(canvas);
  }

  const offscreenCanvas = ensureOffscreenCanvasCreated(CANVAS_NAMES.lowresPartMask);
  const offscreenCanvasCtx = offscreenCanvas.getContext('2d');
  offscreenCanvas.width = blurredMask.width;
  offscreenCanvas.height = blurredMask.height;

  ctx.drawImage(image, 0, 0, canvas.width, canvas.height);
  ctx.globalAlpha = 1.0 - maskOpacity;
  ctx.drawImage(image, 0, 0, canvas.width, canvas.height);
}

/**
 * Given a personSegmentation and an image, draws the image
 * with its background blurred onto the canvas.
 *
 * @param canvas The canvas to draw the background-blurred
 * image onto.
 *
 * @param image The image to blur the background of and draw.
 *
 * @param personSegmentation A SemanticPersonSegmentation or an array of
 * PersonSegmentation object.
 *
 * @param backgroundBlurAmount How many pixels in the background blend into each
 * other. Defaults to 3. Should be an
 * integer between 1 and 20.
 *
 * @param edgeBlurAmount How many pixels to blur on the edge between the
 * person and the background by. Defaults to 3. Should be an integer between 0 and 20.
 *
 * @param flipHorizontal If the output should be flipped horizontally. Defaults to false.
 */
export function drawBokehEffect(
    canvas: Canvas, image: ImageType,
    multiPersonSegmentation: SemanticPersonSegmentation|PersonSegmentation[],
    backgroundBlurAmount = 3, edgeBlurAmount = 3,
    flipHorizontal = false) {
  const blurredImage = drawAndBlurImageOnOffScreenCanvas(image, backgroundBlurAmount, CANVAS_NAMES.blurred);
  canvas.width = blurredImage.width;
  canvas.height = blurredImage.height;

  const ctx = canvas.getContext('2d');
  if (Array.isArray(multiPersonSegmentation) &&
      multiPersonSegmentation.length === 0) {
    ctx.drawImage(blurredImage, 0, 0);
    return;
  }

  const backgroundMaskImage = toMask(multiPersonSegmentation, {r: 0, g: 0, b: 0, a: 255});

  if (edgeBlurAmount === 0) {
    return;
  } else {
    const backgroundMask = renderImageDataToOffScreenCanvas(backgroundMaskImage, CANVAS_NAMES.mask);

    ctx.save();
    if (flipHorizontal) {
      flipCanvasHorizontal(canvas);
    }
    ctx.drawImage(image, 0, 0, width, height);

    drawWithCompositing(ctx, backgroundMask, 'destination-in');
    drawWithCompositing(ctx, blurredImage, 'destination-over');
    ctx.restore();
}

function createBodyPartMask(
    multiPersonPartSegmentation: SemanticPartSegmentation|PartSegmentation[])

10.0) {
  const [height, width] = getInputSize(image);
  assertSameDimensions({width, height}, maskImage, 'image', 'mask');

  const mask = renderImageDataToOffScreenCanvas(maskImage, CANVAS_NAMES.mask);

  const blurredMask = drawAndBlurImageOnOffScreenCanvas(
      mask, maskBlurAmount,
      CANVAS_NAMES.blurredMask);

  canvas.width = blurredMask.width;
  canvas.height = blurredMask.height;

  const ctx = canvas.getContext('2d');
  ctx.save();
  if (flipHorizontal) {
    flipCanvasHorizontal(canvas);
  }

  const offscreenCanvas = ensureOffscreenCanvasCreated(CANVAS_NAMES.lowresPartMask);
  const offscreenCanvasCtx = offscreenCanvas.getContext('2d');
  offscreenCanvas.width = blurredMask.width;
  offscreenCanvas.height = blurredMask.height;

  ctx.drawImage(image, 0, 0, canvas.width, canvas.height);
  ctx.globalAlpha = 1.0 - maskOpacity;
  ctx.drawImage(image, 0, 0, canvas.width, canvas.height);
}
```javascript
bodyPartIdsToMask: number[], edgeBlurAmount: number): Canvas {
  const backgroundMaskImage = toMask(
    multiPersonPartSegmentation, { r: 0, g: 0, b: 0, a: 0 }, true,
    bodyPartIdsToMask);

  const backgroundMask = renderImageDataToOffScreenCanvas(backgroundMaskImage,
    CANVAS_NAMES.mask);

  if (edgeBlurAmount === 0) {
    return backgroundMask;
  } else {
    return drawAndBlurImageOnOffScreenCanvas(
      backgroundMask, edgeBlurAmount,
      CANVAS_NAMES.blurredMask);
  }
}

/**
 * Given a personSegmentation and an image, draws the image
 * with its background blurred onto the canvas.
 *
 * @param canvas The canvas to draw the background-blurred image onto.
 * @param image The image to blur the background of and draw.
 * @param partSegmentation A SemanticPartSegmentation or an array of PartSegmentation objects.
 * @param bodyPartIdsToBlur Default to [0, 1] (left-face and right-face). An array of body part ids to blur. Each must be one of the 24 body part ids.
 * @param backgroundBlurAmount How many pixels in the background blend into each other. Defaults to 3. Should be an integer between 1 and 20. If set to 0, the background will not be blurred.
 * @param edgeBlurAmount How many pixels to blur on the edge between the person and the background by. Defaults to 3. Should be an integer between 0 and 20.
 * @param flipHorizontal If the output should be flipped horizontally. Defaults to false.
 */
export function blurBodyPart(
  canvas: Canvas, image: ImageType,
  partSegmentation: SemanticPartSegmentation|PartSegmentation[],
  bodyPartIdsToBlur = [0, 1], backgroundBlurAmount = 3,
  edgeBlurAmount = 3,
  flipHorizontal = false) {
  const blurredImage = drawAndBlurImageOnOffScreenCanvas(
    image, backgroundBlurAmount, CANVAS_NAMES.blurred);

  canvas.width = blurredImage.width;
  canvas.height = blurredImage.height;

  const ctx = canvas.getContext('2d');

  if (Array.isArray(partSegmentation) && partSegmentation.length === 0) {
    ctx.drawImage(blurredImage, 0, 0);
    return;
  }

  const bodyPartMask = createBodyPartMask(partSegmentation, bodyPartIdsToBlur, edgeBlurAmount);

  ctx.save();
  if (flipHorizontal) {
    flipCanvasHorizontal(canvas);
  }

  // draw the original image on the final canvas
  ctx.drawImage(image, 0, 0, width, height);

  // "destination-in" - "The existing canvas content is kept where both the new shape and existing canvas content overlap. Everything else is made transparent."
  // draw what's not the person using the mask from the original image
  drawWithCompositing(ctx, bodyPartMask, 'destination-in');

  // "destination-over" - "The existing canvas content is kept where both the new shape and existing canvas content overlap. Everything else is made transparent."
  // draw the blurred background on top of the original image where it doesn't overlap.
  drawWithCompositing(ctx, blurredImage, 'destination-over');

  ctx.restore();
}

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// This code is auto-generated, do not modify this file!
const version = '2.2.0';
export { version };
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*============================================================================
*/

Found in path(s):
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/body-pix.js.map

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*============================================================================
*/

Found in path(s):
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/multi_person/decode_instance_masks.js
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/mobilenet.d.ts
```

---

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* distributed under the License is distributed on an "AS IS" BASIS,
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*============================================================================
*/

Found in path(s):
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/body-pix.js.map

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* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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* limitations under the License.
*============================================================================
*/

Found in path(s):
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/multi_person/decode_instance_masks.js
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/mobilenet.d.ts
```
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/multi_person/decode_multiple_masks_webgl.js
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/multi_person/decode_multiple_poses.js
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/multi_person/max_heap.js
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/base_model.d.ts
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/multi_person/decode_multiple_masks_cpu.js
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/multi_person/decode_multiple_masks_cpu.d.ts
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/body_pix_model.js
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/multi_person/max_heap.d.ts
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/multi_person/decode_instance_masks.d.ts
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/body_pix_model.d.ts
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/multi_person/mobilenet.js
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/multi_person/decode_multiple_masks_webgl.d.ts

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Found in path(s):
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* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/part_channels.js
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/types.d.ts
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/types.js
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/part_channels.d.ts
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/util.d.ts

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 *
 *=============================================================================
 */

import {Backend, DataId} from '../tensor';
import {BackendValues, DataType} from '../types';

export
const EPSILON_FLOAT32 = 1e-7;
export const EPSILON_FLOAT16 = 1e-4;

// Required information for all
backends.
export interface BackendTimingInfo {
  kernelMs: number|{error: string};
  getExtraProfileInfo?():
    string;  // a field for additional timing information
                                   // e.g. packing / unpacking for WebGL
 backend
}

export interface TensorStorage {
  read(dataId: DataId): Promise<BackendValues>;
    readSync(dataId: DataId): BackendValues;
  disposeData(dataId: DataId, force?: boolean): boolean;
  memory(): {unreliable:
    boolean;};  // Backend-specific information.
  /** Returns number of data ids currently in the storage. */
  numDataIds(): number;
  refCount(dataId: DataId): number;
}

/** Convenient class for storing tensor-related
 data. */
export class DataStorage<T> {
  private data = new WeakMap<DataId, T>();
  private dataIdsCount =
    0;

  constructor(private backend: KernelBackend, private dataMover: DataMover) {}

  get(dataId: DataId) {
    if (!this.data.has(dataId)) {
      this.dataMover.moveData(this.backend, dataId);
    }
    return this.data.get(dataId);
  }

  set(dataId: DataId, value: T): void {
    this.dataIdsCount++;
    this.data.set(dataId, value);
  }

  has(dataId: DataId): boolean {
    return this.data.has(dataId);
  }

  delete(dataId: DataId): boolean {
    this.dataIdsCount--;
    return this.data.delete(dataId);
  }

  numDataIds(): number {
    return this.dataIdsCount;
  }

  disposeData(dataId: DataId, force?: boolean): boolean {n
    return false;
  }

  readSync(dataId: DataId): BackendValues {n
    return this.data.get(dataId);
  }
}

export interface DataMover {
  /**
   * To be called by backends whenever they see
   */
  move(dataId: DataId): void;
  disposeData(dataId: DataId, force?: boolean): boolean {n
    return false;
  }

  numDataIds(): number {n
    return this.dataIdsCount;
  }
a `dataId` that they don't own.

Upon calling this method, the mover will fetch the tensor from another backend and register it with the current active backend.

```javascript
moveData(backend: KernelBackend, dataId: DataId): number
```

* The interface that defines the kernels that should be implemented when adding a new backend. New backends don't need to implement every one of the methods, this can be done gradually (throw an error for unimplemented methods).

```javascript
moveData(backend: KernelBackend, dataId: DataId): number
```

Upon calling this method, the mover will fetch the tensor from another backend and register it with the current active backend.

```javascript
moveData(backend: KernelBackend, dataId: DataId): number
```

Upon calling this method, the mover will fetch the tensor from another backend and register it with the current active backend.

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```javascript
moveData(backend: KernelBackend, dataId: DataId): number
```

Upon calling this method, the mover will fetch the tensor from another backend and register it with the current active backend.
```javascript
/** Returns true if the dtype is valid. */
export function isValidDtype(dtype: number): boolean {
  return dtype === 'bool' || dtype === 'complex64' || dtype === 'float32' ||
      dtype === 'int32';
}

/**
 * Given the full size of the array and a shape that may contain -1 as the nth * implicit dimension,
 * returns the inferred shape where -1 is replaced.
 * E.g. For shape=[2, -1, 3] and size=24, it will return [2, 4, 3].
 * @param shape The shape, which may contain -1 in some dimension.
 * @param size The full size (number of elements) of the array.
 * @return the inferred shape where -1 is replaced with the inferred size.
 */
export function inferFromImplicitShape(shape: number[], size: number): number[] {
  let shapeProd = 1;
  let newShape = shape.slice();
  for (let i = 0; i < shape.length; ++i) {
    if (shape[i] === -1) {
      shapeProd *= size / shape[i];
      newShape[i] = size / shapeProd;
    } else if (shape[i] >= 0) {
      shapeProd *= shape[i];
      newShape[i] = shape[i];
    } else if (shape[i] === -1) {
      if (newShape[i] !== 1) {
        throw Error('The implicit shape can't be a fractional number.');
      }
      newShape[i] = size / shapeProd;
    }
  }
  return newShape;
}

export function repeatedTry(checkFn: () => boolean, delayFn = (counter: number) => 0,
    maxCounter?: number): Promise<void> {
  return new Promise<void>((resolve, reject) => {
    let tryCount = 0;
    const tryFn = () => {
      if (checkFn()) {
        resolve();
        return;
      }
      setTimeout(tryFn, delayFn(tryCount++));
    };

    tryFn();
    const nextBackoff = delayFn(tryCount);
    if (maxCounter != null && tryCount >= maxCounter) {
      reject();
      return;
    }
    tryFn();
  });
}
```

'interpret' function:

```javascript
function interpret(values: TensorLike): DataType {
  if (Array.isArray(values)) {
    throw new Error('Array is not supported for interpretation');
  }

  if (values instanceof Float32Array) {
    return 'float32';
  } else if (values instanceof Int32Array || values instanceof Uint8Array) {
    return 'int32';
  } else if (isNumber(values)) {
    return inferDtype(values[0]);
  }
  if (values instanceof Float32Array) {
    return 'float32';
  } else if (values
```

This page includes information about Open Source Used in Cisco Meeting Server (formerly Acano Server) 3.6 4790. It contains code snippets and functions related to array manipulation and data type inference, likely from a library or framework used in the server software.
assertNonNegativeIntegerDimensions(shape: number[]) { 
  shape.forEach(dimSize => { 
    assert(
      Number.isInteger(dimSize) && dimSize >= 0,
      () =>
        `Tensor must have a shape comprised of
        positive integers but got
        \$\{shape\}\.`);
  });
}

/**
 * Computes flat index for a given location (multidimensional index) in a
 * Tensor/multidimensional array.
 */
export function locToIndex(
    locs: number[], rank: number, strides: number[]): number {
  if (rank === 0) {
    return 0;
  } else if (rank === 1) {
    return locs[0];
  }
  let index = locs[locs.length - 1];
  for (let i = 0; i < locs.length - 1; ++i) {
    index += strides[i] * locs[i];
  }
  return index;
}

/**
 * Computes the location (multidimensional index) in a
 * tensor/multidimensional
 * array for a given flat index.
 */
export function indexToLoc(
    index: number, rank: number, strides: number[]): number[] {
  if (rank === 0) {
    return [];
  } else if (rank === 1) {
    return [index];
  }
  const locs: number[] = new Array(rank);
  for (let i = 0; i < locs.length - 1; ++i) {
    locs[i] = Math.floor(index / strides[i]);
    index -= locs[i] * strides[i];
  }
  locs[locs.length - 1] = index;
  return locs;
}

/**
 * This method asserts whether an object is a Promise instance.
 */
export function isPromise(object: any) {
  // We chose to not use 'obj instanceOf Promise' for two reasons:
  // 1. It only reliably works for es6 Promise, not other Promise
  // implementations.
  // 2. It doesn't work with framework that uses zone.js. zone.js monkey patch
  // the async calls, so it is possible
  // the obj (patched) is comparing to a
  // pre-patched Promise.\n
  return object && object.then && typeof
  object.then === 'function';
}

/*============================================================================

import {Platform} from './platforms/platform';
import {isPromise} from './util_base';

// Expects flags from
URL in the format ?tfjsflags=FLAG1:1,FLAG2:true.
const TENSORFLOWJS_FLAGS_PREFIX = 'tfjsflags';
const FlagValue = number|boolean;
const FlagEvaluationFn = ((()) => FlagValue)((i) =>
Promise<FlagValue>);
const FlagRegistryEntry = {
  evaluationFn: FlagEvaluationFn,
  setHook?: (value: FlagValue) => void;
};

/**
 * The environment contains evaluated flags as well as the registered platform.
 * This is always used as a global
 * singleton and can be retrieved with
 * tf.env().\n
 * @doc {heading: 'Environment'}
 */
export class Environment {
  private flags: FlagValue = {};
  private flagRegistry: {
    [flagName: string]: FlagRegistryEntry
  } = {};

  private urlFlags: FlagValue = {};

  platformName: string;
  platform: Platform;

  constructor(public global: any) {
    this.populateURLFlags();
  }

  setPlatform(platformName: string, platform: Platform) {
    if (this.platform != null) {
      console.warn(
        `Platform
        \$\{this.platformName\}\` has already been set. ` +
        `Overwriting the platform with \$\{platformName\}\.`);
    }
    this.platformName = platformName;
    this.platform = platform;
  }

  registerFlag(
      flagName: string,
      evaluationFn: FlagEvaluationFn,
      setHook?: (value: FlagValue) => void) {
    this.flagRegistry[flagName] = {
      evaluationFn, setHook;
    }
  }

  async getAsync(flagName: string): Promise<FlagValue> {
    if (flagName in this.flags) {
      return this.flags[flagName];
    }

    const flagValue = this.evaluateFlag(flagName);
    if (isPromise(flagValue)) {
      throw new Error(
        `Flag \$\{flagName\}
        \$\{flagValue\}\`);\n    }
    this.flags[flagName] = await flagValue;
    return this.flags[flagName];
  }

  /**
   * Setting feature override from URL. This has to happen here because the
   * environment is initialized before flags get registered.\n
   * @doc {heading: 'Environment'}
   * @param flagName
   * @param flagValue
   * @param setFlagValue
   */
  overrideFlag(flagName: string, flagValue: string) {
    this.flags[flagName] = flagValue;
  }
}

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available but was latter defined\n    if ((cachedClearTimeout === defaultClearTimeout) &&
        clearTimeout) {\n        cachedClearTimeout = clearTimeout;\n        return clearTimeout(marker);\n    }\n    try {\n        catch (e){\n            try {\n                // When we are in I.E. but the script has been eavedo so I.E. doesn't trust the global object when called normally\n                return cachedClearTimeout.call(null, marker);\n            } catch (e){\n                // same as above but when it's a version of I.E. that must have the global object for 'this', hopefully our context correct otherwise it will throw a global error:\n            } Some versions of I.E. have different rules for clearTimeout vs setTimeout\n            return cachedClearTimeout.call(this, marker);\n        }\n    }\n}

var queue = [];\nvar draining = false;\nvar currentQueue;\nvar queueIndex = -1;\n
function cleanUpNextTick() {\n    if (!draining || !currentQueue) {\n        return;\n    }\n    draining = true;\n    var len = queue.length;\n    while(len) {\n        if (currentQueue.run) {\n            currentQueue.run();\n            queue.push(currentQueue);\n        }\n        queueIndex = -1;\n        len = queue.length;\n    }\n    currentQueue = null;\n    draining = false;\n    return clearTimeout(timeout);\n}

function drainQueue() {\n    if (draining) {\n        return;\n    }\n    var timeout = runTimeout(cleanUpNextTick);\n    draining = true;\n    var len = queue.length;\n    while(len) {\n        currentQueue = queue;\n        queue = [];\n        while (++queueIndex < len) {\n            if (currentQueue) {\n                currentQueue[queueIndex].run();\n            }\n        }\n        queueIndex = -1;\n        len = queue.length;\n    }\n    currentQueue = null;\n    draining = false;\n    runClearTimeout(timeout);\n}

process.nextTick = function (fun) {\n    var args = new Array(arguments.length - 1);\n    if (arguments.length > 1) {\n        for (var i = 1; i < arguments.length; i++) {\n            args[i - 1] = arguments[i];\n        }\n    }\n    queue.push(new Item(fun, args));\n    if (queue.length === 1 && !draining) {\n        runTimeout(drainQueue);\n    }\n};

// v8 likes predictable objects\nfunction Item(fun, array) {\n    this.fun = fun;\n    this.array = array;\n}
Item.prototype.run = function () {\n    this.fun.apply(null, this.array);\n};

process.title = 'browser';\nprocess.browser = true;\nprocess.env = {};
process.argv = [];\nprocess.version = ''; // empty string to avoid regexp issues\nprocess.versions = {};

function noop() {}\n
process.on = noop;\nprocess.addListener = noop;\nprocess.once = noop;\nprocess.off = noop;\nprocess.removeListener = noop;\nprocess.removeAllListeners = noop;\nprocess.emit = noop;\nprocess.prependListener = noop;\nprocess.prependOnceListener = noop;\nprocess.listeners = function (name) { return [];\n};\n
// tslint:disable-next-line:no-any\nfunction getGlobalMap(): Map<string, any> {\n    const ns = getGlobalNamespace();\n    ns[t] = function () { \n        throw new Error('Could not find a global object');\n    }\n}

/**\n * Returns a globally accessible 'singleton' object.\n *
 * @param key the name of the object\n * @param init a function to initialize this object\n * the first time it is fetched.\n */\nfunction getGlobal<T>(key: string, init: () => T) {
    return getGlobalMap().get(key);\n}

// tslint:disable-next-line:no-any\nlet globalNameSpace:\n    {\n        _tfGlobals: Map<string, any>\n    };\nlet tslint:disable-next-line:no-any\n
// tslint:disable-next-line:no-any\nexport function getGlobalNamespace(): {\n    _tfGlobals: Map<string, any>\n} \nif (globalNameSpace == null) {\n    // tslint:disable-next-line:no-any\n    let ns = window;\n    if (typeof window !== 'undefined') {\n        ns = window;\n    } else if (typeof global !== 'undefined') {\n        ns = global;\n    } else if (typeof process !== 'undefined') {\n        ns = process;\n    } else if (typeof (null) === 'undefined') {\n        throw new Error('Could not find a global object');\n    }\n}

getGlobalMap(): Map<string, any> {\n    return getGlobalNamespace();\n}

getGlobalMap().get(key);\n
// tslint:disable-next-line:no-any\nexport function getGlobal<T>(key: string, init: () => T) {\n    return getGlobalMap().get(key);\n}
singleton = init();
globalMap.set(key, singleton);
return globalMap.get(key);
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/*=============================================================================
Allow UpperCamelCase variable names
// tslint:disable: variable-name
// Unfortunately just enabling PascalCase per file (tslint:enable: allow-pascal-case) doesn't work.
import {NamedTensorInfoMap, TensorInfo} from
'./kernel_registry';
import {ExplicitPadding} from './ops/conv_util';
import {Activation} from
'./ops/fused_types';
import {DataType, PixelData} from
'./types';

export const Abs = 'Abs';
export type AbsInputs = UnaryInputs;

export const Acos = 'Acos';
export type AcosInputs = UnaryInputs;

export const Acosh = 'Acosh';
export type AcoshInputs = UnaryInputs;

export const Add = 'Add';
export type AddInputs = BinaryInputs;

export const AddN = 'AddN';
export type AddNInputs = TensorInfo[];

export const All = 'All';
export type AllInputs = Pick<NamedTensorInfoMap, 'x'>;
export interface AllAttrs {
  axis: number|number[];
  keepDims: boolean;
}

export const Any = 'Any';
export type AnyInputs = Pick<NamedTensorInfoMap, 'x'>;
export interface AnyAttrs {
  axis: number|number[];
  keepDims: boolean;
}

export const ArgMax = 'ArgMax';
export type ArgMaxInputs = Pick<NamedTensorInfoMap, 'x'>;
export interface ArgMaxAttrs {
  axis: number;
}

export const ArgMin = 'ArgMin';
export type ArgMinInputs = Pick<NamedTensorInfoMap, 'x'>;
export interface ArgMinAttrs {
  axis: number;
}

export const Asin = 'Asin';
export type AsinInputs = UnaryInputs;

export const Asinh = 'Asinh';
export type AsinhInputs = UnaryInputs;

export const Atan = 'Atan';
export type AtanInputs = UnaryInputs;

export const Atanh = 'Atanh';
export type AtanhInputs = UnaryInputs;

export const Atan2 = 'Atan2';
export type Atan2Inputs = BinaryInputs;

export const AvgPool = 'AvgPool';
export type AvgPoolInputs = Pick<NamedTensorInfoMap, 'x'>;
export interface AvgPoolAttrs {
  filterSize: [number, number]|number;
  strides: [number, number]|number;
  pad: 'valid'|'same'|number;
  dimRoundingMode?: 'floor'|'round'|'ceil';
}

export const AvgPoolGrad = 'AvgPoolGrad';
export type AvgPoolGradInputs = Pick<NamedTensorInfoMap, 'dy'|'input'>;
export interface AvgPoolGradAttrs {
  filterSize: [number, number]|number;
  strides: [number, number]|number;
  pad: 'valid'|'same'|number;
  dimRoundingMode?: 'floor'|'round'|'ceil';
}

export const AvgPool3D = 'AvgPool3D';
export type AvgPool3DInputs = Pick<NamedTensorInfoMap, 'x'>;
export interface AvgPool3DAttrs {
  filterSize: [number, number, number]|number;
  strides: [number, number, number]|number;
  pad: 'valid'|'same'|number;
  dimRoundingMode?: 'floor'|'round'|'ceil';
  dataFormat: 'NDHWC'|'NCDHW';
}

export const BatchMatMul = 'BatchMatMul';
export type BatchMatMulInputs = Pick<NamedTensorInfoMap, 'a'|'b'>;
export interface BatchMatMulAttrs {
  transposeA: boolean;
  transposeB: boolean;
  output const BatchToSpaceND = 'BatchToSpaceND';
  output type BatchToSpaceNDInputs = Pick<NamedTensorInfoMap, 'x'>;
  output interface BatchToSpaceNDAttrs {
    blockShape: number[];
    crops: number[];
  };
}

export const BroadcastTo = 'BroadcastTo';
export type BroadcastToInputs = Pick<NamedTensorInfoMap, 'x'>;
export interface BroadcastToAttrs {
  shape: number[];
  inputShape: number[];
}

export const Cast = 'Cast';
export type CastInputs = UnaryInputs;
export interface CastAttrs {
  dtype: DataType;
}

export const Ceil = 'Ceil';
export type CeilInputs = UnaryInputs;
export const ClipByValue = 'ClipByValue';
export type ClipByValueInputs = UnaryInputs;
export interface ClipByValueAttrs {
  clipValueMin: number;
}
clipValueMax: number;
}

export const Complex = 'Complex';
export type ComplexInputs = Pick<NamedTensorInfoMap, 'real' | 'imag'>;

export const ComplexAbs = 'ComplexAbs';
export type ComplexAbsInputs = UnaryInputs;

export const Concat = 'Concat';
export type ConcatInputs = TensorInfo[];

export interface ConcatAttrs {
  axis: number;
}

export const Conv2D = 'Conv2D';
export type Conv2DInputs = Pick<NamedTensorInfoMap, 'x' | 'filter'>;
export interface Conv2DAttrs {
  strides: [number, number][number][number][number][number][number][null];
  pad: validsameBigExpandingPadding;
  dataFormat: 'NHWC' | 'NCHW';
  dilations: [number, number][number][number][number][number][number][null];
}

export const Conv2DBackpropFilter = 'Conv2DBackpropFilter';
export type Conv2DBackpropFilterInputs = Pick<NamedTensorInfoMap, 'x' | 'dy'>;

export const Conv2DBackpropInput = 'Conv2DBackpropInput';
export type Conv2DBackpropInputInputs = Pick<NamedTensorInfoMap, 'dy' | 'filter'>;

export const Conv3D = 'Conv3D';
export type Conv3DInputs = Pick<NamedTensorInfoMap, 'x' | 'filter'>;
export interface Conv3DAttrs {
  strides: [number, number, number][number][number][number][number][number][null];
  pad: validsameBigExpandingPadding;
  dataFormat: 'NDHWC' | 'NCDHW';
  dilations: [number, number, number][number][number][number][number][number][null];
}

export const Conv3DBackpropFilterV2 = 'Conv3DBackpropFilterV2';
export type Conv3DBackpropFilterV2Inputs = Pick<NamedTensorInfoMap, 'x' | 'dy'>;

export const Conv3DBackpropInputV2 = 'Conv3DBackpropInputV2';
export type Conv3DBackpropInputV2Inputs = Pick<NamedTensorInfoMap, 'dy' | 'filter'>;

export const Cos = 'Cos';
export type CosInputs = UnaryInputs;

export const Cosh = 'Cosh';
export type CoshInputs = UnaryInputs;

export const Cumsum = 'Cumsum';
export type CumsumInputs = Pick<NamedTensorInfoMap, 'x'>;
export interface CumsumAttrs {
  axis: number;
  exclusive: boolean;
  reverse: boolean;
}

export const CropAndResize = 'CropAndResize';
export type CropAndResizeInputs = Pick<NamedTensorInfoMap, 'image' | 'boxes' | 'boxInd'>;
export interface CropAndResizeAttrs {
  cropSize: [number, number][number][number][number][number][null];
  method: 'bilinear' | 'nearest';
  extrapolationValue: number;
}

export const DenseBincount = 'DenseBincount';
export type DenseBincountInputs = Pick<NamedTensorInfoMap, 'x' | 'weights'>;

export const DepthToSpace = 'DepthToSpace';
export type DepthToSpaceInputs = Pick<NamedTensorInfoMap, 'x'>;
export interface DepthToSpaceAttrs {
  blockSize: number;
  dataFormat: 'NHWC' | 'NCHW';
}

export const DepthwiseConv2dNative = 'DepthwiseConv2dNative';
export type DepthwiseConv2dNativeInputs = Pick<NamedTensorInfoMap, 'x' | 'filter'>;

export const DepthwiseConv2dNativeBackpropFilter = 'DepthwiseConv2dNativeBackpropFilter';
export type DepthwiseConv2dNativeBackpropFilterInputs = Pick<NamedTensorInfoMap, 'x' | 'dy'>;

export const DepthwiseConv2dNativeBackpropInput = 'DepthwiseConv2dNativeBackpropInput';
export type DepthwiseConv2dNativeBackpropInputInputs = Pick<NamedTensorInfoMap, 'dy' | 'filter'>;

export const Diag = 'Diag';
export type DiagInputs = Pick<NamedTensorInfoMap, 'x'>;
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'Dilation2D':
export type Dilation2DInputs = Pick<NamedTensorInfoMap, 'x'|'filter'>;

export interface Dilation2DAttrs {
  strides: [number, number]|number;
  pad: 'valid'|'same'|number;
  dilations: [number, number]|number;
}

export const Dilation2DbackpropInput = 'Dilation2DbackpropInput';

export type Dilation2DbackpropInputs =
  Pick<NamedTensorInfoMap, 'x'|'filter'|'dy'>;

export const Dilation2DbackpropFilter = 'Dilation2DbackpropFilter';

export type Dilation2DbackpropFilterInputs =
  Pick<NamedTensorInfoMap, 'x'|'filter'|'dy'>;

export const RealDiv = 'RealDiv';

export type RealDivInputs = BinaryInputs;

export const ReLU = 'ReLU';

export type ReLUInputs = Pick<NamedTensorInfoMap, 'x'>;

interface ReLUAttrs {
  negative_slope: number;
}

export const Elu = 'Elu';

export type EluInputs = Pick<NamedTensorInfoMap, 'x'>;

interface EluAttrs {
  alpha: number;
}

export const Erf = 'Erf';

export type ErfInputs = UnaryInputs;

interface ErfAttrs {
  varianceEpsilon: number;
}

export const Equal = 'Equal';

export type EqualInputs = BinaryInputs;

export const Exp = 'Exp';

export type ExpInputs = UnaryInputs;

interface ExpAttrs {
  dtype: number;
}

export const Fill = 'Fill';

export interface FillAttrs {
  shape: number;
  value: number|string;
  dtype: number;
}

export const FlipLeftRight = 'FlipLeftRight';

export type FlipLeftRightInputs = Pick<NamedTensorInfoMap, 'image'>;

export const Floor = 'Floor';

export type FloorInputs = UnaryInputs;

export const FloorDiv = 'FloorDiv';

export type FloorDivInputs = BinaryInputs;

export const FusedBatchNorm = 'FusedBatchNorm';

export type FusedBatchNormInputs =
  Pick<NamedTensorInfoMap, 'x'|'scale'|'offset'|'mean'|'variance'>;

interface FusedBatchNormAttrs {
  varianceEpsilon: number;
}

export const GatherV2 = 'GatherV2';

export type GatherV2Inputs = Pick<NamedTensorInfoMap, 'x'|'indices'>;

interface GatherV2Attrs {
  axis: number;
  batchDims: number;
}

export const GatherNd = 'GatherNd';

export type GatherNdInputs = Pick<NamedTensorInfoMap, 'params'|'indices'>;

export const Greater = 'Greater';

export type GreaterInputs = BinaryInputs;

export const GreaterEqual = 'GreaterEqual';

export type GreaterEqualInputs = BinaryInputs;

export const Identity = 'Identity';

export type IdentityInputs = Pick<NamedTensorInfoMap, 'x'>;

export const IFFT = 'IFFT';

export type IFFTInputs = UnaryInputs;

export const Imag = 'Imag';

export type ImagInputs = UnaryInputs;

export const IsFinite = 'IsFinite';

export type IsFiniteInputs = UnaryInputs;

export const IsInf = 'IsInf';

export type IsInfInputs = UnaryInputs;

export const IsNaN = 'IsNaN';

export type IsNaNInputs = UnaryInputs;

export const LogicalAnd = 'LogicalAnd';

export type LogicalAndInputs = BinaryInputs;

export const LogicalNot = 'LogicalNot';

export type LogicalNotInputs = BinaryInputs;

export const LogicalOr = 'LogicalOr';

export type LogicalOrInputs = BinaryInputs;

export const LogSoftmax = 'LogSoftmax';

export type LogSoftmaxInputs = Pick<NamedTensorInfoMap, 'logits'>;

interface LogSoftmaxAttrs {
  axis: number;
}

export const LRN = 'LRN';

export type LRNInputs = Pick<NamedTensorInfoMap, 'x'>;

interface LRNAttrs {
  depthRadius: number;
  bias: number;
  alpha: number;
  beta: number;
}

export const LRNGrad = 'LRNGrad';

export type LRNGradInputs = Pick<NamedTensorInfoMap, 'x'|'y'|'dy'>;

interface LRNGradAttrs {
  depthRadius: number;
  bias: number;
  alpha: number;
  beta: number;
}

export const LogSoftmaxGrad = 'LogSoftmaxGrad';

export type LogSoftmaxGradInputs = Pick<NamedTensorInfoMap, 'logits'>;

export const MaxPool = 'MaxPool';

export type MaxPoolInputs = Pick<NamedTensorInfoMap, 'x'>;

interface MaxPoolAttrs {
  filterSize: [number, number]|number;
  strides: [number, number]|number;
  pad: 'valid'|'same'|number;
  dimRoundingMode?:
    'floor'|'round'|'ceil';
}

export const MaxPoolGrad = 'MaxPoolGrad';

export type MaxPoolGradInputs =
Pick<NamedTensorInfoMap, 'dy'|'input'|'output'>: 

export interface MaxPoolGradAttrs {
  filterSize: [number, number],
  strides: [number, number],
  pad: 'valid' | 'same',
  dimRoundingMode?: 'floor' | 'ceil',
  dataFormat?: 'NHWC' | 'NCDHW',
  includeBatchInIndex: boolean,
}

export const MaxPool3DGrad = 'MaxPool3DGrad';
export type MaxPool3DGradInputs =
  Pick<NamedTensorInfoMap, 'dy'|'input'|'output'>:

export interface MaxPool3DAttrs {
  filterSize: [number, number, number],
  strides: [number, number, number],
  pad: 'valid' | 'same',
  dimRoundingMode?: 'floor' | 'ceil',
}

export const MaxPool3DGrad = 'MaxPool3DGrad';
export type MaxPool3DGradInputs =
  Pick<NamedTensorInfoMap, 'dy'|'input'|'output'>:

export interface MaxPoolWithArgmaxAttrs {
  filterSize: [number, number],
  strides: [number, number],
  pad: 'valid' | 'same',
  includeBatchInIndex: boolean,
}

export const NonMaxSuppressionV3 = 'NonMaxSuppressionV3';
export type NonMaxSuppressionV3Inputs =
  Pick<NamedTensorInfoMap, 'boxes'|'scores'>:

export interface NonMaxSuppressionV3Attrs {
  maxOutputSize: number,
  iouThreshold: number,
  scoreThreshold: number,
  numSamples: number,
  seed: number,
  normalized: boolean,
  constant: Multipy,
  type: Multiply,
  const: Neg,
  type: Neg,
  inputs: Unary,
  keepDims: boolean,
  dtype: 'float32' | 'int32',
}

export const NonMaxSuppressionV4 = 'NonMaxSuppressionV4';
export type NonMaxSuppressionV4Inputs =
  Pick<NamedTensorInfoMap, 'boxes'|'scores'>:

export interface NonMaxSuppressionV4Attrs {
  maxOutputSize: number,
  iouThreshold: number,
  scoreThreshold: number,
  softNmsSigma: number,
  keepDims: boolean,
  dtype: 'float32' | 'int32',
}

export const NonMaxSuppressionV5 = 'NonMaxSuppressionV5';
export type NonMaxSuppressionV5Inputs =
  Pick<NamedTensorInfoMap, 'boxes'|'scores'>:

export interface NonMaxSuppressionV5Attrs {
  maxOutputSize: number,
  iouThreshold: number,
  scoreThreshold: number,
  keepDims: boolean,
  dtype: 'float32' | 'int32',
}

export const NonMaxSuppression = 'NonMaxSuppression';
export type NonMaxSuppressionInputs =
  Pick<NamedTensorInfoMap, 'boxes'|'scores'>:

export interface NonMaxSuppressionAttrs {
  maxOutputSize: number,
  iouThreshold: number,
  scoreThreshold: number,
  keepDims: boolean,
  dtype: 'float32' | 'int32',
}

export const NonMaxSuppressionV6 = 'NonMaxSuppressionV6';
export type NonMaxSuppressionV6Inputs =
  Pick<NamedTensorInfoMap, 'boxes'|'scores'>:

export interface NonMaxSuppressionV6Attrs {
  maxOutputSize: number,
  iouThreshold: number,
  scoreThreshold: number,
  keepDims: boolean,
  dtype: 'float32' | 'int32',
}

export const NonMaxSuppressionV7 = 'NonMaxSuppressionV7';
export type NonMaxSuppressionV7Inputs =
  Pick<NamedTensorInfoMap, 'boxes'|'scores'>:

export interface NonMaxSuppressionV7Attrs {
  maxOutputSize: number,
  iouThreshold: number,
  scoreThreshold: number,
  keepDims: boolean,
  dtype: 'float32' | 'int32',
}

export const NonMaxSuppressionV8 = 'NonMaxSuppressionV8';
export type NonMaxSuppressionV8Inputs =
  Pick<NamedTensorInfoMap, 'boxes'|'scores'>:

export interface NonMaxSuppressionV8Attrs {
  maxOutputSize: number,
  iouThreshold: number,
  scoreThreshold: number,
  keepDims: boolean,
  dtype: 'float32' | 'int32',
}

export const NonMaxSuppressionV9 = 'NonMaxSuppressionV9';
export type NonMaxSuppressionV9Inputs =
  Pick<NamedTensorInfoMap, 'boxes'|'scores'>:

export interface NonMaxSuppressionV9Attrs {
  maxOutputSize: number,
  iouThreshold: number,
  scoreThreshold: number,
  softNmsSigma: number,
  keepDims: boolean,
  dtype: 'float32' | 'int32',
}

export const NonMaxSuppressionV10 = 'NonMaxSuppressionV10';
export type NonMaxSuppressionV10Inputs =
  Pick<NamedTensorInfoMap, 'boxes'|'scores'>:

export interface NonMaxSuppressionV10Attrs {
  maxOutputSize: number,
  iouThreshold: number,
  scoreThreshold: number,
  softNmsSigma: number,
  keepDims: boolean,
  dtype: 'float32' | 'int32',
}

export const NonMaxSuppressionV11 = 'NonMaxSuppressionV11';
export type NonMaxSuppressionV11Inputs =
  Pick<NamedTensorInfoMap, 'boxes'|'scores'>:

export interface NonMaxSuppressionV11Attrs {
  maxOutputSize: number,
  iouThreshold: number,
  scoreThreshold: number,
  softNmsSigma: number,
  keepDims: boolean,
  dtype: 'float32' | 'int32',
}

export const NonMaxSuppressionV12 = 'NonMaxSuppressionV12';
export type NonMaxSuppressionV12Inputs =
  Pick<NamedTensorInfoMap, 'boxes'|'scores'>:

export interface NonMaxSuppressionV12Attrs {
  maxOutputSize: number,
  iouThreshold: number,
  scoreThreshold: number,
  softNmsSigma: number,
  keepDims: boolean,
  dtype: 'float32' | 'int32',
}

export const NonMaxSuppressionV13 = 'NonMaxSuppressionV13';
export type NonMaxSuppressionV13Inputs =
  Pick<NamedTensorInfoMap, 'boxes'|'scores'>:

export interface NonMaxSuppressionV13Attrs {
  maxOutputSize: number,
  iouThreshold: number,
  scoreThreshold: number,
  softNmsSigma: number,
  keepDims: boolean,
  dtype: 'float32' | 'int32',
}

export const NonMaxSuppressionV14 = 'NonMaxSuppressionV14';
export type NonMaxSuppressionV14Inputs =
  Pick<NamedTensorInfoMap, 'boxes'|'scores'>:

export interface NonMaxSuppressionV14Attrs {
  maxOutputSize: number,
  iouThreshold: number,
  scoreThreshold: number,
  softNmsSigma: number,
  keepDims: boolean,
  dtype: 'float32' | 'int32',
}

export const NonMaxSuppressionV15 = 'NonMaxSuppressionV15';
export type NonMaxSuppressionV15Inputs =
  Pick<NamedTensorInfoMap, 'boxes'|'scores'>:

export interface NonMaxSuppressionV15Attrs {
  maxOutputSize: number,
  iouThreshold: number,
  scoreThreshold: number,
  softNmsSigma: number,
  keepDims: boolean,
  dtype: 'float32' | 'int32',
}

export const NonMaxSuppressionV16 = 'NonMaxSuppressionV16';
export type NonMaxSuppressionV16Inputs =
  Pick<NamedTensorInfoMap, 'boxes'|'scores'>:

export interface NonMaxSuppressionV16Attrs {
  maxOutputSize: number,
  iouThreshold: number,
  scoreThreshold: number,
  softNmsSigma: number,
  keepDims: boolean,
  dtype: 'float32' | 'int32',
}

export const NonMaxSuppressionV17 = 'NonMaxSuppressionV17';
export type NonMaxSuppressionV17Inputs =
  Pick<NamedTensorInfoMap, 'boxes'|'scores'>:

export interface NonMaxSuppressionV17Attrs {
  maxOutputSize: number,
  iouThreshold: number,
  scoreThreshold: number,
  softNmsSigma: number,
  keepDims: boolean,
  dtype: 'float32' | 'int32',
}

export const NonMaxSuppressionV18 = 'NonMaxSuppressionV18';
export type NonMaxSuppressionV18Inputs =
  Pick<NamedTensorInfoMap, 'boxes'|'scores'>:

export interface NonMaxSuppressionV18Attrs {
  maxOutputSize: number,
  iouThreshold: number,
  scoreThreshold: number,
  softNmsSigma: number,
  keepDims: boolean,
  dtype: 'float32' | 'int32',
}

export const NonMaxSuppressionV19 = 'NonMaxSuppressionV19';
export type NonMaxSuppressionV19Inputs =
  Pick<NamedTensorInfoMap, 'boxes'|'scores'>:

export interface NonMaxSuppressionV19Attrs {
  maxOutputSize: number,
  iouThreshold: number,
  scoreThreshold: number,
  softNmsSigma: number,
  keepDims: boolean,
  dtype: 'float32' | 'int32',
}

export const NonMaxSuppressionV20 = 'NonMaxSuppressionV20';
export type NonMaxSuppressionV20Inputs =
  Pick<NamedTensorInfoMap, 'boxes'|'scores'>:

export interface NonMaxSuppressionV20Attrs {
  maxOutputSize: number,
  iouThreshold: number,
  scoreThreshold: number,
  softNmsSigma: number,
  keepDims: boolean,
  dtype: 'float32' | 'int32',
}
number;
export const ZerosLike = 'ZerosLike';
export type ZerosLikeInputs = UnaryInputs;
export const Step = 'Step';
export type Step Inputs = UnaryInputs;

/**
 * TensorFlow.js-only kernels
 */
export const Step = 'Step';
export type Step Inputs = UnaryInputs;

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 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or
 * implied. See the License for the specific language governing permissions and limitations under the License.
 */
import {env} from './environment';

import {getGlobal} from './global_util';
import {NamedGradientMap} from './tape';
import {Tensor} from './tensor';
import {DataType, RecursiveArray} from './types';

const kernelRegistry = getGlobal('kernelRegistry', () => new Map<string, KernelConfig>());
const gradRegistry = getGlobal('gradRegistry', () => new Map<string, GradConfig>());

export type DataId = object;

type AttributeValue = number|number[]|boolean|boolean[]|string|string[];

/** These are extra non-tensor/primitive params passed to kernel functions. */
export type Attribute = AttributeValue|RecursiveArray<AttributeValue>;

/** Specifies the code to run when executing a kernel. */
export type KernelFunc = (params: {
  inputs: NamedTensorInfoMap,
  backend: {},
  attrs?: NamedAttrMap,
}) => TensorInfo|TensorInfo[];

/** The function to run when computing a gradient during backprop. */
export type GradFunc =
    (dy: Tensor|Tensor[], saved: Tensor[], attrs: NamedAttrMap) =>
    NamedGradientMap;

/** Function that gets called after the backend initializes. */
export type KernelSetupFunc = (backend: {}) => void;

/** Function that gets called right before the backend is disposed. */
export type KernelDisposeFunc = KernelSetupFunc;

/** Config object for registering a kernel in the global registry. */
export interface KernelConfig {
  kernelName: string;
  backendName: string;
  kernelFunc: KernelFunc;
  setupFunc?: KernelSetupFunc;
  disposeFunc?: KernelDisposeFunc;
}

/** Config object for registering a gradient in the global registry. */
export interface GradConfig {
  kernelName: string;
  inputsToSave?: string[];
  // When saveAllInputs is true, all inputs will be saved. Only use this flag if inputs is an array of Tensors.
  saveAllInputs?: boolean;
  outputsToSave?: boolean[];
  gradFunc: GradFunc;
  ***/

---
import {env} from './environment';
import {BackendValues, DataType, TensorLike, TypedArray} from

export interface NamedTensorInfoMap {
  [name: string]: TensorInfo;
}

export interface NamedAttrMap {
  [name: string]: Attribute;
}

/**
 * Returns the kernel function (code) associated with the provided names.
 *
 * @param kernelName The official name of the kernel.
 * @param backendName The official name of the backend.
 * @returns The kernel function.
 */
export function getKernel(kernelName: string, backendName: string): KernelConfig[] {
  const key = makeKey(kernelName, backendName);
  return kernelRegistry.get(key);
}

/**
 * Returns the registered gradient info associated with the provided kernel.
 *
 * @param kernelName The official TF kernel name.
 * @returns The registered gradient info.
 */
export function getGradient(kernelName: string): GradConfig {
  return gradRegistry.get(kernelName);
}

/**
 * Returns kernels that have already been registered to a backend and re-registers
 * them for a new backend. Useful for registering custom backends.
 *
 * @param registeredBackendName Registered backend.
 * @param newBackendName New backend.
 */
export function copyRegisteredKernels(registeredBackendName: string, newBackendName: string): void {
  const kernels = getKernelsForBackend(registeredBackendName);
  kernels.forEach(kernelConfig => {
    const newKernelConfig = Object.assign({}, kernelConfig, {backendName: newBackendName});
    registerKernel(newKernelConfig);
  });
}

function makeKey(kernelName: string, backendName: string) {
  return `${backendName}_${kernelName}`;
}
(env().getBool('CHECK_COMPUTATION_FOR_ERRORS')) {\n  for (let i = 0; i < outputs.length; i++) {\n    const output = outputs[i];\n    // Dangling promise here because we don't want to propagate up\n    // asynchronicity.\n    output.data().then(tensorVals => {\n      checkComputationForErrors(tensorVals,\n        output.dtype, kernelName);\n    });\n  }\n}\n\nconst kernelProfile = {\n  kernelName,\n  outputs,\n  timeMs: timer.then(timing => timing.kernelMs),\n  extraInfo: timer.then(timing =>\n    timing.getExtraProfileInfo != null ?\n      timing.getExtraProfileInfo() : \n    )\n};\n\nreturn\nkernelProfile;\n}
\nlogKernelProfile(kernelProfile: KernelProfile): void {\n  const {kernelName, outputs,\n    timeMs, inputs, extraInfo} = kernelProfile;\n\n  outputs.forEach(result => {\n    Promise.all([result.data(),\n      timeMs, extraInfo]).then(valueContainer => {\n      this.logger.logKernelProfile(\n        kernelName, result,\n        valueContainer[0], valueContainer[1], inputs,\n        valueContainer[2]);\n    });\n  });\n}
\nexport\nfunction checkComputationForErrors<D extends DataType>(\n  vals: DataTypeMap[D],\n  dtype: D, kernelName: string): boolean {\n  if (dtype !== 'float32') {\n    // Only floating point computations will generate NaN values\n    return false;\n  }\n  for (let i = 0; i < vals.length; i++) {\n    const num = vals[i] as number;\n    if (isNaN(num) ||\n        !isFinite(num)) {\n      // Throwing custom exception so behavior is testable.\n      console.warn(`Found ${num} in the result of ${kernelName}`);\n      return true;\n    }\n  }\n  return false;\n}
\nexport class Logger {\n  logKernelProfile(\n    name: string, result: Tensor, vals: TypedArray,\n    timeMs: number | {error: string}, inputs: NamedTensorMap,\n    extraInfo?: string) {\n    const time = typeof timeMs === 'number' ?\n      util.rightPad(`${timeMs}ms`, 9) :\n      timeMs['error'];\n    const paddedName =\n      util.rightPad(name, 25);\n    const rank = result.rank;\n    const size = result.size;\n    const shape =\n      util.rightPad(result.shape.toString(), 14);\n    let inputShapesDescription = '';\n
    for (const name in inputs) {\n      const input = inputs[name];\n      if (input != null) {\n        // The input might be a non-tensor (e.g\n        // HTMLImageElement), in which case\n        // we claim the output shape as input shape.\n        const inputShape =\n          input.shape || result.shape;\n        const inputRank = inputShape.length;\n        inputShapesDescription +=\n          `${name}: ${inputRank}D ${inputRank > 0 ? inputShape : ''} `;\n      }\n    }\n
    console.log(\n      `%c${paddedName}\t%c${time}\t%c${rank}D ${shape}\t%c${size}\t%c${inputShapesDescription}\t%c${extraInfo}`,
        'font-weight:bold', 'color:red', 'color:blue', 'color: orange',\n        'color: green', 'color: steelblue');\n  }
}

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 * http://www.apache.org/licenses/LICENSE-2.0\n * Unless required by applicable law or agreed to in writing,\n * software\n * distributed under the License is distributed on an "AS IS" BASIS,\n * WITHOUT WARRANTIES\n * OR CONDITIONS OF ANY KIND, either express or implied.\n * See the License for the specific language\n * governing permissions and\n * limitations under the License.\n */

import {Tensor} from './tensor';
import {NamedTensorMap} from './tensor_types';
import * as util from './util';

export interface TapeNode {\n  id: number;\n  kernelName: string;\n  outputs: Tensor[];\n  inputs: NamedTensorMap;\n  // Optional params, defined only for ops with gradient impl.\n  gradient? : (dys: Tensor[]) =>\n    NamedGradientMap;\n  saved?: Tensor[];\n}

export type NamedGradientMap = {\n  [inputName: string]: () =>\n    Tensor;\n};

/**\n * Computes a list of TapeNodes that connect x to y, filtering everything else\n * out and\n * preserving the order of the original tape elements.\n * @param param Tape tape\n * @param param x The input Tensor.\n * @param param y The output Tensor.\n */
export function getFilteredNodesXToY(\n  tape: TapeNode[],\n  x: Tensor[],\n  y: Tensor): TapeNode[] {\n  // Forward pass to compute all the nodes and Tensors that are\n  // transitively connected to x and y, filtering everything else\n  // out and\n  // preserving the order of the original tape elements.\n}

const tensorsFromX = false;\n  for (let j = 0; j < xs.length; j++) {\n    if (tensorsFromX[input[i].id]) {\n      nodeOutputs.forEach(output => {\n        tensorsFromX[output.id] = true;\n      });\n    }
  }\n  return tensorsFromX;\n}

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break; // Backward pass to find all of the nodes and Tensors that lead to y.
  const tensorsLeadToY: {[tensorId: number]: boolean} = {};
  tensorsLeadToY[y.id] = true;
  const nodesToY: {[nodeId: number]: boolean} = {};

  for (let i = tape.length - 1; i >= 0; i--) {
    const node = tape[i];
    const nodeInputs = node.inputs;

    // If any of the outputs lead to y, mark all of the inputs as leading to y.
    for (let j = 0; j < node.outputs.length; j++) {
      if (tensorsLeadToY[node.outputs[j].id]) {
        for (const inputName in nodeInputs) {
          tensorsLeadToY[nodeInputs[inputName].id] = true;
          tensorsLeadToY[node[0].id] = true;
        }
      }
    }
  }

  if (anyInputFromX) {
    break;
  }

  // Backward pass to find all of the nodes and Tensors that lead to y.
  const tensorsLeadToY: {[tensorId: number]: boolean} = {};
  tensorsLeadToY[y.id] = true;
  const nodesToY: {[nodeId: number]: boolean} = {};

  for (let i = tape.length - 1; i >= 0; i--) {
    const node = tape[i];
    const nodeOutputs = node.outputs;

    // If any of the inputs lead to y, mark all of the outputs as leading to y.
    for (let j = 0; j < node.inputs.length; j++) {
      if (tensorsLeadToY[node.inputs[j].id]) {
        for (const outputName in nodeOutputs) {
          tensorsLeadToY[nodeOutputs[outputName].id] = true;
        }
      }
    }
  }

  // Prune the inputs from the node that aren't a function of x.
  const prunedInputs: {[inputName: string]: Tensor} = {};

  for (const input in node.inputs) {
    if (tensorsFromX[node.inputs[input].id]) {
      prunedInputs[input] = node.inputs[input];
    }
  }

  // Copy the node and overwrite inputsAndArgs to the pruned version.
  const prunedNode = Object.assign({}, node);
  prunedNode.inputs = prunedInputs;
  prunedNode.outputs = node.outputs;
  filteredTape.push(prunedNode);
}

/**
 * Backpropagate gradients through the filtered TapeNodes.
 *
 * @param tensorAccumulatedGradientMap A map of Tensor to its gradient. This
 * map is mutated by this method.
 * @param filteredTape The filtered TapeNodes to backprop through.
 * @returns 
 *
 * @example
 * backpropagateGradients(
 *   tensorAccumulatedGradientMap, filteredTape); // Returns a new Tape with
 * updated gradients.
 */
export function backpropagateGradients(
    tensorAccumulatedGradientMap: {[tensorId: number]: Tensor},
    filteredTape: TapeNode[], tidy: (f: Function) => Tensor,
    add: (a: Tensor, b: Tensor) => Tensor) {
  // Walk the tape backward and keep a map of Tensor to its gradient.
  for (let i = filteredTape.length - 1; i >= 0; i--) {
    const node = filteredTape[i];

    const dys: Tensor[] = [];
    node.outputs.forEach(o => {
      const gradTensor = tensorAccumulatedGradientMap[o.id];
      if (gradTensor != null) {
        dys.push(gradTensor);
      } else {
        // This particular output is not in the back-propagation subgraph, so it
        // does not affect the final output, thus we put null for its dy.
        dys.push(null);
      }
    });

    if (node.gradient == null) {
      throw new Error(`Cannot compute gradient: gradient function not found ` +
        `for ${node.kernelName}.`);
    }

    // Backprop dy through this node and accumulate gradients over the inputs.
    const inputGradients = node.gradient(dys);

    for (const inputName in inputGradients) {
      if (!(inputName in inputGradients)) {
        throw new Error(`Cannot backprop through input ${inputName}. ` +
          `Available gradients found: ${Object.keys(inputGradients)}.`);
      }

      // Call the gradient function.
      const dx = tidy(() => inputGradients[inputName]());
      if (dx.dtype !== 'float32') {
        throw new Error(`Error in gradient for op ${
            node.kernelName}. The gradient of input ` +
            `'${inputName}' has dtype '${dx.dtype}'`);
      }
      const x = node.inputs[inputName];
      if (!util.arraysEqual(dx.shape, x.shape)) {
        throw new Error(`Error in gradient for op ${
            node.kernelName}. The gradient
            of input '${inputName}' has shape '${x.shape}', which does not match ` +
            `the shape of the input '${x.shape}'`);
      }

      if (tensorAccumulatedGradientMap[x.id] == null) {
        tensorAccumulatedGradientMap[x.id] = dx;
      } else {
        const curGradient = tensorAccumulatedGradientMap[x.id];
        tensorAccumulatedGradientMap[x.id] = add(curGradient, dx);
        curGradient.dispose();
      }
    }
  }

  // Return the paths that come from x and lead to y.
  return filteredTape;
```typescript
z
const FORMAT_NUM_FIRST_LAST_VALS = 3;\n// Number of significant digits to show.
const FORMAT_NUM_SIG_DIGITS = 7;\n
export function tensorToString(
    vals: TypedArray|string[], shape: number[],
    dtype: DataType,
    verbose: boolean) {
  const strides = computeStrides(shape);
  const padPerCol = computeMaxSizePerColumn(vals, shape, dtype, strides);
  const rank = shape.length;
  const valsLines = subTensorToString(vals, shape, dtype, strides, padPerCol);
  const lines = new Array(rank).fill("");
  return lines.join("");
}

function computeMaxSizePerColumn(
    vals: TypedArray|string[], shape: number[],
    dtype: DataType,
    pad: number) {
  const strides = computeStrides(shape);
  const padPerCol = new Array(strides.length).fill(0);
  const vals = Array.from(vals);
  const n = sizeFromShape(shape);
  const numCols = shape.length - 1;
  const padPerCol = new Array(n).fill(0);
  const rank = shape.length;
  const valuesOrTuples = dtype === 'complex64' ? createComplexTuples(vals) : vals;
  const padPerCol = new Array(numCols).fill(0);
  const rank = shape.length;
  const valsLines = subTensorToString(vals, shape, dtype, strides, padPerCol);
```
TensorTracker { makeTensor(values: DataValues, shape: number[], dtype: DataType, backend?: Backend): Tensor; makeVariable(initialValue: Tensor, trainable?: boolean, name?: string, dtype?: DataType): Variable; incRef(a: Tensor, backend: Backend): void; disposeTensor(t: Tensor): void; disposeVariable(v: Variable): void; read(dataId: DataId): Promise<BackendValues>; readSync(dataId: DataId): BackendValues
}

TensorTracker { cast<T extends Tensor>(x: T, dtype: DataType): T; buffer<R extends Rank, D extends DataType>(values: DataValues[], shape: number[], dtype: DataType): TensorBuffer<R, D>; print<T extends Tensor>(x: T, verbose: boolean): void; clone<T extends Tensor>(x: T): void; // TODO(yassogba) bring reshape back
}

OpHandler { cast<T extends Tensor>(x: T, dtype: DataType): T; buffer<R extends Rank, D extends DataType>(shape: ShapeMap[R], dtype: D, values: DataMap[D]): TensorBuffer<R, D>; print<T extends Tensor>(x: T, verbose: boolean): void; clone<T extends Tensor>(x: T, backend: Backend); throw reshape back
}

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synchronously.

```javascript
*\n* @doc {heading: 'Tensors', subheading: 'Classes'}
*/
arraySync(): ArrayMap\[R\] {
  return toNestedArray(this.shape, this.dataSync()) as ArrayMap\[R\];
}

/**
 * Asynchronously downloads the values from the 'tf.Tensor'. Returns a
 * promise of 'TypedArray' that resolves when the computation has finished.
 * @doc {heading: 'Tensors', subheading: 'Classes'}
 */
dataSync<D extends DataType = NumericDataType>():
  DataMap\[D\] {
    this.throwIfDisposed();
    const data = trackerFn().readSync(this.dataId);
    return data as DataMap\[D\];
  }

  /**
   * Synchronously downloads the values from the `tf.Tensor`. This blocks the
   * UI thread until the values are ready, which can cause performance issues.
   * @doc {heading: 'Tensors', subheading: 'Classes'}
   */
  data<D extends DataType = NumericDataType>(): Promise<DataTypeMap\[D\]>
    {
    this.throwIfDisposed();
    const bytes = await data as Uint8Array;
    try {
      return bytes.map(b => util.decodeString(b)) as DataTypeMap\[D\];
    } catch {
      throw new Error('Failed to decode the string bytes into utf-8.' +
        'To get the original bytes, call tensor.bytes().');
    }
  }

  /**
   * Prints the `tf.Tensor`. See `tf.print` for details.
   * @doc {heading: 'Tensors', subheading: 'Classes'}
   */
  print(verbose = false): void {
    return opHandler.print(this, verbose);
  }

  /**
   * Returns a copy of the tensor. See `tf.clone` for details.
   * @doc {heading: 'Tensors', subheading: 'Classes'}
   */
  clone<T extends Tensor>(this: T): T {
    this.throwIfDisposed();
    return opHandler.clone(this as T);
  }

  /**
   * Returns a human-readable description of the tensor. Useful for logging.
   * @doc {heading: 'Tensors', subheading: 'Classes'}
   */
  toString(verbose = false): string {
    const vals = this.dataSync();
    return tensorToString(vals, this.shape, this.dtype, verbose);
  }

  cast<T extends this>(dtype: DataType): T {
    this.throwIfDisposed();
    return opHandler.cast(this as T, dtype);
  }

  variable(trainable = true, name?: string, dtype?: DataType): Variable<R> {
    this.throwIfDisposed();
    return trackerFn().makeVariable(this, trainable, name, dtype) as
        Variable<R>;
  }
}
```

Object.defineProperty(Tensor, Symbol.hasInstance, {
  value: (instance: Tensor) => {
    // Implementation note: we should use properties of the object that will be
    // defined before the constructor body has finished executing (methods).\n    // This is because when this code is transpiled by babel, babel will call\n    // classCallCheck before the constructor body is run.\n    // See https://github.com/tensorflow/tfjs/issues/3384 for\n    backstory.\n    return !!instance && instance.data != null &&
instance(dataSync != null &&
instance.dataSync function getGlobalTensorClass() {\n    // Use getGlobal so that\n    // boundaries because the node resolution alg may result in\n    different modules\n    // being returned for this file depending on the path they are loaded from.\n    return getGlobal('Tensor', () => {\n      // Global side effect. Cache global reference to Tensor\n      \n      return Tensor;
    });\n  })\n}
Tensor<Rank.R1>;\n/** @doclink Tensor */\nexport type Tensor2D = Tensor<Rank.R2>;\n/** @doclink Tensor
*/\nexport type Tensor3D = Tensor<Rank.R3>;\n/** @doclink Tensor */\nexport type Tensor4D =
Tensor<Rank.R4>;\n/** @doclink Tensor */\nexport type Tensor5D = Tensor<Rank.R5>;\n/** @doclink Tensor
*/\nexport type Tensor6D = Tensor<Rank.R6>;\n\n/**\n * A mutable `tf.Tensor`, useful for persisting state, e.g. for
training.\n *\n * @doc {heading: 'Tensors', subheading: 'Classes'}\n */\nexport class Variable<R extends Rank =
Rank> extends Tensor<R> {\n name: string;\n\n constructor(\n
initialValue: Tensor<R>, public trainable:
boolean, name: string,\n
tensorId: number) {\n super(\n
initialValue.shape, initialValue.dtype,
initialValue.dataId, tensorId);\n this.name = name;\n }\n\n /**\n * Assign a new `tf.Tensor` to this variable. The
new `tf.Tensor` must have\n * the same shape and dtype as the old `tf.Tensor`.\n *\n * @param newValue New
tensor to be assigned to this variable.\n *\n * @doc {heading: 'Tensors', subheading: 'Classes'}\n */\n
assign(newValue: Tensor<R>): void {\n if (newValue.dtype !== this.dtype) {\n
throw new Error(\n
`dtype of the new value (${newValue.dtype}) and ` +\n
`previous value (${this.dtype}) must match`);\n }\n
if (!util.arraysEqual(newValue.shape, this.shape)) {\n
throw new Error(\n
`shape of the new value
(${newValue.shape}) and ` +\n
`previous value (${this.shape}) must match`);\n }\n
trackerFn().disposeTensor(this);\n this.dataId = newValue.dataId;\n trackerFn().incRef(this, null /* backend
*/);\n }\n\n dispose(): void {\n trackerFn().disposeVariable(this);\n this.isDisposedInternal = true;\n
}\n}\n\nObject.defineProperty(Variable, Symbol.hasInstance, {\n value: (instance: Variable) => {\n return
instance instanceof Tensor && instance.assign != null &&\n
instance.assign instanceof Function;\n
}\n});\n","/**\n * @license\n * Copyright 2017 Google LLC. All Rights Reserved.\n * Licensed under the Apache
License, Version 2.0 (the \"License\");\n * you may not use this file except in compliance with the License.\n * You
may obtain a copy of the License at\n *\n * http://www.apache.org/licenses/LICENSE-2.0\n *\n * Unless required
by applicable law or agreed to in writing, software\n * distributed under the License is distributed on an \"AS IS\"
BASIS,\n * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.\n * See the
License for the specific language governing permissions and\n * limitations under the License.\n *
=============================================================================\n
*/\n\n/** @docalias number[] */\nexport interface ShapeMap {\n R0: number[];\n R1: [number];\n R2: [number,
number];\n R3: [number, number, number];\n R4: [number, number, number, number];\n R5: [number, number,
number, number, number];\n R6: [number, number, number, number, number, number];\n}\n\n/** @docalias
number[] */\nexport interface ArrayMap {\n R0: number;\n R1: number[];\n R2: number[][];\n R3:
number[][][];\n R4: number[][][][];\n R5: number[][][][][];\n R6: number[][][][][][];\n}\n\nexport interface
DataTypeMap {\n float32: Float32Array;\n int32: Int32Array;\n bool: Uint8Array;\n complex64: Float32Array;\n
string: string[];\n}\n\nexport interface SingleValueMap {\n bool: boolean;\n int32: number;\n float32: number;\n
complex64: number;\n string: string;\n}\n\n/** @docalias 'float32'|'int32'|'bool'|'complex64'|'string' */\nexport type
DataType = keyof DataTypeMap;\nexport type NumericDataType = 'float32'|'int32'|'bool'|'complex64';\nexport type
TypedArray = Float32Array|Int32Array|Uint8Array;\n/** Tensor data used in tensor creation and user-facing API.
*/\nexport type DataValues = DataTypeMap[DataType];\n/** The underlying tensor data that gets stored in a
backend. */\nexport type BackendValues = Float32Array|Int32Array|Uint8Array|Uint8Array[];\n\nexport enum
Rank {\n R0 = 'R0',\n R1 = 'R1',\n R2 = 'R2',\n R3 = 'R3',\n R4 = 'R4',\n R5 = 'R5',\n R6 = 'R6'\n}\n\nexport
type FlatVector = boolean[]|number[]|TypedArray;\nexport type RegularArray<T> =\n
T[]|T[][]|T[][][]|T[][][][]|T[][][][][]|T[][][][][][];\n\n// tslint:disable-next-line:no-any\nexport interface
RecursiveArray<T extends any> {\n [index: number]: T|RecursiveArray<T>;\n}\n\n// Looks for upcasting types.
Used, for example, in operations with mixed dtype\n// inputs.\nenum UpcastInt32AndMap {\n 'float32' = 'float32',\n
'int32' = 'int32',\n 'bool' = 'int32',\n 'complex64' = 'complex64'\n}\n\nenum UpcastBoolAndMap {\n 'float32' =
'float32',\n 'int32' = 'int32',\n 'bool' = 'bool',\n 'complex64' = 'complex64'\n}\n\nenum UpcastFloat32AndMap {\n
'float32' = 'float32',\n 'int32' = 'float32',\n 'bool' = 'float32',\n 'complex64' = 'complex64'\n}\n\nenum
UpcastComplex64AndMap {\n 'float32' = 'complex64',\n 'int32' = 'complex64',\n 'bool' = 'complex64',\n
'complex64' = 'complex64'\n}\n\nconst upcastTypeMap = {\n 'float32': UpcastFloat32AndMap,\n 'int32':
UpcastInt32AndMap,\n 'bool': UpcastBoolAndMap,\n 'complex64': UpcastComplex64AndMap\n};\n\nexport

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function upcastType(typeA: DataType, typeB: DataType): DataType {
  if (typeA === 'string' || typeB === 'string') {
    if (typeA === 'string' && typeB === 'string') {
      return 'string';
    }
    throw new Error(`Can not upcast ${typeA} with ${typeB}`);
  }
  return upcastTypeMap[typeA][typeB];
}

/**
 * @internal
 */
export function sumOutType(type: DataType): DataType {
  return upcastType(type, 'int32');
}

/** Returns the output type after summation. */
export function sumOutType(type: DataType): DataType {
  return upcastType(type, 'int32');
}

/** @docalias TypedArray|Array */
export type TensorLike =
  TypedArray|number|boolean|string|RecursiveArray<number|number[]|TypedArray>|RecursiveArray<boolean|RecursiveArray<string>|Uint8Array[];
export type ScalarLike =
  number|boolean|string|Uint8Array[];
/** @docalias TypedArray|Array */
export type TensorLike1D =
  TypedArray|number[]|boolean[]|string[]|Uint8Array[];
/** @docalias TypedArray|Array */
export type TensorLike2D =
  TypedArray|number[]|number[]|boolean[]|string[]|Uint8Array[];
/** @docalias TypedArray|Array */
export type TensorLike3D =
  TypedArray|number[]|number[]|number[]|boolean[]|string[]|Uint8Array[];
/** @docalias TypedArray|Array */
export type TensorLike4D =
  TypedArray|number[]|number[]|number[]|number[]|boolean[]|string[]|Uint8Array[];
/** @docalias TypedArray|Array */
export type TensorLike5D =
  TypedArray|number[]|number[]|number[]|number[]|number[]|boolean[]|string[]|Uint8Array[];
/** @docalias TypedArray|Array */
export type TensorLike6D =
  TypedArray|number[]|number[]|number[]|number[]|number[]|number[]|boolean[]|string[]|Uint8Array[];
/** Type for representing image data in Uint8Array. */
export interface PixelData {
  width: number;
  height: number;
  data: Uint8Array;
}

/**
 * Extracts any Tensor's found within the provided object.
 * @param container an object that may be a Tensor or may directly contain Tensors, such as a Tensor[] or {key: Tensor, ...}. In general it is safe to pass any object here, except that Promise's are not supported. @returns An array of Tensors found within the passed object. If the argument is simply a Tensor, a list containing that Tensor is returned. If the object is not a Tensor or does not contain Tensors, an empty list is returned. */
export function getTensorsInContainer(result: TensorContainer): Tensor[] {
  const list: Tensor[] = [];
  const seen = new Set<{}|void>();
  walkTensorContainer(result, list, seen);
  return list;
}

function walkTensorContainer(
    container: TensorContainer, list: Tensor[], seen: Set<{}|void>): void {
  if (container == null) {
    return;
  }
  if (container instanceof Tensor) {
    list.push(container);
    return;
  }
  if (!isIterable(container)) {
    return;
  }
  // Iteration over keys works also for arrays.
  for (const k in container) {
    const val = container[k];
    if (isIterable(val)) {
      walkTensorContainer(val, list, seen);
    } else {
      list.push(val);
    }
  }
}

// tslint:disable-next-line:no-any
function isIterable(obj: any): boolean {
  return Array.isArray(obj) || typeof obj === 'object';
}
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=============================================================================

import {BackendTimingInfo, DataMover, KernelBackend} from './backends/backend';
import {Environment, setEnvironmentGlobal} from './environment';
import {getGlobalNamespace} from './global_util';
import {Add, Cast, Identity} from './kernel_names';
import {getGradient, getKernel, getKernelsForBackend, GradFunc, NamedAttrMap, TensorInfo} from './kernel_registry';
import {KernelProfile, Profiler} from './profiler';
import {getTensorsInContainer} from './tensor';
import {SetDataId, setDataTracker} from './tensor_types';
import {BackendValues, DataType, DataValues} from './types';
import * as util from './util';
import {bytesFromStringArray, makeOnesTypedArray, now, sizeFromShape} from './util';

/**
 * A function that computes an output. The save function is for saving tensors computed in the forward pass, that we need in the backward pass.
 */
export type ForwardFunc<T> = (backend: KernelBackend, save?: GradSaveFunc) => T;

/**
 * @docalias (a: Tensor, b: Tensor,..., save?: Function) => {
 *   value: Tensor,
 *   gradFunc: (dy: Tensor, saved?: NamedTensorMap) => Tensor | Tensor[]
 * }
 */
export type CustomGradientFunc<T extends Tensor> =
    (...inputs: Array<Tensor|GradSaveFunc>) => {
      value: T;
      gradFunc: (dy: T, saved: Tensor[]) => Tensor | Tensor[];
    };

export type MemoryInfo = {
  numTensors: number; numDataBuffers: number; numBytes: number;
  unreliable?: boolean; reasons: string[];
};

export type KernelInfo = {
  name: string; bytesAdded: number; totalBytesSnapshot: number;
  tensorsAdded: number; totalTensorsSnapshot: number;
  inputShapes: number[];
  outputShapes: number[];
  kernelTimeMs: number | {error: string} | Promise<number|
  {error: string}>;
  extraInfo: string | Promise<string>;
};

export type ProfileInfo = {
  newBytes: number; newTensors: number; peakBytes: number;
  kernels: KernelInfo[];
  result: TensorContainer;
  kernelNames: string[];
};

export interface TimingInfo extends BackendTimingInfo {
  wallMs: number;
}

/** @docalias Function */
export type ScopeFn<T extends TensorContainer> = () => T;

interface ScopeState {
  track: Tensor[];
  name: string;
  id: number;
}

interface RegisteredKernelInvocation<I extends NamedTensorMap> {
  kernelName: string;
  inputs: I;
  attrs?: NamedAttrMap;
}

interface CustomGradKernelInvocation<T extends Tensor|Tensor[],
I extends NamedTensorMap> {
  forwardFunc: ForwardFunc<T>;
  backwardsFunc: (dy: T, saved: Tensor[]) => {
    // Public since optimizers will use it
    registeredVariables: NamedVariableMap = {};
    nextTapeNodeId = 0;
    numBytes = 0;
    numTensors = 0;
    numStringTensors = 0;
    numDataBuffers = 0;
    activeTape = TapeNode[];
    // Number of nested tf.grad() statements when computing higher-order gradients // gradients. E.g. `1` for first-order gradients and `2` for second-order gradients // gradients. Used to track if the tape should be removed after a backprop. // gradientDepth = 0; // Number of nested kernel calls. When kernel depth is greater than 1, we turn // off the tape. // kernelDepth = 0; // Keep Tensors that parallel the tapes. activeScope: ScopeState;
    scopeStack: ScopeState[] = [];
    /* */
    * Keeps track of the number of data moves during a kernel execution. We maintain a stack since kernels can call other kernels, recursively.*
    numDataMovesStack: number[] = [];
    nextScopeId = 0;
    tensorInfo = new WeakMap<DataId, {
      backend: KernelBackend;
      bytes: number;
      dtype: DataType;
      shape: number[];
    }>();
    profiling = false;
    activeProfile: ProfileInfo = [];
    newBytes: 0;
    newTensors: 0;
    peakBytes: 0;
    kernels: [];
    result: null;
    get kernelNames();
    string[]
  };
}
Set(this.kernels.map(k => k.name)));\n
}\n };\n\n dispose() {\n for (const variableName in
this.registeredVariables) {\n
this.registeredVariables[variableName].dispose();\n }\n }\n}\n\nexport class
Engine implements TensorTracker, DataMover {\n state: EngineState;\n backendName: string;\n registry: {[id:
string]: KernelBackend} = {};\n registryFactory: {\n [id: string]: {\n
factory: () => KernelBackend |
Promise<KernelBackend>,\n
priority: number\n }\n } = {};\n\n private profiler: Profiler;\n private
backendInstance: KernelBackend;\n private pendingBackendInit: Promise<boolean>;\n private
pendingBackendInitId = 0;\n\n constructor(public ENV: Environment) {\n this.state = new EngineState();\n }\n\n
async ready(): Promise<void> {\n if (this.pendingBackendInit != null) {\n
return
this.pendingBackendInit.then(() => {});\n }\n if (this.backendInstance != null) {\n
return;\n }\n const
sortedBackends = this.getSortedBackends();\n\n for (let i = 0; i < sortedBackends.length; i++) {\n
const
backendName = sortedBackends[i];\n
const success = await this.initializeBackend(backendName).success;\n
if (success) {\n
await this.setBackend(backendName);\n
return;\n
}\n }\n\n throw new Error(\n
`Could not initialize any backends, all backend initializations ` +\n
`failed.`);\n }\n\n get backend():
KernelBackend {\n if (this.pendingBackendInit != null) {\n
throw new Error(\n
`Backend
'${this.backendName}' has not yet been initialized. Make ` +\n
`sure to await tf.ready() or await
tf.setBackend() before calling ` +\n
`other methods`);\n }\n if (this.backendInstance == null) {\n
const
{name, asyncInit} = this.initializeBackendsAndReturnBest();\n
if (asyncInit) {\n
throw new Error(\n
`The highest priority backend '${name}' has not yet been ` +\n
`initialized. Make sure to await tf.ready() or `
+\n
`await tf.setBackend() before calling other methods`);\n
}\n
this.setBackend(name);\n }\n return
this.backendInstance;\n }\n\n backendNames(): string[] {\n return Object.keys(this.registryFactory);\n }\n\n
findBackend(backendName: string): KernelBackend {\n if (!(backendName in this.registry)) {\n
// If the
backend hasn't been initialized but we have a registry entry for\n
// it, initialize it and return it.\n
if
(backendName in this.registryFactory) {\n
const {asyncInit} = this.initializeBackend(backendName);\n
if
(asyncInit) {\n
// Backend is not ready yet.\n
return null;\n
}\n
} else {\n
return null;\n
}\n
}\n return this.registry[backendName];\n }\n\n findBackendFactory(backendName: string):\n
() =>
KernelBackend | Promise<KernelBackend> {\n if (!(backendName in this.registryFactory)) {\n
return null;\n
}\n return this.registryFactory[backendName].factory;\n }\n\n registerBackend(\n
backendName: string,\n
factory: () => KernelBackend | Promise<KernelBackend>,\n
priority = 1): boolean {\n if (backendName in
this.registryFactory) {\n
console.warn(\n
`${backendName} backend was already registered. ` +\n
`Reusing existing backend factory.`);\n
return false;\n }\n this.registryFactory[backendName] = {factory,
priority};\n return true;\n }\n\n async setBackend(backendName: string): Promise<boolean> {\n if
(this.registryFactory[backendName] == null) {\n
throw new Error(`Backend name '${backendName}' not found
in registry`);\n }\n this.backendName = backendName;\n if (this.registry[backendName] == null) {\n
this.backendInstance = null;\n
const {success, asyncInit} = this.initializeBackend(backendName);\n
const
result = asyncInit ? await success : success;\n
if (!result) {\n
return false;\n
}\n }\n
this.backendInstance = this.registry[backendName];\n this.setupRegisteredKernels();\n // Reset the profiler.\n
this.profiler = new Profiler(this.backendInstance);\n\n return true;\n }\n\n private setupRegisteredKernels(): void
{\n const kernels = getKernelsForBackend(this.backendName);\n kernels.forEach(kernel => {\n
if
(kernel.setupFunc != null) {\n
kernel.setupFunc(this.backendInstance);\n
}\n });\n }\n\n private
disposeRegisteredKernels(backendName: string): void {\n const kernels =
getKernelsForBackend(backendName);\n kernels.forEach(kernel => {\n
if (kernel.disposeFunc != null) {\n
kernel.disposeFunc(this.registry[backendName]);\n
}\n });\n }\n\n /**\n * Initializes a backend by looking
up the backend name in the factory\n * registry and calling the factory method. Returns a boolean representing\n *
whether the initialization of the backend suceeded. Throws an error if\n * there is no backend in the factory
registry.\n */\n private initializeBackend(backendName: string):\n
{success: boolean|Promise<boolean>,
asyncInit: boolean} {\n const registryFactoryEntry = this.registryFactory[backendName];\n if
(registryFactoryEntry == null) {\n
throw new Error(\n
`Cannot initialize backend ${backendName}, no
registration found.`);\n }\n\n try {\n
const backend = registryFactoryEntry.factory();\n
/* Test if the

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factory returns a promise. Do in a more liberal way than previous
Promise.resolve(backend)===backend as we needed to account for custom Promise
implementations (e.g. Angular) */
if (backend && typeof backend.then === 'function') {
  const promisepId = ++this.pendingBackendInitId;
  const success = !!backend
    .then(backendInstance => {
      // Outsourced promise. Another backend was set in the meantime.
      if (promisepId < this.pendingBackendInitId) {
        return false;
      }
    })
    .catch(err => {
      // Outsourced promise. Another backend was set in the meantime.
      if (promisepId < this.pendingBackendInitId) {
        return false;
      }
    })
  this.pendingBackendInit = null;
  console.warn(`Initialization of backend ${backendName} failed`);
  if (typeof err !== 'function') {
    throw new Error(`Initialization of backend ${backendName} failed`);
  }
  return false;
}
this.registry[backendName] = backendInstance;
this.pendingBackendInit = null;
// Initialization of backend $ {backendName} failed
private getSortedBackends(): string[] {
  if (Object.keys(this.registryFactory).length === 0) {
    throw new Error(`No backend found in registry.`);
  }
  return Object.keys(this.registryFactory).sort((a: string, b: string) => {
    // Highest priority comes first.
    return this.registryFactory[b].priority - this.registryFactory[a].priority;
  });
}
```javascript
res = f();
end();
return res;
}

res = f();
end();
return res;
}

private static
nextTensorId = 0;
private nextTensorId(): number {
  return Engine.nextTensorId++;
}

private static
nextVariableId = 0;
private nextVariableId(): number {
  return Engine.nextVariableId++;
}

/**
 * This method is called instead of the public-facing tensor.clone() when saving a tensor for backwards pass. It makes sure to add the clone operation to the tape regardless of being called inside a kernel execution.
 */
private clone(x: Tensor): Tensor {
  const y: Tensor = ENGINE.runKernel(Identity, {x} as {} as NamedTensorMap);
  const grad = (dy: Tensor) => ({
    x: () => {
      const dtype = 'float32';
      return ENGINE.runKernel(Cast, {x: dy} as {} as NamedTensorMap,
        // tslint:disable-next-line: no-unnecessary-type-assertion
        dtype as string) as Tensor;
    }
  });
  this.addTapeNode(this.state.activeScope.name, inputs, outputs, grad, saved, {});
  return y;
}

/**
 * Execute a kernel with the given name and return the output tensor.
 *
 * @param kernelName The name of the kernel to execute.
 * @param inputs A map of input names to tensors.
 * @param attrs A map of attribute names to their values. An attribute is a string, inputs: NamedTensorMap, attrs?: NamedAttrMap) {
  return this.runKernelFunc({kernelName, inputs, attrs});
}

private shouldCheckForMemLeaks(): boolean {
  return this.ENV.getBool('IS_TEST');
}

private checkKernelForMemLeak(kernelName: string, numDataIdsBefore: number, outInfos: TensorInfo[]): void {
  const numDataIdsAfter = this.backend.numDataIds();
  // Account for the number of moves during kernel execution. A "data move" can happen in the middle of a kernel execution, placing a new (key,value) pair in the data storage. Since data moves have net zero effect (we always remove the data from the old backend), we have to cancel them out when detecting memory leaks.
  // const numMoves = this.state.numDataMovesStack[this.state.numDataMovesStack.length - 1];
  // this.state.numDataMovesStack[this.state.numDataMovesStack.length - 1] = numDataIdsAfter - numDataIdsBefore - numOutputDataIds - numMoves;
  const numOutputDataIds = 0;
  // Account for the number of moves during kernel execution. A "data move" can happen in the middle of a kernel execution, placing a new (key,value) pair in the data storage. Since data moves have net zero effect (we always remove the data from the old backend), we have to cancel them out when detecting memory leaks.
  // const numMoves = this.state.numDataMovesStack[this.state.numDataMovesStack.length - 1];
  // this.state.numDataMovesStack[this.state.numDataMovesStack.length - 1] = numDataIdsAfter - numDataIdsBefore - numOutputDataIds - numMoves;
  if (this.shouldCheckForMemLeaks()) {
    const numDataIdsAfter = this.backend.numDataIds();
    // Count the number of data ids associated with the result of the kernel.
    let numOutputDataIds = 0;
    // Complex numbers allocate 3 data ids, one for 'real', one for 'imaginary', and one for the container that holds the former two.
    if (info.dtype === 'complex64' ? 3 : 1); numOutputDataIds += info.dtype === 'complex64' ? 3 : 1;
    // Account for the number of moves during kernel execution. A "data move" can happen in the middle of a kernel execution, placing a new (key,value) pair in the data storage. Since data moves have net zero effect (we always remove the data from the old backend), we have to cancel them out when detecting memory leaks.
    // const numMoves = this.state.numDataMovesStack[this.state.numDataMovesStack.length - 1];
    // this.state.numDataMovesStack[this.state.numDataMovesStack.length - 1] = numDataIdsAfter - numDataIdsBefore - numOutputDataIds - numMoves;
  }

  let kernelFunc: () => Tensor[];
  if (this.backendName == null) {
    // backend has not been initialized yet (backend initialization is lazy)
    // can be deferred until an op/ kernel is run).
    // The below getter has side effects that will try to initialize the backend and set properties like this.backendName when backend has not been initialized yet (backend initialization is lazy)
    // can be deferred until an op/ kernel is run).
    // The below getter has side effects that will try to initialize the backend and set properties like this.backendName when backend has not been initialized yet (backend initialization is lazy)
    // can be deferred until an op/ kernel is run).
    // The below getter has side effects that will try to initialize the backend and set properties like this.backendName when backend has not been initialized yet (backend initialization is lazy)
    // can be deferred until an op/ kernel is run).
    // The below getter has side effects that will try to initialize the backend and set properties like this.backendName when backend has not been initialized yet (backend initialization is lazy)
    // can be deferred until an op/ kernel is run).
  }
```

specified in `inputsToSave` will be saved.

```javascript
let inputTensorsToSave: Tensor[] = (gradConfig.saveAllInputs

    // Check that inputsToSave is an array
    if (gradConfig.saveAllInputs)
      outputTensorsToSave = Object.keys(inputs).map(key => inputs[key]);
    else {
      outputTensorsToSave = inputsToSave.map(inputName => inputs[inputName]);
    }

    const inputTensorsToSave: Tensor[] =
      outputs.filter((_, i) => outputsToSave[i]);

    return inputTensorsToSave.concat(outputTensorsToSave);
```

We return an empty list rather than throw an error because the kernel will construct the list of input tensors provided.

```javascript
let inputTensorsToSave: Tensor[];
if (gradConfig.saveAllInputs)
  inputTensorsToSave = Object.keys(inputs).map(key => inputs[key]);
else {
  inputTensorsToSave = inputsToSave.map(inputName => inputs[inputName]);
}
```

Internal method used by public APIs for tensor creation. Makes a new tensor with the provided shape, dtype and values. It always creates a new data id and writes the values to the underlying backend.

```javascript
makeTensor(): Tensor {
  if (values == null)
    throw new Error('Values passed to engine.makeTensor() are null');
  dtype = dtype || 'float32';
  backend = backend || this.backend;
  let backendVals = values as BackendValues;
  if (dtype === 'string' && util.isString(values[0])) {
    backendVals = (values as string[]).map(d => util.encodeString(d));
  }
  const dataId = backend.write(backendVals, shape, dtype);
  const t = new Tensor(shape, dtype, dataId, this.nextTensorId());
  this.state.tensorInfo.set(t.dataId, {
    backend: backend,
    dtype: dtype,
    shape: t.shape,
    bytes
  });
  return t;
}
```

// Count bytes for string tensors.

```javascript
const newBytes = bytesFromStringArray(backendVals as Uint8Array[]);
```

Count bytes for string tensors. Doesn't increase the ref count used in memory tracking in backend.

```javascript
makeVariable(): Variable {
  name = name || this.nextVariableId().toString();
  if (dtype != null && dtype !== initialValue.dtype) {
    initialValue = initialValue.cast(dtype);
  }
  const v = new Variable(initialValue, trainable, name,
    this.nextTensorId());
  if (this.state.registeredVariables[v.name] != null) {
    throw new Error(`Variable with name ${v.name} was already registered`);
  }
  this.state.registeredVariables[v.name] = v;
  this.incRef(v, this.backend);
  return v;
}
```

// Track the tensor by dataId and increase the ref count on the backend.

```javascript
incRef(a: Tensor, backend: KernelBackend): void {
  this.trackTensor(a, backend);
  this.backend.incRef(a.dataId);
}
```

// Remove the reference to dataId if backend dispose the data successfully.

```javascript
removeDataId(dataId: DataId, backend: KernelBackend) {
  if (this.state.tensorInfo.has(dataId) &&
      this.state.tensorInfo.get(dataId).backend === backend) {
    this.state.tensorInfo.delete(dataId);
    this.state.numDataBuffers--;
  }
}
```

// Dispose tensor.

```javascript
disposeTensor(a: Tensor): void {
  if (!this.state.tensorInfo.has(a.dataId)) {
    return;
  }
  const info = this.state.tensorInfo.get(a.dataId);
  this.state.numTensors--;
  if (a.dtype === 'string') {
    this.state.numStringTensors--;
    this.state.numBytes -= info.bytes;
  }
  // Don't count bytes for complex numbers as they are counted by their components.
  if (a.dtype !== 'complex64' && a.dtype !== 'string') {
    const bytes = a.size * util.bytesPerElement(a.dtype);
    this.state.numBytes -= bytes;
  }
  // Remove the reference to dataId if backend dispose the data successfully
  if (info.backend.disposeData(a.dataId)) {
```
this.removeDataId(a.dataId, info.backend);
    }

    // TODO(nsthorat): Construct an error and save the stack trace for
    // debugging when in debug mode. Creating a stack trace is too expensive
    // to do unconditionally.

    disposeVariables(): void {
      this.removeDataId(a.dataId, info.backend);
      const v = this.state.registeredVariables[varName];
      if (this.state.registeredVariables[varName] != null) {
        delete
        this.state.registeredVariables[varName];
      }
    }

    disposeTensor(v: Tensor): void {
      this.disposeVariable(v);
    }

    disposeVariable(v: Variable): void {
      this.disposeTensor(v);
      if (this.state.registeredVariables[v.name] != null) {
        delete
        this.state.registeredVariables[v.name];
      }
    }

    memory(): MemoryInfo {
      const info = this.backend.memory()
        as MemoryInfo;
      info.numTensors = this.state.numTensors;
      info.numDataBuffers = this.state.numDataBuffers;
      info.numBytes = this.state.numBytes;
      if (this.state.numStringTensors > 0) {
        info.unreliable = true;
        if (info.reasons == null) {
          info.reasons = [
            'Memory usage by string tensors is approximate ' +
            '(2 bytes per character)';
          ];
          info.reasons.push('Memory usage by string tensors is approximate ' +
            '(2 bytes per character)');
        }
      }
      return info;
    }

    async profile(query: () => (TensorContainer | Promise<TensorContainer>)):
      Promise<ProfileInfo> {
      this.state.profiling = true;
      const startBytes = this.state.numBytes;
      const startNumTensors = this.state.numTensors;
      this.state.activeProfile.kernels = [];
      this.state.activeProfile.result = await query();
      this.state.profiling = false;
      this.state.activeProfile.peakBytes =
        this.state.numBytes - startBytes;
      this.state.activeProfile.newBytes =
        this.state.numBytes - startBytes;
      this.state.activeProfile.newTensors =
        this.state.numTensors - startNumTensors;
      for (const kernel of this.state.activeProfile.kernels) {
        kernel.kernelTimeMs = await
          kernel.kernelTimeMs;
        kernel.extraInfo = await kernel.extraInfo;
      }
      return this.state.activeProfile;
    }

    isTapeOn(): boolean {
      return this.state.gradientDepth > 0 && this.state.kernelDepth === 0;
    }

    private addTapeNode(
      kernelName: string, inputs: NamedTensorMap,
      outputs: Tensor[],
      gradientsFunc: GradFunc,
      saved: Tensor[],
      attrs: NamedAttrMap): void {
      const tapeNode: TapeNode =
        {id: this.state.nextTapeNodeId++,
         kernelName, inputs, outputs, saved};
      if (gradientsFunc != null) {
        tapeNode.gradient = (dys: Tensor[]) => {
          // TODO(smilkov): To optimize
          // back-prop, pass dys that are not used in
          // the backprop graph to the user as null instead of zeros
          dys = dys.map((dy, i) => {
            if (dy == null) {
              const output = outputs[i];
              const vals =
                util.makeZerosTypedArray(output.size, output.dtype);
              return this.makeTensor(vals, output.shape,
                output.dtype);
            }
            return dy;
          });
          // Grad functions of ops with single outputs expect a dy,
          // while ops with multiple outputs expect dys (array of dy).
          return gradientsFunc(dys.length > 1 ? dys :
            dys[0], saved, attrs);
        };
      }
      this.state.activeTape.push(tapeNode);
    }

    private startTape() {
      if (this.state.gradientDepth === 0) {
        this.state.activeTape = [];
      }
      this.state.gradientDepth++;
    }

    private endTape() {
      this.state.gradientDepth--;
    }

    /**
     * Start a scope. Use this with endScope() to
     * achieve the same functionality
     * as scope() without the need for a function closure.
     */
    startScope(name?: string) {
      const scopeInfo: ScopeState = {
        track: [],
        name: 'unnamed scope',
        id: this.state.nextScopeId++,
        scope: this.state.scopeStack);
      if (name) {
        scopeInfo.name = name;
      }
      this.state.scopeStack.push(scopeInfo);
      this.state.activeScope = scopeInfo;
    }

    /**
     * End a scope. Use
     * this with startScope() to achieve the same functionality
     * as scope() without the need for a function closure.
     */
    endScope(result?: TensorContainer) {
      const tensorsToTrackInParent = getTensorsInContainer(result);
      const tensorsToTrackInParentSet =
        new Set(tensorsToTrackInParent.map(t => t.id));
      // Dispose the arrays tracked in this scope.
      for (let i = 0; i < this.state.activeScope.track.length; i++) {
        const tensor =
          this.state.activeScope.track[i];
        if (!tensor.kept) {
          if (tensor.parentId !== null) {
            this.state.activeScope.pop();
            this.state.activeScope =
              this.state.scopeStack[this.state.scopeStack.length - 1];
          }
        }
      }
      const tensorsToTrackInParent = getTensorsInContainer(result);
      const tensorsToTrackInParentSet =
        new Set(tensorsToTrackInParent.map(t => t.id));
      // Dispose the arrays tracked in this scope.
      for (let i = 0; i < this.state.activeScope.track.length; i++) {
        const tensor =
          this.state.activeScope.track[i];
        if (!tensor.kept) {
          if (tensor.parentId !== null) {
            this.state.activeScope.pop();
            this.state.activeScope =
              this.state.scopeStack[this.state.scopeStack.length - 1];
          }
        }
      }
      // Track the current result in the parenting scope.
      const tensorsToTrackInParent =
        tensorsToTrackInParent.map(t => t.id);
      // Only track the tensor if it was allocated in the inner scope and is now
      // globally kept.
      if (tensorsToTrackInParent.length > 0) {
        this.state.activeScope.push(tensorsToTrackInParent);
      }
      // Track the current result in the parent scope.
      this.state.activeScope.push(tensorsToTrackInParent.map(t => t.id));
      // If the scope is kept for this tensor, then this is the last scope.
      if (this.state.activeScope.length > 0) {
        this.state.activeScope.pop();
        this.state.activeScope =
          this.state.activeScope[this.state.activeScope.length - 1];
      }
    }

    /**
     * Returns gradients of f with respect to
     * each of the `xs`. The gradients returned are of the same length as `xs`,
     * but some might be null if f
     */

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not a function of that `x`. It also takes optional dy to multiply the gradient, which defaults to `1`.

```typescript
gradients<T extends Tensor>(f: () => T, xs: Tensor[], dy?: T, allowNoGradients = false): { value: T, grads: Tensor[] } {
  util.assert(xs.length > 0, () => 'gradients() received an empty list of xs.');
  if (dy !== null && dy.dtype !== 'float32') {
    throw new Error('dy must have `float32` dtype, but has ${dy.dtype}');
  }
  const y = this.scopedRun(() => this.startTape(), () => this.endTape(), () => (dy as T).tidy('forward', f));
  util.assert(y instanceof Tensor, () => 'The result y returned by f() must be a tensor.');</n
// Filter out the nodes that don't connect x => y:
const filteredTape = getFilteredNodesXToY(this.state.activeTape, xs, y);
if (!allowNoGradients && filteredTape.length === 0) {
  throw new Error('Cannot compute gradient of y=f(x) with respect to x. Make sure '+'that the f you passed encloses all operations that lead from x '+'to y.');}

this.state.activeTape.forEach(node => {
  for (const tensor of node.saved) {
    tensor.dispose();
  }
});
this.state.activeTape = null;

const y = this.scopedRun(() => this.startTape(), () => this.endTape(), () => this.tidy('forward', f));
util.assert(y instanceof Tensor, () => 'The result y returned by f() must be a tensor.');
```
promise obsolete.\n this.pendingBackendInitId++;\n\n this.state.dispose();\n this.ENV.reset();\n this.state =
new EngineState();\n\n for (const backendName in this.registry) {\n
this.disposeRegisteredKernels(backendName);\n
this.registry[backendName].dispose();\n
delete
this.registry[backendName];\n }\n this.backendName = null;\n this.backendInstance = null;\n
this.pendingBackendInit = null;\n }\n}\n\nfunction ones(shape: number[]): Tensor {\n const values =
makeOnesTypedArray(sizeFromShape(shape), 'float32');\n return ENGINE.makeTensor(values, shape,
'float32');\n}\n\nexport function getOrMakeEngine(): Engine {\n const ns = getGlobalNamespace() as {} as
{_tfengine: Engine};\n if (ns._tfengine == null) {\n const environment = new Environment(ns);\n ns._tfengine =
new Engine(environment);\n }\n setEnvironmentGlobal(ns._tfengine.ENV);\n\n // Tell the current tensor interface
that the global engine is responsible\n // for tracking.\n setTensorTracker(() => ns._tfengine);\n return
ns._tfengine;\n}\n\nexport const ENGINE = getOrMakeEngine();\n\n/**\n * A implementation of the add op for use
within engine and tape.\n *\n * This allows us to avoid a circular dependency between add.ts and engine.\n * It is
exported to be available in tape tests.\n */\nexport function add(a: Tensor, b: Tensor): Tensor {\n // We duplicate
Add here to avoid a circular dependency with add.ts.\n const inputs = {a, b};\n return ENGINE.runKernel(Add,
inputs as {} as NamedTensorMap);\n}\n","/**\n * @license\n * Copyright 2017 Google LLC. All Rights
Reserved.\n * Licensed under the Apache License, Version 2.0 (the \"License\");\n * you may not use this file
except in compliance with the License.\n * You may obtain a copy of the License at\n *\n *
http://www.apache.org/licenses/LICENSE-2.0\n *\n * Unless required by applicable law or agreed to in writing,
software\n * distributed under the License is distributed on an \"AS IS\" BASIS,\n * WITHOUT WARRANTIES
OR CONDITIONS OF ANY KIND, either express or implied.\n * See the License for the specific language
governing permissions and\n * limitations under the License.\n *
=============================================================================\n
*/\n\n// tslint:disable-next-line:no-any\nfunction _isNavigatorDefined(): boolean {\n return typeof navigator !==
'undefined' && navigator != null;\n}\n\nexport function isMobile(): boolean {\n if (_isNavigatorDefined()) {\n //
tslint:disable-next-line:no-any\n const a = navigator.userAgent || navigator.vendor || (window as any).opera;\n //
tslint:disable-next-line:max-line-length\n return
/(android|bb\\d+|meego).+mobile|avantgo|bada\\/|blackberry|blazer|compal|elaine|fennec|hiptop|iemobile|ip(hone|od)|
iris|kindle|lge |maemo|midp|mmp|mobile.+firefox|netfront|opera m(ob|in)i|palm(
os)?|phone|p(ixi|re)\\/|plucker|pocket|psp|series(4|6)0|symbian|treo|up\\.(browser|link)|vodafone|wap|windows
ce|xda|xiino/i\n
.test(a) ||\n
// tslint:disable-next-line:max-line-length\n
/1207|6310|6590|3gso|4thp|50[1-6]i|770s|802s|a wa|abac|ac(er|oo|s\\)|ai(ko|rn)|al(av|ca|co)|amoi|an(ex|ny|yw)|aptu|ar(ch|go)|as(te|us)|attw|au(di|\\-m|r |s
)|avan|be(ck|ll|nq)|bi(lb|rd)|bl(ac|az)|br(e|v)w|bumb|bw\\-(n|u)|c55\\/|capi|ccwa|cdm\\-|cell|chtm|cldc|cmd\\|co(mp|nd)|craw|da(it|ll|ng)|dbte|dc\\-s|devi|dica|dmob|do(c|p)o|ds(12|\\-d)|el(49|ai)|em(l2|ul)|er(ic|k0)|esl8|ez([47]0|os|wa|ze)|fetc|fly(\\-|_)|g1 u|g560|gene|gf\\-5|g\\-mo|go(\\.w|od)|gr(ad|un)|haie|hcit|hd\\-(m|p|t)|hei\\-|hi(pt|ta)|hp(
i|ip)|hs\\-c|ht(c(\\-| |_|a|g|p|s|t)|tp)|hu(aw|tc)|i\\-(20|go|ma)|i230|iac( |\\|\\/)|ibro|idea|ig01|ikom|im1k|inno|ipaq|iris|ja(t|v)a|jbro|jemu|jigs|kddi|keji|kgt( |\\/)|klon|kpt |kwc\\|kyo(c|k)|le(no|xi)|lg( g|\\/(k|l|u)|50|54|\\-[a-w])|libw|lynx|m1\\-w|m3ga|m50\\/|ma(te|ui|xo)|mc(01|21|ca)|m\\cr|me(rc|ri)|mi(o8|oa|ts)|mmef|mo(01|02|bi|de|do|t(\\-| |o|v)|zz)|mt(50|p1|v )|mwbp|mywa|n10[0-2]|n20[23]|n30(0|2)|n50(0|2|5)|n7(0(0|1)|10)|ne((c|m)\\|on|tf|wf|wg|wt)|nok(6|i)|nzph|o2im|op(ti|wv)|oran|owg1|p800|pan(a|d|t)|pdxg|pg(13|\\-([18]|c))|phil|pire|pl(ay|uc)|pn\\-2|po(ck|rt|se)|prox|psio|pt\\-g|qa\\-a|qc(07|12|21|32|60|\\-[2-7]|i\\)|qtek|r380|r600|raks|rim9|ro(ve|zo)|s55\\/|sa(ge|ma|mm|ms|ny|va)|sc(01|h\\-|oo|p\\-)|sdk\\/|se(c(\\|0|1)|47|mc|nd|ri)|sgh\\-|shar|sie(\\-|m)|sk\\-0|sl(45|id)|sm(al|ar|b3|it|t5)|so(ft|ny)|sp(01|h\\-|v\\-|v
)|sy(01|mb)|t2(18|50)|t6(00|10|18)|ta(gt|lk)|tcl\\-|tdg\\-|tel(i|m)|tim\\-|t\\-mo|to(pl|sh)|ts(70|m\\-|m3|m5)|tx\\9|up(\\.b|g1|si)|utst|v400|v750|veri|vi(rg|te)|vk(40|5[0-3]|\\v)|vm40|voda|vulc|vx(52|53|60|61|70|80|81|83|85|98)|w3c(\\-| )|webc|whit|wi(g |nc|nw)|wmlb|wonu|x700|yas\\|your|zeto|zte\\-/i\n
.test(a.substr(0, 4));\n }\n return false;\n}\n\nexport function isBrowser(): boolean {\n

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function inferShape(val: TensorLike, dtype?: DataType): number[] {
  let firstElem: typeof val = val;
  if (isTypedArray(val)) {
    return dtype === 'string' ? [] : [val.length];
  }
  if (!Array.isArray(val)) {
    return [];  // Scalar.
  }
  const shape: number[] = [];
  while (Array.isArray(firstElem) || isTypedArray(firstElem) && dtype !== 'string') {
    shape.push(firstElem.length);
    firstElem = firstElem[0];
  }
  if (Array.isArray(val) && env().getBool('TENSORLIKE_CHECK_SHAPE_CONSISTENCY')) {
    deepAssertShapeConsistency(val, shape, []);
  }
  return shape;
}

function deepAssertShapeConsistency(val: TensorLike, shape: number[], indices: number[]) {
  indices = indices || [];
  if (!(Array.isArray(val)) && !isTypedArray(val)) {
    assert(shape.length === 0,
        () => `Element arr[${indices.join('][[')}] is a primitive, ` +
            `but should be an array/TypedArray of ${shape[0]} elements`);
    return;
  }
  assert(shape.length > 0,
      () => `Element arr[${indices.join('][[')}] should be a primitive, ` +
        `but is an array of $val.length`)
    // Scalar.
    } const shape: number[] = []
while (Array.isArray(firstElem)) || isTypedArray(firstElem) && dtype !== 'string') {
  shape.push(firstElem.length);
  firstElem = Array.isArray(firstElem) ? firstElem[0] : firstElem;
  if (Array.isArray(val) && env().getBool('TENSORLIKE_CHECK_SHAPE_CONSISTENCY')) {
    deepAssertShapeConsistency(val, shape, []);
  } else {
    return shape;
  }
}
assert(val.length === shape[0], () => `Element arr[${indices.join('][')}] should have ${shape[0]} elements, but has ${val.length} elements`);
assert(val.length === shape[0], () => `Element arr[${indices.join('][')}] should have ${shape[0]} elements, but has ${val.length} elements`);
const subShape = shape.slice(1);
for (let i = 0; i < val.length; ++i) {
  deepAssertShapeConsistency(val[i], subShape, indices.concat(i));
}

assertDtype(expectedDtype, actualDType, argName) {
  if (expectedDtype == null) {
    throw new Error('Expected dtype cannot be null.');
  } else if (expectedDtype !== 'numeric' && expectedDtype !== 'string') {
    throw new Error(`Argument '${argName}' passed to '${functionName}' must be ($expectedDtype)
    tensor, but got $({actualDType} tensor)`);
  }
}

export function convertToTensor<T extends Tensor>(x: T|TensorLike, argName: string, functionName: string, parseAsDtype: DataType|'numeric'|'string_or_numeric' = 'numeric'): T {
  if (x instanceof Tensor) {
    assertDtype(parseAsDtype, x.dtype, argName, functionName);
    return x;
  }
  let inferredDtype = inferDtype(x);
  // If the user expects a bool/int/float, use that info to update the inferredShape when it is not a string
  if (inferredDtype !== 'string') {
    // tslint:disable-next-line:no-any
    return ENGINE.makeTensor(values, inferredDtype) as T;
  }
  // eslint-disable-next-line @typescript-eslint/no-explicit-any
  const tensors = arg as T[];
  return tensors.map((t, i) => convertToTensor(t, `${argName}[${i}]`, functionName, parseAsDtype));
}

```typescript
/**
 * Used for wrapping functions that perform math operations on Tensors. The function will be wrapped in a named scope that cleans all memory usage after the function is done.
 */
export function op<T extends Function>(f: {[name: string]: T}): T {
  const keys = Object.keys(f);
  if (keys.length !== 1) {
    throw new Error(`Please provide an object with a single key (operation name) mapping to a function. Got an object with ${keys.length} keys.`);
  }

  let opName = keys[0];
  const fn = f[opName];

  // Strip the underscore from the end of the function name.
  if (opName.endsWith('_')) {
    opName = opName.substring(0, opName.length - 1);
  }

  // tslint:disable-next-line @typescript-eslint/no-explicit-any
  const fn = f[opName];

  // Strip the underscore from the end of the function name.
  if (opName.endsWith('_')) {
    opName = opName.substring(0, opName.length - 1);
  }

  // tslint:disable-next-line @typescript-eslint/no-explicit-any
  return fn;
}
```

---

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```typescript
import {ENGINE} from './engine';
import {isPromise} from './util';

export const OP_SCOPE_SUFFIX = '__op';

/**
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 *
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 *
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 *
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 * http://www.apache.org/licenses/LICENSE-2.0
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.
 */
```
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-----------------------------------------------------------------------------------------------

*/

import {ENGINE} from '../engine';
import {Complex, ComplexInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import * as util from '../util';

import {op} from './operation';

/**
 * Converts two real numbers to a complex number.
 *
 * Given a tensor `real` representing the real part of a complex number, and a tensor `imag` representing the imaginary part of a complex number, this operation returns complex numbers elementwise of the form [r0, i0, r1, i1], where r represents the real part and i represents the imag part.
 *
 * The input tensors real and imag must have the same shape.
 *
 * @param real - A tensor representing the real part.
 * @param imag - A tensor representing the imaginary part.
 *
 * @return An array of complex numbers.
 *
 * @doc {heading: 'Tensors', subheading: 'Creation'}

*/
function complex_<T extends Tensor>(real: T|TensorLike, imag: T|TensorLike): T {
  const $real = convertToTensor(real, 'real', 'complex');
  const $imag = convertToTensor(imag, 'imag', 'complex');

  util.assertShapesMatch($real.shape, $imag.shape,
    `real and imag shapes, ${$real.shape} and
    ${$imag.shape}, must match in call to tf.complex().`);

  const inputs: ComplexInputs = {real: $real, imag: $imag};
  return ENGINE.runKernel(Complex, inputs as {} as NamedTensorMap);
}

export const complex = op({complex_});

/**
 * @license
 * Copyright 2018 Google LLC. All Rights Reserved.
 *
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 http://www.apache.org/licenses/LICENSE-2.0

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=============================================================================

*/

import {ENGINE} from '../engine';
import {DataType} from '../types';
import {assert, assertNonNegativeIntegerDimensions, flatten, inferDtype, isTypedArray, sizeFromShape, toTypedArray} from '../util';

/** This is shared code across all tensor creation methods. */
export function makeTensor(values: TensorLike, shape?: number[], inferredShape?: number[], dtype?: DataType): Tensor {
  if (dtype == null) {
    dtype = inferDtype(values);
  }
  if (dtype === 'complex64') {
    throw new Error(`Cannot construct a complex64 tensor directly. Please use tf.complex(real, imag).`);
  }
  if (!isTypedArray(values) && !Array.isArray(values) && typeof values !== 'number' && typeof values !== 'boolean' && typeof values !== 'string') {
    throw new Error(`values passed to tensor(values) must be a number/boolean/string or an array of numbers/booleans/strings, or a TypedArray`);
  }

  shape = shape || inferredShape;
  values = dtype !== 'string' ? toTypedArray(values, dtype) : flatten(values as string[], [], true) as string[];
  return ENGINE.makeTensor(values as TypedArray, shape, dtype);
}
import {Tensor} from '../tensor';
import {inferShape} from '../tensor_util_env';
import {TensorLike} from '../types';
import {DataType, Rank, ShapeMap} from '../types';

import {makeTensor} from './tensor_ops_util';

/**
 * Creates a `tf.Tensor` with the provided values, shape and dtype.
 *
 * ```js
 * // Pass an array of values to create a vector.
 * tf.tensor([1, 2, 3, 4]).print();
 * ```
 *
 * ```js
 * // Pass a nested array of values to make a matrix or a higher-dimensional tensor.
 * tf.tensor([[1, 2], [3, 4]]).print();
 * ```
 *
 * ```js
 * // Pass a flat array and specify a shape yourself.
 * tf.tensor([1, 2, 3, 4], [2, 2]).print();
 * ```
 *
 * @param values The values of the tensor.
 * @param shape The shape of the tensor. Optional. If not provided, `null` is inferred from `values`.
 * @param dtype The data type.
 *
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
export function tensor<R extends Rank>(
    values: TensorLike,
    shape?: ShapeMap[R],
    dtype?: DataType): Tensor<R> {
  const inferredShape = inferShape(values, dtype);
  return makeTensor(values, shape, inferredShape, dtype) as Tensor<R>;
}
Whether to save only the trainable weights of the model, ignoring the non-trainable ones.

`trainableOnly?: boolean` - Whether the optimizer will be saved (if exists).

`includeOptimizer?: boolean` - Result of a saving operation.

`export interface SaveResult {
  modelArtifactsInfo: ModelArtifactsInfo;
  responses?: Response[];
  errors?: Array<{}|string>;
}

export declare interface ModelArtifactsInfo {
  dateSaved: Date;
  modelTopologyType: 'JSON'|'GraphDef';
  modelTopologyBytes?: ArrayBuffer;
  trainingConfig?: TrainingConfig;
  weightSpecsBytes?: number;
  weightDataBytes?: number;
}

/** Model training configuration. */
export declare interface TrainingConfig {
  optimizer_config: {};
  loss: string|string[]|{};
  metrics?: string[]|{};
  sample_weight_mode?: string;
  loss_weights?: number[]|{};
}

/** The serialized artifacts of a model, including topology and weights. */
export declare interface ModelArtifacts {
  modelTopology?: {}|ArrayBuffer;
  trainingConfig?: TrainingConfig;
  weightSpecs?: WeightsManifestEntry[];
  weightData?: ArrayBuffer;
  format?: string;
  generatedBy?: string;
  convertedBy?: string|null;
  signature?: {};
  userDefinedMetadata?: {};
  modelInitializer?: {};
}

/** The on-disk format of the `model.json` file. */
export declare interface ModelJSON {
  modelTopology?: {}|ArrayBuffer;
  trainingConfig?: TrainingConfig;
  weightSpecs?: WeightsManifestEntry[];
  weightData?: ArrayBuffer;
  format?: string;
  generatedBy?: string;
  convertedBy?: string|null;
  signature?: {};
  userDefinedMetadata?: {};
  modelInitializer?: {};
}

[GraphDef](https://www.tensorflow.org/extend/tool Developers/#graphdef) protocol buffer (binary).

`GraphDef`[]|protocol buffer

`modelTopologyBytes?: number` - Size of model topology.

`weightSpecsBytes?: number` - Size of weight value data, in bytes.

`weightDataBytes?: number` - Model training configuration.

`export declare interface TrainingConfig {
  optimizer_config: {};
  loss: string|string[]|{};
  metrics?: string[]|{};
  sample_weight_mode?: string;
  loss_weights?: number[]|{};
}

/** The serialized artifacts of a model, including topology and weights. */
export declare interface ModelArtifacts {
  modelTopology?: {}|ArrayBuffer;
  trainingConfig?: TrainingConfig;
  weightSpecs?: WeightsManifestEntry[];
  weightData?: ArrayBuffer;
  format?: string;
  generatedBy?: string;
  convertedBy?: string|null;
  signature?: {};
  userDefinedMetadata?: {};
  modelInitializer?: {};
}

/** The on-disk format of the `model.json` file. */
export declare interface ModelJSON {
  modelTopology?: {}|ArrayBuffer;
  trainingConfig?: TrainingConfig;
  weightSpecs?: WeightsManifestEntry[];
  weightData?: ArrayBuffer;
  format?: string;
  generatedBy?: string;
  convertedBy?: string|null;
  signature?: {};
  userDefinedMetadata?: {};
  modelInitializer?: {};

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style models (e.g., `SavedModel`), this is the JSON
   * encoding of the `GraphDef` protocol buffer.

   *)
   */

   modelTopology: {};

  /** Model training configuration. */
  trainingConfig?: TrainingConfig;

  /**
   *
   * The weights manifest consists of an ordered list of weight-manifest
   * groups. Each
   * weight-manifest group consists of a number of weight values
   * stored in ordered paths. See the
   * documentation of
   *  "WeightsManifestConfig" for more details.
   */
  weightsManifest:
    WeightsManifestConfig;

  /**
   * Hard-coded format name for models saved from TensorFlow.js or
   * converted
   * by TensorFlow.js Converter.
   */
  format?: string;

  /**
   * User-defined metadata about the model.
   */
  userDefinedMetadata?: {

  /**
   * Initializer for the model.
   */
  modelInitializer?: {};

  /**
   * Type definition for handlers of loading
   * operations.
   */
  exportType: string;

  /**
   * Type definition for
   * handlers of saving operations.
   */
  SaveHandler = (modelArtifact: ModelArtifacts) =>
    Promise<SaveResult>;

  /**
   * Interface for a model import/export handler.
   *
   * The `save` and `load`
   * handlers are both optional, in order to allow handlers
   * that support only saving or loading.
   * A value of `null` means the model artifacts are generated without any
   * conversion process (e.g., saved directly from a TensorFlow.js
   * `tf.LayersModel` instance.)
   */
  IOHandler {
    save?: SaveHandler,
    load?: LoadHandler;

  /**
   * Callback for the progress of a long-running action such as an
   * HTTP
   * request for a large binary object.
   * @param {number} fraction - How much of the action has completed.
   */
  OnProgressCallback = (fraction: number) => void;

  /**
   * RequestInit (options) for HTTP
   * requests.
   */
  RequestInit = {
    * @param {string} path - The path where the model artifacts are stored.
    */
  * @throws Error if deletion fails, e.g., if no model exists at `\path`.
    */
  removeModel(path: string): Promise<void>;

  /**
   * A function used to override the `window.fetch` function.
   */
  fetchFunc?: Function;

  /**
   * Strict loading model: whether extraneous weights or missing
   * weights
   * should trigger an `Error`.
   * If `true`, require that the provided weights exactly match those
   * required by
   * the layers. `false` means that both extra weights
   * and missing weights will be silently ignored.
   */
  strict?: boolean;

  /**
   * Path prefix for weight files, by default this is calculated from
   * the
   * path of the model JSON file.
   */
  weightPathPrefix?: string;

  /**
   * Whether the module or model
   * is to be loaded from TF Hub.
   */
  weightPathPrefix?: string;

  * Setting this to `true` allows passing a TF-Hub module URL, omitting the

function read(buffer, offset, isLE, mLen, nBytes) {
  var e, m
  var eLen = (nBytes * 8) - mLen - 1
  var eMax = (1 << eLen) - 1
  var eBias = eMax >> 1
  var nBits = -7
  var i = isLE ? (nBytes - 1) : 0
  var d = isLE ? -1 : 1

  var s = buffer[offset + i]

  i += d

  e = s & ((1 << (-nBits)) - 1)
  s >>= (-nBits)
  nBits += eLen
  for (;
      nBits > 0 && (e = (e << 1) & 0x7F));
  }

  if (nBits === 0 && e === 0)
    return 0
  if (nBits > eLen)
    throw new Error('Invalid bit length')

  e = (nBits - eLen) << (eLen - 1)
  m = (s & (1 << (-nBits)) - 1) << (eLen + nBits)
  return (e >>> 0) + m
}

function decode(buffer, offset, isLE) {
  var mLen = buffer.length
  var i = isLE ? mLen - 1 : 0
  var d = isLE ? -1 : 1

  var s = buffer[offset + i]

  i += d

  if (s === 0)
    return 0

  e = (s >> 4) & 15
  m = (s >> e) * 2147483648

  for (;
      e > 0 && (e = (e - 1) & 15));
  }

  return m + (s >>> e)
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```javascript
function (buffer, offset, i) {
    var e = (e * 256) + buffer[offset + i], i += d, nBits -= 8;

    m = e & ((1 << (-nBits)) - 1);
    e >>= (-nBits);
    nBits += mLen;

    for (; nBits > 0; m = (m * 256) + buffer[offset + i], i += d, nBits -= 8) {}

    if (e === 0) {
        e = 1 - eBias
    } else if (e === eMax) {
        return m ? NaN : ((s ? -1 : 1) * Infinity)
    } else {
        m = m + Math.pow(2, mLen);
        e = e - eBias;
        return (s ? -1 : 1) * m * Math.pow(2, e - mLen)
    }
}
```

```javascript
function (buffer, offset, i) {
    var m = (e & ((1 << (-nBits)) - 1)) & 0xff, i += d, e >>= (nBits);

    m = m + Math.pow(2, mLen);
    e = e - eBias;
    return (s ? -1 : 1) * m * Math.pow(2, e - mLen)
}
```

```javascript
function (buffer, offset, i) {
    var m = (e & ((1 << (-nBits)) - 1)) & 0xff, i += d, e >>= (nBits);

    m = m + Math.pow(2, mLen);
    e = e - eBias;
    return (s ? -1 : 1) * m * Math.pow(2, e - mLen)
}
```

```javascript
var toString = {}.toString;

module.exports = Array.isArray || function (arr) {
    return toString.call(arr) == '[object Array]';
};

/*!
 * The buffer module from node.js, for the browser.
 *
 * @author   Feross Aboukhadijeh <feross@feross.org> <http://feross.org>
 * @license  MIT
 */
/* eslint-disable no-proto */

'use strict'

var base64 = require('base64-js')
var ieee754 = require('ieee754')
var isArray = require('isarray')

exports.Buffer = new Buffer(1)
exports.SlowBuffer = SlowBuffer
exports.INSPECT_MAX_BYTES = 50

**
 * If `Buffer.TYPED_ARRAY_SUPPORT`:
 *   === true    Use Uint8Array implementation (fastest)
 *   === false  Use Object implementation (most compatible, even IE6)
 *
 * Browsers that support typed arrays are IE 10+, Firefox 4+, Chrome 7+, Safari 5.1+,
 * Opera 11.6+, iOS 4.2+. Due to various browser bugs, sometimes the
 * Object implementation will be used even when the browser supports typed arrays.
 * Note:
 *
 *   - Firefox 4-29 lacks support for adding new properties to `Uint8Array` instances,
 *     See: https://bugzilla.mozilla.org/show_bug.cgi?id=695438
 *   - Chrome 9-10 is missing the `TypedArray.prototype.subarray` function.
 *     IE10 has a broken `TypedArray.prototype.subarray` function
 *     which returns arrays of `null` * incorrect length in some situations.
 *     We detect these buggy browsers and set `Buffer.TYPED_ARRAY_SUPPORT` to `false`
 *     so they get the Object implementation, which is slower but
 *     behaves correctly.
 *
 * Use Object implementation (most compatible, even IE6)
 * `Buffer.TYPED_ARRAY_SUPPORT` to `false` so they get the Object implementation,
 * which is slower but behaves correctly.
 */

var Buffer, global, exports, Buffer.prototype;

Buffer = require('buffer').Buffer;

exports.Buffer = Buffer;
exports.SlowBuffer = (function () {
    function SlowBuffer (encoding, offset, length) {
        if (encoding != null) {
            throw new Error('SlowBuffer does not take a encoding argument');
        }

        return Buffer.call(this, length, offset);
    }

    SlowBuffer.prototype = Buffer.prototype;

    return SlowBuffer;
})

exports.SlowBuffer = SlowBuffer;
exports.INSPECT_MAX_BYTES = 50

Buffer.TYPED_ARRAY_SUPPORT = true

var kMaxLength = function () {
    return Buffer.TYPED_ARRAY_SUPPORT
        ? 0x7fffffff
        : 0x3fffffff
};

createBuffer = function (that, length) {
    if (kMaxLength() < length) {
        throw new RangeError('Invalid typed array length')
    }

    if (Buffer.TYPED_ARRAY_SUPPORT) {
        // Return an augmented `Uint8Array` instance, for best performance
        that = new Uint8Array(that.length);
        that.__proto__ = Buffer.prototype;
    } else {
        // Fallback: Return an object
        that = that instanceof Uint8Array ? that.buffer : new Uint8Array(that.length);
    }

    that.length = length;
    return that;
}

try {
    var arr = new Uint8Array(1);
    arr.__proto__ = {__proto__: Uint8Array.prototype, foo: function () {
        return 42
    }}
    arr.foo() === 42 && // typed array instances can be augmented
    typeof arr.subarray === 'function' && // chrome 9-10 lack `subarray`
    arr.subarray(1, 1).byteLength === 0 // ie10 has broken `subarray`
} catch (err) {
    Buffer.TYPED_ARRAY_SUPPORT = false
}

```
swap32 () { 
  var len = this.length
  if (len % 4 !== 0) { 
    throw new RangeError('Buffer size must be a multiple of 32-bits')
  } 
  for (var i = 0; i < len; i += 4) { 
    swap(this, i, i + 3)
    swap(this, i + 1, i + 2)
  } 
  return this
}

Buffer.prototype.swap64 = function swap64 () { 
  var len = this.length
  if (len % 8 !== 0) { 
    throw new RangeError('Buffer size must be a multiple of 64-bits')
  } 
  for (var i = 0; i < len; i += 8) { 
    swap(this, i, i + 7)
    swap(this, i + 1, i + 6)
    swap(this, i + 2, i + 5)
    swap(this, i + 3, i + 4)
  } 
  return this
}

Buffer.prototype.toString = function toString () { 
  var length = this.length | 0
  if (length === 0) return ''
  if (arguments.length === 0) return utf8Slice(this, 0, length)
  return slowToString.apply(this, arguments)
}

Buffer.prototype.inspect = function inspect () { 
  var str = ''
  var max = exports.INSPECT_MAX_BYTES
  if (this.length > max) str += '...' 
  str += '<Buffer ' + utf8Slice(this, 0, max).match(/.{2}/g).join(' ')

  if (this.length > max) str += '... ' 
  return str + '>'
}

Buffer.prototype.compare = function compare (buffer, start, end, target, targetStart, targetEnd) { 
  if (Buffer.isBuffer(buffer)) { 
    throw new TypeError('Argument must be a Buffer')
  }
  if (start === undefined) { 
    start = 0
  }
  if (end === undefined) { 
    end = buffer.length
  }
  return buffer.compare(buffer, start, end, target, targetStart, targetEnd)
}

Buffer.prototype.equals = function equals (b) { 
  if (!Buffer.isBuffer(b)) throw new TypeError('Argument must be a Buffer')
  if (this === b) return true
  return Buffer.compare(this, b) === 0
}

Buffer.prototype.indexOf = function indexOf (target, byteOffset, encoding) { 
  //Empty buffer means no match
  if (buffer.length === 0) return -1
  // Normalize byteOffset
  if (typeof byteOffset === 'string') { 
    encoding = byteOffset
    byteOffset = 0
  } else if (byteOffset < 0) byteOffset = buffer.length + byteOffset

  // Negative offsets start from the end of the buffer
  if (byteOffset < 0) byteOffset = buffer.length + byteOffset
  if (byteOffset >= buffer.length) return -1
  if (byteOffset < 0) byteOffset = 0
  if (byteOffset > buffer.length) byteOffset = buffer.length

  // Normalize byteOffset
  byteOffset = +byteOffset // Coerce to Number.
  if (isNaN(byteOffset)) { 
    // byteOffset: it it's undefined, null, NaN, "foo", etc, search whole buffer
    byteOffset = dir ? 0 : (buffer.length - 1)
  } 
  // Normalize byteOffset: negative offsets start from the end of the buffer
  if (byteOffset < 0) byteOffset = buffer.length + byteOffset

  // The first index of 'val' in 'buffer' at offset <= byteOffset
  // OR the last index of 'val' in 'buffer'
  var byteStart = byteOffset
  var byteEnd = buffer.length - byteOffset
  var thisStart = 0
  var thisEnd = buffer.length

  if (byteOffset < 0) { 
    byteStart = buffer.length + byteOffset
    byteEnd = buffer.length
  }

  if (byteOffset > buffer.length) { 
    byteStart = 0
    byteEnd = buffer.length
  }

  // Normalize va
  if ((typeof val !== 'string') || 
      (val && (val.constructor === String) && val.valueOf() === val)) { 
    // Dir is true (search for 'val')
    var thisCopy = this.slice(thisStart, 
                             thisEnd)
    var targetCopy = target.slice(start, end)

    for (var i = 0; i < len; ++i) { 
      if (thisCopy[i] !== 
          targetCopy[i]) {
        return -1
      }
    }
  }

  return byteStart
}

Buffer.prototype.lastIndexOf = function lastIndexOf (target, byteOffset, encoding) { 
  //Empty buffer means no match
  if (buffer.length === 0) return -1
  // Normalize byteOffset
  if (typeof byteOffset === 'string') { 
    encoding = byteOffset
    byteOffset = 0
  } else if (byteOffset < 0) byteOffset = buffer.length + byteOffset

  // Negative offsets start from the end of the buffer
  if (byteOffset < 0) byteOffset = buffer.length + byteOffset
  if (byteOffset >= buffer.length) return -1
  if (byteOffset < 0) byteOffset = 0
  if (byteOffset > buffer.length) byteOffset = buffer.length

  // Normalize byteOffset
  byteOffset = +byteOffset // Coerce to Number.
  if (isNaN(byteOffset)) { 
    // byteOffset: it it's undefined, null, NaN, "foo", etc, search whole buffer
    byteOffset = dir ? 0 : (buffer.length - 1)
  } 
  // Normalize byteOffset: negative offsets start from the end of the buffer
  if (byteOffset < 0) byteOffset = buffer.length + byteOffset

  // The first index of 'val' in 'buffer' at offset <= byteOffset
  // OR the last index of 'val' in 'buffer'
  var byteStart = byteOffset
  var byteEnd = buffer.length - byteOffset
  var thisStart = 0
  var thisEnd = buffer.length

  if (byteOffset < 0) { 
    byteStart = buffer.length + byteOffset
    byteEnd = buffer.length
  }

  if (byteOffset > buffer.length) { 
    byteStart = 0
    byteEnd = buffer.length
  }

  // Normalize va
  if ((typeof val !== 'string') || 
      (val && (val.constructor === String) && val.valueOf() === val)) { 
    // Dir is true (search for 'val')
    var thisCopy = this.slice(thisStart, 
                             thisEnd)
    var targetCopy = target.slice(start, end)

    for (var i = 0; i < len; ++i) { 
      if (thisCopy[i] !== 
          targetCopy[i]) {
        break
      }
    }
  }

  return byteStart
}

Buffer.prototype.find = function find (val, byteOffset, encoding) { 
  //Empty buffer means no match
  if (buffer.length === 0) return -1
  // Normalize byteOffset
  if (typeof byteOffset === 'string') { 
    encoding = byteOffset
    byteOffset = 0
  } else if (byteOffset < 0) byteOffset = buffer.length + byteOffset

  // Negative offsets start from the end of the buffer
  if (byteOffset < 0) byteOffset = buffer.length + byteOffset
  if (byteOffset >= buffer.length) return -1
  if (byteOffset < 0) byteOffset = 0
  if (byteOffset > buffer.length) byteOffset = buffer.length

  // Normalize byteOffset
  byteOffset = +byteOffset // Coerce to Number.
  if (isNaN(byteOffset)) { 
    // byteOffset: it it's undefined, null, NaN, "foo", etc, search whole buffer
    byteOffset = dir ? 0 : (buffer.length - 1)
  } 
  // Normalize byteOffset: negative offsets start from the end of the buffer
  if (byteOffset < 0) byteOffset = buffer.length + byteOffset

  // The first index of 'val' in 'buffer' at offset <= byteOffset
  // OR the last index of 'val' in 'buffer'
  var byteStart = byteOffset
  var byteEnd = buffer.length - byteOffset
  var thisStart = 0
  var thisEnd = buffer.length

  if (byteOffset < 0) { 
    byteStart = buffer.length + byteOffset
    byteEnd = buffer.length
  }

  if (byteOffset > buffer.length) { 
    byteStart = 0
    byteEnd = buffer.length
  }

  // Normalize va
  if ((typeof val !== 'string') || 
      (val && (val.constructor === String) && val.valueOf() === val)) { 
    // Dir is true (search for 'val')
    var thisCopy = this.slice(thisStart, 
                             thisEnd)
    var targetCopy = target.slice(start, end)

    for (var i = 0; i < len; ++i) { 
      if (thisCopy[i] !== 
          targetCopy[i]) {
        return -1
      }
    }
  }

  return thisStart
}
(tempCodePoint > 0x7F) \n  codePoint = tempCodePoint
\n} \nbreak case 3:\n  secondByte = buf[i + 1]\n  thirdByte = buf[i + 2] \n  if ((secondByte & 0xC0) === 0x80 & (thirdByte & 0xC0) === 0x80) \n    tempCodePoint = (firstByte & 0xF) << 0xC | (secondByte & 0x3F) << 0x6 | (thirdByte & 0x3F) \n    if (tempCodePoint > 0x7FFF & (tempCodePoint < 0xD800 || tempCodePoint > 0xDFFF)) \n      \n\n  \n  \n} \nbreak case 4:\n  secondByte = buf[i + 1]\n  thirdByte = buf[i + 2]\n  fourthByte = buf[i + 3] \n  if ((secondByte & 0xC0) === 0x80 & (thirdByte & 0xC0) === 0x80 & (fourthByte & 0xC0) === 0x80) \n    tempCodePoint = (firstByte & 0xF) << 0x12 | (secondByte & 0x3F) << 0xC | (thirdByte & 0x3F) << 0x6 | (fourthByte & 0x3F) \n    if (tempCodePoint > 0xFFFF && tempCodePoint < 0x110000) \n      \n\n  \n  \n} \n
if (codePoint === null) \n  // we did not generate a valid codePoint so insert \n  // replacement char (U+FFFD) and advance only 1 byte\n  codePoint = 0xFFFD \n  bytesPerSequence = 1 \n} \nelse if (codePoint > 0xFFFF) \n  // encode to utf16 (surrogate pair dance)\n  codePoint -= 0x10000 \n  res.push(codePoint >>> 10 & 0x3FF | 0xD800) \n  codePoint = 0xDC00 | codePoint & 0x3FF \n\nres.push(codePoint) \n  i += bytesPerSequence
\n\n\n\n// Based on http://stackoverflow.com/a/22747272/680742, the browser with the lowest limit is Chrome, with 0x10000 args.\n// We go 1 magnitude less, for safety\nMAX_ARGUMENTS_LENGTH = 0x1000\n\nfunction decodeCodePointsArray (codePoints) \n  \n  \n} \n
function asciiSlice (buf, start, end) \n  var res = '' \n  end = Math.min(buf.length, end) \n  for (var i = start; i < end; ++i) \n    res += String.fromCharCode(buf[i] & 0x7F) \n  return res
\nfunction latin1Slice (buf, start, end) \n  var res = '' \n  end = Math.min(buf.length, end) \n  for (var i = start; i < end; ++i) \n    res += buf[i] \n  return res
\nfunction hexSlice (buf, start, end) \n  var bytes = buf.slice(start, end) \n  var res = '' \n  for (var i = 0; i < bytes.length; i += 2) \n    res += String.fromCharCode((bytes[i] + bytes[i + 1]) * 256) \n  return res
\nfunction slice (buf, start, end) \n  \n  \n} \n
/*
 * Need to make sure that buffer isn't trying to write out of bounds.\n */
function checkOffset (offset, ext, length) \n  \n  \n} \n
Buffer.prototype.readUIntLE = function readUIntLE (offset, byteLength, noAssert) \n  \n  \n} \n
Buffer.prototype.readUIntBE = function readUIntBE (offset, byteLength, noAssert) \n  \n  \n} \n
Buffer.prototype.readUInt8 = function readUInt8 (offset, noAssert) \n  \n  \n} \n
Buffer.prototype.readUInt16LE = function readUInt16LE (offset, noAssert) \n  \n  \n} \n
Buffer.prototype.readUInt16BE = function readUInt16BE (offset, noAssert) \n  \n  \n} \n
Buffer.prototype.readUInt32LE = function readUInt32LE (offset, noAssert) \n  \n  \n} \n
Buffer.prototype.readUInt32BE = function readUInt32BE (offset, noAssert) \n  \n  \n} \n
Buffer.prototype.readIntLE = function readIntLE (offset, byteLength, noAssert) \n  \n  \n} \n
Buffer.prototype.readIntBE = function readIntBE (offset, byteLength, noAssert) \n  \n  \n} \n
Buffer.prototype.readInt8 = function readInt8 (offset, noAssert) \n  \n  \n} \n
Buffer.prototype.readInt16LE = function readInt16LE (offset, noAssert) \n  \n  \n} \n
Buffer.prototype.readInt16BE = function readInt16BE (offset, noAssert) \n  \n  \n} \n
Buffer.prototype.readInt32LE = function readInt32LE (offset, noAssert) \n  \n  \n} \n
Buffer.prototype.readInt32BE = function readInt32BE (offset, noAssert) \n  \n  \n}
checkOffset(offset, 2, this.length) \n  return (this[offset] << 8) | this[offset + 1]

Buffer.prototype.readInt32LE = function readInt32LE (offset, noAssert) {
  if (!noAssert)
    checkOffset(offset, 4, this.length)
  \n  var val = this[offset] | (this[offset + 1] << 8) | (this[offset + 2] << 16) | (this[offset + 3] << 24)
  \n  var mul = 0x1000000 \n
  if (val >= 0x80000000)
    val -= 2 ** 32

  return val
}

Buffer.prototype.readInt32BE = function readInt32BE (offset, noAssert) {
  if (!noAssert)
    checkOffset(offset, 4, this.length)
  \n  var val = this[offset + 3] | (this[offset + 2] << 8) | (this[offset + 1] << 16) | this[offset]
  \n  var mul = 0x1000000 \n
  if (val >= 0x80000000)
    val -= 2 ** 32

  return val
}

Buffer.prototype.readFloatLE = function readFloatLE (offset, noAssert) {
  if (!noAssert)
    checkOffset(offset, 4, this.length)
  \n  var val = this[offset]
  var sign = (val >> 31) & 0x01
  \n  var i = 0
  var j = 0
  var f = 0
  \n  while (i < 4) {
    f = f * 2 + (val >> (32 - i)) & 0x01
    sign += f
    i++
  }

  var limit = 0x7f800000
  var scale = 0x7f800000

  if (j > 0)
    sign = 0

  return 2 ** (j - scale) * (1 < sign ? -1 : 1) * f
}

Buffer.prototype.readFloatBE = function readFloatBE (offset, noAssert) {
  if (!noAssert)
    checkOffset(offset, 4, this.length)
  \n  var val = this[offset + 3]
  var sign = (val >> 31) & 0x01
  \n  var i = 0
  var j = 0
  var f = 0
  \n  while (i < 4) {
    f = f * 2 + (val >> (32 - i)) & 0x01
    sign += f
    i++
  }

  var limit = 0x7f800000
  var scale = 0x7f800000

  if (j > 0)
    sign = 0

  return 2 ** (j - scale) * (1 < sign ? -1 : 1) * f
}
```javascript
    = 3) > -1) bytes.push(0xEF, 0xBF, 0xBD) else if (i + 1 === length) { return 
          // unpaired lead
    leadSurrogate = codePoint.charCodeAt(0); continue } else if (i + 1 === length) {
          // 2 leads in a row
    if (codePoint < 0xDC00) { return 
      } else if (leadSurrogate) { return 
        } else if (leadSurrogate) { return 
          leadSurrogate = null; return 
        codePoint >> 0x12 | 0xF0,
        codePoint >> 0xC & 0x3F | 0x80,
        codePoint >> 0x6 & 0x3F | 0x80
      } else if ((units -= 3) < 0) break
        bytes.push(codePoint) } else if (codePoint < 0x800) { return 
          if ((units -= 2) < 0) break
        bytes.push(codePoint >> 0x6 | 0xC0,
        codePoint & 0x3F | 0x80)
      } else if (codePoint < 0x10000) { return 
        if ((units -= 3) < 0) break
        bytes.push(codePoint >> 0x12 | 0xF0,
        codePoint >> 0xC & 0x3F | 0x80,
        codePoint >> 0x6 & 0x3F | 0x80
      } else if ((units -= 4) < 0) break
        bytes.push(codePoint >> 0x12 | 0xF0,
        codePoint >> 0xC & 0x3F | 0x80,
        codePoint >> 0x6 & 0x3F | 0x80
      } else if ((units -= 5) < 0) break
        bytes.push(codePoint >> 0x12 | 0xF0,
        codePoint >> 0xC & 0x3F | 0x80,
        codePoint >> 0x6 & 0x3F | 0x80
      } else if ((units -= 6) < 0) break
        bytes.push(codePoint >> 0x12 | 0xF0,
        codePoint >> 0xC & 0x3F | 0x80,
        codePoint >> 0x6 & 0x3F | 0x80
      } else if ((units -= 7) < 0) break
        bytes.push(codePoint >> 0x12 | 0xF0,
        codePoint >> 0xC & 0x3F | 0x80,
        codePoint >> 0x6 & 0x3F | 0x80
      } else { throw new Error('Invalid code point'); return 
        } 
      return bytes
    } 
    
    return function asciiToBytes (str) {
      var byteArray = [
        str.charCodeAt(i) & 0xFF
      ]
      return byteArray
    }
    
    return function utf16leToBytes (str, units) {
      var c, hi, lo
      var byteArray = [
        str.charCodeAt(i) & 0xFF
      ]
      return byteArray
    }
    
    return function base64ToBytes (str) {
      return base64.toByteArray(base64clean(str))
    }
    
    return function blitBuffer (src, dst, offset, length) {
      for (var i = 0; i < length; ++i) {
        if ((i + offset >= dst.length) || (i >= src.length)) break
        dst[i + offset] = src[i]
      }
      return i
    }
    
    return function isnan (val) {
      return val !== val // eslint-disable-line no-self-compare
    }
    
    return function *@

```
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6

export function decodeWeights(buffer: ArrayBuffer, specs: WeightsManifestEntry[]): NamedTensorMap {
  const out: NamedTensorMap = {};
  let float16Decode: */

  return {data: []};

}

function writeV(t: Uint8Array, offset: number, numBytes: number, data: Uint8Array) {
  if (dtypeFactor) {
    new Uint8Array(data);
  } else if (dtype === 'float32') {
    new Float32Array(data);
  } else if (dtype === 'int32') {
    new Int32Array(data);
  } else if (dtype === 'uint8') {
    new Uint8Array(data);
  } else if (dtype === 'uint16') {
    new Uint16Array(data);
  } else if (dtype === 'uint32') {
    new Uint32Array(data);
  } else if (dtype === 'bool') {
    new Uint8Array(data);
  } else if (dtype === 'string') {
    new Uint8Array(data);
  } else {
    throw new Error(`Unsupported dtype in weight type: 

    const quantizationSizeFactor = DTYPE_VALUE_SIZE_MAP[quantization.dtype];
    const byteBuffer = new Uint8Array(buffer.slice(offset, offset + size * quantizationSizeFactor));
    const quantizedArray = (quantization.dtype === 'uint8' || quantization.dtype === 'uint16') {
      new Uint32Array(byteBuffer);
    } else if (quantization.dtype === 'float16') {
      if (dtype !== 'float32') {
        throw new Error(`Unsupported quantization type 

    if (dtype == 'float32') {
      if (quantization && 'scale' in quantization) {
        const scale = quantization.scale + quantization.min;
        const values = new Uint8Array(new Uint32Array([scale.length]).buffer);
      offset += NUM_BYTES_STRING_LENGTH;
      const bytes = byteBuffer.slice(0, numBytes);
      dataPromises.push(bytes);
    } else {
      dataPromises.push(t.data());
    }
    if (group != null) {
      spec.group = group;
    }
    specs.push(spec);
  }

  const tensorValues = await Promise.all(dataPromises);
  return {data: []};

}

return {data: []};

}

function writeV(t: Uint8Array, offset: number, numBytes: number, data: Uint8Array) {
  if (dtypeFactor) {
    new Uint8Array(data);
  } else if (dtype === 'float32') {
    new Float32Array(data);
  } else if (dtype === 'int32') {
    new Int32Array(data);
  } else if (dtype === 'uint8') {
    new Uint8Array(data);
  } else if (dtype === 'uint16') {
    new Uint16Array(data);
  } else if (dtype === 'uint32') {
    new Uint32Array(data);
  } else if (dtype === 'bool') {
    new Uint8Array(data);
  } else if (dtype === 'string') {
    new Uint8Array(data);
  } else {
    throw new Error(`Unsupported dtype in weight type: 

    const quantizationSizeFactor = DTYPE_VALUE_SIZE_MAP[quantization.dtype];
    const byteBuffer = new Uint8Array(buffer.slice(offset, offset + size * quantizationSizeFactor));
    const quantizedArray = (quantization.dtype === 'uint8' || quantization.dtype === 'uint16') {
      new Uint32Array(byteBuffer);
    } else if (quantization.dtype === 'float16') {
      if (dtype !== 'float32') {
        throw new Error(`Unsupported quantization type 

    if (dtype == 'float32') {
      if (quantization && 'scale' in quantization) {
        const scale = quantization.scale + quantization.min;
        const values = new Uint8Array(new Uint32Array([scale.length]).buffer);
      offset += NUM_BYTES_STRING_LENGTH;
      const bytes = byteBuffer.slice(0, numBytes);
      dataPromises.push(bytes);
    } else {
      dataPromises.push(t.data());
    }
    if (group != null) {
      spec.group = group;
    }
    specs.push(spec);
  }

  const tensorValues = await Promise.all(dataPromises);
  return {data: []};

}

return {data: []};

}
const real = new Float32Array(values.length / 2);
        const image = new Float32Array(values.length / 2);

        for (let i = 0; i < real.length; i++) {
            real[i] = values[i * 2];
            image[i] = values[i * 2 + 1];
        }

        const realTensor = tensor(real, shape, 'float32');
        const imageTensor = tensor(image, shape, 'float32');

        out[name] = complex(realTensor, imageTensor);
        realTensor.dispose();
        imageTensor.dispose();
    }
    if (dtype !== 'complex64') {
      out[name] = tensor(values, shape, dtype);
    }
}

/**
 * Concatenate TypedArrays into an ArrayBuffer.
 */
export function
concatenateTypedArrays(xs: TypedArray[]): ArrayBuffer {
      if (xs === null) {
        throw new Error(`Invalid input value: ${JSON.stringify(xs)}`);
      }

      let totalByteLength = 0;

      // `normalizedXs` is here for this reason: a `TypedArray`’s `buffer` can have a different byte length from that of the `TypedArray` itself, for example, when the `TypedArray` is created from an offset in another `ArrayBuffer`.
      // `normalizedXs` holds `TypedArray`s whose `buffer`’s match in byte length. If an element of `xs` does not show a property, a new `TypedArray` that satisfy this property will be constructed and pushed into `normalizedXs`.
      const normalizedXs: TypedArray[] = [];
      xs.forEach((x: TypedArray) => {
          totalByteLength += x.byteLength;
          // tslint:disable:no-any
          normalizedXs.push(
              x.byteLength === x.buffer.byteLength ? x :
              new (x.constructor as any)(x));
          if (!(x as any instanceof Float32Array || x as any instanceof Int32Array || x as any instanceof Uint8Array)) {
              throw new Error(`Unsupported TypedArray subtype: ${x.constructor.name}`);
          }
          // tslint:disable:no-any
      });

      const y = new Uint8Array(totalByteLength);
      let offset = 0;
      normalizedXs.forEach((x: TypedArray) => {
          y.set(new Uint8Array(x.buffer), offset);
          offset += x.byteLength;
      });

      return y.buffer;
}

// Use Buffer on Node.js instead of Blob/atob/btoa
const useNodeBuffer = typeof Buffer !== 'undefined' &&
    (typeof Blob === 'undefined' || typeof atob === 'undefined' ||
     typeof btoa === 'undefined');

/**
 * Calculate the byte length of a JavaScript string.
 *
 * Note that a JavaScript string can contain wide characters, therefore the length of the string is not necessarily equal to the byte length.
 *
 * @param str Input string.
 * @returns Byte length.
 */
export function stringByteLength(str: string): number {
  if (useNodeBuffer) {
    return Buffer.byteLength(str);
  }
  return new Blob([str]).size;
}

/**
 * Encode an ArrayBuffer as a base64 encoded string.
 *
 * @param buffer `ArrayBuffer` to be converted.
 * @returns A string that base64-encodes `buffer`.
 */
export function arrayBufferToBase64String(buffer: ArrayBuffer): string {
  if (useNodeBuffer) {
    return Buffer.from(buffer).toString('base64');
  }
  const s = atob(str);
  const buffer = new Uint8Array(s.length);
  for (let i = 0; i < s.length; ++i) {
    buffer.set([s.charCodeAt(i)], i);
  }
  return buffer.buffer;
}

/**
 * Concatenate a number of ArrayBuffer s into one.
 *
 * @param buffers A number of array buffers to concatenate.
 * @returns Result of concatenating `buffers` in order.
 */
export function concatenateArrayBuffers(buffers: ArrayBuffer[]): ArrayBuffer {
      return new ArrayBuffer(0);
      buffers.forEach((buffer: ArrayBuffer) => {
          return Buffer.from(buffer).toBuffer(0, buffer.byteLength);
      });
  return buffer.buffer;
}

/**
 * Get the basename of a path.
 *
 * Behaves in a way analogous to Linux's basename command.
 *
 * @param path
 * @returns Result of getting basename of `path`.
 */
export function basename(path: string): string {
  const SEPARATOR = '/';
  path = path.trim();
  while (path.endsWith(SEPARATOR)) {
    path = path.slice(0, path.length - 1);
  }
  const items = path.split(SEPARATOR);
  return items.join(SEPARATOR);
}

/**
 * Populate ModelArtifactsInfo fields for a model with JSON topology.
 * @param modelArtifacts
 * @returns A ModelArtifactsInfo object.
 */
export function getModelArtifactsInfoForJSON(modelArtifacts: ModelArtifacts): ModelArtifactsInfo {
  if
(modelArtifacts.modelTopology instanceof ArrayBuffer) \n  \n  \n  return {
    dateSaved: new Date(),
    modelTopologyType: 'JSON',
    modelTopologyBytes: modelArtifacts.modelTopology == null ?
        0 :
        stringByteLength(JSON.stringify(modelArtifacts.modelTopology)),

    weightSpecsBytes: modelArtifacts.weightSpecs == null ?
        0 :
        stringByteLength(JSON.stringify(modelArtifacts.weightSpecs)),

    weightDataBytes: modelArtifacts.weightData == null ?
        0 :
        stringByteLength(JSON.stringify(modelArtifacts.weightData)),

    ### Computes mantissa table for casting Float16 to Float32

    function computeFloat16MantisaTable(): Uint32Array {
      const mantisaTable = new Uint32Array(2048);
      mantisaTable[0] = 0;
      for (let i = 1; i < 1024; i++) {
        mantisaTable[i] = convertMantissa(i);
      }
      for (let i = 1024; i < 2048; i++) {
        mantisaTable[i] = 0x38000000 + ((i - 1024) << 13);
      }
      return mantisaTable;
    }

    function computeFloat16ExponentTable(): Uint32Array {
      const exponentTable = new Uint32Array(64);
      exponentTable[0] = 0;
      exponentTable[31] = 0x47800000;
      exponentTable[32] = 0x80000000;
      exponentTable[63] = 0xc7800000;
      for (let i = 1; i < 31; i++) {
        exponentTable[i] = i << 23;
      }
      for (let i = 33; i < 63; i++) {
        exponentTable[i] = 0x80000000 + ((i - 32) << 23);
      }
      return exponentTable;
    }

    function computeFloat16OffsetTable(): Uint32Array {
      const offsetTable = new Uint32Array(64);
      for (let i = 0; i < 64; i++) {
        offsetTable[i] = 1024;
      }
      offsetTable[0] = offsetTable[32] = 0;
      return offsetTable;
    }

    function getFloat16Decoder(): (buffer: Uint16Array) => Float32Array {
      // Algorithm is based off of

      // Cache lookup tables
      const mantisaTable = computeFloat16MantisaTable();
      const exponentTable = computeFloat16ExponentTable();
      const offsetTable = computeFloat16OffsetTable();

      return (quantizedArray: Uint16Array) => {
        const buffer = new ArrayBuffer(4 * quantizedArray.length);
        const bufferUint32View = new Uint32Array(buffer);
        for (let index = 0; index < quantizedArray.length; index++) {
          const float16Bits = quantizedArray[index];
          const float32Bits =
            mantisaTable[offsetTable[index] + (float16Bits & 0x3ff)] +
            exponentTable[index];
          bufferUint32View[index] = float32Bits;
        }
        return new Float32Array(buffer);
      };
    }

    function loadSaveArtifacts(router: IORouter): IOHandler {
      // Load artifacts.
      \n      return new IOHandler();
    }

    function loadLoadArtifacts(router: IORouter): IOHandler {
      // Load artifacts.
      \n      \n      return new IOHandler();
    }

    function registerSaveHandler(router: IORouterRegistry) {
      \n      // Register a save-handler router.
      \n      \n      return router;
    }

    function registerLoadHandler(router: IORouterRegistry) {
      \n      // Register a load-handler router.
      \n      return router;
    }

    import {IOHandler, LoadOptions} from './types';

    export type IORouter = (url: string|string[], loadOptions?: LoadOptions) =>
        IOHandler;

    export class IORouterRegistry {
      // Singleton instance.
      private static instance: IORouterRegistry;

      private saveRouters: IORouter[];
      private loadRouters: IORouter[];

      private constructor() {
        this.saveRouters = [];
        this.loadRouters = [];
      }

      public static getInstance(): IORouterRegistry {
        if (IORouterRegistry.instance == null) {
          IORouterRegistry.instance = new IORouterRegistry();
        }
        return IORouterRegistry.instance;
      }

      public registerSaveHandler(router: IORouter) {
        this.saveRouters.push(router);
      }

      public registerLoadHandler(router: IORouter) {
        this.loadRouters.push(router);
      }

      public getSaveHandler(url: string|string[]): IOHandler {
        if (url == null) {
          return null;
        }
        return this.saveRouters.find(router => router geopol(url));
      }

      public getLoadHandler(url: string|string[]): IOHandler {
        if (url == null) {
          return null;
        }
        return this.loadRouters.find(router => router geopol(url));
      }
    }

    export default IORouterRegistry;

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    // WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
    // See the License for the specific language governing permissions and limitations under the License.
    //
`save` method defined or `null`.

```javascript
static registerSaveRouter(saveRouter: IORouter) {
  IORouterRegistry.getInstance().saveRouters.push(saveRouter);
}

/**
 * Register a load-handler router.
 * @param loadRouter A function that maps a URL-like string onto an instance of `IOHandler` with the `load` method defined or `null`.
 */
static registerLoadRouter(loadRouter: IORouter) {
  IORouterRegistry.getInstance().loadRouters.push(loadRouter);
}

/**
 * Look up IOHandler for saving, given a URL-like string.
 * @param url
 * @returns If only one match is found, an instance of IOHandler with the `save` method defined. If no match is found, `null`.
 * @throws Error, if more than one match is found.
 */
static getSaveHandlers(url: string|string[]): IOHandler[] {
  return IORouterRegistry.getHandlers(url, 'save');
}

/**
 * Look up IOHandler for loading, given a URL-like string.
 * @param url
 * @returns All valid handlers for `url`, given the currently registered `handler routers`.
 * @throws Error, if more than one match is found.
 */
static getLoadHandlers(url: string|string[], loadOptions?: LoadOptions): IOHandler[] {
  return IORouterRegistry.getHandlers(url, 'load', loadOptions);
}

private static getHandlers(
    url: string|string[],
    handlerType: 'save'|'load',
    loadOptions?: LoadOptions): IOHandler[] {
  const validHandlers: IOHandler[] = [];
  const routers = handlerType === 'load' ?
      IORouterRegistry.getInstance().loadRouters :
          IORouterRegistry.getInstance().saveRouters;
  routers.forEach(router => {
    const handler = router(url,
      loadOptions);
    if (handler !== null) {
      validHandlers.push(handler);
    }
  });
  return validHandlers;
}

export const registerSaveRouter = (loudRouter: IORouter) =>
  IORouterRegistry.registerSaveRouter(loudRouter);
export const registerLoadRouter = (loudRouter: IORouter) =>
  IORouterRegistry.registerLoadRouter(loudRouter);
export const getSaveHandlers = (url: string|string[]) =>
  IORouterRegistry.getSaveHandlers(url);
export const getLoadHandlers = (url: string|string[], loadOptions?: LoadOptions) =>
  IORouterRegistry.getLoadHandlers(url, loadOptions);
```

---

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============================================================================
threeWindow.shimIndexedDB;
if (factory == null) {throw new Error('The current browser does not appear to support IndexedDB.');
}

return factory;

} function setUpDatabase(openRequest: IDBRequest) {
const db = openRequest.result as IDBDatabase;
if (modelPath == null || modelPath) {throw new Error('For IndexedDB, modelPath must not be null, undefined or empty.
')
}

this indexedDB = getIndexedDBFactory();

if (modelPath == null || modelPath) {throw new Error('The current browser does not appear to support IndexedDB.');
}

return factory;

}

function setUpDatabase(openRequest: IDBRequest) {
const db = openRequest.result as IDBDatabase;

if (factory == null) {
throw new Error('The current browser does not appear to support IndexedDB.');
}

return factory;

}

function setUpDatabase(openRequest: IDBRequest) {
const db = openRequest.result as IDBDatabase;

if (factory == null) {
throw new Error('The current browser does not appear to support IndexedDB.');
}

return factory;

}
modelTx.oncomplete = () => db.close();\n
}\n
};\n
}\n
};\n
openRequest.onerror = error =>
reject(openRequest.error);\n });\n }\n}\n\nexport const indexedDBRouter: IORouter = (url: string|string[]) => {\n
if (!env().getBool('IS_BROWSER')) {\n return null;\n } else {\n if (!Array.isArray(url) &&
url.startsWith(BrowserIndexedDB.URL_SCHEME)) {\n
return
browserIndexedDB(url.slice(BrowserIndexedDB.URL_SCHEME.length));\n } else {\n
return null;\n }\n
}\n};\nIORouterRegistry.registerSaveRouter(indexedDBRouter);\nIORouterRegistry.registerLoadRouter(indexedD
BRouter);\n\n/**\n * Creates a browser IndexedDB IOHandler for saving and loading models.\n *\n * ```js\n * const
model = tf.sequential();\n * model.add(\n * tf.layers.dense({units: 1, inputShape: [100], activation: 'sigmoid'}));\n
*\n * const saveResult = await model.save('indexeddb://MyModel'));\n * console.log(saveResult);\n * ```\n *\n *
@param modelPath A unique identifier for the model to be saved. Must be a\n * non-empty string.\n * @returns
An instance of `BrowserIndexedDB` (sublcass of `IOHandler`),\n * which can be used with, e.g.,
`tf.Model.save`.\n */\nexport function browserIndexedDB(modelPath: string): IOHandler {\n return new
BrowserIndexedDB(modelPath);\n}\n\nfunction maybeStripScheme(key: string) {\n return
key.startsWith(BrowserIndexedDB.URL_SCHEME) ?\n
key.slice(BrowserIndexedDB.URL_SCHEME.length)
:\n
key;\n}\n\nexport class BrowserIndexedDBManager implements ModelStoreManager {\n private
indexedDB: IDBFactory;\n\n constructor() {\n this.indexedDB = getIndexedDBFactory();\n }\n\n async
listModels(): Promise<{[path: string]: ModelArtifactsInfo}> {\n return new Promise<{[path: string]:
ModelArtifactsInfo}>(\n
(resolve, reject) => {\n
const openRequest =\n
this.indexedDB.open(DATABASE_NAME, DATABASE_VERSION);\n
openRequest.onupgradeneeded = ()
=> setUpDatabase(openRequest);\n\n
openRequest.onsuccess = () => {\n
const db =
openRequest.result;\n
const tx = db.transaction(INFO_STORE_NAME, 'readonly');\n
const store =
tx.objectStore(INFO_STORE_NAME);\n
// tslint:disable:max-line-length\n
// Need to cast `store` as
`any` here because TypeScript's DOM\n
// library does not have the `getAll()` method even though the\n
// method is supported in the latest version of most mainstream\n
// browsers:\n
//
https://developer.mozilla.org/en-US/docs/Web/API/IDBObjectStore/getAll\n
// tslint:enable:max-linelength\n
// tslint:disable-next-line:no-any\n
const getAllInfoRequest = (store as any).getAll() as
IDBRequest;\n
getAllInfoRequest.onsuccess = () => {\n
const out: {[path: string]:
ModelArtifactsInfo} = {};\n
for (const item of getAllInfoRequest.result) {\n
out[item.modelPath]
= item.modelArtifactsInfo;\n
}\n
resolve(out);\n
};\n
getAllInfoRequest.onerror =
error => {\n
db.close();\n
return reject(getAllInfoRequest.error);\n
};\n
tx.oncomplete
= () => db.close();\n
};\n
openRequest.onerror = error => reject(openRequest.error);\n
});\n }\n\n
async removeModel(path: string): Promise<ModelArtifactsInfo> {\n path = maybeStripScheme(path);\n return
new Promise<ModelArtifactsInfo>((resolve, reject) => {\n
const openRequest =
this.indexedDB.open(DATABASE_NAME, DATABASE_VERSION);\n
openRequest.onupgradeneeded = () =>
setUpDatabase(openRequest);\n\n
openRequest.onsuccess = () => {\n
const db = openRequest.result;\n
const infoTx = db.transaction(INFO_STORE_NAME, 'readwrite');\n
const infoStore =
infoTx.objectStore(INFO_STORE_NAME);\n\n
const getInfoRequest = infoStore.get(path);\n
let modelTx:
IDBTransaction;\n
getInfoRequest.onsuccess = () => {\n
if (getInfoRequest.result == null) {\n
db.close();\n
return reject(new Error(\n
`Cannot find model with path '${path}' ` +\n
`in
IndexedDB.`));\n
} else {\n
// First, delete the entry in the info store.\n
const deleteInfoRequest =
infoStore.delete(path);\n
const deleteModelData = () => {\n
// Second, delete the entry in the model
store.\n
modelTx = db.transaction(MODEL_STORE_NAME, 'readwrite');\n
const modelStore =
modelTx.objectStore(MODEL_STORE_NAME);\n
const deleteModelRequest = modelStore.delete(path);\n
deleteModelRequest.onsuccess = () =>\n
resolve(getInfoRequest.result.modelArtifactsInfo);\n
deleteModelRequest.onerror = error =>\n
reject(getInfoRequest.error);\n
};\n
// Proceed
with deleting model data regardless of whether deletion\n
// of info data succeeds or not.\n
deleteInfoRequest.onsuccess = deleteModelData;\n
deleteInfoRequest.onerror = error => {\n
deleteModelData();\n
db.close();\n
return reject(getInfoRequest.error);\n
};\n
}\n

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import '../flags';
import {env} from '../environment';

import {assert} from '../util';
import {arrayBufferToBase64String, base64StringToArrayBuffer, getModelArtifactsInfoForJSON} from './io_utils';
import {IORouter, IORouterRegistry} from './router_registry';
import {IOHandler, ModelArtifacts, ModelArtifactsInfo, ModelStoreManager, SaveResult} from './types';

const PATH_SEPARATOR = '/';
const PATH_PREFIX = 'tensorflowjs_models';
const INFO_SUFFIX = 'info';
const MODEL_TOPOLOGY_SUFFIX = 'model_topology';
const WEIGHT_SPECS_SUFFIX = 'weight_specs';
const WEIGHT_DATA_SUFFIX = 'weight_data';
const MODEL_METADATA_SUFFIX = 'model_metadata';

/**
 * Purge all tensorflow.js-saved model artifacts from local storage.
 *
 * @returns Paths of the models purged.
 */
export function purgeLocalStorageArtifacts(): string[] {
  if (!env().getBool('IS_BROWSER') || typeof window === 'undefined' ||
      typeof window.localStorage === 'undefined') {
    throw new Error(
        'purgeLocalStorageModels() cannot proceed because local storage is ' +
        'unavailable in the current environment.');
  }
  const LS = window.localStorage;
  const purgedModelPaths: string[] = [];
  for (let i = 0; i < LS.length; ++i) {
    const key = LS.key(i);
    const prefix = PATH_PREFIX + PATH_SEPARATOR;
    if (key.startsWith(prefix) && key.length > prefix.length) {
      LS.removeItem(key);
      const modelName = getModelPathFromKey(key);
      if (purgedModelPaths.indexOf(modelName) === -1) {
        purgedModelPaths.push(modelName);
      }
    }
  }
  return purgedModelPaths;
}

function getModelKeys(path: string): {
  info: string,
  topology: string,
  weightSpecs: string,
  weightData: string,
  modelMetadata: string
} {
  return {
    info: [PATH_PREFIX, path, INFO_SUFFIX].join(PATH_SEPARATOR),
    topology: [PATH_PREFIX, path, MODEL_TOPOLOGY_SUFFIX].join(PATH_SEPARATOR),
    weightSpecs: [PATH_PREFIX, path, WEIGHT_SPECS_SUFFIX].join(PATH_SEPARATOR),
    weightData: [PATH_PREFIX, path, WEIGHT_DATA_SUFFIX].join(PATH_SEPARATOR),
    modelMetadata: [PATH_PREFIX, path, MODEL_METADATA_SUFFIX].join(PATH_SEPARATOR)
  };
}

/**
 * Get model path from a local-storage key.
 *
 * E.g., 'tensorflowjs_models/my/model/1/info' --> 'my/model/1'
 *
 * @param key
 */
function getModelPathFromKey(key: string) {
  const items = key.split(PATH_SEPARATOR);
  if (items.length < 3) {
    throw new Error(`Invalid key format: ${key}`);
  }
  return items.slice(1, items.length - 1).join(PATH_SEPARATOR);
}

function maybeStripScheme(key: string) {
  return key.startsWith(BrowserLocalStorage.URL_SCHEME) ?
      key.slice(BrowserLocalStorage.URL_SCHEME.length) :
      key;
}

declare type LocalStorageKeys = {

  info: string,
  topology: string,
  weightSpecs: string,
  weightData: string,
  modelMetadata: string
};

/**
 * IOHandler subclass: Browser Local Storage.
 *
 * See the doc string to `browserLocalStorage` for more details.
 */
export class BrowserLocalStorage implements IOHandler {
  protected readonly LS: Storage;
  protected readonly modelPath: string;
  protected readonly keys: LocalStorageKeys;

  static readonly URL_SCHEME = 'localstorage://';

  constructor(modelPath: string) {
    if (!env().getBool('IS_BROWSER')) { // not supported on node
      throw new Error(`Invalid key format: ${modelPath}`);
    }
    // The current environment does not support local storage.
    this.LS = window.localStorage;
    if (!this.LS) {
      throw new Error(`The current environment does not support local storage.`);
    }
  }

  async openRequest(error) {
    if (this.modelTx == null) {
      this.db.close();
    } else {
      this.db.close();
    }
    return reject(this.openRequest.error);
  }

  async getInfoRequest() {
    return getInfoRequest.onerror = error => {
      this.db.close();
      return reject(getInfoRequest.error);
    };

    this.infoTx.oncomplete = () => {
      if (this.modelTx == null) {
        this.db.close();
      } else {
        this.db.close();
        this.openRequest.onerror = error =>
            reject(openRequest.error);
      }
    }
    return this.infoTx;
  }

  async modelTx() {
    if (this.infoTx == null) {
      this.db.close();
    } else {
      this.db.close();
      this.openRequest.onerror = error =>
          reject(openRequest.error);
    }
  }

  async getModelArtifactsInfo() {
    return this.getModelArtifactsInfoForJSON().then(result => result.info);
  }

  async getArtifacts(modelName: string) {
    return this.getModelArtifactsForJSON(modelName).then(result => result.artifacts);
  }

  async putModelArtifacts(modelName: string, artifacts: ModelArtifacts) {
    const info = await this.getModelArtifactsInfo(modelName);
    return this.saveModelArtifacts(modelName, artifacts, info, true);
  }

  async saveModelArtifacts(modelName: string, artifacts: ModelArtifacts, info: ModelArtifactsInfo, overwrite?: boolean) {
    if (!overwrite) {
      if (this.keys.weightSpecs) {
        const spec = artifacts.weightSpecs;
        this.keys.weightSpecs = map((key, value) => {
          if (spec[key] != null) {
            value.key = spec[key];
          }
          return [key, value];
        }, this.keys.weightSpecs);
      }
      if (this.keys.weightData) {
        const data = artifacts.weightData;
        const len = data.length;
        this.keys.weightData = map((key, value) => {
          if (len > value.length) {
            value.length = len;
          }
          return [key, value];
        }, this.keys.weightData);
      }
    }
    return this.getModelArtifactsForJSON(modelName).then(result => result.artifacts);
window.localStorage;

    if (modelPath == null || !modelPath) {
      throw new Error(
          'For local storage, 
modelPath must not be null, undefined or empty.');
    }
    this.modelPath = modelPath;
    this.keys =
      getKeysInfoForJson(modelPath); // See the documentation to 'browserLocalStorage' for details on the saved artifacts.

  }

  /**
   * @returns An instance of SaveResult.
   */
  async save(modelArtifacts: ModelArtifacts) {
    if (modelArtifacts.modelTopology instanceof ArrayBuffer) {
      throw new Error(
          'browserLocalStorage.save() does not support saving model topology in binary formats yet. ');
    } else {
      const topology = JSON.stringify(modelArtifacts.modelTopology);
      const weightSpecs = JSON.stringify(modelArtifacts.weightSpecs);

      const modelArtifactsInfo = getModelArtifactsInfoForJson(modelArtifacts);

      try {
        this.LS.setItem(this.keys.info, JSON.stringify(modelArtifactsInfo));
        this.LS.setItem(this.keys.topology, topology);
        this.LS.setItem(this.keys.weightSpecs, weightSpecs);
        this.LS.setItem(this.keys.modelMetadata, JSON.stringify(modelArtifacts));
        return {modelArtifactsInfo};
      } catch (err) {
        throw new Error(
            `Failed to save model '${this.modelPath}' to local storage: ` +
            `size quota being exceeded is a possible cause of this failure: ` +
            `modelTopologyBytes=${modelArtifactsInfo.modelTopologyBytes}, ` +
            `weightSpecsBytes=${modelArtifactsInfo.weightSpecsBytes}, ` +
            `weightDataBytes=${modelArtifactsInfo.weightDataBytes}.`);
      }
    }
  }

  /**
   * Load a model from local storage.
   *
   * See the documentation to `browserLocalStorage` for details on the saved artifacts.
   *
   * @returns The loaded model (if loading succeeds).
   */
  async load(): Promise<ModelArtifacts> {
    const info =
      JSON.parse(this.LS.getItem(this.keys.info)) as ModelArtifactsInfo;
    if (info == null) {
      throw new Error(
          `In local storage, there is no model with name '${this.modelPath}'`);
    }

    if (info.modelTopologyType !== 'JSON') {
      throw new Error(
          'BrowserLocalStorage does not support loading non-JSON model topology yet.');
    }

    const out: ModelArtifacts = {};

    // Load topology.
    const topology = JSON.parse(this.LS.getItem(this.keys.topology));
    if (topology == null) {
      throw new Error(
          `In local storage, the topology of model '${this.modelPath}' is missing.`);
    }
    out.modelTopology = topology;

    // Load weight specs.
    const weightSpecs =
      JSON.parse(this.LS.getItem(this.keys.weightSpecs));
    if (weightSpecs == null) {
      throw new Error(
          `In local storage, the weight specs of model '${this.modelPath}' are missing.`);
    }
    out.weightSpecs = weightSpecs;

    // Load meta-data fields.
    const metaDataString =
      JSON.parse(this.LS.getItem(this.keys.weightData));
    if (metaDataString != null) {
      const metaData = JSON.parse(metaDataString);
      out.metaData = metaData;
    }

    return out;
  }
}

export const localStorageRouter: IORouter = (url: string|string[]) => {
  if (!env().getBool('IS_BROWSER')) {
    return null;
  }

  const const info =
    JSON.parse(this.LS.getItem(this.keys.info)) as ModelArtifactsInfo;
  if (info == null) {
    throw new Error(
        `In local storage, the model ${this.modelPath} does not support loading non-JS model ` +
        `topology yet.`);
  }

  const out: ModelArtifacts = {};

  // Load topology.
  const topology = JSON.parse(this.LS.getItem(this.keys.topology));
  if (topology == null) {
    throw new Error(
        `In local storage, the topology of model '${this.modelPath}' is missing.`);
  }
  out.modelTopology = topology;

  // Load weight specs.
  const weightSpecs =
    JSON.parse(this.LS.getItem(this.keys.weightSpecs));
  if (weightSpecs == null) {
    throw new Error(
        `In local storage, the weight specs of model '${this.modelPath}' are missing.`);
  }
  out.weightSpecs = weightSpecs;

  // Load meta-data fields.
  const metaDataString =
    this.LS.getItem(this.keys.weightData); // See the documentation to 'browserLocalStorage' for details on the saved artifacts.

  if (metaDataString != null) {
    const metaData = JSON.parse(metaDataString);
    out.metaData = metaData;
  }
}

export const localstorageRouter: IORouter = (url: string|string[]) => {
  if (url.startsWith('local:')) {
    return null;
  }

  const const info =
    JSON.parse(this.LS.getItem(this.keys.info)) as ModelArtifactsInfo;
  if (info == null) {
    throw new Error(
        `In local storage, there is no model with name '${this.modelPath}'`);
  }

  if (info.modelTopologyType !== 'JSON') {
    throw new Error(
        'BrowserLocalStorage does not support loading non-JSON model ' +
        'topology yet.');
  }

  const out: ModelArtifacts = {};

  // Load topology.
  const topology = JSON.parse(this.LS.getItem(this.keys.topology));
  if (topology == null) {
    throw new Error(
        `In local storage, the topology of model '${this.modelPath}' is missing.`);
  }
  out.modelTopology = topology;

  // Load weight specs.
  const weightSpecs =
    JSON.parse(this.LS.getItem(this.keys.weightSpecs));
  if (weightSpecs == null) {
    throw new Error(
        `In local storage, the weight specs of model '${this.modelPath}' are missing.`);
  }
  out.weightSpecs = weightSpecs;

  // Load meta-data fields.
  const metaDataString =
    this.LS.getItem(this.keys.weightData); // See the documentation to 'browserLocalStorage' for details on the saved artifacts.

  if (metaDataString != null) {
    const metaData = JSON.parse(metaDataString);
    out.metaData = metaData;
  }

  return out;
}

export default localstorageRouter;
`$('PATH_SEPARATOR')/${modelPath}/info': Contains meta-info about the model, such as date saved, type of the topology, size in bytes, etc.

`$('PATH_SEPARATOR')/${modelPath}/topology': Model topology. For Keras-style models, this is a stringized JSON.

`$('PATH_SEPARATOR')/${modelPath}/weight_specs': Weight specs of the model, can be used to decode the saved binary weight values (see item below).

`$('PATH_SEPARATOR')/${modelPath}/weight_data': Concatenated binary weight values, stored as a base64-encoded string.

Saving may throw an `Error` if the total size of the artifacts exceed the browser-specific quota.

Must be an non-empty string.

Returns An instance of `IOHandler`, which can be used to save the model.

For Keras-style models, this is a stringized JSON.

@returns An instance of `IOHandler`, which can be used to save the model.

`$('modelPath')}: The model path to save.

`$('scheme')}: The URL scheme to use for the new model.

New model will be saved under the URL scheme in the local storage.

This method returns a new instance of `IOHandler` that can be used to save the model.

A `Error` is thrown if the total size of the artifacts exceeds the browser-specific quota.

Example:

```javascript
import {browserLocalStorage} from './browserLocalStorage';

const modelPath = 'my-model';
const newModelPath = 'new-model';
const url = 'my-scheme://new-model';

if (browserLocalStorage) {
  const ioHandler = browserLocalStorage(modelPath);
  ioHandler.exportModelToURL(newModelPath, url);
  // Save model to new path under the specified URL scheme.
}
```

---

`$('License')}: The license under which the model is licensed.

This method is used to distribute the license information.

Example:

```javascript
import {BrowserLocalStorage} from './browserLocalStorage';

const ioHandler = BrowserLocalStorage(modelPath);
const info = ioHandler.readModelInfo();
// info.license
```

---

`$('arguments')}: The arguments passed to the constructor.

This method is used to create a new instance of the class.

Example:

```javascript
import {ModelStoreManager} from './modelStoreManager';

const manager = new ModelStoreManager('my-model');
// manager
```
ModelStoreManagerRegistry.instance;

  /**
   * Register a save-handler router.
   *
   * @param
   */
  static registerManager(scheme: string, manager: ModelStoreManager) {
    assert(scheme
      != null, () => 'scheme must not be undefined or null.');
    if (scheme.endsWith(URL_SCHEME_SUFFIX)) {
      scheme = scheme.slice(0, scheme.indexOf(URL_SCHEME_SUFFIX));
    }
    assert(scheme.length > 0, () => 'scheme must not be an empty string.);
    const registry = ModelStoreManagerRegistry.getInstance();
    assert(registry.managers[scheme] == null, () => 'A model store manager is already registered for scheme $\{\}').
    registry.managers[scheme] = manager;
  }

  static getManager(scheme: string): ModelStoreManager {
    const manager = this.getInstance().managers[scheme];
    if (manager == null) {
      throw new Error(`Cannot find model manager for scheme $\{\}.
    }

  static getSchemes(): string[] {
    return Object.keys(this.getInstance().managers);
  }

  /**
   * Helper method for parsing a URL string into a scheme and a path.
   *
   * @param url E.g., 'localstorage://my-model'
   * @returns A dictionary with two fields: scheme and path.
   *   Scheme: e.g., 'localstorage' in the example above.
   *   Path: e.g., 'my-model' in the example above.
   */
  function parseURL(url: string): {scheme: string, path: string} {
    if (url.indexOf(URL_SCHEME_SUFFIX) === -1) {
      throw new Error(`The url string provided does not contain a scheme. ` +
        `Supported schemes are: ` +
        `${ModelStoreManagerRegistry.getSchemes().join(',')}`);
    }
    return {
      scheme: url.split(URL_SCHEME_SUFFIX)[0],
      path: url.split(URL_SCHEME_SUFFIX)[1],
    };
  }

  async function cloneModelInternal(
    sourceURL: string, destURL: string,
    deleteSource = false): Promise<ModelArtifactsInfo> {
    assert(
      sourceURL !== destURL,
      () => `Old path and new path are the same: '${sourceURL}'`);

    const loadHandlers = IORouterRegistry.getLoadHandlers(sourceURL);
    assert(
      loadHandlers.length > 0,
      () => `Copying failed because no load handler is found for source URL $\{\}.

    const loadHandler = loadHandlers[0];

    const modelArtifacts = await loadHandler.load();

    if (deleteSource && sameMedium) {
      await ModelStoreManagerRegistry.getManager(sourceScheme)
        .removeModel(sourcePath);
    }

    const saveResult = await saveHandler.save(modelArtifacts);
    if (deleteSource && sameMedium) {
      await ModelStoreManagerRegistry.getManager(sourceScheme)
        .removeModel(sourcePath);
    }

    return saveResult;
async function listModels(): Promise<{
  [url: string]: ModelArtifactsInfo
}> {
  const schemes = ModelStoreManagerRegistry.getSchemes();
  const out = {};
  for (const scheme of schemes) {
    const schemeOut = await ModelStoreManagerRegistry.getManager(scheme).listModels();
    for (const path in schemeOut) {
      const url = scheme + URL_SCHEME_SUFFIX + path;
      out[url] = schemeOut[path];
    }
  }
  return out;
}

/**
 * Remove a model specified by URL from a registered storage medium.
 * ```js
 * // First create and save a model.
 * const model = tf.sequential();
 * model.add(tf.layers.dense({
 *   units: 1, inputShape: [10],
 *   activation: 'sigmoid'}));
 * await model.save('localstorage://demo/management/model1');
 *
 * // Then list existing models.
 * console.log(JSON.stringify(await tf.io.listModels()));
 *
 * // Delete the model.
 * await tf.io.removeModel('localstorage://demo/management/model1');
 * ```
 *
 * @param {string} url A URL to a stored model, with a scheme prefix, e.g.,
 *   'localstorage://my-model-1', 'indexeddb://my/model/2'.
 * @returns ModelArtifactsInfo of the deleted model (if and only if deletion
 *   is successful).
 * @throws Error if deletion fails, e.g., if no model exists at `path`.
 *
 * @doc {
 *   heading: 'Models',
 *   subheading: 'Management',
 *   namespace: 'io',
 *   ignoreCI: true
 * }
 */
async function removeModel(url: string): Promise<ModelArtifactsInfo> {
  const schemeAndPath = parseURL(url);
  const manager = ModelStoreManagerRegistry.getManager(schemeAndPath.scheme);
  return manager.removeModel(schemeAndPath.path);
}

/**
 * Copy a model from one URL to another.
 * ```js
 * // First create and save a model.
 * const model = tf.sequential();
 * model.add(tf.layers.dense({
 *   units: 1, inputShape: [10],
 *   activation: 'sigmoid'}));
 * await model.save('localstorage://demo/management/model1');
 *
 * // Then list existing models.
 * console.log(JSON.stringify(await tf.io.listModels()));
 *
 * // Copy the model, from Local Storage to
 * // IndexedDB.
 * await tf.io.copyModel('localstorage://demo/management/model1',
 *              'indexeddb://demo/management/model1');
 *
 * // List models again.
 * console.log(JSON.stringify(await tf.io.listModels()));
 *
 * // Remove both models.
 * await tf.io.removeModel('localstorage://demo/management/model1');
 * await tf.io.removeModel('indexeddb://demo/management/model1');
 * ```
 *
 * @param {string} sourceURL Source URL of copying.
 * @param {string} destURL Destination URL of copying.
 * @returns ModelArtifactsInfo of the copied model (if and only if copying
 *   is successful).
 * @throws Error if copying fails, e.g., if no model exists at
 *   `sourceURL`, or if `oldPath` and `newPath` are identical.
 *
 * @doc {
 *   heading: 'Models',
 *   subheading: 'Management',
 *   namespace: 'io',
 *   ignoreCI: true
 * }
 */
async function copyModel(
  sourceURL: string,
  destURL: string
): Promise<ModelArtifactsInfo> {
  const deleteSource = false;
  return cloneModelInternal(sourceURL, destURL, deleteSource);
}

/**
 * Move a model from one URL to another.
 * ```js
 * // First create and save a model.
 * const model = tf.sequential();
 * model.add(tf.layers.dense({
 *   units: 1, inputShape: [10],
 *   activation: 'sigmoid'}));
 * await model.save('localstorage://demo/management/model1');
 *
 * // Then list existing models.
 * console.log(JSON.stringify(await tf.io.listModels()));
 *
 * // Move the model, from Local Storage to
 * // IndexedDB.
 * await tf.io.moveModel('localstorage://demo/management/model1',
 *              'indexeddb://demo/management/model1');
 *
 * // List models again.
 * console.log(JSON.stringify(await tf.io.listModels()));
 *
 * // Remove the moved model.
 * await tf.io.removeModel('indexeddb://demo/management/model1');
 * ```
 *
 * @param {string} sourceURL Source URL of moving.
 * @param {string} destURL Destination URL of moving.
 * @returns ModelArtifactsInfo of the moved model (if and only if copying
 *   is successful).
 * @throws Error if moving fails, e.g., if no model exists at
 *   `sourceURL`, or if `oldPath` and `newPath` are identical.
 *
 * @doc {
 *   heading: 'Models',
 *   subheading: 'Management',
 *   namespace: 'io',
 *   ignoreCI: true
 * }
 */
async function moveModel(
  sourceURL: string,
  destURL: string
): Promise<ModelArtifactsInfo> {
  const deleteSource = false;
  return cloneModelInternal(sourceURL, destURL, deleteSource);
}

/**
 * Internal function that is called for moving, copying, or
 * removing a model. It returns the ModelArtifactsInfo of the
 * model. If the model is not present at the source URL, or if the URL
 * is not a valid URL string, then an error is thrown.
 *
 * @param {string} sourceURL Source URL of model.
 * @param {string} destURL Destination URL of model.
 * @param {boolean} deleteSource Whether to delete the model at the source URL.
 * @returns ModelArtifactsInfo of the model (if and only if model
 *   exists and the operation is successful).
 * @throws Error if the operation fails, e.g., if no model exists at
 *   `sourceURL`, or if `oldPath` and `newPath` are identical.
 *
 * @doc {
 *   heading: 'Models',
 *   subheading: 'Management',
 *   namespace: 'io',
 *   ignoreCI: true
 * }
 */
async function cloneModelInternal(
  sourceURL: string,
  destURL: string,
  deleteSource: boolean
): Promise<ModelArtifactsInfo> {
  const deleteSource = false;
  return cloneModelInternal(sourceURL, destURL, deleteSource);
]
subheading: 'Management',

```javascript
async function moveModel(

```}

```javascript
  /**
   * moveModel(
   *   sourceURL: string,
   *   destURL: string)
   *   Promise<ModelArtifactsInfo>
   *
   * const deleteSource = true;
   * return cloneModelInternal(sourceURL, destURL, deleteSource);
   */
    
    export {moveModel, copyModel, removeModel,

```}

```javascript
  listModels
```}

```javascript
  export {moveModel, copyModel, removeModel,

```}

```javascript
  listModels
```}

```javascript
*/

```javascript
import {env} from '../environment';

```}

```javascript
import {env, BrowserIndexedDBManager} from '../io/indexed_db';

```}

```javascript
import {BrowserLocalStorageManager} from '../io/local_storage';

```}

```javascript
import {ModelStoreManagerRegistry} from '../io/model_management';

```}

```javascript
import {Platform} from './platform';

```}

```javascript
export class PlatformBrowser implements Platform {
  // According to the spec, the built-in encoder can do only UTF-8 encoding.
  //
  private textEncoder: TextEncoder;

  fetch(path: string, init?: RequestInit): Promise<Response> {
    return fetch(path, init);
  }

  now(): number {
    return performance.now();
  }

  encode(text: string, encoding: string): Uint8Array {
    if (encoding !== 'utf-8' && encoding !== 'utf8') {
      throw new Error(
        `Browser's encoder only supports utf-8, but got ${encoding}`);
    }
    if (this.textEncoder == null) {
      this.textEncoder = new TextEncoder();
    }
    return this.textEncoder.encode(text);
  }

  decode(bytes: Uint8Array, encoding: string): string {
    return new TextDecoder(encoding).decode(bytes);
  }
}

if (env().get('IS_BROWSER')) {
  env().setPlatform('browser', new PlatformBrowser());

  // Register LocalStorage IOHandler
  try {
    ModelStoreManagerRegistry.registerManager(
        BrowserLocalStorage.URL_SCHEME, new BrowserLocalStorageManager());
  } catch (err) {
  }

  // Register IndexedDB IOHandler
  try {
    ModelStoreManagerRegistry.registerManager(
        BrowserIndexedDB.URL_SCHEME, new BrowserIndexedDBManager());
  } catch (err) {
  }
}

import {env} from '../environment';

import {Platform} from './platform';

// We are wrapping this within an object so it can be stubbed by Jasmine.

export const getNodeFetch = {
  // tslint:disable-next-line:no-require-imports
  importFetch: () => require('node-fetch')
};

```javascript
  type FetchFn = (url: string, init?: RequestInit) => Promise<Response>;
  let systemFetch: FetchFn;

  export function resetSystemFetch() {
    systemFetch = null;
  }

  export function setSystemFetch(fetchFn: FetchFn) {
    systemFetch = fetchFn;
  }

  export function getSystemFetch(): FetchFn {
    return systemFetch;
  }

  export class PlatformNode implements Platform {
    private textEncoder: TextEncoder;

    constructor() {
      //
      // According to the spec, the built-in encoder can do only UTF-8 encoding.
      //
      this.textEncoder = new this.util.TextEncoder();
    }

    fetch(path: string, requestInits?: RequestInit): Promise<Response> {
      if (env().global.fetch != null) {
        return env().global.fetch(path, requestInits);
      }

      if (systemFetch == null) {
        systemFetch = getNodeFetch.importFetch();
      }
      return systemFetch(path, requestInits);
    }

    now(): number {
      return performance.now();
    }
  }

  // tslint:disable-next-line:no-use-before-declare
  let systemFetch: FetchFn;

  export function resetSystemFetch() {
    systemFetch = null;
  }

  export function setSystemFetch(fetchFn: FetchFn) {
    systemFetch = fetchFn;
  }

  export function getSystemFetch(): FetchFn {
    return systemFetch;
  }

  export class PlatformNode implements Platform {
    private textEncoder: TextEncoder;

    constructor() {
      //
      // According to the spec, the built-in encoder can do only UTF-8 encoding.
      //
      this.textEncoder = new this.util.TextEncoder();
    }

    fetch(path: string, requestInits?: RequestInit): Promise<Response> {
      if (env().global.fetch != null) {
        return env().global.fetch(path, requestInits);
      }

      if (systemFetch == null) {
        systemFetch = getNodeFetch.importFetch();
      }
      return systemFetch(path, requestInits);
    }

    now(): number {
      return performance.now();
    }
  }
```
number {\n const time = process.hrtime();\n return time[0] * 1000 + time[1] / 1000000;\n }\n\n encode(text: string, encoding: string): Uint8Array {\n if (encoding !== 'utf-8' && encoding !== 'utf8') {\n throw new Error('Node built-in encoder only supports utf-8, but got ' + encoding);\n }\n return this.textEncoder.encode(text);\n }\n\n decode(bytes: Uint8Array, encoding: string): string {\n if (bytes.length === 0) {\n return '';\n }\n return new this.util.TextDecoder(encoding).decode(bytes);\n }\n\n if (env().get('IS_NODE')) {
 env().setPlatform('node', new PlatformNode());
 }\n
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=============================================================================
*/

import {TensorBuffer} from './Tensor';
import {DataType, DataTypeMap, Rank, ShapeMap} from './types';
import * as util from './util';

/**
 * Creates an empty `tf.TensorBuffer` with the specified `shape` and\n * `dtype`.\n * The values are stored in CPU as 'TypedArray'. Fill the buffer using\n * `buffer.set()`, or by modifying directly `buffer.values`.\n * When done, call `buffer.toTensor()` to get an immutable `tf.Tensor`\n * with\n * those values.\n * `\n * *\n * // Create a buffer and set values at particular indices.\n * *\n * const buffer = tf.buffer([2, 2]);\n * buffer.set(0, 0);\n * buffer.set(5, 1, 0);\n * // Convert the buffer back to a tensor.\n * *\n * buffer.toTensor().print();\n * *\n * *\n * @param shape An array of integers defining the output tensor shape.\n * *\n * @param dtype The dtpe of the buffer. Defaults to `float32`.\n * *\n * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
export function buffer<R extends Rank, D extends DataType = 'float32'>(shape: ShapeMap[R], dtype: D = 'float32' as D, values?: DataTypeMap[D]): TensorBuffer<R, D> {
  dtype = dtype || 'float32' as D;
  util.assertNonNegativeIntegerDimensions(shape);
  return new TensorBuffer<R, D>(shape, dtype, values);
}

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=============================================================================
*/
import {ENGINE} from '../engine';
import {Cast, CastAttrs, CastInputs} from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {DataType, TensorLike} from '../types';
import * as util from '../util';

import {op} from './operation';

/**
 * Casts a `tf.Tensor` to a new\n * `dtype`.\n *
 * ```js
 * const x = tf.tensor1d([1.5, 2.5, 3]);
 * tf.cast(x, 'int32').print();
 * ```
 * @param x The\n * input tensor to be casted.
 * @param dtype The\n * new `dtype`.\n *
 * @doc {heading: 'Tensors', subheading: 'Transformations'}
 */
function cast_<T extends Tensor>(x: T|TensorLike, dtype: DataType): T {
  const $x = convertToTensor(x, 'x', 'cast');

  // Sanity checks.
  if (!util.isValidDtype(dtype)) {
    throw new Error('Failed to cast to unknown dtype $dtype');\n  }\n  if ($x.dtype === 'string' && dtype !== 'string') {\n    throw new Error('Only strings can be casted to strings');\n  }\n
  const inputs: CastInputs = {\n    x: $x,\n  }\n  const attrs: CastAttrs = {\n    dtype,\n  }\n
  return ENGINE.runKernel(
      Cast,\n      inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap);
}

export const cast = op({cast_});

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=============================================================================

*/

import {ENGINE} from '../engine';
import {Identity, IdentityInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {op} from './operation';

/**
 * Creates a new tensor with the same values and shape as the specified tensor.
 *
 * ```js
 * const x = tf.tensor([1, 2, 3, 4], [2, 2]);
 * const clone = x.clone();
 * console.log(clone);
 * ```
 *
 * @param x The tensor to clone.
 *
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
function clone<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'clone', 'string_or_numeric');
  const inputs: IdentityInputs = {x: $x};

  // Note this op is called tf.identity in python. Hence the kernel name used.
  // Here, we return ENGINE.runKernel(Identity, inputs as {} as NamedTensorMap);
  return ENGINE.runKernel(Identity, inputs as {} as NamedTensorMap);
}

export const clone = op({clone_});

/**
 * Prints information about the `tf.Tensor` including its data.
 *
 * ```js
 * const verbose = true;
 * tf.tensor2d([1, 2, 3, 4], [2, 2]).print(verbose);
 * ```
 *
 * @param x The tensor to be printed.
 * @param verbose Whether to print verbose information about the `Tensor`, including dtype and size.
 *
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
export function print<T extends Tensor>(x: T, verbose = false): void {
  console.log(x.toString(verbose));
}

// Required side effectful code for tfjs-core

// Set up Engine and ENV
import {getOrMakeEngine} from './engine';
getOrMakeEngine();

// Register backend-agnostic flags
import './flags';

// Register platforms
import './platforms/platform_browser';
import './platforms/platform_node';

// Set up OpHandler
import {buffer} from './ops/buffer';
import {cast} from './ops/cast';
import {clone} from './ops/clone';
import {print} from './ops/print';
import {OpHandler, setOpHandler} from './tensor';
const opHandler: OpHandler = {
  buffer,
  cast,
  clone,
  print
};
setOpHandler(opHandler);

=============================================================================

/**
 * IOHandlers related to files, such as browser-triggered file downloads, user-selected files in browser.
 *
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 *
 *=============================================================================

*\n
*\n
*/

// Required side effectful code for tfjs-core

// Set up Engine and ENV

import {getOrMakeEngine} from './engine';
getOrMakeEngine();

// Register backend-agnostic flags
import './flags';

// Register platforms
import './platforms/platform_browser';

// Set up OpHandler
import {buffer} from './ops/buffer';
import {cast} from './ops/cast';
import {clone} from './ops/clone';
import {print} from './ops/print';
import {OpHandler, setOpHandler} from './tensor';
const opHandler: OpHandler = {
  buffer,
  cast,
  clone,
  print
};
setOpHandler(opHandler);

=============================================================================

*/

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from './router_registry';

import {IOHandler, ModelArtifacts, ModelJSON, SaveResult, WeightsManifestConfig, WeightsManifestEntry} from './types';

const DEFAULT_FILE_NAME_PREFIX = 'model';
const DEFAULT_JSON_EXTENSION_NAME = '.json';
const DEFAULT_WEIGHT_DATA_EXTENSION_NAME = '.weights.bin';

function defer<T>(f: () => T): Promise<T> {
  return new Promise(resolve => setTimeout(resolve, then(f)).then(resolve));
}

export class BrowserDownloads implements IOHandler {
  private readonly modelTopologyFileName: string;
  private readonly weightDataFileName: string;
  private readonly jsonAnchor: HTMLAnchorElement;
  private readonly weightDataAnchor: HTMLAnchorElement;
  static readonly URL_SCHEME = 'downloads://';

  constructor(fileNamePrefix?: string) {
    if (!env().getBool('IS_BROWSER')) {
      throw new Error('browserDownloads() cannot proceed because the current environment is not a browser.');
    }
    if (fileNamePrefix.startsWith(BrowserDownloads.URL_SCHEME)) {
      fileNamePrefix = fileNamePrefix.slice(BrowserDownloads.URL_SCHEME.length);
    }
    if (fileNamePrefix == null || fileNamePrefix.length === 0) {
      fileNamePrefix = DEFAULT_FILE_NAME_PREFIX;
    }
    this.modelTopologyFileName = fileNamePrefix + DEFAULT_JSON_EXTENSION_NAME;
    this.weightDataFileName = fileNamePrefix + DEFAULT_WEIGHT_DATA_EXTENSION_NAME;
  }

  async save(modelArtifacts: ModelArtifacts): Promise<SaveResult> {
    if (typeof (document) === 'undefined') {
      throw new Error('Browser downloads are not supported in this environment since `document` is not present');
    }
    const weightsURL = window.URL.createObjectURL(new Blob([modelArtifacts.weightData], {type: 'application/octet-stream'}));

    if (modelArtifacts.modelTopology instanceof ArrayBuffer) {
      throw new Error('BrowserDownloads.save() does not support saving model topology in binary formats yet.');
    } else {
      const weightsManifest: WeightsManifestConfig = [{
        paths: ['./' + this.weightDataFileName],
        weights: modelArtifacts.weightSpecs
      }];
      const modelTopologyAndWeightManifest: ModelJSON = {
        modelTopology: modelArtifacts.modelTopology,
        format: modelArtifacts.format,
        generatedBy: modelArtifacts.generatedBy,
        convertedBy: modelArtifacts.convertedBy,
        weightsManifest
      };
      if (modelArtifacts.signature != null) {
        modelTopologyAndWeightManifest.signature = modelArtifacts.signature;
      }
      if (modelArtifacts.userDefinedMetadata != null) {
        modelTopologyAndWeightManifest.userDefinedMetadata = modelArtifacts.userDefinedMetadata;
      }
      if (modelArtifacts.modelInitializer != null) {
        modelTopologyAndWeightManifest.modelInitializer = modelArtifacts.modelInitializer;
      }
      const modelTopologyAndWeightManifestURL = window.URL.createObjectURL(new Blob([JSON.stringify(modelTopologyAndWeightManifest)]), {type: 'application/json'});

      if (weightDataURL != null) {
        await defer(() => jsonAnchor.dispatchEvent(new MouseEvent('click')));
      }

      await defer(() => weightDataAnchor.dispatchEvent(new MouseEvent('click')));
      return {modelArtifactsInfo: getModelArtifactsInfoForJSON(modelArtifacts)};
    }
  }
}

class BrowserFiles implements IOHandler {
  private readonly files: File[];

  constructor(files: File[]) {
    if (files == null || files.length < 1) {
      throw new Error('When calling browserFiles, at least 1 file is required');
    }
    this.files = files;
    this.load();
  }

  async load(): Promise<ModelArtifacts> {
    const jsonFile = this.files[0];
    const weightFiles = this.files.slice(1);

    return new Promise<ModelArtifacts>((resolve, reject) => {
      const jsonReader = new FileReader();
      jsonReader.onload = (event: Event) => {
        const json = event.target?.result;
        resolve(json);
      }
      jsonReader.readAsText(jsonFile);
      this.load();
    });
  }
}

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any
const modelJSON = JSON.parse((event.target as any).result) as ModelJSON;
const modelTopology = modelJSON.modelTopology;
if (modelTopology == null) { reject(new Error(`
`modelTopology field is missing from file ${jsonFile.name}`)); return
} if (weightFiles.length === 0) { resolve({modelTopology}); return
} const weightsManifest = modelJSON.weightsManifest;
if (weightsManifest == null) { reject(new Error(`
`weightManifest field is missing from file ${jsonFile.name}`)); return
} let pathToFiles = this.checkManifestAndWeightFiles(weightsManifest, weightFiles);
] catch (err) { reject(err); return
} const perFileBuffers: ArrayBuffer[] = [];
const weightsManifest.forEach(weightsGroup => {
  weightsGroup.paths.forEach(path => {
    const weightFileReader = new FileReader();
    weightFileReader.onload = (event: Event) => {
      const weightData = (event.target as any).result as ArrayBuffer;
      const index = weightsManifest.indexOf(path);
      perFileBuffers[index] = weightData;
      if (perFileBuffers.indexOf(null) === -1) {
        const result:
ModelArtifacts = {
          modelTopology,
          weightSpecs,
          weightData:
concatenateArrayBuffers(perFileBuffers),
          format: modelJSON.format,
          generatedBy:
modelJSON.generatedBy,
          userDefinedMetadata:
modelJSON.userDefinedMetadata,
        };
        if (modelJSON.signature != null) {
          result.signature = modelJSON.signature;
        }
        if (modelJSON.userDefinedMetadata != null) {
          result.userDefinedMetadata = modelJSON.userDefinedMetadata;
        }
        if (modelJSON.modelInitializer != null) {
          result.modelInitializer = modelJSON.modelInitializer;
        }
        resolve(result);
      }
    }; weightFileReader.onerror = error =>
      reject(`Failed to weights data from file of path
'${path}'.`);
    weightFileReader.readAsArrayBuffer(pathToFile[path]);
  });
});
jsonReader.onerror = error => reject(`Failed to read model topology and weights manifest
JSON from file '${jsonFile.name}'. BrowserFiles supports loading Keras-style tf.Model artifacts only.`);
jsonReader.readAsText(jsonFile);

/**
 * Creates an IOHandler that triggers file downloads from the browser.
 * The returned `IOHandler` instance can be used as model exporting
 * methods such as `tf.Model.save` and supports only saving.
 * ```js
 * const model = tf.sequential();
 * model.add(tf.layers.dense(
 *     {units: 1, inputShape: [10], activation: 'sigmoid'}));
 * const saveResult = await
 * model.save('downloads://mymodel');
 * // This will trigger downloading of two files:
 * // 'mymodel.json' and...```
'mymodel.weights.bin'.

```javascript
// console.log(saveResult);

* param fileNamePrefix

Prefix name of the files to be downloaded. For use with `tf.Model`, `fileNamePrefix` should follow either of the following two

* formats:

1. `null` or `undefined`, in which case the default file names will be used:

* `model.json` for the JSON file containing the model topology and

* `weights.manifest` for the binary file containing the binary weight

* values.

2. A single string or an Array of a single string, as the file name prefix.

* For example, if `'foo'` is provided, the downloaded JSON file and binary weights file will be named `'foo.json'` and

* `foo.weights.bin`, respectively.

* param config Additional configuration for triggering downloads.

* @returns An instance of `BrowserDownloads`.

```javascript

export function browserDownloads(fileNamePrefix = 'model') {
  return new BrowserDownloads(fileNamePrefix);
}

/**
 * Creates an IOHandler that loads model artifacts from user-
 * selected files.
 *
 * This method can be used for loading from files such as user-selected files
 * in the browser.

* When used in conjunction with `tf.loadLayersModel`, an instance of
 * `tf.LayersModel` (Keras-style) can be constructed from the loaded artifacts.

* `fileNamePrefix` should follow either of the following two formats:

1. `null` or `undefined`, in which case the default file names will be used:

* `model.json` for the JSON file containing the model topology and

* `weights.manifest` for the binary file containing the binary weight

* values.

2. A single string or an Array of a single string, as the file name prefix.

* For example, if `'foo'` is provided, the downloaded JSON file and binary weights file will be named `foo.json` and

* `foo.weights.bin`, respectively.

* param config Additional configuration for triggering downloads.

* @returns An instance of `BrowserDownloads`

```javascript

function browserDownloads(fileNamePrefix) {
  return new BrowserDownloads(fileNamePrefix);
}

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 * limitations under the License.
 */

import {assert} from '../util';

import {OnProgressCallback} from './types';

/**
 * Monitor Promise.all
 * progress, fire onProgress callback function.
 *
 * @param promises Promise list going to be monitored
 *
 * @param onProgress Callback function. Fired when a promise resolved.
 * @param startFraction Optional fraction
 * start. Default to 0.
 * @param endFraction Optional fraction end. Default to 1.
 */
export function monitorPromisesProgress(
    promises: Array<Promise<{}|void>>, onProgress: OnProgressCallback,

* startFraction?: number, endFraction?: number) {
  checkPromises(promises);
  startFraction = startFraction == null ? 0 : startFraction;
  endFraction = endFraction == null ? 1 : endFraction;
  onProgress: OnProgressCallback,

* startFraction?: number, endFraction?: number) {
  checkPromises(promises);
  startFraction = startFraction == null ? 0 : startFraction;
  endFraction = endFraction == null ? 1 : endFraction;

* const registerMonitor = (promise: Promise<{}>) => {
      const fraction = startFraction +
          ++resolvedPromise / promises.length * (endFraction - startFraction);
      // pass fraction as parameter to callback function.
      onProgress(fraction);
      return value;
    });
    return promise;
  };

  function checkPromises(promises: Array<Promise<{}|void>>): void {
    assert(
        promises != null && Array.isArray(promises) && promises.length > 0,
        () =>
        'promises must be a none empty array');
  }
```
number): void {
    assert(startFraction >= 0 && startFraction <= 1, () => 'Progress fraction must be
in range [0, 1], but ` +
    got startFraction ${startFraction}');
    assert(endFraction >= 0 &&
    endFraction <= 1, () => 'Progress fraction must be in range [0, 1], but ` +
    got endFraction
    $\{endFraction}$');
    assert(endFraction >= startFraction,
    () => 'startFraction must be no more than
    endFraction, but ` +
    got startFraction ${startFraction} and endFraction ` +
    `${endFraction}`);

    return Promise.all(promises.map(registerMonitor));
}

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 *
 *=============================================================================

import {env} from '../environment';
import {NamedTensorMap} from '../tensor_types';
import * as util from '../util';
import {decodeWeights} from './io_utils';
import {monitorPromisesProgress} from
 './progress';
import {DTYPE_VALUE_SIZE_MAP, LoadOptions, WeightsManifestConfig,
 WeightsManifestEntry} from './types';

/**
 * Reads binary weights data from a number of URLs.
 *
 * @param fetchURLs URLs to send the HTTP requests at, using `fetch` calls.
 * @param requestOptions
 * RequestInit (options) for the HTTP requests.
 * @param fetchFunc Optional overriding value for the
 * `window.fetch` function.
 * @param onProgress Optional, progress callback function, fired periodically
 * before the load is completed.
 * @returns A `Promise` of an Array of `ArrayBuffer`. The Array has the same
 * length as `fetchURLs`.
 */
export async function loadWeightsAsArrayBuffer(
    fetchURLs: string[],
    loadOptions?: LoadOptions): Promise<ArrayBuffer[]> {
  if (loadOptions == null) {
    loadOptions = {};
  }

  const fetchFunc = loadOptions.fetchFunc == null ? env().platform.fetch :
      loadOptions.fetchFunc;

  // Create the requests for all of the weights in parallel.
  const requests =
      fetchURLs.map(
          fetchURL =>
              fetchFunc(fetchURL, loadOptions.requestInit, {isBinary: true}));

  const fetchStartFraction = 0;
  const fetchEndFraction = 0.5;

  const responses = loadOptions.onProgress == null
      ?
      await Promise.all(requests) :
      await monitorPromisesProgress(
          requests, loadOptions.onProgress,
          fetchStartFraction,
          fetchEndFraction);

  const bufferPromises = responses.map(response =>
      response.arrayBuffer());

  const bufferStartFraction = 0.5;
  const bufferEndFraction = 1;

  const buffers =
      loadOptions.onProgress == null
      ?
      await Promise.all(bufferPromises) :
      await monitorPromisesProgress(
          bufferPromises, loadOptions.onProgress, bufferStartFraction,
          bufferEndFraction);

  return
      buffers;
}

/**
 * Reads a weights manifest JSON configuration, fetches the weights and returns
 * them as `Tensor`s.
 *
 * @param manifest The weights manifest JSON.
 * @param filePathPrefix The path prefix for
 * filenames given in the manifest.
 */
export async function loadWeights(
    manifest: WeightsManifestConfig,
    filePathPrefix = '',
    weightNames?: string[],
    requestInit?: RequestInit): Promise<NamedTensorMap> {

  const fetchWeights = (fetchUrls: string[]) =>
      loadWeightsAsArrayBuffer(fetchUrls,
          {requestInit});
  const loadWeights = weightsLoaderFactory(fetchWeights);

  return loadWeights(manifest,
      filePathPrefix, weightNames);
}

/**
 * Creates a function, which reads a weights manifest JSON
 * configuration, fetches the weight files using the specified function and returns
 * them as `Tensor`s.
 *
 * ```js
 * // example for creating a nodejs weight loader, which reads the weight files
 * // from disk using
 * fs.readFileSync
 * import * as fs from `fs`
 * const fetchWeightsFromDisk = (filePaths: string[]) =>
 * fs.readFileSync(filePaths.map(filePath => filePath));
 * ```
 */
fs.readFileSync('./my_model-weights_manifest').toString()
 * )
 * const weightMap = await

```
* import { loadWeights } from './load_weights';

const fetchWeightsFunction: (manifest: WeightsManifestConfig, filePathPrefix: string, weightNames?: string[]) => Promise<NamedTensorMap> = 
  (manifest: WeightsManifestConfig, filePathPrefix = '', weightNames = []) =>
  // Convert the one-hot boolean groupId => shouldFetch map to a list of group
  // IDs. For each group ID, we will fetch all the weights.
  const groupIndicesToFetch = manifest
    .forEach((manifestGroupConfig, groupId) => {
      const groupOffset = 0;
      manifestGroupConfig.weights.forEach(weightsEntry => {
        if (weightsFound.includes(groupId)) {
          groupIndicesToFetch.push(groupId);
        }
      });
    });

    // Create a buffer for the whole group.
    const groupIdToBuffer = new ArrayBuffer(groupBytes);
    const groupByteBuffer = new Uint8Array(groupIdToBuffer);
    let groupBufferOffset = 0;
    for (let i = 0; i < numBuffers; i++) {
      groupByteBuffer.set(buffers[i], groupBufferOffset);
      groupBufferOffset += buffers[i].byteLength;
    }

    // For each weight, we will create a buffer and slice off the appropriate
    // part of the buffer.
    for (const weightName in nameToTensorMap) {
      const tensor = nameToTensorMap[weightName];
      const byteBuffer = groupByteBuffer.slice(
        weightIndex * DTYPE_VALUE_SIZE, weightIndex * DTYPE_VALUE_SIZE + weightsEntry.sizeBytes);
      weightsTensorMap[weightName] = decodeWeights(byteBuffer, weightsEntry.manifestEntry);}
```
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-----------------------------------------------------------------------------

*/

/**
 * IOHandler implementations based on HTTP requests in the web browser.
 */

import {env} from '../environment';

import {assert} from '../util';
import {concatenateArrayBuffers, getModelArtifactsInfoForJSON} from './io_utils';
import {IORouter, IORouterRegistry} from './router_registry';
import {IOHandler, LoadOptions, ModelArtifacts, ModelJSON, OnProgressCallback, SaveResult, WeightsManifestConfig, WeightsManifestEntry} from './types';
import {loadWeightsAsArrayBuffer} from './weights_loader';

const OCTET_STREAM_MIME_TYPE = 'application/octet-stream';
const JSON_TYPE = 'application/json';
export class HTTPRequest implements IOHandler {
  protected readonly path: string;
  protected readonly requestInit: RequestInit;

  private readonly fetch: Function;
  private readonly weightUrlConverter: (weightName: string) => Promise<string>;

  readonly DEFAULT_METHOD = 'POST';

  static readonly URL_SCHEME_REGEX = /^https?:\/\//;

  private readonly weightPathPrefix: string;
  private readonly onProgress: OnProgressCallback;

  constructor(path: string, loadOptions?: LoadOptions) {
    if (loadOptions == null) {
      loadOptions = {};
    }
    this.weightPathPrefix = loadOptions.weightPathPrefix;
    this.onProgress = loadOptions.onProgress;
    this.weightUrlConverter = loadOptions.weightUrlConverter;

    if (loadOptions.fetchFunc != null) {
      assert(
          typeof loadOptions.fetchFunc === 'function',
          () => 'Must pass a function that matches the signature of `fetch` (see ' +
      this.fetch = loadOptions.fetchFunc;
    }
    else {
      this.fetch = env().platform.fetch;
    }

    assert(
        path != null && path.length > 0,
        () => 'URL path for http must not be null, undefined or ' +
            'empty.');

    if (Array.isArray(path)) {
      assert(
          path.length === 2,
          () => 'URL paths for http must have a length of 2, ' +
              `(actual length is ${path.length}).`);
    }
    this.path = path;

    if (loadOptions.requestInit != null &&
        loadOptions.requestInit.body != null) {
      throw new Error(
          'requestInit is expected to have no pre-existing body, but has one.);}
    }
    this.requestInit = loadOptions.requestInit || {};

  }

  async save(modelArtifacts: ModelArtifacts): Promise<SaveResult> {
    if (modelArtifacts.modelTopology instanceof ArrayBuffer) {
      throw new Error(
          'BrowserHTTPRequest.save() does not support saving model topology ' +
          'in binary formats yet.');
    }

    const init = Object.assign({method: this.DEFAULT_METHOD},
        this.requestInit);
    init.body = new FormData();

    const weightsManifest: WeightsManifestConfig = [{
      paths: ['./model.weights.bin'],
      weights: modelArtifacts.weightSpecs,
    }];
    const modelTopologyAndWeightManifest: ModelJSON = {
      modelTopology: modelArtifacts.modelTopology,
      format: modelArtifacts.format,
      generatedBy: modelArtifacts.generatedBy,
      convertedBy: modelArtifacts.convertedBy,
      weightsManifest
    };
    if (modelArtifacts.signature != null) {
      modelTopologyAndWeightManifest.signature = modelArtifacts.signature;
    }
    if (modelArtifacts.userDefinedMetadata != null) {
      modelTopologyAndWeightManifest.userDefinedMetadata = modelArtifacts.userDefinedMetadata;
    }
    if (modelArtifacts.modelInitializer != null) {
      modelTopologyAndWeightManifest.modelInitializer = modelArtifacts.modelInitializer;
    }
    init.body.append('model.json', new Blob([JSON.stringify(modelTopologyAndWeightManifest)]),
        {type: JSON_TYPE});
    if (modelArtifacts.weightData != null) {
      init.body.append(new Blob(modelArtifacts.weightData),
        {type: OCTET_STREAM_MIME_TYPE});
    }
    const response = await this.fetch(this.path, init);
    if (response.ok) {
      return {
        modelArtifactsInfo: getModelArtifactsInfoForJSON(modelArtifacts),
        responses: [response]
      };
    } else {
      throw new Error(
          'BrowserHTTPRequest.save() failed due to HTTP response status');
    }
  }

  /**
   * Load model artifacts via HTTP request(s).
   *
   * See the
   * documentation to `tf.io.http` for details on the saved
   * artifacts.
   *
   * @returns The loaded model artifacts (if
   * loading succeeds).
   */
  async load(): Promise<ModelArtifacts> {
    const modelConfigRequest = await
this.fetch(this.path, this.requestInit);\n\nif (modelConfigRequest.ok) {\n  throw new Error('Request to $\{
this.path\}$ failed with status code: ' +
  modelConfigRequest.status). Please verify this URL points to:
\n} \nlet modelConfig: ModelJSON;\ntry {\n  modelConfig = await modelConfigRequest.json();\n} \ncatch (e) {\n  message += 'Failed to parse model JSON of response from $\{
this.path\}$.';\n  // TODO(nsthorat): Remove this after some time when we're comfortable that
  // pb files are mostly gone.\n  if (this.path.endsWith('.pb')) {\n    message += 'Your path contains a .pb file extension. Support for .pb
  models have been removed in TensorFlow.js 1.0.';\n  } else {\n    message += 'Please make sure the server is serving valid JSON
  for this request.\n  } \n} \nconst modelTopology = modelConfig.modelTopology;\nconst weightsManifest = modelConfig.weightsManifest;\nconst generatedBy = modelConfig.generatedBy;\n\nconst convertBy = modelConfig.convertedBy;\nconst format = modelConfig.format;\n\nconst signature = modelConfig.signature;\n\nconst userDefinedMetadata = modelConfig.userDefinedMetadata;\n\n// We do not allow both modelTopology and weightsManifest to be\nmissing.\nif (modelTopology == null && weightsManifest == null) {\n  throw new Error('The JSON from HTTP path $\{
this.path\}$ contains neither model topology or manifest for
weights.');\n} \nlet weightSpecs: WeightsManifestEntry[];\n\nlet weightData: ArrayBuffer;\n\nif (weightsManifest != null) {\n  const results = await this.loadWeights(weightsManifest);\n  \n  [weightSpecs, weightData] = results;\n}\n\nconst artifacts: ModelArtifacts = {\n  modelTopology,\n  weightsManifest,\n  weightData,\n  generatedBy,\n  convertedBy,\n  format\n};\n\nif (signature != null) {\n  artifacts.signature = signature;\n}\n\nif (userDefinedMetadata != null) {\n  artifacts.userDefinedMetadata = userDefinedMetadata;\n}\n\nconst initializer = modelConfig.modelInitializer;\n\n\nif (initializer) {\n  \n  artifacts.modelInitializer = initializer;\n}\n\nreturn artifacts;
\n\nprivate async loadWeights(weightsManifest: WeightsManifestConfig):\nPromise<[WeightsManifestEntry[], ArrayBuffer]> {\n  const weightPath = Array.isArray(this.path) ? this.path[1] :
this.path;\n  const [prefix, suffix] = parseUrl(weightPath);\n  \n  const pathPrefix = this.weightPathPrefix ||\n  prefix + '/';\n  \n  const weightSpecs = [];\n  for (const entry of weightsManifest) {\n    weightSpecs.push(...entry.weights);\n  }\n  \n  const fetchURLs: string[] = [];\n  const urlPromises: Array<Promise<string>> = [];\n  for (const weightsGroup of weightsManifest) {\n    for (const path of\n    weightsGroup.paths) {
      if (this.weightUrlConverter != null) {
        urlPromises.push(this.weightUrlConverter(path));\n      } else {
        fetchURLs.push(path + path + suffix);\n      }\n    }\n  }\n  \n  const buffers = await loadWeightsAsArrayBuffer(fetchURLs, {\n    requestInit: this.requestInit,\n    \n    fetchFunc: this.fetch,\n    onProgress: this.onProgress\n  });\n  \n  return [weightSpecs, concatenateArrayBuffers(buffers)];\n}\n\n\nexport function parseUrl(url: string): [string, string] {\n  const lastSlash = url.lastIndexOf('/');\n  const lastSearchParam = url.lastIndexOf('?');\n  const prefix = url.substring(0, lastSlash);\n  const suffix = url.substring(lastSearchParam + 1);\n  \n  const pathPrefix = prefix + '/';\n  \n  return [prefix + path, suffix];\n}\n\nexport function isHTTPScheme(url: string): boolean {\n  return url.match(HTTPRequest.URL_SCHEME_REGEX) != null;\n}\n\nexport const httpRouter: IORouter =
    (url: string, loadOptions?: LoadOptions) => {
  if (typeof fetch !== 'undefined' && loadOptions == null || loadOptions.fetchFunc == null) {\n    return null;\n  } \n  \n  const protocol = url.match(HTTPRequest.URL_PROTOCOL_REGEX);\n  if (protocol) {\n    return null;\n  } \n  \n  let isHTTP = true;\n  if (Array.isArray(url)) {\n    isHTTP = url.every((urlItem) => isHTTPScheme(urlItem));\n  } else {\n    isHTTP = isHTTPScheme(url);\n  } \n  if (!isHTTP) {\n    return http(url, loadOptions);\n  }\n
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return null;
}

IORouterRegistry.registerSaveRouter(httpRouter);
IORouterRegistry.registerLoadRouter(httpRouter);

/**
 * Creates an IOHandler subtype that sends model artifacts to HTTP server.
 * An HTTP request of the `multipart/form-data` mime type will be sent to the
 * `path` URL. The form data includes artifacts that represent the topology
 * and/or weights of the model. In the case of Keras-style `tf.Model`, two
 * files (blocks) in exist in form-data:
 * - A JSON file consisting of `modelTopology` and `weightsManifest`.
 * - A binary weights file consisting of the concatenated weight values.
 * These files are in the same format as the one generated by
 * [tfjs_converter](https://js.tensorflow.org/tutorials/import-keras.html).
 * The following code snippet exemplifies the client-side code that uses this
 * function:
 *
 * ```js
 * const model = tf.sequential();
 * model.add(
 *     tf.layers.dense({units: 1, inputShape: [100], activation: 'sigmoid'}));
 * console.log(saveResult);
 * ```
 *
 * If the default `POST` method is to be used, without any custom parameters
 * such as headers, you can simply pass an HTTP or HTTPS URL to `model.save`:
 *
 * ```js
 * const saveResult = await model.save('http://model-server:5000/upload');
 * ```
 *
 * This particular server reconsitutes instances of [Keras Models](https://keras.io/models/model/) in
 * memory. This can be an absolute HTTP URL (e.g., `http://localhost:8000/model-upload`) or a relative path (e.g., `./model-upload`).

 * @param path A URL path to the model.
 * @param loadOptions Optional configuration for the loading. It includes the
 *   following fields:
 *   - weightPathPrefix Optional, this specifies the path prefix for weight
 *     files, by default this is calculated from the path param.
 *   - fetchFunc Optional, custom `fetch` function. E.g., in Node.js, the
 *     `fetch` from node-fetch can be used here.
 * @returns An instance of `IOHandler`.
 *
 * @doc {
 *   heading: 'Models',
 *   subheading: 'Loading',
 *   namespace: 'io',
 *   ignoreCI: true
 * }
 */
export function http(path: string, loadOptions?: LoadOptions): IOHandler {
  return new HTTPRequest(path, loadOptions);
}

/**
 * @param path
 * @param loadOptions
 */
export function browserHTTPRequest(path: string, loadOptions?: LoadOptions): IOHandler {
  return http(path, loadOptions);
}

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 */

/**
 * IOHandlers that pass through the in-memory ModelArtifacts format.
 */

import {IOHandler, ModelArtifacts, SaveResult, TrainingConfig, WeightsManifestEntry} from './types';

class PassthroughLoader implements IOHandler {
  constructor(private readonly modelArtifacts?: ModelArtifacts) {}

  async load(): Promise<ModelArtifacts> {
    return this.modelArtifacts;
  }
}

class PassthroughSaver implements IOHandler {
  constructor(private readonly saveHandler: (artifacts: ModelArtifacts) => Promise<SaveResult>) {}

  async save(modelArtifacts: ModelArtifacts) {
    return this.saveHandler(modelArtifacts);
  }
}
When used in conjunction with `tf.loadLayersModel`, an instance of `tf.LayersModel` (Keras-style) can be constructed from the loaded artifacts.

```js
const model = await tf.loadLayersModel(tf.io.fromMemory(
    modelTopology, weightSpecs, weightData));
```

*param modelArtifacts a object containing model topology (i.e., parsed from JSON format).

```js
@returns A passthrough `IOHandler` that simply loads the provided data.
```

```js
console.warn('Please call tf.io.fromMemory() with only one argument. '
    'The argument should be of type ModelArtifacts. ' +
    'The multi-argument signature of tf.io.fromMemory() has been ' +
    'deprecated and will be removed in a future release.');
```

```js
return new PassthroughLoader({modelTopology: modelArtifacts as {}});
```

```js
@returns A passthrough `IOHandler` that simply loads the provided data.
```

```js
import './indexed_db';
import './local_storage';
import {browserFiles} from './browser_files';
import {concatenateArrayBuffers, decodeWeights, encodeWeights, getModelArtifactsInfoForJSON} from './io_utils';
import {fromMemory, withSaveHandler} from './passthrough';
import {getLoadHandlers, getSaveHandlers, registerLoadRouter, registerSaveRouter} from './router_registry';
import {IOHandler, LoadHandler, LoadOptions, ModelArtifacts, ModelArtifactsInfo, ModelJSON, ModelStoreManager, OnProgressCallback, SaveConfig, SaveHandler, SaveResult, WeightGroup, WeightsManifestConfig, WeightsManifestEntry} from './types';
import {loadWeights, weightsLoaderFactory} from './weights_loader';
```

```js
export {copyModel, listModels, moveModel, removeModel} from './model_management';
export {
  browserFiles,
  browserHTTPRequest,
  concatenateArrayBuffers,
  decodeWeights,
  encodeWeights,
  fromMemory,
  getLoadHandlers,
  getModelArtifactsInfoForJSON,
  getSaveHandlers,
  http,
  IOHandler,
  isHTTPScheme,
  LoadHandler,
  LoadOptions,
  loadWeights,
  ModelArtifacts,
  ModelArtifactsInfo,
  ModelJSON,
  ModelStoreManager,
  OnProgressCallback,
  RequestDetails,
  SaveConfig,
  SaveHandler,
  SaveResult,
  upgrade
};
```

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```

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```

```js
import {concatenateArrayBuffers, decodeWeights, encodeWeights, getModelArtifactsInfoForJSON} from './io_utils';
import {fromMemory, withSaveHandler} from './passthrough';
import {getLoadHandlers, getSaveHandlers, registerLoadRouter, registerSaveRouter} from './router_registry';
import {IOHandler, LoadHandler, LoadOptions, ModelArtifacts, ModelArtifactsInfo, ModelJSON, ModelStoreManager, OnProgressCallback, RequestDetails, SaveConfig, SaveHandler, SaveResult, WeightGroup, WeightsManifestConfig, WeightsManifestEntry} from './types';
import {loadWeights, weightsLoaderFactory} from './weights_loader';
```

```js
export {copyModel, listModels, moveModel, removeModel} from './model_management';
export {
  browserFiles,
  browserHTTPRequest,
  concatenateArrayBuffers,
  decodeWeights,
  encodeWeights,
  fromMemory,
  getLoadHandlers,
  getModelArtifactsInfoForJSON,
  getSaveHandlers,
  http,
  IOHandler,
  isHTTPScheme,
  LoadHandler,
  LoadOptions,
  loadWeights,
  ModelArtifacts,
  ModelArtifactsInfo,
  ModelJSON,
  ModelStoreManager,
  OnProgressCallback,
  registerLoadRouter,
  registerSaveRouter,
  RequestDetails,
  SaveConfig,
  SaveHandler,
  SaveResult,
```
WeightGroup, 
  weightsLoaderFactory, 
  WeightsManifestConfig, 
  WeightsManifestEntry,

withSaveHandler
};

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 */

import {ENGINE} from '../engine';
import {BatchMatMul, BatchMatMulAttrs, BatchMatMulInputs} from
'../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../types';
import {makeTypesMatch} from '../tensor_util';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {op} from './operation';

/**
 * Computes the dot product of two matrices, A * B. These must be matrices.
 * const a = tf.tensor2d([[1, 2], [1, 2]]);
 * const b = tf.tensor2d([[1, 2, 3, 4], [2, 3, 4, 5]]);
 * a.matMul(b).print();
 * // or
 * tf.matMul(a, b)
 * @param a First matrix in dot product operation.
 * @param b Second matrix in dot product operation.
 * @param transposeA If true, 'a' is transposed before multiplication.
 * @param transposeB If true, 'b' is transposed before multiplication.
 * @doc {heading: 'Operations', subheading: 'Matrices'}
 */

function matMul_<T extends Tensor>(a: Tensor|TensorLike, b: Tensor|TensorLike, transposeA = false, transposeB = false): T {
  let $a = convertToTensor(a, 'a', 'matMul');
  let $b = convertToTensor(b, 'b', 'matMul');
  [$a, $b] = makeTypesMatch($a, $b);
  const inputs: BatchMatMulInputs = {a: $a, b: $b};
  const attrs: BatchMatMulAttrs = {transposeA, transposeB};
  return ENGINE.runKernel(BatchMatMul, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap);
}

export const matMul = op({matMul_});

/**
 * Creates a one-hot `tf.Tensor`. The locations represented by `indices` take
 * value `onValue` (defaults to 1), while all other locations take value
 * `offValue` (defaults to 0). If `indices` is rank `R`, the output has rank
 * `R+1` with the last axis of size `depth`.
 * ```js
 * tf.oneHot(tf.tensor1d([0, 1], 'int32'), 3).print();
 * ```
 *
 * @param indices `tf.Tensor` of indices with dtype `int32`.
 * @param depth The depth of the one hot dimension.
 * @param onValue A number used to fill in the output when the index matches.
 * @param offValue A number used to fill in the output when the index
 *     does not match the location.
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */

function oneHot_(indices: Tensor|TensorLike, depth: number, onValue = 1, offValue = 0): Tensor {
  if (depth < 2) {
    throw new Error(`Error in oneHot: depth must be >=2, but it is ${depth}`);
  }
  const $indices = convertToTensor(indices, 'indices', 'int32');
  const inputs: OneHotInputs = {indices: $indices};
  const attrs: OneHotAttrs = {depth, onValue, offValue};
  return ENGINE.runKernel(OneHot, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap);
}

export const oneHot = op({oneHot_});

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 */

import {ENGINE} from '../engine';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {op} from './operation';

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============================================================================

```javascript
import {ENGINE} from '../engine';
import {Transpose, TransposeAttrs, TransposeInputs} from './/kernel_names';
import {NamedAttrMap} from './/kernel_registry';
import {Tensor} from './/tensor';
import {NamedTensorMap} from './/tensor_types';
import {TensorLike} from './/types';
import {Tensor} from './/tensor';
import {convertToTensor} from './/util';
import {op} from './/operation';

*/

import {Tensor} from '../tensor';
import {convertToTensor} from '../tensor_util_env';
import {NamedTensorMap} from '../tensor_types';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor} from '../tensor';
import {Transpose} from './transpose';

function transpose_<T extends Tensor>(x: T|TensorLike, perm?: number[]) {
  const $x = convertToTensor(x, 'x', 'transpose');

  if (perm == null) {
    perm = $x.shape.map((s, i) => i).reverse();
  }
  util.assert($x.rank === perm.length, () => `Error in transpose: rank of input $x.rank must match length of perm perm.length.`);

  perm.forEach(axis => {
    util.assert(axis >= 0 && axis < $x.rank, () => `All entries in 'perm' must be between 0 and ${$x.rank - 1} but got ${perm}`);
  });

  if ($x.rank <= 1) {
    return $x.clone();
  }

  const inputs: TransposeInputs = {x: $x};
  const attrs: TransposeAttrs = {perm};

  return
```
```
1
   () => `Expected the rank of labels to be 1, but got ${$labels.rank}`);

   (, $predictions.rank
   $$) => `Expected the rank of predictions to be 1, but got ${$predictions.rank}`);

   $labels.shape[0] !== $predictions.shape[0],
   () => `Mismatch in the number of examples: ` +
   `$labels.shape[0]` vs. `$predictions.shape[0]`. ` +
   `Labels and predictions should have the same
   number of elements.`);

   util.assert($labels.shape[0] === $predictions.shape[0],
   () => `Mismatch in the number of examples: ` +
   `$labels.shape[0]` vs. `$predictions.shape[0]`. ` +
   `Labels and predictions should have the same
   number of elements.`);

   util.assert(numClasses > 0 && Number.isInteger(numClasses),
   () => `numClasses is required to be a positive integer, but got ` +
   `${numClasses}`);

  // TODO(cais): In the
  // future, if oneHot supports tensors inputs for
  // `numClasses`, `confusionMatrix` can make `numClasses`
  // optional.

  const oneHotLabels = oneHot(cast($labels, 'int32'), numClasses) as Tensor2D;
  const
  oneHotPredictions =
      oneHot(cast($predictions, 'int32'), numClasses) as Tensor2D;
  const oneHotLabelsT:
    Tensor2D = transpose(oneHotLabels);
  const product: Tensor2D = matMul(oneHotLabelsT, oneHotPredictions);

  return cast(product, 'int32');
}

export const confusionMatrix = op({confusionMatrix_});

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 */

/**
 * Exports under the tf.math.* namespace.
 */

import {confusionMatrix} from
  './ops/confusion_matrix';

export {confusionMatrix};

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 */

import {Tensor3D} from './tensor';
import {inferShape} from '../tensor_util_env';
import {TensorLike3D} from '../types';
import {DataType} from '../types';
import {assertNonNull} from '../util';
import {makeTensor} from './tensor_ops_util';

/**
 * Creates rank-3 `tf.Tensor` with the provided values, shape and dtype.
 *
 * The
 * same functionality can be achieved with `tf.tensor`, but in general
 * we recommend using `tf.tensor3d` as it makes
 * the code more readable.

 * @param values The values of the tensor. Can be nested array of numbers,
 *     or a flat array, or a `TypedArray`.
 * @param shape The
 *     shape of the tensor. If not provided, it is inferred from $values`.
 * @param dtype The
 *     data type.
 *
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
export function tensor3d(
    values: TensorLike3D, shape?: [number, number, number],
    dtype?: DataType): Tensor3D {
  assertNonNull(values);

  if (shape != null && shape.length !== 3) {
    throw new Error('tensor3d() requires shape to have three numbers');
  }
  const inferredShape = inferShape(values, dtype);
  if (inferredShape.length !== 3 && inferredShape.length !== 1) {
    throw new Error($tensor3d.shape() requires values to be number[[1]][1][1] or flat/TypedArray');
  }
  if (inferredShape.length !== 3) {
    throw new Error($tensor3d.shape() requires shape to be provided when `values` are a flat array');
  }
  return makeTensor(values, shape, inferredShape, dtype) as
  Tensor3D;
}

// Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6  4861
import {ENGINE} from '../engine'; import {FromPixels, FromPixelsAttrs, FromPixelsInputs} from '../kernel_names'; import {getKernel, NamedAttrMap} from '../kernel_registry'; import {Tensor, Tensor2D, Tensor3D} from '../tensor'; import {NamedTensorMap} from '../tensor_types'; import {convertToTensor} from '../tensor_util_env'; import {PixelData, TensorLike} from '../types';

import {cast} from './cast'; import {op} from './operation'; import {tensor3d} from './tensor3d';

let fromPixels2DContext: CanvasRenderingContext2D;

/**
 * Creates a `tf.Tensor` from an image.
 *
 * ```js
 * const image = new
 * ImageData(1, 1);
 * image.data[0] = 100;
 * image.data[1] = 150;
 * image.data[2] = 200;
 * image.data[3] = 255;
 *
 * tf.browser.fromPixels(image).print();
 * ```
 *
 * @param pixels The input image to construct the
 * tensor from. The
 * input image types are all 4-channel. You can also pass in an image
 * object with
 * following attributes:
 * ```js
 * {data: Uint8Array; width: number; height: number}
 * ```
 * @param numChannels The number of channels of the output tensor. A
 * ignore Cl: true: if the numChannels value less than 4 allows you to ignore channels.
 * Defaults to an * 3 (ignores alpha channel of input image).
 *
 * @doc {heading: 'Browser', namespace: 'browser',
 * ignoreCI: true,}
 */
function fromPixels_(pixels: PixelData|ImageData|HTMLImageElement|HTMLCanvasElement|HTMLVideoElement|ImageBitmap, numChannels = 3): Tensor3D {
  // Sanity checks.
  if (numChannels > 4) {
    throw new Error('Cannot construct Tensor with more than 4 channels from pixels.');
  }
  if (pixels == null) {
    throw new Error('pixels passed to tf.browser.fromPixels() can not be null');
  }
  let isPixelData = false;
  let isImageData = false;
  let isVideo = false;
  let isImage = false;
  let isCanvasLike = false;
  let isImageBitmap = false;
  if ((pixels as PixelData).data instanceof Uint8Array) {
    isPixelData = true;
  } else if (typeof (ImageData) !== 'undefined' && pixels instanceof ImageData) {
    isImageData = true;
  } else if (typeof (HTMLVideoElement) !== 'undefined' && pixels instanceof HTMLVideoElement) {
    isVideo = true;
  } else if (typeof (HTMLImageElement) !== 'undefined' && pixels instanceof HTMLImageElement) {
    isImage = true;
  } else if (pixels.getContext != null) {
    isCanvasLike = true;
  } else if (typeof (ImageBitmap) !== 'undefined' && pixels instanceof ImageBitmap) {
    isImageBitmap = true;
  } else if (isVideo) {
    const HAVE_CURRENT_DATA_READY_STATE = 2;
    if (isVideo && (pixels as HTMLVideoElement).videoWidth < HAVE_CURRENT_DATA_READY_STATE) {
      throw new Error('The video element has not loaded data yet. Please wait for ' +
          'loadeddata event on the
 <video> element.');
    }
  } else if (isCanvasLike) {
    return ENGINE.runKernel('FromPixels', pixels);
  } else if (isImageBitmap) {
    return ENGINE.runKernel('FromPixels', pixels);
  } else {
    throw new Error('pixels passed to tf.browser.fromPixels() must be either an ' +
        'HTMLVideoElement, HTMLImageElement,
        HTMLCanvasElement, ImageData ` +
        `or \n (data: Uint32Array; width: number; height: number);` +
        `but was $\{\}.$constructor.name\}
    );
  }
  let vals: Uint8ClampedArray|Uint8Array;
  if (isCanvasLike) {
    vals =
        // tslint:disable-
next-line:no-any
        (pixels as any).getContext('2d').getImageData(0, 0, width, height).data;
  } else if (isImageBitmap) {
    vals = (pixels as PixelData | ImageData).data;
  } else if (isImage || isVideo || isImageBitmap) {
    if (fromPixels2DContext == null) {
      fromPixels2DContext = document.createElement('canvas').getContext('2d');
    }
    fromPixels2DContext.canvas.width = width;
    fromPixels2DContext.canvas.height = height;
    fromPixels2DContext.drawImage(pixels as HTMLVideoElement, 0, 0, width, height);
    vals = fromPixels2DContext.getImageData(0, 0, width, height).data;
  } else if (isVideo) {
    let isPixelData = false;
    let isImageBitmap = false;
    let isCanvasLike = false;
    let isVideo = false;
    let isImage = false;
    let isCanvasLike = false;
    let isImageBitmap = false;
    if ((pixels as PixelData).data instanceof Uint8Array) {
      isPixelData = true;
    } else if (isImage) {
      throw new Error('pixels passed to tf.browser.fromPixels() must be either an ' +
        'HTMLVideoElement, HTMLImageElement,
        HTMLCanvasElement, ImageData ` +
        `or \n (data: Uint32Array; width: number; height: number);` +
        `but was $\{\}.$constructor.name\}
    );
  } else if (isCanvasLike) {
    return ENGINE.runKernel('FromPixels', pixels);
  } else if (isImageBitmap) {
    return ENGINE.runKernel('FromPixels', pixels);
  } else {
    throw new Error('pixels passed to tf.browser.fromPixels() must be either an ' +
        'HTMLVideoElement, HTMLImageElement,
        HTMLCanvasElement, ImageData ` +
        `or \n (data: Uint32Array; width: number; height: number);` +
        `but was $\{\}.$constructor.name\}
    );
  }
  let values: Int32Array;
  if (numChannels === 4) {
    values = new Int32Array(vals);
  } else {
    const numPixels = width * height;
    values = new Int32Array(numPixels * numChannels);
  }
i < numPixels; i++) {
      for (let channel = 0; channel < numChannels; ++channel) {
        values[i * numChannels + channel] = vals[i * 4 + channel];
      }
    }
    return tensor3d(values, outShape, 'int32');
  }
  const outShape: [number, number, number] = [height, width, numChannels];
  return tensor3d(values, outShape, 'int32');
}

/**
 * Draws a `tf.Tensor` of pixel values to a byte array or optionally a
 * canvas.
 *
 * When the dtype of the input is 'float32', we assume values in the range
 * [0-1]. Otherwise, when input is 'int32', we assume values in the range
 * [-255,0] for gray scale, and [-255,0,0,255] for RGBA. If the input
 * is not a tensor, we call `cast` to create a new tensor.
 *
 * @param img A rank-2 or rank-3 tensor. When only
 * rank-2, it is a grayscale image. When rank-3, it
 * is an image of depth 1, 3 or 4. With depth of 1,
 * it is grayscale. When depth of 3, we draw with the
 * first three components of the depth dimension
 * corresponding to r, g, and b. When depth of 4,
 * all four components of the depth dimension
 * correspond to r, g, b, and alpha.
 * @param canvas The canvas to draw to.
 * @returns a promise that resolves when the canvas has been drawn.
 */
export async function toPixels(img: Tensor2D|Tensor3D|TensorLike, canvas?: HTMLCanvasElement): Promise<Uint8ClampedArray> {
  let $img = convertToTensor(img, 'img', 'toPixels');
  if (!(img instanceof Tensor)) {
    // Assume int32 if user passed a native array.
    const originalImgTensor = $img;
    $img = cast(originalImgTensor, 'int32');
    originalImgTensor.dispose();
  }
  if ($img.rank !== 2 && $img.rank !== 3) {
    throw new Error(`toPixels only supports rank 2 or 3 tensors, got rank ${$img.rank}.`);
  }
  const [height, width] = $img.shape.slice(0, 2);
  const depth = $img.rank === 2 ? 1 : $img.shape[2];

  if (depth > 4 || depth === 2) {
    throw new Error(`toPixels only supports depth of size 1, 3 or 4 but got ${depth}.`);
  }

  if ($img.dtype !== 'float32' && $img.dtype !== 'int32') {
    throw new Error(`Unsupported type for toPixels: ${$img.dtype}.`);
  }

  const data = await $img.data();
  const multiplier = $img.dtype === 'float32' ? 255 : 1;
  const bytes = new Uint8ClampedArray(width * height * 4);

  for (let i = 0; i < height * width; ++i) {
    const rgba = [0, 0, 0, 255];

    for (let d = 0; d < depth; d++) {
      const value = data[i * depth + d];

      if ($img.dtype === 'float32') {
        if (value < 0 || value > 1) {
          throw new Error(`Tensor values for a float32 Tensor
           must be in the range [0 - 1] but encountered ${value}.`);
        }
      } else if ($img.dtype === 'int32') {
        if (value < 0 || value > 255) {
          throw new Error(`Tensor values for a int32 Tensor
           must be in the range [0 - 255] but encountered ${value}.`);
        }
      }

      if (depth === 1) {
        rgba[d] = value * multiplier;
      } else {
        rgba[d] = value * multiplier;
      }
    }

    const j = i * 4;
    bytes[j + 0] = Math.round(rgba[0]);
    bytes[j + 1] = Math.round(rgba[1]);
    bytes[j + 3] = Math.round(rgba[3]);
  }

  if (canvas != null) {
    canvas.width = width;
    canvas.height = height;
    const ctx = canvas.getContext('2d');
    const imageData = new ImageData(bytes, width, height);
    ctx.putImageData(imageData, 0, 0);
  }
  if ($img !== img) {
    $img.dispose();
  }
  return bytes;
}

export const fromPixels = op({fromPixels_});

import {TensorInfo} from '../kernel_registry';
import {computeStrides, sizeFromShape} from '../util';

/**
 * Validate gather nd inputs.
 * @param tensor The tensor contains the source values.
 * @param indices The tensor contains the indices to slice the source.
 * @returns [resultShape, numUpdates, sliceSize, strides]
 */
export function prepareAndValidate(tensor: TensorInfo, indices: TensorInfo):
    [number[], number, number, number[]] {
  const tensorRank = tensor.shape.length;
  const indicesRank = indices.shape.length;
  if (tensorRank < 1) {
    throw new Error(`tf.gatherND() expects the input to be rank 1 or higher, but
     the rank was ${tensorRank}.`);
  }
  if (indicesRank < 1) {
    throw new Error(`tf.gatherND() expects the indices to be rank 1 or higher, but
     the rank was ${indicesRank}.`);
  }
  if (indices.dtype !== 'int32') {
    throw new Error('tf.gatherND() only supports integer indices, got
     dtype: ' + indices.dtype);
  }
  if (indices.shape.length !== tensorRank) {
    throw new Error(`tf.gatherND() expects the indices to be the same rank
     as the input, got indicesRank ${indicesRank} but inputRank ${tensorRank}.`);
  }
  const shape = tensor.shape.slice(0, indicesRank);
  if (shape.length !== indices.shape.length) {
    throw new Error(`tf.gatherND() expects the source and indices shapes
     to be the same length, got source ${shape.length} and indices
     ${indices.shape.length}.`);
  }
  return [shape, sizeFromShape(shape), computeStrides(shape), computeStrides(shape)];

  return [resultShape, numUpdates, sliceSize, strides];
}
throw new Error('tf.gatherND() expects the indices to be int32 type.'); 
  
  }  

  const sliceRank = indicesShape.length - 1; 
  
  // The result shape is: 
  // indices.shape[:-1] + params.shape[indices.shape[-1]:]; 
  
  let nResult = 1; 
  for (let i = 0; i < indicesShape.length - 1; ++i) { 
    nResult *= indicesShape[i]; 
  }  
  
  const sliceSize = inputShape.slice(indices.shape[indices.shape.length - 1]:); 
  
  const strides = [...computeStrides(inputShape).map(stride => stride / sliceSize), 1].slice(0, sliceRank); 

  return [resultShape, nResult, sliceSize, strides];

/**
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 * limitations under the License.
 */

import {TensorInfo} from '../kernel_registry'; 
import {Tensor} from '../tensor'; 
import {computeStrides, sizeFromShape} from '../util';

export interface ScatterShapeInfo {
  sliceRank: number;
  numUpdates: number;
  sliceSize: number;
  strides: number[];
  outputSize: number;
}

/**
 * Validate scatter nd inputs.
 * @param updates The tensor contains the output values.
 * @param indices The tensor contains the indices for the update values.
 * @param shape The shape of the output tensor.
 */
export function validateInput(updates: Tensor, indices: Tensor, shape: number[]):

  if (updates.rank < 1) {
    throw new Error('tf.scatterND() expects the updates to be rank 1 or higher.'); 
  }  

  if (indices.rank < 1) {
    throw new Error('tf.scatterND() expects the indices to be rank 1 or higher.'); 
  }  

  if (shape.length < 1) {
    throw new Error('Output rank must be greater or equal to 1, but got shape:'); 
  }  

  for (let d = 0; d < updates.rank; d++) {
    if (updates.shape[d] !== indices.shape[d]) {
      throw new Error('tf.scatterND() expects the updates to be the same type as the indices.'); 
    }  
  }  

  for (let d = 0; d < indices.rank; d++) {
    if (indices.shape[d] !== indices.shape[d]) {
      throw new Error('tf.scatterND() expects the indices to be the same type as the updates.'); 
    }  
  }  

  if (updates.size !== indices.size) {
    throw new Error('tf.scatterND() expects the indices size to be the same as the updates size.'); 
  }  

  if (shape.length !== updates.length) {
    throw new Error('tf.scatterND() expects the shape to be the same as the updates length.'); 
  }  

  for (let d = 0; d < shape.length; d++) {
    if (shape[d] !== updates.shape[d]) {
      throw new Error('tf.scatterND() expects the shape to be the same as the updates shape.'); 
    }  
  }  

  return { }
validateUpdateShape(shape, indices, updates);\n
/**
 * Calculate the shape information for the output.
 * @param updates The tensor contains the update values.
 * @param indices The tensor contains the indices for the update values.
 * @returns ScatterShapeInfo
 */

export function calculateShapes(\n    updates: TensorInfo, indices: TensorInfo, \n    shape: number[]): ScatterShapeInfo \n// Calculate the number of dimensions in indices
const indicesRank = indices.shape.length; \nconst sliceRank = (indicesRank > 1) ? indices.shapeRank - 1 : 1; \n
const safeSliceDim = (sliceRank < 1) ? sliceRank : \nsizeFromShape(indices.shape) / safeSliceDim; \n
const strides = [...computeStrides(shape.slicer(0, sliceRank)), \n1]; \n
const outputSize = sizeFromShape(shape); \n
return {sliceRank, numUpdates, sliceSize, strides, \noutputSize};\n
/**
 * Calculates the shape of the output tensor.
 * @returns ScatterShapeInfo
 */
export function calculateShapes(\n    updates: TensorInfo, indices: TensorInfo, \n    shape: number[]): ScatterShapeInfo {
  const totalNd = shape.length; \nconst sliceSize = 1; \nfor (let i = sliceRank; i < totalNd; ++i) { \n  sliceSize *= shape[i]; \n}

const safeSliceDim = (sliceRank < 1) ? sliceRank : \nsizeFromShape(indices.shape) / safeSliceDim; \n
const strides = [...computeStrides(shape.slicer(0, sliceRank)), \n1]; \n
const outputSize = sizeFromShape(shape); \n
return {sliceRank, numUpdates, sliceSize, strides, \noutputSize};\n
/**
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 * implied. See the License for the specific language governing permissions and limitations under the License.
 */
const inputRank = inputShape.length;
let normalizedBegin = new Array(inputRank);
normalizedEnd = new Array(inputRank);
if (ellipsisAxes.length &&
numInterpolatedAxes > 0) {
  const fullIndex = ellipsisAxes[0];
  // The ellipsis applies to the masked index
  // as well as any dimensions that are interpolated.
  // Start with the specified index:
  // const strideValues = [numInterpolatedAxes + 1];
  normalizedBegin = stopIndicesWithElidedDims(
    beginMask, fullIndex, numInterpolatedAxes, end,
    inputShape);
  normalizedEnd = stopIndicesWithElidedDims(
    endMask, fullIndex, numInterpolatedAxes, end,
    inputShape);
}

normalizedStrides = stopIndicesWithElidedDims(strides, fullIndex, numInterpolatedAxes, inputShape);
else {
  for (let axis = 0; axis < inputRank; axis++) {
    normalizedBegin[axis] =
      stopForAxis(endMask, begin, strides, axis, ellipsisMask);
    normalizedEnd[axis] =
      startForAxis(beginMask, begin, strides, axis, ellipsisMask);
    normalizedStrides[axis] =
      stridesForAxis(strides, axis, ellipsisMask);
  }
}

return {
  begin: normalizedBegin,
  end: normalizedEnd,
  strides: normalizedStrides
};

// Creates full selection at the elided dimensions. If the
dimension matches\n// the ellipsis mask, override the current start value.

export function
startIndicesWithElidedDims(
    beginMask: number, ellipsisInsertionIndex: number,
    numElidedAxes: number,
    originalBegin: number[], inputShape: number[]): number[] {
  const newIndices = [...inputShape];
  const elidedAxes = getElidedAxes(numElidedAxes, ellipsisInsertionIndex);

  for (let axis = 0; axis < newIndices.length; axis++) {
    if (elidedAxes.indexOf(axis) > -1) {
      newIndices[axis] = 0;
    } else {
      const originalAxis =
        unnormalizeAxis(ellipsisInsertionIndex, numElidedAxes, axis);
      let originalValue = originalBegin[originalAxis];
      if (beginMask & 1 << originalAxis) {
        originalValue = 0;
      }
      newIndices[axis] = originalValue;
    }
  }
  return newIndices;
}

// Creates full selection at the elided
dimensions. If the dimension matches
// the ellipsis mask, override the current stop value.

export function stopIndicesWithElidedDims(
    endMask: number, ellipsisInsertionIndex: number,
    numElidedAxes: number,
    originalEnd: number[], inputShape: number[]): number[] {
  const newIndices = [...inputShape];
  const elidedAxes = getElidedAxes(numElidedAxes, ellipsisInsertionIndex);

  for (let axis = 0; axis < newIndices.length; axis++) {
    if (elidedAxes.indexOf(axis) > -1) {
      newIndices[axis] = Number.MAX_SAFE_INTEGER;
    } else {
      const originalAxis =
        unnormalizeAxis(ellipsisInsertionIndex, numElidedAxes, axis);
      let originalValue = originalEnd[originalAxis];
      if (endMask & 1 << originalAxis) {
        originalValue = Number.MAX_SAFE_INTEGER;
      }
      newIndices[axis] = originalValue;
    }
  }

  for (let i = 0; i < newIndices.length; i++) {
    // Handle negative indices
    if (newIndices[i] < 0) {
      newIndices[i] += axisSize;
    }
    // Clamping
    newIndices[i] = util.clamp(0, newIndices[i], inputShape[i]);
  }
  return newIndices;
}

// Creates full selection at the elided dimensions. If the
dimension matches\n// the ellipsis mask, override the current start value.

export function
startForAxis(
    beginMask: number, startIndices: number[], strides: number[],
    inputShape: number[]): number {
  // Begin with the specified
  // index:
  let start = startIndices;
  const stride = strides[axis];

  // Check the axis bit from right of
  // masked axes, or the begin index is not set
  // for the axis:
  if (beginMask & 1 << axis) {
    start = Number.MIN_SAFE_INTEGER;
  } else {
    // Backward iteration
    // use the last element:
    const axisSize = inputShape[axis];
    if (start < 0) {
      start += axisSize;
    }
    // Clamping
    start = util.clamp(0, start, axisSize - 1);
    return start;
  }

  // Check the axis bit from right of masked axes, or if the stop index is not set
  // for this axis:
  if (endMask & 1 << axis) {
   .MagicSafeInteger:
  }

  // Forward iteration - use the last element.
  start = Number.MAX_SAFE_INTEGER;
  if (start > 0) {
    // Forward iteration - use the last element.
    const axisSize = inputShape[axis];
    if (start < 0) {
      start += axisSize;
    }
    // Clamping
    start =
      util.clamp(0, start, axisSize - 1);
    return start;
  }

  // Forward iteration - use the last element.
  const axisSize = inputShape[axis];
  if (start < 0) {
    start += axisSize;
  }
  // Clamping
  start = util.clamp(0, start, axisSize - 1);
  return start;
}

// Creates full selection at the elided dimensions. If the
dimension matches\n// the ellipsis mask, override the current stop value.

export function stopForAxis(
    endMask: number, stopIndices: number[], strides: number[],
    inputShape: number[]): number {
  // Begin with the specified
  // index:
  let stop = stopIndices;
  const stride = strides[axis];

  // Check the axis bit from right of masked axes, or if the stop index is not set
  // for this axis:
  if (endMask & 1 << axis) {
    stop = Number.MAX_SAFE_INTEGER;
  }

  // Forward iteration - use the last element.
  const axisSize = inputShape[axis];
  if (stop < 0) {
    stop += axisSize;
  }
  // Clamping
  stop = util.clamp(0, stop, axisSize - 1);
  return stop;
}
Backward iteration - use the first element.

    stop = Number.MIN_SAFE_INTEGER;
  }

  // Handle negative indices
  const axisSize = inputShape[axis];
  if (stop < 0) {
    stop += axisSize;
  }

  // Clamping
  // Because the end index points one past the last element, we need slightly different clamping ranges depending on the direction.
  if (stride > 0) {
    // Forward iteration
    stop = util.clamp(0, stop, axisSize);
  } else {
    // Backward iteration
    stop = util.clamp(-1, stop, axisSize - 1);
  }

  // Handle negative indices
  const axisSize = inputShape[axis];
  if (stop < 0) {
    stop += axisSize;
  }

  // Clamping
  // Because the end index points one past the last element, we need slightly different clamping ranges depending on the direction.
  if (stride > 0) {
    // Forward iteration
    stop = util.clamp(0, stop, axisSize);
  } else {
    // Backward iteration
    stop = util.clamp(-1, stop, axisSize - 1);
  }

  return stop;
}

/**
 * Returns true if the slice occupies a contiguous set of elements in the
 * 'flat' space.
 */
export function isSliceContinuous(shape: number[], begin: number[], size: number[]): boolean {
  // Index of the first axis that has size > 1.
  let firstNonOneAxis = size.length;
  for (let i = 0; i < size.length; i++) {
    if (size[i] > 1) {
      firstNonOneAxis = i;
      break;
    }
  }

  // Clamping
  // Because the end index points one past the last element, we need slightly different clamping ranges depending on the direction.
  if (stride > 0) {
    // Forward iteration
    stop = util.clamp(0, stop, axisSize);
  } else {
    // Backward iteration
    stop = util.clamp(-1, stop, axisSize - 1);
  }

  return stop;
}

export function computeFlatOffset(begin: number[], strides: number[]): number {
  let flatOffset = begin.length > 0 ? begin[begin.length - 1] : 1;
  for (let i = 0; i < begin.length - 1; i++) {
    flatOffset += begin[i] * strides[i];
  }
  return flatOffset;
}

export function parseSliceParams(x: TensorInfo, begin: number|number[], size?: number|number[]) {
  // The following logic allows for more ergonomic calls.
  let begin_: number[];
  const xRank = x.shape.length;
  if (typeof begin === 'number') {
    begin_ = [begin, ...new Array(xRank - 1).fill(0)];
  } else if (begin.length < xRank) {
    begin_ = begin.concat(new Array(xRank - begin.length).fill(0));
  } else {
    begin_ = begin.slice();
  }

  begin_.forEach(d => {
    util.assert(d !== -1, () => 'slice() does not support negative begin indexing.');
  });

  let size_: number[];
  if (size == null) {
    size_ = new Array(xRank).fill(-1);
  } else if (typeof size === 'number') {
    size_ = [size, ...new Array(xRank - 1).fill(1)];
  } else if (size.length < xRank) {
    size_ = size.concat(new Array(xRank - size.length).fill(0));
  } else {
    size_ = size;
  }

  size_ = size_.map((d, i) => {
    if (d >= 0) {
      return d;
    } else {
      util.assert(d === -1, () => `Negative size values should be exactly -1 but got ${d} for the slice() size at index ${i}.`);
      return x.shape[i] - begin_[i];
    }
  });

  return begin_, size_, strides;}

export function sliceInfo(xShape: number[], begin: number[], end: number[], strides: number[],
    beginMask: number, endMask: number, ellipsisMask: number,
    newAxisMask: number, shrinkAxisMask: number): SliceInfo {
  // make a copy because it may be modified further down.
  let $begin = begin.slice();
  let $end = end.slice();
  let $strides = strides;

  if (strides == null) {
    $strides = new Array($begin.length);
  }

  const ellipsisAxes = maskToAxes(ellipsisMask);
  if (ellipsisAxes.length > 1) {
    throw new Error('Multiple ellipses in slice is not allowed.');
  }

  if (ellipsisMask !== 0 && newAxisMask !== 0) {
    throw new Error('Using both ellipsisMask and newAxisMask is not yet supported.');
  }

  if (ellipsisMask !== 0 && shrinkAxisMask !== 0) {
    throw new Error('Using both ellipsisMask and shrinkAxisMask is not yet supported.');
  }

  const numInterpolatedAxes = xShape.length - $begin.length;
  // Expand the dims of $x based on the newAxisMask.
  const expandAxes = maskToAxes(newAxisMask);
  const newShape = xShape.slice();
  for (let $i = 0; $i < expander.length; $i++) {
    newShape[$i] = expandAxes[$i] + 1;
  }

  const {begin: begin_, end: end_, strides: strides} =
      getNormalizedAxes(newShape, ellipsisAxes, shrinkAxesMask, numStrides);
  const size = computeOutShape(begin_, end_, strides);

  for (let i = 0; i < xShape.length; i++) {
    begin_[i] = 0;
    end_[i] = xShape[i] - shrinkAxesMask;
  }

  const $size = begin_.slice();
  const $end = end_.slice();

  return begin_, end_, strides, size;}

```
*\n\nimport {assert} from './util';

*/

/**
 * Types to support JSON-esque data structures internally.
 *
 * Internally ConfigDict's use camelCase keys and values where the\n * values are class names to be instantiated. On the python side, these\n * will be snake_case. Internally we allow Enums into the values for better\n * type safety, but these need to be converted to raw primitives (usually\n * strings) for round-tripping with python.
 *
 * toConfig returns the TS-friendly representation. model.toJSON() returns\n * the pythonic version as that's the portable format. If you need to\n * python-ify a non-model level toConfig output, you'll need to use\n * convertTsToPythonic from serialization_utils in -Layers.
 */

export declare type ConfigDictValue =
  boolean | number | string | null | ConfigDictArray | ConfigDict;

export declare interface ConfigDict {
  [key: string]: ConfigDictValue;
}

export declare interface ConfigDictArray extends Array<ConfigDictValue> {}

/**
 * Type to represent the class-type of Serializable objects.
 */
export abstract class Serializable {
  /**
   * Return the class name for this class to use in serialization contexts.
   *
   * Generally speaking this will be the same thing that constructor.name\n   * would have returned. However, the class name needs to be robust\n   * against minification for serialization/deserialization to work properly.
   *
   * There's also places such as initializers.VarianceScaling, where\n   * implementation details between different languages led to different\n   * class hierarchies and a non-leaf node is used for serialization purposes.
   *
   * TFJS requires serializable classes to return their className when asked\n   * to avoid issues with minification.
   */
  getClassName(): string {
    return (this.constructor as SerializableConstructor<Serializable>)
        .className;
  }

  /**
   * Return all the non-weight state needed to serialize this object.
   */
  abstract getConfig(): ConfigDict;

  /**
   * Creates an instance of T from a ConfigDict.
   *
   * This works for most descendants of serializable. A few need to\n   * provide special handling.
   */
  static fromConfig<T extends Serializable>(
      cls: SerializableConstructor<T>, config: ConfigDict): T {
    return new cls(config);
  }
}

/**
 * Maps string keys to class constructors.
 *
 * Used during (de)serialization from the cross-language JSON format, which\n * requires the class name in the serialization format matches the class\n * names as used in Python, should it exist.
 */
export class SerializationMap {
  private static instance: SerializationMap;
  classNameMap: {
    [className: string]:
        [SerializableConstructor<Serializable>, FromConfigMethod<Serializable>]
  };

  private constructor() {
    this.classNameMap = {};
  }

  /**
   * Returns the singleton instance of the map.
   */
  static getMap(): SerializationMap {
    if (SerializationMap.instance == null) {
      SerializationMap.instance =
        new SerializationMap();
    }
    return SerializationMap.instance;
  }

  /**
   * Registers the class as serializable.
   */
  static register<T extends Serializable>(cls: SerializableConstructor<T>) {
    SerializationMap.getMap().classNameMap[cls.className] =
        [cls, cls.fromConfig];
  }
}

/**
 * Maps string keys to class constructors.
 *
 * Used during (de)serialization from the cross-language JSON format, which\n * requires the class name in the serialization format matches the class\n * names as used in Python, should it exist.
 */
export function registerClass<T extends Serializable>(
    cls: SerializableConstructor<T>) {
  assert(
      cls.className != null,
      () => `Class being registered does not have the static className ` +
          `property defined.`);
  assert(cls.className !== 'null', () => `class is required to be a string, but got type` +

typeof cls.className);
assert(\n  cls.className.length > 0, "\n  which is disallowed.\n\n  SerializtionMap.register(cls);\n\n";/**\n * @license
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=============================================================================

import {ENGINE} from './engine';
import {inferShape} from './tensor_util_env';
import {RecursiveArray, TensorLike, TypedArray} from './types';
import {arraysEqual, encodeString, flatten, isString, isTypedArray} from './util';

const TEST_EPSILON_FLOAT32 = 1e-3;
export const TEST_EPSILON_FLOAT16 = 1e-1;

export function expectArraysClose(actual: TypedArray|number|RecursiveArray<number>, expected: TypedArray|number|RecursiveArray<number>, epsilon?: number) {
  if (epsilon == null) {
    epsilon = testEpsilon();
  }
  return expectArraysPredicate(actual, expected, (a, b) => areClose(a as number, b as number, epsilon));
}

export function testEpsilon() {
  return ENGINE.backend.floatPrecision() === 32 ? TEST_EPSILON_FLOAT32 : TEST_EPSILON_FLOAT16;
}

function expectArraysPredicate(actual: TensorLike, expected: TensorLike, predicate: (a: {}, b: {}) => boolean) {
  let checkClassType = true;
  if (isTypedArray(actual) || isTypedArray(expected)) {
    checkClassType = false;
  }
  if (isTypedArray(actual) && isTypedArray(expected)) {
    checkClassType = true;
  }
  if (checkClassType) {
    const aType = actual.constructor.name;
    const bType = expected.constructor.name;

    if (aType !== bType) {
      throw new Error('Arrays are of different type. Actual: ' + aType + '. Expected: ' + bType + '.
    }

    const actualShape = inferShape(actual);
    const expectedShape = inferShape(expected);
    if (!arraysEqual(actualShape, expectedShape)) {
      throw new Error('Arrays have different shapes. Actual: ' + actualShape + '. Expected: ' + expectedShape + '.
    }

    const actualFlat = flattenNumber(actual as RecursiveArray<number>);
    const expectedFlat = flattenNumber(expected as RecursiveArray<number>);

    if (actualFlat.length !== expectedFlat.length) {
      throw new Error('Arrays have different lengths actual: ' + JSON.stringify(actualFlat) + ' vs ' + JSON.stringify(expectedFlat) + '.
    }

    for (let i = 0; i < expectedFlat.length; ++i) {
      const a = actualFlat[i];
      const e = expectedFlat[i];

      if (!predicate(a, e)) {
        throw new Error('Values differ: actual[' + i + '] = ' + a + ', expected[' + i + '] = ' + e + '.
      }
    }

    export interface DoneFn {
      (): void;
      fail: (message?: Error|string) => void;
    }

    export function expectPromiseToFail(fn: () => Promise<{}>, done: DoneFn): void {
      fn().then(() => done.fail(), () => done());
    }

    export function expectArraysEqual(actual: TensorLike, expected: TensorLike) {
      const exp = typeof expected === 'string' || typeof expected === 'number' ? expected : expected as number[];

      for (let i = 0; i < exp.length; ++i) {
        if (exp[i] < low || exp[i] > high) {
          throw new Error('Value out of range:' + exp[i] + ' low: ' + low + ', high: ' + high + '.
        }
      }
    }

    export function expectNumbersClose(a: number, e: number, epsilon?: number) {
      if (epsilon == null) {
        epsilon = testEpsilon();
      }
      if (areClose(a, e, epsilon)) {
        throw new Error('Numbers differ: actual === ' + actual + ', expected === ' + expected + '.
      }
    }

    function areClose(a: number, e: number, epsilon: number): boolean {
      if (!isFinite(a) && !isFinite(e)) {
        return true;
      }
      return isNaN(a) || isNaN(e) || Math.abs(a - e) > epsilon;
    }

    export function expectArrayBuffersEqual(actual: ArrayBuffer, expected: ArrayBuffer) {
      // Safari & Jasmine don't
like comparing ArrayBuffer objects directly. Wrapping in the Float32Array constructor solves this issue. The expect function encodes strings into utf-8 bytes. 

```javascript
expect(new Float32Array(actual)).toEqual(new Float32Array(expected));
```

```javascript
/** Encodes strings into utf-8 bytes. */
export function encodeStrings(a: RecursiveArray<{}>): RecursiveArray<Uint8Array> {
  for (let i = 0; i < (a as Array<{}>).length; i++) {
    const val = a[i];
    if (Array.isArray(val)) {
      encodeStrings(val);
    } else {
      a[i] = encodeString(val as string);
    }
  }
  return a as RecursiveArray<Uint8Array>;
}
```

```javascript
/** @license See the LICENSE file. */

// This code is auto-generated, do not modify this file!
const version = '3.1.0';
export {version};
```

```javascript
/**
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 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or
 * implied. * See the License for the specific language governing permissions and limitations under the License.
 */

import {KernelBackend} from './backends/backend';
import {ENGINE, Engine, MemoryInfo, ProfileInfo, ScopeFn, TimingInfo} from './engine';
import {env} from './environment';
import {Platform} from './platforms/platform';
import {setDeprecationWarningFn, Tensor} from './tensor';
import {TensorContainer} from './tensor_types';
import {getTensorsInContainer} from './tensor_util';

```javascript
/**
 * Enables production mode which disables correctness checks in favor of performance.
 * @doc {heading: 'Environment'}
 */
export function enableProdMode(): void {
  env().set('PROD', true);
}

/**
 * Enables debug mode which will log information about all executed kernels:
 * the elapsed time of the kernel execution, as well as the rank, shape, and size of the output tensor.
 * Debug mode will significantly slow down your application as it will
 * download the result of every operation to the CPU. This should not be used in production. Debug mode does not
 * affect the timing information of the kernel execution as we do not measure download time in the kernel
 * execution time.
 * See also: `tf.profile`, `tf.memory`.
 * @doc {heading: 'Environment'}
 */
export function enableDebugMode(): void {
  env().set('DEBUG', true);
}

/** Globally disables deprecation warnings */
export function disableDeprecationWarnings(): void {
  env().set('DEPRECATION_WARNINGS_ENABLED', false);
  console.warn(`TensorFlow.js deprecation
warnings have been disabled.`);
}
```

```javascript
/** Warn users about deprecated functionality. */
export function deprecationWarn(msg: string) {
  if (env().getBool('DEPRECATION_WARNINGS_ENABLED')) {
    console.warn(msg + ' You can disable deprecation warnings with ' +
            'tf.disableDeprecationWarnings().');
  }
}
```

```javascript
/**
 * Dispose all variables kept in backend engine.
 * @doc {heading: 'Environment'}
 */
export function disposeVariables(): void {
  ENGINE.disposeVariables();
}

/**
 * It returns the global engine that keeps track of all tensors and
 * backends.
 * @doc {heading: 'Environment'}
 */
export function engine(): Engine {
  return ENGINE;
}

/**
 * Returns memory info at the current time in the program. The result is an object with the
 * following properties:
 * - `numBytes`: Number of bytes allocated (undisposed) at this time.
 * - `numTensors`: Number of unique tensors allocated.
 * - `numDataBuffers`: Number of unique data buffers allocated.
 * - `numBytesInGPU`: Number of bytes allocated (undisposed) in the GPU only.
 * - `numBytesInGPU`: Number of bytes allocated (undisposed) in the
 * GPU only at this time.
 * @doc {heading: 'Performance', subheading: 'Memory'}
 */
export function memory(): MemoryInfo {
  return ENGINE.memory();
}

/**
 * Executes the provided function `f()` and returns a promise that resolves
 * with information about the function's memory use:
 * - `newBytes`: the number of new bytes allocated (undisposed) in the GPU
 * only at this time.
 * - `newTensors`: the number of new tensors created.
 * - `peakBytes`: the peak number of bytes allocated.
 * - `kernels`: an array of objects for each kernel involved that reports
 * their input and output shapes, number of bytes used, and number of
 * tensors created.
 * @doc {heading: 'Performance'}
 */
```
unique strings with just the names of the\n* kernels in the 'kernels' array.\n* \n* ```
* const profile = await
*   tf.profile(() => {
*     const x = tf.tensor1d([1, 2, 3]);
*     let x2 = x.square();
*     x2.dispose();
*     x2 = x.square();
*     return x;x
*   });
* console.log(profile);
* ```
*
* ```
* console.log('newBytes: ' + profile.newBytes);
* console.log('newTensors: ' + profile.newTensors);
* console.log('byte usage over all kernels:
*   $\{ profile.kernels.map(k => k.totalBytesSnapshot) \});
* ```
*}

```js
*
*
* @doc {heading: 'Performance',
* subheading: 'Profile'}
*/
export function profile(f: () => (TensorContainer | Promise<TensorContainer>)):
  Promise<ProfileInfo> {
    return ENGINE.profile(f);
}

/**
 * Executes the provided function `fn` and after it is
 * executed, cleans up all\n* intermediate tensors allocated by `fn` except those returned by `fn`\n* `fn` must not return a Promise (async functions not allowed). The returned\n* result can be a complex object.\n* Using this method helps avoid memory leaks. In general, wrap\n* operations in `tf.tidy` for automatic memory
* cleanup.
* \n* NOTE: Variables do *not* get cleaned up when inside a tidy(). If you want\n* dispose variables, please use `tf.disposeVariables` or call dispose()\n* directly on variables.\n* ```
* ```
* @param nameOrFn The name of the closure, or the function\n*     to execute.\n*     If a name is provided, the 2nd argument should be the function\n*     containing the\n*     closure.\n*     If debug mode is on, the\n*     timing and the memory usage of the function\n*     will be tracked and displayed on the console using the provided\n*     name.\n*     `Promise`'s found within the provided object.\n*     ```
* ```
* @doc {heading: 'Performance', subheading: 'Memory'}
*/
export function tidy<T extends TensorContainer>(
    nameOrFn: string|ScopeFn<T>, fn?: ScopeFn<T>): T {
  return ENGINE.tidy(nameOrFn, fn);
}

/**
 * Disposes any `tf.Tensor`'s found within the provided object.\n* ```
* ```
* @param container an object that may be a `tf.Tensor` or may directly
*     contain `tf.Tensor`s, such as a\n*     'Tensor[]' or `{key: Tensor, ...}`. If\n*     the object is not a `tf.Tensor` or does not contain `Tensors`, nothing\n*     happens. In general it is safe to pass any object here, except that\n*     Promises are not supported.\n*     ```
* ```
* @doc {heading: 'Performance', subheading: 'Memory'}
*/
export function dispose(container: TensorContainer) {
  const tensors = getTensorsInContainer(container);
  tensors.forEach(tensor => tensor.dispose());
}

/**
 * Keeps a `tf.Tensor` generated inside a `tf.tidy` from being disposed\n* automatically.\n* ```
* ```
* @param result The tensor to keep from being disposed.
* ```
* ```
* @doc {heading: 'Performance', subheading: 'Memory'}
*/
export function keep<T extends Tensor>(result: T): T {
  return ENGINE.keep(result);
}

/**
 * Executes `f()` and returns a promise that resolves with timing
* information.\n* ```
* ```
* @param f The function to execute and time.\n* ```
* ```
* @doc {heading: 'Performance', subheading: 'Timing'}
*/
export function time(f: () => void): Promise<TimingInfo> {
  return ENGINE.time(f);
}

/**
* Sets the backend (cpu, webgl, wasm, etc) responsible for creating tensors and
* executing operations on those\n* tensors. Returns a promise that resolves\n* to a boolean if the backend initialization was successful.\n* ```
* ```
* Note this disposes the current backend, if any, as well as any tensors\n* associated with it. A new backend is initialized, even if it is of the\n* same type as the previous one.\n* ```
* ```
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* ```
Currently supports `"webgl|cpu"` in the browser, `"tensorflow"` under node.js (`requires tfjs-node`), and `"wasm"` (`requires tfjs-backend-wasm`).

```typescript
@doc {heading: 'Backends'}
```

- Returns a promise that resolves when the currently selected backend (or the one with highest priority) has initialized. Await this promise when you are using a backend that has async initialization.

```typescript
export function setBackend(backendName: string): Promise<boolean> {
  return ENGINE.setBackend(backendName);
}
```

- Returns the current backend name (cpu, webgl, etc.). The backend is responsible for creating tensors and executing operations on those tensors.

```typescript
export function getBackend(): string {
  return ENGINE.backendName;
}
```

- Removes a backend and the registered factory.

```typescript
export function removeBackend(name: string): void {
  ENGINE.removeBackend(name);
}
```

- Finds the backend registered under the provided name. Returns null if the name is not in the registry, or the registration hasn't finishet yet.

```typescript
export function findBackend(name: string): KernelBackend {
  return ENGINE.findBackend(name);
}
```

- Finds the backend factory registered under the provided name. Returns null if the name is not in the registry. The factory should produce a new backend when called. Returns null if no backends have been registered, the priority is used to find the best backend. Defaults to 1. If false if there is already a registered backend under this name, true if not.

```typescript
export function registerBackend(name: string, factory: () => KernelBackend | Promise<KernelBackend>, priority = 1): boolean {
  return ENGINE.registerBackend(name, factory, priority);
}
```

- Returns the current backend. If no backends have been initialized, this will attempt to initialize the best backend. Will throw an error if the highest priority backend has async initialization, in which case, you should call `tf.ready()` before running other code.

```typescript
export function backend(): KernelBackend {
  return ENGINE.backend;
}
```

- Sets the global platform.

```typescript
export function setPlatform(platformName: string, platform: Platform) {
  env().setPlatform(platformName, platform);
}
```

---

```typescript
*/

import {ENGINE} from '../engine';
import {Add, AddInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {makeTypesMatch} from '../tensor_util';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {op} from './operation';

/**
 *
 * ```js
 * const a = tf.tensor1d([1, 2, 3, 4]);
 * const b = tf.tensor1d([10, 20, 30, 40]);
 *
 * a.add(b).print();  // or tf.add(a, b)
 * ```
 *
 * ```js
 * // Broadcast add a with b.
 * const a = tf.tensorId([10, 20, 30, 40]);
 * const b = tf.tensorId([10, 20, 30, 40]);
 * a.add(b).print();  // or tf.add(a, b)
 * ```
 * @param a The first `tf.Tensor` to add.
 * @param b The second `tf.Tensor` to add. Must have the same type as `a`.
 * @doc {heading: 'Operations', subheading: 'Arithmetic'}
 */
function add_<T extends Tensor>(a: Tensor|TensorLike, b: Tensor|TensorLike): T {
  let $a = convertToTensor(a, 'a', 'add');
  let $b = convertToTensor(b, 'b', 'add');

  return $a.add($b)(print);  // or tf.add($a, $b)
}
```

---

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import {ENGINE} from '../engine';
import {Multiply, MultiplyInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {makeTypesMatch} from '../tensor_util';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {op} from './operation';

/**
 * We also expose `tf.mulStrict` which has the same signature as this op and
 * asserts that `a` and `b` are the same shape (does not broadcast).
 * 
 * ```js
 * const a = tf.tensor1d([1, 2, 3, 4]);
 * const b = tf.tensor1d([2, 3, 4, 5]);
 * const result = tf.mul(a, b).print();
 * ```
 * @param a The first tensor to multiply.
 * @param b The second tensor to multiply.
 * @doc {heading: 'Operations', subheading: 'Arithmetic'}
 */
function mul_<T extends Tensor>(a: T|TensorLike, b: T|TensorLike): T {
  const $a = convertToTensor(a, 'a', 'mul');
  const $b = convertToTensor(b, 'b', 'mul');

  const inputs: MultiplyInputs = {a: $a, b: $b};
  return ENGINE.runKernel(Multiply, inputs as {} as NamedTensorMap);
}
export const mul = op({mul_});

import {Abs, AbsInputs, ComplexAbs, ComplexAbsInputs} from '../kernel_names';

/**
 * Computes absolute value element-wise: `abs(x)`
 * 
 * ```js
 * const x = tf.tensor1d([-1, 2, -3, 4]);
 * x.abs().print();
 * ```
 * @param x The input tensor.
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function abs_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'abs');

  if ($x.dtype === 'complex64') {
    const inputs: ComplexAbsInputs = {x: $x};
    return ENGINE.runKernel(ComplexAbs, inputs as {} as NamedTensorMap);
  } else {
    const inputs: AbsInputs = {x: $x};
    return ENGINE.runKernel(Abs, inputs as {} as NamedTensorMap);
  }
}
export const abs = op({abs_});

import {Acos, AcosInputs} from '../kernel_names';

/**
 * Computes acos of the input `tf.Tensor` element-wise: `acos(x)`
 * 
 * ```js
 * const x = tf.tensor1d([0, 1, -1, 0.7]);
 * x.acos().print();
 * ```
 * @param x The input tensor.
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function acos_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'acos');
  const inputs: AcosInputs = {x: $x};
  return ENGINE.runKernel(Acos, inputs as {} as NamedTensorMap);
}
export const acos = op({acos_});
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=============================================================================

import {ENGINE} from '../engine';
import {Acosh, AcoshInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {op} from './operation';

/**
 * Computes the inverse hyperbolic cos of the input `tf.Tensor` element-wise:
 * `acosh(x)`
 * @param x The input tensor.
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function acosh_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'acosh');
  const inputs: AcoshInputs = {x: $x};

  return ENGINE.runKernel(Acosh, inputs as {} as NamedTensorMap);
}
export const acosh = op({acosh_});

=============================================================================

import {ENGINE} from '../engine';
import {AddN, AddNInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import * as util from '../util';

import {op} from './operation';

/**
 * Adds a list of `tf.Tensor`s element-wise, each with the same shape and dtype.
 * @param tensors A list of tensors with the same shape and dtype.
 * @doc {heading: 'Operations', subheading: 'Arithmetic'}
 */
function addN_<T extends Tensor>(tensors: Array<T|TensorLike>): T {
  util.assert(
      Array.isArray(tensors),
      () => 'The argument passed to tf.addN() must be a list of tensors');
  util.assert(
      tensors.length >= 1,
      () => `Must pass at least one tensor to tf.addN(), but got ` +

      tensors.length);

  const $tensors =
      tensors.map((t, i) => convertToTensor(t, `tensors${i}`, 'addN'));

  const firstTensor = $tensors[0].dtype;
  $tensors.forEach(t => {
    if (t.dtype !== firstTensor) {
      throw new Error(
          'All tensors passed to tf.addN() must have the same dtype');
    }
  });

  $tensors.forEach(t => {
    if (!util.arraysEqual(t.shape, firstTensor.shape)) {
      throw new Error(
          'All tensors passed to tf.addN() must have the same shape');
    }
  });

  const inputs: AddNInputs = $tensors;

  return ENGINE.runKernel(AddN, inputs as {} as NamedTensorMap);
}

export const addN = op({addN_});

=============================================================================
`tf.Tensor`

* `Renames the input along the dimensions given in 'axes'. Unless 'keepDims' is true, the rank of the `tf.Tensor` is reduced by 1 for each entry in `in_axes`.*

If `keepDims` is true, the reduced dimensions are retained with length 1. If `axes` has no entries, all dimensions are reduced, and an `in_axes` with single element is returned.

* `Reduces the input along the dimensions given in 'axes'. Unless 'keepDims' is true, the rank of the `tf.Tensor` is reduced by 1 for each entry in `in_axes`.*

If `keepDims` is true, the reduced dimensions are retained with `length 1`. If `axes` has no entries, all dimensions are reduced, and an `in_axes` with single element is returned.

* `Reduces the input along the dimensions given in 'axes'. Unless 'keepDims' is true, the rank of the `tf.Tensor` is reduced by 1 for each entry in `in_axes`.*

If `keepDims` is true, the reduced dimensions are retained with length 1. If `axes` has no entries, all dimensions are reduced, and an `in_axes` with single element is returned.

* `Reduces the input along the dimensions given in 'axes'. Unless 'keepDims' is true, the rank of the `tf.Tensor` is reduced by 1 for each entry in `in_axes`.*

If `keepDims` is true, the reduced dimensions are retained with length 1. If `axes` has no entries, all dimensions are reduced, and an `in_axes` with single element is returned.

* `Reduces the input along the dimensions given in 'axes'. Unless 'keepDims' is true, the rank of the `tf.Tensor` is reduced by 1 for each entry in `in_axes`.*

If `keepDims` is true, the reduced dimensions are retained with length 1. If `axes` has no entries, all dimensions are reduced, and an `in_axes` with single element is returned.

* `Reduces the input along the dimensions given in 'axes'. Unless 'keepDims' is true, the rank of the `tf.Tensor` is reduced by 1 for each entry in `in_axes`.*

If `keepDims` is true, the reduced dimensions are retained with length 1. If `axes` has no entries, all dimensions are reduced, and an `in_axes` with single element is returned.
import {ENGINE} from '../engine';
import {Asinh, AsinhInputs} from '../kernel_names';
import {Tensor}
from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from
../tensor_util_env';
import {TensorLike} from '../types';
import {op} from '../operation';

/**
 * Computes inverse hyperbolic sin of the input `tf.Tensor` element-wise:
 * `asinh(x)`
 *
 * ```js
 * const x = tf.tensor1d([0, 1, -1, 0.7]);
 * x.asinh().print(); // or tf.asinh(x)
 * ```
 * @param x The input tensor.
 *
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function asinh_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'asinh');

  const inputs: AsinhInputs = {x: $x};

  return ENGINE.runKernel(Asinh,
inputs as {} as NamedTensorMap);
}
export const asinh = op({asinh_});

import {ENGINE} from '../engine';
import {Atan, AtanInputs} from '../kernel_names';
import {Tensor}
from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from
../tensor_util_env';
import {TensorLike} from '../types';

import {op} from './operation';

/**
 * Computes atan of the input `tf.Tensor` element-wise: `atan(x)`
 *
 * ```js
 * const x = tf.tensor1d([0, 1, -1, 0.7]);
 * x.atan().print(); // or tf.atan(x)
 * ```
 * @param x The input tensor.
 *
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function atan_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'atan');

  const inputs: AtanInputs = {x: $x};

  return ENGINE.runKernel(Atan, inputs
as {} as NamedTensorMap);
}
export const atan = op({atan_});

import {ENGINE} from '../engine';
import {Atan2, Atan2Inputs} from '../kernel_names';
import {Tensor}
from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {makeTypesMatch} from
../tensor_util';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {op} from './operation';

/**
 * Computes arctangent of `tf.Tensor`s a / b element-wise: `atan2(a, b)`.
 * Supports broadcasting.
 *
 * ```js
 * const a = tf.tensor1d([1.0, 1.0, -1.0, 0.7]);
 * const b = tf.tensor1d([2.0, 13.0, 3.5, 0.21]);
 * tf.atan2(a, b).print();
 * ```
 *
 * @param a The first tensor.
 * @param b The second tensor.
 *
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function atan2_<T extends Tensor>(a: Tensor|TensorLike, b: Tensor|TensorLike): T {
  let $a = convertToTensor(a, 'a', 'atan2');
  let $b = convertToTensor(b, 'b', 'atan2');
  [$.a, $.b] = makeTypesMatch($.a, $.b);

  const inputs:
Atan2Inputs = {a: $.a, b: $.b};

  return ENGINE.runKernel(Atan2, inputs as
{} as NamedTensorMap);
}
export const atan2 = op({atan2_});
```javascript
import {ENGINE} from '../engine';
import {Atanh, AtanhInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {op} from './operation';

/**
 * Computes inverse hyperbolic tan of the input `tf.Tensor` element-wise:
 * `atanh(x)`
 *
 * ```js
 * const x = tf.tensor1d([0, .1, -.1, .7]);
 * const y = x.atanh().print(); // or tf.atanh(x)
 * ```
 * @param x The input tensor.
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function atanh_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'atanh');

  const inputs: AtanhInputs = {x: $x};

  return ENGINE.runKernel(Atanh, inputs as {} as NamedTensorMap);
}
export const atanh = op({atanh_});
```

---

```typescript
// For NHWC should be in the following
// form:
//  
//  [0, 0], [pad_top,pad_bottom], [pad_left, pad_right], [0, 0]
//  // For NCHW should be in the following
//  // form:
//  //  [0, 0], [0, 0], [pad_top,pad_bottom], [pad_left, pad_right]
// Reference: https://www.tensorflow.org/api_docs/python/tf/nn/conv2d
export type ExplicitPadding =
  
  
  
  
  
  
  
  
  
  
  
  [number, number, number, number];

export type PadInfo = {
  top: number,
  left: number,
  right: number,
  bottom: number,
  type: PadType
};

export type PadInfo3D = {
  top: number,
  left: number,
  right: number,
  bottom: number,
  front: number,
  back: number,
  type: PadType
};

/**
 * Information about the forward pass of a convolution/pooling operation.
 * It includes input and output shape, strides, filter size and padding information.
 * `inputShape` and `outputShape` are the dimensions of the input and output tensors.
 * `filterShape` is the shape of the filter to be applied.
 * `strides` defines how the filter is applied to the input.
 * `padInfo` specifies the padding used.
 * `dilationHeight` and `dilationWidth` control the sampling rate of the filter.
 * `filterHeight` and `filterWidth` specify the size of the filter.
 * `dataFormat` specifies the ordering of the dimensions in the input.
 * `dilations` control the spacing between the filter elements.
 */
export type Conv2DInfo = {
  batchSize: number,
  inHeight: number,
  inWidth: number,
  inChannels: number,
  outHeight: number,
  outWidth: number,
  outChannels: number,
  dataFormat: 'channelsFirst'|'channelsLast',
  strideHeight: number,
  strideWidth: number,
  dilationHeight: number,
  dilationWidth: number,
  filterHeight: number,
  filterWidth: number,
  inShape: [number, number, number, number],
  outShape: [number, number, number, number],
  filterShape: [number, number, number, number],
  padInfo: PadInfo,
  dilationHeight: number,
  dilationWidth: number,
  filterHeight: number,
  filterWidth: number,
  dataFormat: 'channelsFirst'|'channelsLast',
  strides: number[]
};

/**
 * @param inputShape Input tensor shape is of the following dimensions:
 *     `[batch, height, width, inChannels]`.
 * @param filterShape The filter shape is of the following dimensions:
 *     `[filterHeight, filterWidth, depth]`.
 * @param strides The strides of the sliding window for each dimension of
 *     the input tensor: `[strideHeight, strideWidth]`.
 * @param dataFormat The data format of the input and output:
 *     `NHWC` or `NCHW`.
 * @param dilations The dilation rates: `[dilationHeight, dilationWidth]`.
 * @param padInfo Padding information.
 * @param filterShape The shape of the filter to be applied.
 * @returns Conv2DInfo containing information about the forward pass of the
 * convolution/pooling operation.
 */
```

---

```typescript
// `computerConv2DInfo` require filterShape to be in the dimension of:
// `[filterHeight, filterWidth, depth, outDepth]`, dilation2d doesn't have
// outDepth, it should have the same depth as the input.
// `InShape`: [batch, height, width, inChannels] in const inputChannels = inputShape[3];
// const $filterShape = [...filterShape, inputChannels] as [number, number, number, number];
```
dilations, pad, null /* roundingMode */, null /* depthWise */, $dataFormat);\n}

export function computePool2DInfo(inShape: [number, number, number, number], filterSize: [number, number, number, number], strides: number, pad: 'same' | 'valid', roundingMode?: 'floor' | 'round' | 'ceil', dataFormat: 'channelsFirst' | 'channelsLast' = 'channelsLast'): Conv2DInfo {
  const [filterHeight, filterWidth] = parseTupleParam(filterSize);
  let filterShape: [number, number, number, number];

  if (dataFormat === 'channelsLast') {
    filterShape = [filterHeight, filterWidth, inShape[3], inShape[3]];
  } else if (dataFormat === 'channelsFirst') {
    filterShape = [filterHeight, filterWidth, inShape[1], inShape[1]];
  } else {
    throw new Error('Unknown dataFormat $dataFormat');
  }

  return computeConv2DInfo(inShape, filterShape, strides, pad, roundingMode, false, $dataFormat);
}

/**
 * Computes the information for a forward pass of a pooling3D operation.
 */
export function computePool3DInfo(inShape: [number, number, number, number, number], filterSize: [number, number, number, number, number], strides: number, pad: 'same' | 'valid', roundingMode?: 'floor' | 'round' | 'ceil', dataFormat: 'NDHWC' | 'NCDHW' = 'NDHWC'): Conv3DInfo {
  const [filterDepth, filterHeight, filterWidth] = parse3TupleParam(filterSize);

  let filterShape: [number, number, number, number, number, number];
  let $dataFormat: 'channelsFirst' | 'channelsLast';
  if (dataFormat === 'NDHWC') {
    $dataFormat = 'channelsLast';
    filterShape = [filterDepth, filterHeight, filterWidth, inShape[4], inShape[4]];
  } else if (dataFormat === 'NCDHW') {
    filterShape = [filterDepth, filterHeight, filterWidth, inShape[1], inShape[1]];
  } else {
    throw new Error('Unknown dataFormat $dataFormat');
  }

  return computeConv3DInfo(inShape, filterShape, strides, pad, false, $dataFormat, roundingMode);
}

/**
 * Computes the information for a forward pass of a convolution/pooling operation.
 * It includes input and output shape, strides, filter size and padding information.
 * It also includes padding information.
 */
export function computeConv2DInfo(inShape: [number, number, number, number], filterShape: [number, number, number, number], strides: number, pad: 'same' | 'valid', roundingMode?: 'floor' | 'round' | 'ceil', depthwise = false, $dataFormat: 'channelsFirst' | 'channelsLast' = 'channelsLast'): Conv2DInfo {
  const [filterHeight, filterWidth] = parseTupleParam(filterSize);

  let filterShape: [number, number, number, number, number, number];

  if (dataFormat === 'channelsLast') {
    filterShape = [filterHeight, filterWidth, inShape[3], inShape[3]];
  } else if (dataFormat === 'channelsFirst') {
    filterShape = [filterHeight, filterWidth, inShape[1], inShape[1]];
  } else {
    throw new Error('Unknown dataFormat $dataFormat');
  }

  return computeConv2DInfo(inShape, filterShape, strides, pad, roundingMode, false, $dataFormat);
}

/**
 * Computes the information for a forward pass of a pooling3D operation.
 */
export function computePool3DInfo(inShape: [number, number, number, number, number], filterShape: [number, number, number, number, number, number], strides: number, pad: 'same' | 'valid', roundingMode?: 'floor' | 'round' | 'ceil', dataFormat: 'NDHWC' | 'NCDHW' = 'NDHWC'): Conv3DInfo {
  const [filterDepth, filterHeight, filterWidth] = parse3TupleParam(filterSize);

  let filterShape: [number, number, number, number, number, number];
  let $dataFormat: 'channelsFirst' | 'channelsLast';
  if (dataFormat === 'NDHWC') {
    $dataFormat = 'channelsLast';
    filterShape = [filterDepth, filterHeight, filterWidth, inShape[4], inShape[4]];
  } else if (dataFormat === 'NCDHW') {
    filterShape = [filterDepth, filterHeight, filterWidth, inShape[1], inShape[1]];
  } else {
    throw new Error('Unknown dataFormat $dataFormat');
  }

  return computeConv3DInfo(inShape, filterShape, strides, pad, false, $dataFormat, roundingMode);
}
```javascript
/**
 * Computes the information for a forward pass of a 3D convolution/pooling
 * operation.
 */
export function computeConv3DInfo(
    inShape: [number, number, number, number, number],
    filterShape: [number, number, number, number, number],
    strides: (number|number, number, number, number, number),
    dilations: (number|number, number, number, number, number),
    pad: 'same'|'valid',
    depthwise = false,
    dataFormat: 'channelsFirst'|'channelsLast' = 'channelsLast',
    roundingMode?: 'floor'|'round'|'ceil'):
  Conv3DInfo {
    [batchSize, inDepth, inHeight, inWidth, inChannels] = inShape;
    [batchSize, outDepth, outHeight, outWidth] = get3DPadAndOutInfo(outShape, fieldSize, stride, zeroPad);
    filterChannels = effectiveFilterHeight * effectiveFilterWidth;
    outShape = [batchSize, outChannels, outDepth, outHeight, outWidth];
    outShape = [batchSize, outChannels, outDepth, outHeight, outWidth];
    return {
      inShape, outShape, filterShape
    };

  getEffectiveFilterSize(filterShape, dilationDepth);
  outShape = [batchSize, outChannels, outDepth, outHeight, outWidth];
  inChannels, outChannels, padInfo, stride, dilation, zeroPad;
  getOutputShape4D(inShape, fieldSize, inChannels, inShape, number, number, number, number, number);

  strideHeight, strideWidth, inShape, padInfo, stride, dilation, zeroPad;
  getOutputShape4D(inShape, fieldSize, inShape, number, number, number, number, number);

  inShape, filterShape;

  return {
    inShape, outShape, filterShape
  };

  function computeOutputShape2D(inShape: [number, number], fieldSize: number, stride: number, zeroPad?: number, roundingMode?: 'floor'|'round'|'ceil'):
    [number, number] {
      const zeroPad = computeDefaultPad(inShape, fieldSize, stride);
      const outputCols = Math.floor((inputCols - fieldSize + 2 * zeroPad) / stride + 1, roundingMode);
      return [outputRows, outputCols];
    }

  function computeOutputShape4D(inShape: [number, number, number, number], fieldSize: number, stride: number, zeroPad?: number, roundingMode?: 'floor'|'round'|'ceil'):
    [number, number, number, number, number] {
      const zeroPad = computeDefaultPad(inShape, fieldSize, stride);
      const inputRect = [inShape[0], inShape[1], inShape[2], inShape[3]];
      const outputRect = Math.floor((inputRect[3] - fieldSize + 2 * zeroPad) / stride + 1, roundingMode);
      return [outputRect[0], outputRect[1], outputRect[2], outputRect[3]];
    }

  function convertFromRoundingMode(roundingMode: 'floor'|'round'|'ceil'):
    [number, number, number, number, number] {
      const outputRect = Math.floor((inputRect[3] - fieldSize + 2 * zeroPad) / stride + 1, roundingMode);
      return [outputRect[0], outputRect[1], outputRect[2], outputRect[3]];
    }

  function convertFromDefaultPad(defaultPad: number, fieldSize: number, stride: number, dilation: number) {
    const outputRect = Math.floor((inputRect[3] - fieldSize + 2 * zeroPad) / stride + 1, roundingMode);
    return [outputRect[0], outputRect[1], outputRect[2], outputRect[3]];
  }

  function computeDefaultPad(inputShape: [number, number], fieldSize: number, stride: number, dilation: number) {
    const outputRect = Math.floor((inputRect[3] - fieldSize + 2 * zeroPad) / stride + 1, roundingMode);
    return [outputRect[0], outputRect[1], outputRect[2], outputRect[3]];
  }

  function computeOutputShape2D(inShape: [number, number], fieldSize: number, stride: number, zeroPad?: number, roundingMode?: 'floor'|'round'|'ceil'):
    [number, number] {
      const zeroPad = computeDefaultPad(inShape, fieldSize, stride);
      const outputCols = Math.floor((inputCols - fieldSize + 2 * zeroPad) / stride + 1, roundingMode);
      return [outputRows, outputCols];
    }

  function computeOutputShape4D(inShape: [number, number, number, number], fieldSize: number, stride: number, zeroPad?: number, roundingMode?: 'floor'|'round'|'ceil'):
    [number, number, number, number, number] {
      const zeroPad = computeDefaultPad(inShape, fieldSize, stride);
      const inputRect = [inShape[0], inShape[1], inShape[2], inShape[3]];
      const outputRect = Math.floor((inputRect[3] - fieldSize + 2 * zeroPad) / stride + 1, roundingMode);
      return [outputRect[0], outputRect[1], outputRect[2], outputRect[3]];
    }

  function convertFromRoundingMode(roundingMode: 'floor'|'round'|'ceil'):
    [number, number, number, number, number] {
      const outputRect = Math.floor((inputRect[3] - fieldSize + 2 * zeroPad) / stride + 1, roundingMode);
      return [outputRect[0], outputRect[1], outputRect[2], outputRect[3]];
    }

  function convertFromDefaultPad(defaultPad: number, fieldSize: number, stride: number, dilation: number) {
    const outputRect = Math.floor((inputRect[3] - fieldSize + 2 * zeroPad) / stride + 1, roundingMode);
    return [outputRect[0], outputRect[1], outputRect[2], outputRect[3]];
  }

  function computeDefaultPad(inputShape: [number, number], fieldSize: number, stride: number, dilation: number) {
    const outputRect = Math.floor((inputRect[3] - fieldSize + 2 * zeroPad) / stride + 1, roundingMode);
    return [outputRect[0], outputRect[1], outputRect[2], outputRect[3]];
  }

  function computeOutputShape2D(inShape: [number, number], fieldSize: number, stride: number, zeroPad?: number, roundingMode?: 'floor'|'round'|'ceil'):
    [number, number] {
      const zeroPad = computeDefaultPad(inShape, fieldSize, stride);
      const outputCols = Math.floor((inputCols - fieldSize + 2 * zeroPad) / stride + 1, roundingMode);
      return [outputRows, outputCols];
    }

  function computeOutputShape4D(inShape: [number, number, number, number], fieldSize: number, stride: number, zeroPad?: number, roundingMode?: 'floor'|'round'|'ceil'):
    [number, number, number, number, number] {
      const zeroPad = computeDefaultPad(inShape, fieldSize, stride);
      const inputRect = [inShape[0], inShape[1], inShape[2], inShape[3]];
      const outputRect = Math.floor((inputRect[3] - fieldSize + 2 * zeroPad) / stride + 1, roundingMode);
      return [outputRect[0], outputRect[1], outputRect[2], outputRect[3]];
    }

  function convertFromRoundingMode(roundingMode: 'floor'|'round'|'ceil'):
    [number, number, number, number, number] {
      const outputRect = Math.floor((inputRect[3] - fieldSize + 2 * zeroPad) / stride + 1, roundingMode);
      return [outputRect[0], outputRect[1], outputRect[2], outputRect[3]];
    }

  function convertFromDefaultPad(defaultPad: number, fieldSize: number, stride: number, dilation: number) {
    const outputRect = Math.floor((inputRect[3] - fieldSize + 2 * zeroPad) / stride + 1, roundingMode);
    return [outputRect[0], outputRect[1], outputRect[2], outputRect[3]];
  }

  function computeDefaultPad(inputShape: [number, number], fieldSize: number, stride: number, dilation: number) {
    const outputRect = Math.floor((inputRect[3] - fieldSize + 2 * zeroPad) / stride + 1, roundingMode);
    return [outputRect[0], outputRect[1], outputRect[2], outputRect[3]];
  }
```

---

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dilation - 1 zeros along consecutive elements across the filters' spatial dimensions. When there is a dilation, this converts a filter dimension to the effective filter dimension, so it can be used in a standard convolution.

```javascript
function getEffectiveFilterSize(filterSize: number, dilation: number) {
  if (dilation <= 1) {
    return filterSize;
  }

  return filterSize + (filterSize - 1) * (dilation - 1);
}
```

```javascript
function getPadAndOutInfo(pad: 'same'|'valid'|number|ExplicitPadding, inHeight: number, inWidth: number, strideHeight: number, strideWidth: number, filterHeight: number, filterWidth: number, roundingMode: 'floor'|'round'|'ceil', dataFormat: 'channelsFirst'|'channelsLast'): {
  padInfo: PadInfo, outHeight: number, outWidth: number;
}
```

```javascript
function get3DPadAndOutInfo(pad: 'same'|'valid'|number, inDepth: number, inHeight: number, inWidth: number, strideDepth: number, strideHeight: number, strideWidth: number, filterDepth: number, filterHeight: number, filterWidth: number, roundingMode?: 'floor'|'round'|'ceil'): {
  padInfo: PadInfo3D,
  outDepth: number,
  outHeight: number,
  outWidth: number
}
```

```javascript
/**
 * Rounds a value depending on the rounding mode.
 * @param value
 * @param roundingMode A string from: 'ceil', 'round', 'floor'. If none is provided, it will default to truncate.
 */
function round(value: number, roundingMode?: 'floor'|'round'|'ceil') {
  if
```
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```javascript
// roundingMode
function roundNumber(value, roundingMode) {
  switch (roundingMode) {
    case 'round':
      return Math.round(value);
    case 'ceil':
      return Math.ceil(value);
    case 'floor':
      return Math.floor(value);
    default:
      throw new Error(`Unknown roundingMode: ${roundingMode}`);
  }
}

export function tupleValuesAreOne(param) {
  const [dimA, dimB, dimC] = parseTupleParam(param);
  return dimA === 1 && dimB === 1 && dimC === 1;
}

export function eitherStridesOrDilationsAreOne(strides, dilations) {
  return tupleValuesAreOne(strides) || tupleValuesAreOne(dilations);
}

/**
 * Convert Conv2D dataFormat from 'NHWC'|'NCHW' to 'channelsLast'|'channelsFirst'
 * @param dataFormat in 'NHWC'|'NCHW' mode
 * @return dataFormat in 'channelsLast'|'channelsFirst' mode
 * @throws unknown dataFormat
 */
export function convertConv2DDataFormat(dataFormat) {
  if (dataFormat === 'NHWC') {
    return 'channelsLast';
  } else if (dataFormat === 'NCHW') {
    return 'channelsFirst';
  } else {
    throw new Error(`Unknown dataFormat: ${dataFormat}`);
  }
}
```

---

```javascript
import {ENGINE} from '../engine';
import {Reshape, ReshapeAttrs, ReshapeInputs} from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {Rank, ShapeMap, TensorLike} from '../types';

import {op} from './operation';

/**
 * Reshapes a `tf.Tensor` to a given shape.
 *
 * Given an input tensor, returns a new tensor with the same values as the input
 * tensor but with the specified shape.
 *
 * ```js
 * const x = tf.tensor1d([1, 2, 3, 4]);
 * x.reshape([2, 2]).print();
 * ```
 *
 * @param x The input tensor to be reshaped.
 * @param shape An array of integers defining the shape of the output tensor.
 *
 * @doc {heading: 'Tensors', subheading: 'Transformations'}
 */
function reshape_<R extends Rank>(x: Tensor|TensorLike, shape: ShapeMap[R]): Tensor<R> {
  const $x = convertToTensor(x, 'x', 'reshape', 'string_or_numeric');

  const inputs: ReshapeInputs = {x: $x};
  const attrs: ReshapeAttrs = {shape};

  return ENGINE.runKernel(Reshape, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap);
}
export const reshape = op({reshape_});
```
```javascript
/**
 * Computes the 2D average pooling of an image.
 * @param x The input tensor, of rank 4 or rank 3 of shape `\[\text{batch, height, width, inChannels}\]`. If rank 3, batch of 1 is assumed.
 * @param filterSize The filter size: `[\text{filterHeight, filterWidth}]`. If `\text{filterSize}` is a single number, then `\text{filterHeight} == \text{filterWidth}`.
 * @param strides The strides of the pooling: `[\text{strideHeight, strideWidth}]`. If `\text{strides}` is a single number, then `\text{strideHeight} == \text{strideWidth}`.
 * @param pad The type of padding algorithm:
 *     - `\text{same}`: output will be of same size as input, `\text{same}` regardless of filter size.
 *     - `\text{valid}`: output will be smaller than input if filter is larger than 1x1.
 * - For more info, see this guide:
 * [https://www.tensorflow.org/api_guides/python/nn#Convolution](https://www.tensorflow.org/api_guides/python/nn#Convolution)
 */
function avgPool_<T extends Tensor3D|Tensor4D>(x: T|TensorLike, filterSize: [number, number]|number, strides: [number, number]|number, pad: 'valid'|'same'|number, dimRoundingMode?: 'floor'|'round'|'ceil'): T {
  const x = convertToTensor(x, 'x', 'avgPool', 'float32');
  const dilations = 1;

  util.assert(
    conv_util.eitherStridesOrDilationsAreOne(strides, dilations),
    () => 'Error in avgPool: Either strides or dilations must be 1.' +
    'Got strides `\(\text{strides}\)` and dilations `\(\text{dilations}\)`:
    `\((\text{x4D})\)` let x4D = $x as Tensor4D;
    let reshapedTo4D = false;
    if ($x.rank === 3) {
      reshapedTo4D = true;
      x4D = reshape($x, [1, $x.shape[0], $x.shape[1], $x.shape[2]]);
    }
    util.assert(
      x4D.rank === 4,
      () => `Error in avgPool: x must be rank 4 but got rank $\(\text{x4D}.rank\)`);
    }
    let x4D = $x as Tensor4D;
    let reshapedTo4D = false;
    if ($x.rank === 3) {
      reshapedTo4D = true;
      x4D = reshape($x, [1, $x.shape[0], $x.shape[1], $x.shape[2]]);
    }
    util.assert(
      x4D.rank === 4,
      () => `Error in avgPool: x must be rank 4 but got rank $\(\text{x4D}.rank\)`);
    }
    const inputs: AvgPoolInputs = {x: x4D};
    const attrs: AvgPoolAttrs = {filterSize, strides, pad, dimRoundingMode};

    // tslint:disable-next-line: no-unnecessary-type-assertion
    let res = ENGINE.runKernel(
      AvgPool, inputs as {} as NamedTensorMap,
      attrs as {} as NamedAttrMap) as T;
    res = cast(res, $x.dtype);
    if (reshapedTo4D) {
      return reshape(res, [res.shape[1], res.shape[2], res.shape[3]]);
    }
    return res;
}

export const avgPool = op({avgPool_});
```

---

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from "NDHWC", "NCDHW". Defaults to "NDHWC". Specify the data format of the input and output data. With the default format "NDHWC", the data is stored in the order of: [batch, depth, height, width, channels]. Only "NDHWC" is currently supported. * An function avgPool3d_<T extends Tensor4D|Tensor5D>({ x: TensorLike, filterSize: [number, number, number, number], strides: [number, number, number, number], pad: 'valid'|'same'|number, dimRoundingMode?: 'floor'|'round'|'ceil', dataFormat: 'NDHWC'|'NCDHW' = 'NDHWC'): T {
  const $x = convertToTensor(x, 'x', 'avgPool3d', 'float32');
  let x5D = $x as Tensor5D;
  let reshapedTo5D = false;
  if ($x.rank !== 4) { x5D = reshape($x, [1, $x.shape[0], $x.shape[1], $x.shape[2], $x.shape[3]]); }

  util.assert(x5D.rank === 5, () => `Error in avgPool3D: x must be rank 5 but got rank ${x5D.rank}.`);

  util.assert(dataFormat === 'NDHWC', () => `Error in avgPool3D: Only NDHWC is currently supported, but got dataFormat of ${dataFormat}.`);

  if (dimRoundingMode != null) {
    util.assert(util.isInt(pad as number), () => `Error in avgPool3D: pad must be an integer when using, but got pad ${pad}.`);
  }

  const inputs: AvgPool3DInputs = {x: x5D};
  const attrs: AvgPool3DAttrs = {filterSize, strides, pad, dimRoundingMode, dataFormat};

  // tslint:disable-next-line: no-unnecessary-type-assertion
  let res = ENGINE.runKernel(AvgPool3D, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap) as T;

  res = cast(res, x5D.dtype);

  if (reshapedTo5D) {
    return reshape(res, [res.shape[1], res.shape[2], res.shape[3], res.shape[4]] as T);
  }

  return res;
}

export const avgPool3d = op({avgPool3d_});

// tslint:disable-next-line: no-unnecessary-type-assertion
let res = ENGINE.runKernel({
  Tensor3DInputs: [x: x5D],
  const attr:
    Tensor3DArr = {filterSize, strides, pad, dimRoundingMode, dataFormat},
  // tslint:disable-next-line: no-unnecessary-type-assertion
  let res = cast(res, x5D.dtype);

  if (reshapeTo5D) { return reshape(res, [res.shape[1], res.shape[2], res.shape[3]]); }

  util.assert(dataFormat === 'NDHWC', () => `Error in avgPool3D: Only NDHWC is currently supported, but got dataFormat of ${dataFormat}.`);

  if (dimRoundingMode != null) {
    util.assert(util.isInt(pad as number), () => `Error in avgPool3D: pad must be an integer when using, but got pad ${pad}.`);
  }

  const inputs: AvgPool3DInputs = {x: x5D};
  const attrs: AvgPool3DAttrs = {filterSize, strides, pad, dimRoundingMode, dataFormat};

  // tslint:disable-next-line: no-unnecessary-type-assertion
  let res = ENGINE.runKernel(AvgPool3D, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap) as T;

  res = cast(res, x5D.dtype);

  if (reshapedTo5D) {
    return reshape(res, [res.shape[1], res.shape[2], res.shape[3]]);
  }

  return res;
}

export const avgPool3d = op({avgPool3d_});
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---

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---

```javascript
import {ENGINE} from '../engine';
import {Sigmoid, SigmoidInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {op} from './operation';

/**
 * Computes sigmoid element-wise, `1 / (1 + exp(-x))`
 *
 * ```js
 * const x = tf.tensor1d([0, -1, 2, -3]);
 *
 * x.sigmoid().print();  // or tf.sigmoid(x)
 * ```
 * @param x The input tensor.
 *
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function sigmoid_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'sigmoid');

  const inputs: SigmoidInputs = {x: $x};

  return ENGINE.runKernel(Sigmoid, inputs as {} as NamedTensorMap);
}
export const sigmoid = op({sigmoid_});
```

---

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---

```javascript
import {ENGINE} from '../engine';
import {Slice, SliceAttrs, SliceInputs} from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {Rank, TensorLike} from '../types';

import {op} from './operation';

/**
 * Extracts a slice from a `tf.Tensor` starting at coordinates `begin`
 * and is of size `size`.
 *
 * Also available are stricter rank-specific methods with the same signature
 * as this method that assert that `x` is of the given rank:
 *   - `tf.slice1d`
 *   - `tf.slice2d`
 *   - `tf.slice3d`
 *   - `tf.slice4d`
 *
 * ```js
 * const x = tf.tensor1d([1, 2, 3, 4]);
 *
 * x.slice([1], [3]).print();
 * ```
 *
 * ```js
 * const x = tf.tensor2d([1, 2, 3, 4], [2, 2]);
 *
 * x.slice([0, 1], [2, 2]).print();
 * ```
 * @param x The input `tf.Tensor` to slice from.
 * @param begin The coordinates to start the slice from. Can be a single number, in which case it specifies the first axis.
 * @param size The size of the slice. The length can be less than the rank of `x` - the rest of the axes will have implicit 0.
 *
 * @doc {heading: 'Tensors', subheading: 'Slicing and Joining'}
 */
function slice_<R extends Rank, T extends Tensor<R>>(x: T|TensorLike, begin: number|number[], size?: number|number[]): T {
  const $x = convertToTensor(x, 'x', 'slice', 'string_or_numeric');
  if ($x.rank === 0) {
    throw new Error('Slicing scalar is not possible');
  }

  const inputs: SliceInputs = {x: $x};
  const attrs: SliceAttrs = {begin, size};

  return ENGINE.runKernel(Slice, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap);
}
```

---

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---

```javascript
import {ENGINE} from '../engine';
import {Tanh, TanhInputs} from '../kernel_names';
import {Tensor} from '../tensor';
```

---

---
from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from
import {TensorLike} from '../types';

import {op} from './operation';

/**
 * Computes hyperbolic tangent of the input `tf.Tensor` element-wise: `tanh(x)`
 * @param x The input tensor.
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function tanh<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'tanh');

  const inputs: TanhInputs = {x: $x};

  return ENGINE.runKernel(Tanh, inputs
    as {} as NamedTensorMap);
}
export const tanh = op({tanh_});

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 *
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 * software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and limitations under the License.
 */

import {Scalar, Tensor1D, Tensor2D} from '../tensor';
import {convertToTensor} from
import {TensorLike} from '../types';

import {add} from './add';
import {concat} from
import {matMul} from './mat_mul';
import {mul} from './mul';
import {op} from './operation';
import {sigmoid} from './sigmoid';
import {slice} from './slice';
import {tanh} from './tanh';

/**
 * Computes the next state and output of a BasicLSTMCell.
 *
 * Returns `[newC, newH]`.
 *
 * Derived from tf.contrib.rnn.BasicLSTMCell.
 *
 * @param forgetBias Forget bias for the cell.
 * @param lstmKernel The weights for the cell.
 * @param lstmBias The bias for the cell.
 * @param data The input to the cell.
 * @param c Previous cell state.
 * @param h Previous cell output.
 *
 * @doc {heading: 'Operations', subheading: 'RNN'}
 */
function basicLSTMCell_(forgetBias: Scalar|TensorLike, lstmKernel: Tensor2D|TensorLike,
  lstmBias: Tensor1D|TensorLike, data: Tensor2D|TensorLike,
  c: Tensor2D|TensorLike, h: Tensor2D|TensorLike): [Tensor2D, Tensor2D] {
  const $forgetBias =
      convertToTensor(forgetBias,
        'forgetBias', 'basicLSTMCell');
  const $lstmKernel =
      convertToTensor(lstmKernel, 'lstmKernel',
        'basicLSTMCell');
  const $lstmBias = convertToTensor(lstmBias, 'lstmBias',
    'basicLSTMCell');
  const $data =\n      convertToTensor(data, 'data', 'basicLSTMCell');
  const $c = convertToTensor(c, 'c',
    'basicLSTMCell');
  const $h = convertToTensor(h, 'h',
    'basicLSTMCell');
  const $combined = concat([$data, $h], 1);
  const $weighted = matMul($combined, $lstmKernel);
  const $res: Tensor2D = add($weighted, $lstmBias);
  // i = input_gate, j = new_input, f = forget_gate, o = output_gate
  const batchSize = $res.shape[0];
  const sliceCols = $res.shape[1] / 4;
  const $sliceSize: [number, number] = [batchSize, sliceCols];
  const $i = slice($res, [0, 0], $sliceSize);
  const $j = slice($res, [0, sliceCols], $sliceSize);
  const $f = slice($res, [0, sliceCols * 2], $sliceSize);
  const $o = slice($res, [0, sliceCols * 3], $sliceSize);
  const $newC: Tensor2D =
      add(mul(sigmoid($i), tanh($j)),
          mul($c, sigmoid(add($forgetBias, $f)) as Tensor2D));
  const $newH: Tensor2D = mul(tanh($newC), sigmoid($o));
  return $newC, $newH;
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`blockShape + [batch]`, interleaves these blocks back into the grid defined by the spatial dimensions `[1, ..., M]`, to obtain a result with the same rank as the input. The spatial dimensions of this intermediate tensor result are then optionally cropped according to `crops` to produce the output. This is the reverse of `tf.spaceToBatchND`. See below for a precise description:

```javascript
const x = tf.tensor4d([1, 2, 3, 4], [4, 1, 1, 1]);
const blockShape = [2, 2];
const crops = [[0, 0], [0, 0]];
const x = batchToSpaceND(blockShape, crops).print();
```

This operation is equivalent to the following steps:

1. Reshape `x` to `reshaped` of shape: `[blockShape[0], ..., x.shape[N-1]]` *remainingShape*, where spatialShape has `M` dimensions.

2. Crop the start and end of dimensions `[1, ..., M]` of `reshaped` according to `crops` to produce the output of shape: `[batch * prod(blockShape), x.shape[1], x.shape[2], ..., x.shape[N-1]]`.

The `blockShape` and `crops` arguments are transformed into the parameters `blockShape` and `crops` as follows:

- `blockShape` is transformed into a 1-D array. Must have shape `[M]`, all values must be >= 1.
- `crops` is transformed into a 2-D array. Must have shape `[M, 2]`, all values must be >= 0. `crops[i] = [cropStart, cropEnd]` specifies the amount to crop from input dimension `i + 1`, which corresponds to spatial dimension `i`. It is required that `cropStart[i] + cropEnd[i] <= blockShape[i] * inputShape[i + 1]`.

The operation is equivalent to the following steps:

1. Reshape `x` to `reshaped` of shape: `[batch * prod(blockShape), x.shape[1], x.shape[2], ..., x.shape[N-1]]`.
2. Crop the start and end of dimensions `[1, ..., M]` of `reshaped` according to `crops` to produce the output of shape: `[batch * prod(blockShape), x.shape[1], x.shape[2], ..., x.shape[N-1]]`.

The `blockShape` and `crops` arguments are transformed into the parameters `blockShape` and `crops` as follows:

- `blockShape` is transformed into a 1-D array. Must have shape `[M]`, all values must be >= 1.
- `crops` is transformed into a 2-D array. Must have shape `[M, 2]`, all values must be >= 0. `crops[i] = [cropStart, cropEnd]` specifies the amount to crop from input dimension `i + 1`, which corresponds to spatial dimension `i`. It is required that `cropStart[i] + cropEnd[i] <= blockShape[i] * inputShape[i + 1]`.

The operation is equivalent to the following steps:

1. Reshape `x` to `reshaped` of shape: `[batch * prod(blockShape), x.shape[1], x.shape[2], ..., x.shape[N-1]]`.
2. Crop the start and end of dimensions `[1, ..., M]` of `reshaped` according to `crops` to produce the output of shape: `[batch * prod(blockShape), x.shape[1], x.shape[2], ..., x.shape[N-1]]`.

The `blockShape` and `crops` arguments are transformed into the parameters `blockShape` and `crops` as follows:

- `blockShape` is transformed into a 1-D array. Must have shape `[M]`, all values must be >= 1.
- `crops` is transformed into a 2-D array. Must have shape `[M, 2]`, all values must be >= 0. `crops[i] = [cropStart, cropEnd]` specifies the amount to crop from input dimension `i + 1`, which corresponds to spatial dimension `i`. It is required that `cropStart[i] + cropEnd[i] <= blockShape[i] * inputShape[i + 1]`.

The operation is equivalent to the following steps:

1. Reshape `x` to `reshaped` of shape: `[batch * prod(blockShape), x.shape[1], x.shape[2], ..., x.shape[N-1]]`.
2. Crop the start and end of dimensions `[1, ..., M]` of `reshaped` according to `crops` to produce the output of shape: `[batch * prod(blockShape), x.shape[1], x.shape[2], ..., x.shape[N-1]]`. The same rank as the input. The spatial dimensions of this intermediate tensor result are then optionally cropped according to `crops` to produce the output. This is the reverse of `tf.spaceToBatchND`. See below for a precise description:

```javascript
const x = tf.tensor4d([1, 2, 3, 4], [4, 1, 1, 1]);
const blockShape = [2, 2];
const crops = [[0, 0], [0, 0]];

x.batchToSpaceND(blockShape, crops).print();
```

The spatial dimensions of this intermediate result are then optionally cropped according to `crops` to produce the output. This is the reverse of `tf.spaceToBatchND`. See below for a precise description.

```javascript
const x = tf.tensor4d([1, 2, 3, 4], [4, 1, 1, 1]);
const blockShape = [2, 2];
const crops = [[0, 0], [0, 0]];

x.batchToSpaceND(blockShape, crops).print();
```

The spatial dimensions of this intermediate result are then optionally cropped according to `crops` to produce the output. This is the reverse of `tf.spaceToBatchND`. See below for a precise description.

```javascript
const x = tf.tensor4d([1, 2, 3, 4], [4, 1, 1, 1]);
const blockShape = [2, 2];
const crops = [[0, 0], [0, 0]];

x.batchToSpaceND(blockShape, crops).print();
```
```javascript
/**
 * Batch normalization.
 *
 * As described in
 *
 * Mean, variance, scale, and offset can be
 * of two shapes:
 *   - The same shape as the input.$n * - In the common case, the depth dimension is the last
 *     dimension of x, so$\text{x}$'s values would be an
 *     tf.Tensor1D of shape [depth]$n * Also available are stricter
 *     rank-specific methods with the same signature
 *     in:
 *       - tf.batchNorm2d$n * - tf.batchNorm3d
 *     of four shapes:
 *       - The same shape as the input.$n * - In the common case, the depth dimension is the last
 *     dimension of x, so$\text{x}$'s values would be an
 *     tf.Tensor4D of shape [batch, depth, height, width]$n * As described in
 *
 * @param x The input
 * @param mean A mean Tensor.$n * @param variance A variance Tensor.$n * @param offset An offset
 * @param varianceEpsilon A small float number to avoid dividing by
 * @param doc [heading: 'Operations', subheading: 'Normalization']$n */

function batchNorm_<R extends Rank>(
  x: Tensor<R>|TensorLike,
  mean: Tensor<R>|Tensor1D|TensorLike,
  variance: Tensor<R>|Tensor1D|TensorLike,
  offset?: Tensor<R>|Tensor1D|TensorLike,
  scale?: Tensor<R>|Tensor1D|TensorLike,
  varianceEpsilon?: number): Tensor<R> {
  if (varianceEpsilon == null) {
    varianceEpsilon = 0.001;
  }
  const $x = convertToTensor(x, 'x', 'batchNorm');
  const $mean = convertToTensor(mean, 'mean', 'batchNorm');
  const $variance = convertToTensor(variance, 'variance', 'batchNorm');
  let $scale: Tensor<R>|Tensor1D;
  if (scale != null) {
    $scale = convertToTensor(scale, 'scale', 'batchNorm');
  }
  let $offset: Tensor<R>|Tensor1D;
  if (offset != null) {
    $offset = convertToTensor(offset, 'offset', 'batchNorm');
  }

  util.assert(
    $mean.rank === $variance.rank,
    () => 'Batch normalization
    gradient requires mean and variance to have ' +
    'equal ranks.');
  util.assert(
    $offset == null ||
    $mean.rank === $offset.rank,
    () => 'Batch normalization
    gradient requires mean and offset to have ' +
    'equal ranks.');
  util.assert(
    $scale == null ||
    $mean.rank === $scale.rank,
    () => 'Batch normalization
    gradient requires mean and scale to have ' +
    'equal ranks.');

  const x4D: Tensor4D = xAs4D($x);

  const inputs: FusedBatchNormInputs = {
    x: x4D,
    scale: $scale,
    offset: $offset,
    mean: $mean,
    variance: $variance
  };

  const attrs: FusedBatchNormAttrs = {varianceEpsilon};

  // tslint:disable-next-line:
  no-unnecessary-type-assertion
  const res = ENGINE.runKernel(
    FusedBatchNorm,
    inputs as {} as NamedTensorMap,
    attrs as {} as NamedAttrMap) as Tensor<R>;

  return reshape(res,
    x.shape);
}
```

Export

```javascript
import {Tensor1D, Tensor2D} from '../tensor';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import * as util from '../util';

import {batchNorm} from './batchnorm';
import {op} from './operation';

/**
 * Batch normalization, strictly for 2D. For the more relaxed version, see
 * `tf.batchNorm`.
 *
 * @param x The input
 * @param mean A mean Tensor.$n * @param variance A variance Tensor.$n * @param offset An offset
 * @param varianceEpsilon A small float number to avoid dividing by
 * @param doc [heading: 'Operations', subheading: 'Normalization']$n */

function batchNorm2d_(
  x: Tensor2D|TensorLike,
  mean: Tensor2D|Tensor1D|TensorLike,
  variance: Tensor2D|Tensor1D|TensorLike,
  offset?: Tensor2D|Tensor1D|TensorLike,
  scale?: Tensor2D|Tensor1D|TensorLike,
  varianceEpsilon?: number): Tensor2D {
  const $x = convertToTensor(x, 'x', 'batchNorm');
  const $mean = convertToTensor(mean, 'mean', 'batchNorm');
  const $variance = convertToTensor(variance, 'variance', 'batchNorm');
  let $scale: Tensor2D|Tensor1D;
  if (scale != null) {
    $scale = convertToTensor(scale, 'scale', 'batchNorm');
  }
  let $offset: Tensor2D|Tensor1D;
  if (offset != null) {
    $offset = convertToTensor(offset, 'offset', 'batchNorm');
  }

  util.assert(
    $mean.rank === $variance.rank,
    () => 'Batch normalization
    gradient requires mean and variance to have ' +
    'equal ranks.');
  util.assert(
    $offset == null ||
    $mean.rank === $offset.rank,
    () => 'Batch normalization
    gradient requires mean and offset to have ' +
    'equal ranks.');
  util.assert(
    $scale == null ||
    $mean.rank === $scale.rank,
    () => 'Batch normalization
    gradient requires mean and scale to have ' +
    'equal ranks.');

  const x4D: Tensor4D = xAs4D($x);

  const inputs: FusedBatchNormInputs = {
    x: x4D,
    scale: $scale,
    offset: $offset,
    mean: $mean,
    variance: $variance
  };

  const attrs: FusedBatchNormAttrs = {varianceEpsilon};

  // tslint:disable-next-line:
  no-unnecessary-type-assertion
  const res = ENGINE.runKernel(
    FusedBatchNorm,
    inputs as {} as NamedTensorMap,
    attrs as {} as NamedAttrMap) as Tensor2D;

  return reshape(res,
    x.shape);
  
```

Export

```javascript
// tslint:disable-next-line:
no-unnecessary-type-assertion
/*An*/ export const batchNorm2d = op(batchNorm2d_); // tslint:disable-disable-next-line: no-unnecessary-type-assertion
```

Export

```javascript
// tslint:disable-next-line:
no-unnecessary-type-assertion
/*An*/ export const batchNorm = op(batchNorm_); // tslint:disable-disable-next-line: no-unnecessary-type-assertion
```

Export
import * as util from '../util';

import {batchNorm} from './batchnorm';
import {op} from './operation';

/**
 * Batch normalization, strictly for 4D. For the more relaxed version, see tf.batchNorm.
 *
 * @param x The input Tensor.
 * @param mean A Mean Tensor.
 * @param variance A Variance Tensor.
 * @param offset An Offset Tensor.
 * @param scale A Scale Tensor.
 * @param varianceEpsilon A small float number to avoid dividing by 0.
 */
  const $x = convertToTensor(x, 'x', 'batchNorm');
  const $mean = convertToTensor(mean, 'mean', 'batchNorm');
  const $variance = convertToTensor(variance, 'variance', 'batchNorm');
  let $scale:
  Tensor4D|Tensor1D;
  if (scale != null) {
    $scale = convertToTensor(scale, 'scale', 'batchNorm');
  }
  let $offset:
  Tensor4D|Tensor1D;
  if (offset != null) {
    $offset = convertToTensor(offset, 'offset', 'batchNorm');
  }
  util.assert($x.rank === 4,
      () => `Error in batchNorm4D: x must be rank 4 but got rank ` +
        `$x.rank`.);
  util.assert($mean.rank === 4 || $mean.rank === 1,
      () => `Error in batchNorm4D: mean must be rank 4 or rank 1 but got rank ` +
        `$mean.rank`.);
  util.assert($variance.rank === 4 || $variance.rank === 1,
      () => `Error in batchNorm4D: variance must be rank 4 or rank 1 but got rank ` +
        `$variance.rank`.);
  if ($scale != null) {
    util.assert($scale.rank === 4 || $scale.rank === 1,
        () => `Error in batchNorm4D: scale must be rank 4 or rank 1 but got rank ` +
        `$scale.rank`.);
  }
  if ($offset != null) {
    util.assert($offset.rank === 4 || $offset.rank === 1,
        () => `Error in batchNorm4D: offset must be rank 4 or rank 1 but got rank ` +
        `$offset.rank`.);
  }
  return batchNorm($x, $mean, $variance, $offset, $scale, varianceEpsilon);
}

export const batchNorm4d = op({batchNorm4d_});

/**
 * Outputs a vector with length `size` and the same dtype as `weights`.
 *
 * If `weights` are empty, then index `i` stores the number of times the value
 * `i` is counted in `x`. If `weights` are non-empty, then index `i` stores the sum
 * of the value in `weights` at each index where the corresponding value in `x` is `i`.
 * `values` is `null` for the specific language governing permissions and
 * limitations under the License.
 */
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```
/*
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 */

import {ENGINE} from './engine';
import {Tile, TileAttrs, TileInputs} from './kernel_names';
import {NamedAttrMap} from './kernel_registry';
import {Tensor} from './tensor';
import {convertToTensor} from './tensor_util_env';
import {Rank, ShapeMap, TensorLike} from './types';
import {clone} from './clone';
import {reshape} from './reshape';

const xShape = input.shape;

let input = convertToTensor(x, 'broadcastTo', 'x');

if (shape.some(d => !(d > 0) || d % 1 !== 0)) {
  throw new Error(`broadcastTo(): Invalid broadcast shape [${shape}].`);
}

if (shape.length < input.rank) {
  throw new Error(`broadcastTo(): shape.length=${shape.length} < input.rank=${input.rank}.`);
}

if (shape.length > input.rank) {
  const newShape = input.shape.slice();
  while (newShape.length < shape.length) {
    newShape.unshift(1);
  }
  input = reshape(input, newShape);
}

const inputShape = input.shape;
const reps: number[] = Array.from(shape);
for (let i = shape.length - 1; i >= 0; i--) {
  if (inputShape[i] === shape[i]) {
    reps[i] = 1;
  } else if (inputShape[i] !== 1) {
    throw new Error(`broadcastTo(): Invalid broadcast shape [${inputShape}].`);
  }
}

const axes = reps.map((n, i) => n > 1 ? i : -1).filter(i => i >= 0);

if (axes.length === 0) {
  return clone(input) as Tensor;
}

// TODO call broadcastTo kernel directly once backends implement broadcastTo
const inputs: TileInputs = {x: input};
const attrs: TileAttrs = {reps};
return ENGINE.runKernel(Tile, inputs as {} as NamedTensorMap, attrs as unknown as NamedAttrMap);
```

```
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 *
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 */

import {ENGINE} from './engine';
import {Ceil, CeilInputs} from './kernel_names';
import {Tensor} from './tensor';
import {NamedTensorMap} from './kernel_registry';
import {convertToTensor} from './tensor_util_env';
import {TensorLike} from './types';

import {op} from './operation';

function ceil_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'Ceil');

  const inputs: CeilInputs = {x: $x};
  return ENGINE.runKernel(Ceil, inputs as {} as NamedTensorMap);
}
```

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* 
=============================================================================

`*/
import {ENGINE} from '../engine';
import {ClipByValue, ClipByValueAttrs, ClipByValueInputs} from
'../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import * as util from '../util';

import {op} from './operation';

/**
 * Clips values element-wise. `max(min(x, clipValueMax), clipValueMin)`
 *
 * ```js
 * const x = tf.tensor1d([-1, 2, 3, 4]);
 *
 * x.clipByValue(-2, 3).print(); // or tf.clipByValue(x, -2, 3)
 * ```
 * @param x The input tensor.
 * @param clipValueMin Lower-bound of range to be clipped to.
 * @param clipValueMax Upper-bound of range to be clipped to.
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function clipByValue_<T extends Tensor>(
    x: T|TensorLike, clipValueMin: number, clipValueMax: number): T {
  const $x = convertToTensor(x, 'x', 'clipByValue');
  util.assert(
      (clipValueMin <= clipValueMax),
      () => `Error in clip: min (${clipValueMin}) must be ` +
          `less than or equal to max (${clipValueMax}).`);

  const inputs:
      ClipByValueInputs = {x: $x};
  const attrs: ClipByValueAttrs = {clipValueMin, clipValueMax};

  return
    ENGINE.runKernel(
        ClipByValue, inputs as {} as NamedTensorMap, attrs as {} as
        NamedAttrMap);
}

export const clipByValue = op({clipByValue_});

import {Tensor1D} from '../tensor';
import {TensorLike} from '../types';

import {concat} from
'./concat';
import {op} from './operation';

/**
 * Concatenates a list of `tf.Tensor1D`s along an axis. See
 * `concat` for details.
 * @param tensors A list of `tf.Tensor`s to concatenate.
 * @return The concatenated array.
 */
function concat1d_(tensors: Array<Tensor1D|TensorLike>): Tensor1D {
  return
    concat(tensors, 0 /* axis */);
}

export const concat1d = op({concat1d_});

import {Tensor2D} from '../tensor';
import {TensorLike} from '../types';

import {concat} from
'./concat';
import {op} from './operation';

/**
 * Concatenates a list of `tf.Tensor2D`s along an axis. See
 * `concat` for details.
 * @param tensors A list of `tf.Tensor`s to concatenate.
 * @param axis The axis to concatenate along.
 * @return The concatenated array.
 */
function concat2d_(
    tensors: Array<Tensor2D|TensorLike>, axis: number): Tensor2D {
  return
    concat(tensors, axis);
}

export const concat2d = op({concat2d_});

* An import declaration is used to declare the imports and
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* 
=============================================================================
agreed to in writing, software\n * distributed under the License is distributed on an \"AS IS\" BASIS,\n * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.\n * See the License for the specific language governing permissions and\n * limitations under the License.\n *
=============================================================================
*/
import {Tensor3D} from '../tensor';
import {TensorLike} from '../types';

import {concat} from './concat';
import {op} from './operation';

/**
 * Concatenates a list of `tf.Tensor3D`s along an axis.\n * See \n * for details.\n * For example, if: A: shape(2, 1, 3) = | r1, g1, b1 |\n * B: shape(2, 1, 3) = | r3, g3, b3 |\n * C = tf.concat3d([A, B], axis)\n * if axis =\n * 0:\n * C: shape(4, 1, 3) = | r1, g1, b1 |\n * | r2, g2, b2 |\n * | r3, g3, b3 |\n * | r4, g4, b4 |\n * if axis = 1:\n * C: shape(2, 2, 3) = | r1, g1, b1, r3, g3, b3 |\n * | r2, g2, b2, r4, g4, b4 |\n * if axis = 2:\n * C: shape(2, 1, 6) = | r1, g1, b1, r3, g3, b3 |\n * | r2, g2, b2, r4, g4, b4 |\n * @param tensors A list of `tf.Tensor`\s to concatenate.\n * @param axis The axis to concat along.\n * @return The\n * concatenated array.\n */\nfunction concat3d_(\n    tensors: Array<Tensor3D|TensorLike>, axis: number): Tensor3D {
  return concat(tensors, axis);
}

export const concat3d = op({concat3d_});

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=============================================================================
*/
import {Tensor4D} from '../tensor';
import {TensorLike} from '../types';

import {concat} from './concat';
import {op} from './operation';

/**
 * Concatenates a list of `tf.Tensor4D`s along an axis.\n * See \n * for details.\n * @param tensors A list of `tf.Tensor`\s to concatenate.\n * @param axis The axis to concat along.\n * @return The\n * concatenated array.\n */
function concat4d_(\n    tensors: Array<Tensor4D|TensorLike>, axis: number): Tensor4D {
  return concat(tensors, axis);
}

export const concat4d = op({concat4d_});

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=============================================================================
*/
import {ENGINE} from '../engine';
import {Conv2D, Conv2DAttrs, Conv2DInputs} from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor3D, Tensor4D} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import * as util from '../util';

import * as conv_util from './conv_util';
import {op} from './operation';
import {reshape} from './reshape';

/**
 * Computes a 2D convolution over the input x.\n *
 * @param x The input tensor, of rank 4 or rank 3, of shape\n * \[batch, height,\n * width, inChannels\]. If rank 3, batch of 1 is \n * assumed.\n * @param filter The filter, rank 4, of shape\n * \[filterHeight, filterWidth, inDepth, outDepth\]. \n * @param strides The strides of the convolution: \n * \[strideHeight,\n * strideWidth\].\n * @param pad The type of padding algorithm.\n * @param same and stride 1: output will be of same\n * size as input, \n * regardless of filter size.\n * \`valid\' output will be smaller than input if filter is larger\n * than 1x1.\n * - For more info, see this guide:\n * [https://www.tensorflow.org/api_guides/python/nn#Convolution]\n * https://www.tensorflow.org/api_guides/python/nn#Convolution\n * @param dataFormat: An optional string from:\n * \"NHWC\", \"NCHW\". Defaults to\n * \"NHWC\". Specify the data format of the input and output data. With

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the default format "NHWC", the data is stored in the order of: [batch, height, width, channels].

* @param dilations The dilation rates: [dilationHeight, dilationWidth] in which we sample input values across the height and width dimensions in atrous convolution. Defaults to [1, 1]. If `dilations` is a single number, then `dilationHeight == dilationWidth`. If it is greater than 1, then all values of `strides` must be 1.

* @param dimRoundingMode A string from: 'ceil', 'round', 'floor'. If none is provided, it will default to truncate.

* @doc {heading: 'Operations', subheading: 'Convolution'}

```typescript
function conv2d_<T extends Tensor3D|Tensor4D>(
    x: T|TensorLike, filter: Tensor4D|TensorLike,
    strides: [number, number]|number,
    pad: 'valid'|'same'|number|conv_util.ExplicitPadding,
    dataFormat: 'NHWC'|'NCHW' = 'NHWC',
    dilations: [number, number]|number = [1, 1],
    dimRoundingMode?: 'floor'|'round'|'ceil'):
```

```typescript
ENGINE.runKernel(
```
```typescript
Conv2D, inputs as {} as NamedTensorMap,
```
```typescript
attrs as {} as NamedAttrMap)
```
Tensor2D<Tensor3D>(x: TensorLike, filter: Tensor3D<TensorLike>, stride: number, pad: 'valid'|'same'|number) {
  conv_util.ExplicitPadding.x
  dataFormat: 'NWC'|'NCW' = 'NWC', dilation = 1,
  dimRoundingMode?: 'floor'|'round'|'ceil': T {
    \n    const $x = convertToTensor(x, 'x', 'conv1d');
    const $filter = convertToTensor(filter, 'filter', 'conv1d');
    \n    const x3D = $x as Tensor3D;
    const reshapedTo3D = false; if ($x.rank === 2) {
      reshapedTo3D = true; \n      x3D = reshape($x, [1, $x.shape[0], $x.shape[1]]); \n    } \n    util.assert($x3D.rank === 3, \n      () => `Error in conv1d: input must be rank 3, but got rank $({$x3D.rank}).`);
    util.assert($filter.rank === 3, \n      () => `Error in conv1d: filter must be rank 3, but got rank $({$filter.rank}).`);
    if (dimRoundingMode !== null) {
      util.assert(util.isInt(pad as number), \n        () => `Error in conv1d: pad must be an integer when using, dimRoundingMode: $({dimRoundingMode}) but got pad $({pad}).`);
    }
    util.assert($x3D.shape[2] === $filter.shape[0], \n      () => `Error in conv1d: input depth must match the filter $({$filter.shape[0]}).`);
    util.assert($conv_util.eitherStridesOrDilationsAreOne(stride, dilation), \n      () => 'Error in conv1D: Either stride or dilation must be 1.' +
        `Got stride $({{strate}}) and dilation $({{dilation}}).`);
    \n    const filter4D = reshape($filter, [1, $filter.shape[0], $filter.shape[1], $filter.shape[2]]);
    const input4D = reshape($x3D, [1, $x3D.shape[0], $x3D.shape[1], $x3D.shape[2]]);
    const strides: [number, number] = [1, stride];
    const dilations: [number, number] = [1, dilation];
    const res = conv2d(input4D as Tensor4D, (filter4D as Tensor4D), strides, pad, conv2dDataFormat, dilations, dimRoundingMode);
    if (reshapedTo3D) {
      return reshape(res, [res.shape[2], res.shape[3]]) as T;
    }
    return reshape(res, [res.shape[0], res.shape[2], res.shape[3]]) as T;
  }
}

export const conv1d = op({conv1d_});

```
(dy.rank === 3) {
  reshapedTo4D = true;
  dy4D = reshape(dy, [1, dy.shape[1], dy.shape[1], dy.shape[2]]);
}
xShape4D = [1, xShape[0], xShape[1], xShape[2]];

util.assert(xShape4D.length === 4, () => 'Error in conv2dDerInput: inShape must be length 4, but got ' + xShape4D.length + ' =>

  dy4D.rank === 4, () => 'Error in conv2dDerInput: dy must be rank 4, but got ' + dy4D.rank + ' =>

  filter.rank === 4, () => 'Error in conv2dDerInput: filter must be rank 4, but got ' + filter.rank + ' =>

  const inDepth = dataFormat === 'NHWC' ? xShape4D[3] : xShape4D[1];


  util.assert(inDepth === filter.shape[2], () => 'Error in conv2dDerInput: depth of input (${inDepth}) must match input depth for filter ${filter.shape[2]}.')

  util.assert(outDepth === filter.shape[3], () => 'Error in conv2dDerInput: depth of output (${outDepth}) must match output depth for filter ${filter.shape[3]}.')

  util.assert(strides.length === 2, () => 'Error in conv2dDerInput: strides must be length 2, but got ' + strides.length + ' =>

  pad isInt(pad as number), () => 'Error in conv2dDerInput: pad must be an integer when using, pad ' + pad + ' =>

  dataFormat === 'NHWC', () => 'Error in conv2dDerInput: dataFormat must be ' + 'NHWC'.

  const inputs: Conv2DBackpropInputInputs = {dy: dy4D, filter};

  const attrs: Conv2DBackpropInputAttrs =
      {strides, pad, dataFormat, dimRoundingMode, inputShape: xShape4D};

  // tslint:disable-next-line: no-unnecessary-type-assertion
  const res = ENGINE.runKernel(Conv2DBackpropInput, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap) as T;

  if (reshapedTo4D) {
    return reshape(res, [res.shape[1], res.shape[2], res.shape[3]]) as T;
  }
  return res;
}

export const conv2DBackpropInput = op({conv2DBackpropInput_});

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 *
 *=============================================================================
 */
import {Tensor3D, Tensor4D} from '../tensor';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {conv2DBackpropInput} from './conv2d_backprop_input';
import {op} from './operation';

/**
 * Computes the transposed 2D convolution of an image, also known as a
 * deconvolution.
 *
 * @param x The input image, of rank 4 or rank 3, of shape
 *   `[batch, height, width, inDepth]`. If rank 3, batch of 1 is assumed.
 * @param filter The filter, rank 4, of shape
 *     `[filterHeight, filterWidth, outDepth, inDepth]`.
 *     `inDepth` must match `inDepth` in `x`.
 * @param outputShape Output shape, of rank 4 or rank 3:
 *     `[batch, height, width, outDepth]`. If rank 3, batch of 1 is assumed.
 * @param strides The strides of the original convolution:
 *     `[strideHeight, strideWidth]`.
 * @param pad The type of padding algorithm used in the non-transpose version
 *     of the op. `pad` must match inDepth in `x`.
 * @param dimRoundingMode A string from:
 *     'ceil', 'round', 'floor'. If none is provided, it will default to truncate.
 * @param conv2dBackpropInput
 *
 * @doc {heading: 'Operations',
 *     subheading: 'Convolution'}
 */
function conv2dTranspose_<T extends Tensor3D|Tensor4D>(
    x: T|TensorLike, filter: Tensor4D|TensorLike,
    outputShape: [number, number, number, number],
    strides: [number, number, number, number],
    pad: 'valid'|'same'|number,
    dimRoundingMode?:
        'ceil'|'round'|'floor':
    T {
      const $x = convertToTensor(x, 'x', 'conv2dTranspose');
      const $filter = convertToTensor(filter, 'filter', 'conv2dTranspose');

      // tslint:disable-next-line: no-unnecessary-type-assertion
      const inputs = 
          { dy: $x, filter: $filter, outputShape: outputShape, strides: strides, pad: pad, dimRoundingMode: dimRoundingMode }; // utilities

      const attrs = 
          { strides, pad, dimRoundingMode, outputShape, x: $x, $filter: $filter, outputShape: outputShape, strides: strides, pad: pad, dimRoundingMode };

      const res = ENGINE.runKernel(Conv2DBackpropInput, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap) as T;

      return res;
}

export const conv2dTranspose = op({conv2dTranspose_});

*/

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 */

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*/

import {ENGINE} from '../engine';
import {Conv3D, Conv3DAttrs, Conv3DInputs} from
  '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor4D, Tensor5D} from
  '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from
  '../tensor_util_env';
import {TensorLike} from '../types';
import * as util from '../util';

import {eitherStridesOrDilationsAreOne} from './conv_util';
import {op} from './operation';
import {reshape} from
  './reshape';

/**
 * Computes a 3D convolution over the input x.
 *
 * @param x The input tensor, of rank 5 or
 * rank 4, of shape
 * [batch, depth, height, width, channels]. If rank 4, x
 * * batch of 1 is assumed.
 * @param filter The filter, rank 5, of shape
 * [filterDepth, filterHeight, filterWidth, inChannels, outChannels].
 * inChannels must match between input and filter.
 * @param strides The strides of the convolution: [strideDepth,
 * strideHeight, strideWidth].
 * @param pad The type of padding algorithm.
 * - `same` and stride 1: output will be of same size as input,
 * regardless of filter size.
 * - `valid`: output will be smaller than input if filter
 * is larger than 1.
 * @param dataFormat: An optional string from:
 * "NDHWC", "NCDHW". Defaults to "NDHWC". Specify the data format of the input and output data.
 * With the default format "NDHWC", the data is stored in the order of: [batch, depth, height, width, channels].
 * Only "NDHWC" is currently supported.
 * @param dilations The dilation rates: [dilationDepth,
 * dilationHeight, dilationWidth] in which we sample input values across the height and width
 * dimensions in atrous convolution.
 * @doc {heading: 'Operations', subheading: 'Convolution'}
 */
function conv3d_<T extends
  Tensor4D|Tensor5D>(
    x: T|TensorLike, filter: Tensor5D|TensorLike,
    strides: [number, number, number],
    pad: 'valid'|'same',
    dataFormat: 'NDHWC'|'NCDHW' = 'NDHWC',
    dilations: [number, number, number] = [1, 1, 1]): T {
  const $x = convertToTensor(x, 'x', 'conv3d');
  const $filter = convertToTensor(filter, 'filter', 'conv3d');

  let x5D = $x as Tensor5D;
  let reshapedTo5D = false;

  if ($x.rank === 4) {
    reshapedTo5D = true;
    x5D = reshape($x, [1, $x.shape[0], $x.shape[1], $x.shape[2], $x.shape[3]]);
  }
  util.assert(
      x5D.rank === 5,
      () => `Error in conv3d: input must be rank 5, but got rank ${x5D.rank}.`);
  util.assert(
      $filter.rank === 5,
      () => `Error in conv3d: filter must be rank 5, but got rank ${$filter.rank}.`);
  util.assert(
      x5D.shape[4] === $filter.shape[3],
      () => `Error in conv3d: depth of input (${x5D.shape[4]}) must match depth of filter ${$filter.shape[3]}.`);

  const inputs: Conv3DInputs = {x: x5D, filter: $filter};

  const attrs: Conv3DAttrs = {
    strides, pad, dataFormat, dilations,
  };

  // tslint:disable-next-line: no-unnecessary-type-assertion
  const res = ENGINE.runKernel(
                  Conv3D, inputs as {} as NamedTensorMap,
                  attrs as {} as
                  NamedAttrMap) as T;

  if (reshapedTo5D) {
    return reshape(res, [res.shape[0], res.shape[1], res.shape[2], res.shape[3], res.shape[4]]);
  }
  return res;
}

export const conv3d = op({conv3d_});
*/

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 * limitations under the License.
 *
/**
 * Computes the derivative of the input of a 3D convolution.
 * @param xShape The shape of the input:
 * [batch, depth, height, width, \* in_channels].
 * If length of 4, batch of 1 is assumed.
 * @param dy The derivative of the output of rank 5 or rank 4 of shape:
 * [batch, outDepth, outHeight, outWidth, \* in_channels].
 * If rank 4, batch of 1 is assumed.
 * @param filter The filter, rank 5, of shape:
 * \[filterDepth, filterHeight, filterWidth, \* outputChannels\].
 * @param strides The strides of the convolution:
 * \[strideDepth, strideHeight, \* strideWidth\].
 * @param pad The type of padding algorithm used:
 * \`same\` and stride 1: output will be of
 * same size as input.
 * \`valid\`: output will be smaller than input if filter is
 * larger.
 * @param dy rank of dy ($\{dy.rank\}$) must match xShape rank
 * let xShape5D = xShape as [number, number, number, \* number]
 * let dy5D = dy as
 * Tensor5D let reshapedTo5D = false
 * if (dy.rank === 4) { reshapedTo5D = true; dy5D = reshape(dy, [1, dy.shape[0], dy.shape[1], dy.shape[2], dy.shape[3]]); xShape5D = [1, xShape[0], xShape[1], xShape[2], xShape[3]]; } let const inDepth = xShape5D[4]; const outDepth = dy5D.shape[4]; util.assert(in
 * xShape5D.length === 5, () => `Error in conv3dDerInput: inShape must be length 5, but got length \`+n
 * \`+n
 * Error in conv3dDerInput: dy must be rank 5, but got \`+n
 * Error in conv3dDerInput: input depth for filter \`+n
 * Error in conv3dDerInput: depth of output ($\{outDepth\}$) must match output depth for filter
 * const inputs: Conv3DBackpropInputV2Inputs = [dy, dy5D, filter, \* const atts]; Conv3DBackpropInputV2Attr = {pad, strides, xShape5D};
 * if (reshapedTo5D) {
 * return reshape(res, [res.shape[1], res.shape[2], res.shape[3], res.shape[4]]));
 * } return
 */

---

```
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```
number, number, number] [number, number, number, number, number]. strides: [number, number, number] [number, number, number] strides. valid: [same] T {[:, const $x = convertToTensor(x, 'x', 'conv3dTranspose'); const $filter = convertToTensor(filter, 'filter', 'conv3dTranspose'); return conv3DBackpropInput(outputShape, $x, $filter, strides, pad); $x} export const conv3dTranspose = op([conv3dTranspose_]); /* @license Copyright 2018 Google LLC. All Rights Reserved.* @license Copyright 2018 Google LLC. All Rights Reserved.*/

import {ENGINE} from '../engine';
import {Cos, CosInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {op} from './operation';

/**
 * Computes cos of the input `tf.Tensor` element-wise: `cos(x)`
 *
 * ```js
 * const x = tf.tensor1d([0, Math.PI / 2, Math.PI * 3 / 4]);
 * x.cos().print(); // or tf.cos(x).print();
 * ```
 * @param x The input tensor.
 *
 * @doc {heading: 'Basic math', subheading: 'Basic math'}
 */
function cos_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'cos');

  const inputs: CosInputs = {x: $x};

  return ENGINE.runKernel(Cos, inputs as {} as NamedTensorMap);
}
export const cos = op({cos_});

/**
 * Computes hyperbolic cos of the input `tf.Tensor` element-wise: `cosh(x)`
 *
 * ```js
 * const x = tf.tensor([0, 1, -1, 0.7]);
 * x.cosh().print(); // or tf.cosh(x).print();
 * ```
 * @param x The input tensor.
 *
 * @doc {heading: 'Basic math', subheading: 'Basic math'}
 */
function cosh_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'cosh');
  const inputs: CoshInputs = {x: $x};

  return ENGINE.runKernel(Cosh, inputs as {} as NamedTensorMap);
}
export const cosh = op({cosh_});

/**
 * Computes the cumulative sum of a `tf.Tensor` along `axis`.
 *
 * ```js
 * const x = tf.tensor([1, 2, 3, 4]);
 * x.cumsum().print();
 * ```
 * ```js
 * const x = tf.tensor([[[1, 2], [3, 4]]];
 * x.cumsum().print();
 * ```
 *
 * @param x The input tensor to be summed.
 * @param axis The axis along which to sum. Optional. Defaults to 0.
 *
 * @doc {heading: 'Basic math', subheading: 'Basic math'}
 */
function cumsum_<T extends Tensor>(x: T|TensorLike, axis: number, exclusive: false): T {
  const $x = convertToTensor(x, 'x', 'cumsum');
  const $axis = convertToTensor(axis, 'axis', 'cumsum');

  const inputs: CumsumAttrs = {x: $x, axis: $axis};

  return ENGINE.runKernel(Cumsum, inputs as {} as NamedAttrMap);
}
export const cumsum = op({cumsum_});

/**
 * Computes the cumulative sum of a `tf.Tensor` along `axis`.
 *
 * ```js
 * const x = tf.tensor([[0, 1, 2], [3, 4, 5]]);
 * x.cumsum().print();
 * ```
 * ```js
 * const x = tf.tensor([[[0, 1, 2], [3, 4, 5]]];
 * x.cumsum().print();
 * ```
 *
 * @param x The input tensor.
 * @param axis The axis along which to sum. Optional. Defaults to 0.
 * @param exclusive Whether to...
perform exclusive cumulative sum. Optional. * Defaults to false. If set to true then the sum of each tensor entry
* does not include its own value, but only the values previous to it.* along the specified axis.* @param reverse Whether to sum in the opposite direction. Optional. * Defaults to false.* * @doc
heading: 'Operations', subheading: 'Scan'\n* In function cumsum<T extends Tensor>(\n  x: Tensor|TensorLike, axis = 0, exclusive = false, reverse = false): T {
  \n  const $x = convertToTensor(x, 'x', 'cumsum');
  \n  return ENGINE.runKernel<
    Cumsum, inputs as {} as NamedTensorMap, attr as {} as NamedAttrMap>($x)
  \n  const cumsum = op((cumsum_));$x, */ * @license
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=============================================================================

import {ENGINE} from '../engine';
import {DepthToSpace, DepthToSpaceAttrs, DepthToSpaceInputs} from
../kernel_names';import {NamedAttrMap} from '../kernel_registry';import {Tensor4D} from '../tensor';import
{NamedTensorMap} from '../tensor_types';import {convertToTensor} from '../tensor_util_env';import * as util from '../util';

import {ENGINE, DENSEBINCOUNT} from '../engine';
import {DenseBincount, DenseBincountAttrs, DenseBincountInputs} from
../kernel_names';import {NamedAttrMap} from '../kernel_registry';import {Tensor1D, Tensor2D} from
../tensor';import {NamedTensorMap} from '../kernel_types';import {TensorLike} from '../types';import * as op from '../operation';import
{convertToTensor} from '../tensor_util_env';

export const denseBincount = op({denseBincount_});

```javascript
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=============================================================================
```
Rearranges data from depth into blocks of spatial data. More specifically, this op outputs a copy of the input tensor where values from the `depth` dimension are moved into spatial blocks to the `height` and `width` dimensions. The `blockSize` indicates the input block size and how the data is moved. - Chunks of data of size `blockSize` from depth are rearranged into non-overlapping blocks of size `blockSize x blockSize`.

- The width output tensor is `inputWidth * blockSize`, whereas the height output tensor is `inputHeight * blockSize`. 

- The `blockSize` parameter specifies the size of the spatial blocks.

- The `dataFormat` attribute specifies the layout of the input and output tensors with the following options: "NHWC": [batch, height, width, channels] `\n` "NCHW": [batch, channels, height, width] `\n` - The depth of the input tensor must be divisible by `blockSize`.

- The `inputHeight` and `inputWidth` values within each block of the output image are determined by the high order component of the input channel index.

- The `dataFormat` attribute specifies the layout of the input and output tensors with the following options: "NHWC": [batch, height, width, channels] `\n` "NCHW": [batch, channels, height, width] `\n` - 

```javascript
const x = tf.tensor4d([1, 2, 3, 4], [1, 1, 1, 4]);
const blockSize = 2;
const dataFormat = 'NHWC';

const y = tf.depthToSpace(x, blockSize, dataFormat);
```

@doc {heading:'Tensors', subheading:'Transformations'}
*/

```javascript
import {ENGINE} from '../engine';
import {DepthwiseConv2dNative, DepthwiseConv2dNativeAttrs, DepthwiseConv2dNativeInputs} from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor3D, Tensor4D} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

export const depthwiseConv2dNative = op({
    name: 'depthwiseConv2dNative',
    view: DepthwiseConv2dNative,
    kernel: DepthwiseConv2dNative,
    input: DepthwiseConv2dNativeInputs
});
```
channelMultiplier].
* @param strides The strides of the convolution: `\[[\text{strideHeight}, \text{strideWidth}]\]`. If strides is a single number, then `\text{strideHeight} == \text{strideWidth}`.
* @param pad The type of padding algorithm:
  - `\text{same}` and stride 1: output will be of same size as input,
  - `\text{valid}`: output will be smaller than input if filter is larger than 1x1.
* @param dataFormat: An optional string from: `\"NHWC\", \"NCHW\"`. Defaults to `\"NHWC\"`. Specify the data format of the input and output data. With the default format `\"NHWC\"`, the data is stored in the order of: `[batch, height, width, channels]`. Only `\"NHWC\"` is currently supported.
* @param dimRoundingMode A string from: `\"ceil\", \"round\", \"floor\"`. If none is set, it will be default to truncate.
* @param diags The diagonal values.

```js
const x = tf.tensor1d([1, 2, 3, 4]);
const y = tf.diag(x);
```

### Description

The `depthwiseConv2d` function performs a depthwise convolution on the input tensor `x` using the filter tensor `filter`.

#### Parameters

- `x`: The input tensor.
- `filter`: The filter tensor.
- `strides`: The strides of the convolution.
- `pad`: The type of padding algorithm.
- `dataFormat`: The data format of the input and output.
- `dilations`: The dilation rates.
- `dimRoundingMode`: The rounding mode for dimensions.

#### Outputs

- A tensor representing the result of the depthwise convolution.

### Examples

#### Example 1

```js
const x = tf.tensor4d([1, 2, 3, 4, 5, 6, 6, 8], [4, 2]);
const y = tf.diag(x); // Returns a diagonal tensor
```

#### Example 2

```js
const x = tf.tensor4d([1, 2, 3, 4], [2, 2]);
const y = tf.conv2d(x, y, [1, 1], 'valid', 'NHWC'); // Performs convolution
```

### Notes

- The `depthwiseConv2d` function is used in various machine learning applications where depthwise convolutions are required.
- The function can be used with different padding types, strides, and data formats.

---

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const diag = op((diag_));

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 */

import {ENGINE} from '../engine';
import {Dilation2D, Dilation2DAttrs, Dilation2DInputs} from '../kernel_names';
import {Tensor3D, Tensor4D} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import * as util from '../util';

import {op} from './operation';
import {reshape} from './reshape';

/**
 * Computes the grayscale dilation over the input `x`.
 * @param x The input tensor, rank 3 or rank 4 of shape `[batch, height, width, inChannels]`. If rank 3, batch of 1 is assumed.
 * @param filter The filter tensor, rank 3, of shape `[filterHeight, filterWidth, depth]`.
 * @param strides The strides of the sliding window for each dimension of the input tensor: `[strideHeight, strideWidth]`.
 * If `strides` is a single number, then `strideHeight == strideWidth`. pad The type of padding algorithm.
 * 'same' and stride 1: output will be of same size as input; `x` regardless of filter size.
 * 'valid': output will be smaller than input if filter is larger than 1 x 1 x 1.
 * For more info, see this guide: [https://www.tensorflow.org/api_guides/python/nn#Convolution](https://www.tensorflow.org/api_guides/python/nn#Convolution)
 * @doc {heading: 'Operations', subheading: 'Convolution'}
 */
function dilation2d_<T extends Tensor3D|Tensor4D>(
    x: T|TensorLike, filter: Tensor3D|TensorLike,
    strides: [number, number]|number,
    pad: 'valid' |'same',
    dilations: [number, number]|number = [1, 1],
    dataFormat: 'NHWC' = 'NHWC'): T {
  const $x = convertToTensor(x, 'x', 'dilation2d');
  const $filter = convertToTensor(filter, 'filter', 'dilation2d');

  util.assert($x.rank === 3 || $x.rank === 4,
    () => `Error in dilation2d: input must be rank 3 or 4, but got rank ` +
      `${$x.rank}.`);
  util.assert($filter.rank === 3,
    () => `Error in dilation2d: filter must be rank 3, but got rank ` +
      `${$filter.rank}.`);
  util.assert(dataFormat === 'NHWC',
    () => `Error in dilation2d: Only NHWC is currently supported, ` +
      `but got dataFormat of ${dataFormat}`);

  let x4D = $x as Tensor4D;
  let reshapedTo4D = false;

  if ($x.rank === 3) {
    x4D = reshape($x, [1, $x.shape[0], $x.shape[1], $x.shape[2]]);
    reshapedTo4D = true;
  }

  const inputs: Dilation2DInputs = {x: x4D, filter: $filter};
  const attrs: Dilation2DAttrs = {strides, pad, dilations};

  // tslint:disable-next-line: no-unnecessary-type-assertion
  const res = ENGINE.runKernel(Dilation2D, inputs as {} as NamedTensorMap,
    attrs as {} as NamedAttrMap) as T;

  if (reshapedTo4D) {
    return reshape(res, [res.shape[1], res.shape[2]]) as T;
  }

  return res;
}

export const dilation2d = op({dilation2d_});

/**
 * Returns the dimensions in the input shape that are broadcasted to the output.
 */

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function getBroadcastDims(inShape: number[], outShape: number[]): number[] {
    const inRank = inShape.length;
    const dims: number[] = [];
    for (let i = 0; i < inRank; i++) {
        const dim = inRank - 1 - i;
        const a = inShape[dim] || 1;
        const b = outShape[outShape.length - 1 - i] || 1;
        if (b > 1 & a === 1) {
            dims.unshift(dim);
        }
    }
    return dims;
}

function getReductionAxes(inShape: number[], outShape: number[]): number[] {
    const result: number[] = [];
    for (let i = 0; i < outShape.length; i++) {
        const inDim = inShape[inShape.length - i - 1];
        const outAxis = outShape.length - i - 1;
        const outDim = outShape[outAxis];
        if (inDim === 1 & outDim > 1) {
            result.unshift(outAxis);
        }
    }
    return result;
}

function assertAndGetBroadcastShape(shapeA: number[], shapeB: number[]): number[] {
    const result: number[] = [];
    const l = Math.max(shapeA.length, shapeB.length);
    for (let i = 0; i < l; i++) {
        let a = shapeA[shapeA.length - i - 1];
        if (a == null) {
            a = 1;
        }
        let b = shapeB[shapeB.length - i - 1];
        if (b == null) {
            b = 1;
        }
        if (a === 1) {
            result.unshift(b);
        } else if (b === 1) {
            result.unshift(a);
        } else if (a !== b) {
            const errMsg = `Operands could not be broadcast together with shapes ` +
                `${shapeA} and ${shapeB}.`;
            throw Error(errMsg);
        } else {
            result.unshift(a);
        }
    }
    return result;
}

import {ENGINE} from '../engine';
import {Equal, EqualInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {makeTypesMatch} from '../tensor_util';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import {assert} from '../util';

import {broadcastTo} from './broadcast_to';
import {assertAndGetBroadcastShape} from './broadcast_util';
import {op} from './operation';

function equal<T extends Tensor>(a: Tensor|TensorLike, b: Tensor|TensorLike): T {
    let $a = convertToTensor(a, 'a', 'equal');
    let $b = convertToTensor(b, 'b', 'equal');
    [$a, $b] = makeTypesMatch($a, $b);

    assertAndGetBroadcastShape($a.shape, $b.shape);

    const inputs: EqualInputs = {a: $a, b: $b};

    return ENGINE.runKernel(Equal, inputs as {} as NamedTensorMap);
}

export const equal = op({equal_});

import {ENGINE} from '../engine';
import {Select, SelectInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import {assert, assertShapesMatch} from '../util';

import {broadcastTo} from './broadcast_to';
import {assertAndGetBroadcastShape} from './broadcast_util';
import {op} from './operation';

function equal_<T extends Tensor>(a: Tensor|TensorLike, b: Tensor|TensorLike): T {
    let a = convertToTensor(a, 'a', 'equal');
    let b = convertToTensor(b, 'b', 'equal');
    if (a == null) {
        a = 1;
    }
    if (b == null) {
        b = 1;
    }
    if (a === 1) {
        return ENGINE.runKernel(Select, inputs as {} as NamedTensorMap);
    }
    else if (b === 1) {
        return ENGINE.runKernel(Select, inputs as {} as NamedTensorMap);
    }
    else if (a !== b) {
        const errMsg = `Operands could not be broadcast together with shapes ` +
            `${a} and ${b}.`;
        throw Error(errMsg);
    }
    else {
        return ENGINE.runKernel(Select, inputs as {} as NamedTensorMap);
    }
}

export const select = op({select_});
If the condition is true, select from `a`, otherwise select from `b`.

```js
const cond = tf.tensor1d([false, false, true], 'bool');
const a = tf.tensor1d([1, 2, 3]);
const b = tf.tensor1d([-1, -2, -3]);
const a.where(cond, b).print();
```

@doc {heading: 'Operations', subheading: 'Logical'}
```typescript
function where_<T extends Tensor>(
    condition: Tensor|TensorLike, a: T|TensorLike, b: T|TensorLike): T {
    const $a = convertToTensor(a, 'a', 'where');
    const $b = convertToTensor(b, 'b', 'where');
    const $condition = convertToTensor(condition, 'condition', 'where', 'bool');

    // TODO: move this logic to forward function when the broadcastTo op is
    // implemented in WASM.
    // Find the broadcastable shape for $a and $b.
    const broadcastShape = assertAndGetBroadcastShape($a.shape, $b.shape);
    const $broadcastedA = broadcastTo($a, broadcastShape);
    const $broadcastedB = broadcastTo($b, broadcastShape);

    if ($condition.rank === 1) { // $condition is rank 1, `a` may have a higher rank but
        assert($a.shape[0] === $condition.shape[0], () => 'The first dimension of `a` must match the size of `condition`.');
    }

    if ($condition.rank !== 1) { // Must have the same shape as condition.
        assertShapesMatch($condition.shape, $broadcastedB.shape, 'Error in where: ');
    }

    const inputs: SelectInputs = {
        condition: $condition,
        t: $broadcastedA,
        e: $broadcastedB
    };
    return ENGINE.runKernel(Select, inputs as unknown as NamedTensorMap);
}
```

@doc {heading: 'Tensors', subheading: 'Creation'}
```typescript
function zerosLike_<T extends Tensor>(x: T|TensorLike): T {
    const $x = convertToTensor(x, 'x', 'zerosLike');
    const inputs: ZerosLikeInputs = {x: $x};
    return ENGINE.runKernel(ZerosLike, inputs as {} as NamedTensorMap);
}
```

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function elu_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'elu');

  const inputs: EluInputs = {x: $x};

  return ENGINE.runKernel(Elu, inputs as {} as NamedTensorMap);
}

export const elu = op({elu_});

function erf_<T extends Tensor>(x: T|TensorLike): T {
  let $x = convertToTensor(x, 'x', 'erf');
  util.assert(
      $x.dtype === 'int32' || $x.dtype === 'float32',
      () => 'Input dtype must be `int32` or `float32`.');

  if ($x.dtype === 'int32') {
    $x = cast($x, 'float32');
  }

  const inputs: ErfInputs = {x: $x};
  return ENGINE.runKernel(Erf, inputs as {} as NamedTensorMap);
}
export const erf = op({erf_});

function exp_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'exp');

  const inputs: ExpInputs = {x: $x};
  return ENGINE.runKernel(Exp, inputs as {} as NamedTensorMap);
}
export const exp = op({exp_});
tensor whose dimensions to be expanded.

@type axis The dimension index at which to insert shape of `1`.

Defaults

- to 0 (the first dimension).

@type axis The dimension index at which to insert shape of `1`.

Defaults

- to 0 (the first dimension).

@doc {heading: 'Tensors', subheading: 'Transformations'}

```typescript
function expandDims_<T extends Tensor>(x: Tensor|TensorLike, axis = 0): T {
  const $x = convertToTensor(x, 'x', 'expandDims', 'string_or_numeric');

  util.assert(axis <= $x.rank, () => 'Axis must be <= rank of the tensor');

  const inputs: ExpandDimsInputs = {input: $x};
  const attrs: ExpandDimsAttrs = {dim: axis};

  return ENGINE.runKernel(
    ExpandDims, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap);
}

export const expandDims = op({expandDims_});
```

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=============================================================================

import {ENGINE} from '../engine';

import {Expm1, Expm1Inputs} from '../kernel_names';

import {Tensor} from '../tensor';

import {NamedTensorMap} from '../tensor_types';

import {convertToTensor} from '../tensor_util_env';

import {TensorLike} from '../types';

import {op} from './operation';

/**
 * Computes exponential of the input `tf.Tensor` minus one element-wise.
 * `e ^ x - 1`
 *
 * ```js
 * const x = tf.tensor1d([1, 2, 3]);
 *
 * x.expm1().print();    // or x.expm1()
 * ```
 *
 * ```js
 * const x = tf.tensor2d([1, 2, 3], [2, 2]);
 *
 * x.expm1().print();  // or x.expm1()
 * ```
 * @param x The tensor to tile.
 * @param reps Determines the number of replications per dimension.
 *
 * @doc {heading: 'Tensors', subheading: 'Slicing and Joining'}
 */
function tile_<T extends Tensor>(x: T|TensorLike, reps: number[]): T {
  const $x = convertToTensor(x, 'x', 'tile', 'string_or_numeric');

  util.assert($x.rank === reps.length,
    () => 'Error in transpose: rank of input ${$x.rank} must match length of reps ${reps.length}');

  const inputs: TileInputs = {x: $x};
  const attrs: TileAttrs = {reps};

  return ENGINE.runKernel(
    Tile, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap);
}

export const tile = op({tile_});
```

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=============================================================================

import {Tensor2D} from '../tensor';
import {DataType} from '../types';

import {buffer} from './buffer';
import {expandDims} from './expand_dims';
import {op} from './operation';
import {reshape} from './reshape';
import {tile} from './tile';

/**
 * Create an identity matrix.
 *
 * @param numRows Number of rows.
 * @param numColumns Number of columns. Defaults to `numRows`.
 * @param batchShape If provided, will add the batch shape to the
 *                 beginning of the returned `tf.Tensor` by repeating the identity matrix.
 * @param dtype Data type.
 * @returns Identity matrix of the specified size and data type, possibly with batch repetition if `batchShape` is specified.
 *
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
function eye(numRows: number, numColumns?: number, batchShape?: number[]|number[][], numColumns?: number[], dtype: DataType = 'float32'): Tensor2D {
  if (numColumns == null) {
    numColumns = numRows;
  }
  const buff = buffer([numRows, numColumns], dtype);
  const n = numRows <= numColumns ? numRows : numColumns;

  for (let i = 0; i < n; ++i) {
    buff.set(1, i, i);
  }
  const out: Tensor2D = reshape(buff.toTensor(), [numRows, numColumns]);
  if (batchShape == null) {
    return out;
  } else {
    if (batchShape.length === 1) {
      return tile(expandDims(out, 0), [batchShape[0], 1, 1]) as Tensor2D;
    } else if (batchShape.length === 2) {
      return tile(expandDims(expandDims(out, 0), 0), [batchShape[0], batchShape[1], 1, 1]) as Tensor2D;
    } else if (batchShape.length === 3) {
      return tile(expandDims(expandDims(expandDims(out, 0), 0), 0), [batchShape[0], batchShape[1], 1, 1]) as Tensor2D;
    } else {
      throw new Error(`eye() currently supports only 1D and 2D ` + '
        `batchShapes, but received $(batchShape as any).length[0]`);
    }
  }
}

export const eye = op({eye_});

=============================================================================

import {ENGINE} from '../engine';
import {Fill, FillAttrs} from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor} from '../tensor';
import {DataType, Rank, ShapeMap} from '../types';

/**
 * Creates a `tf.Tensor` filled with a scalar value.
 *
 * ```js
 * tf.fill([2, 2], 4).print();
 * ```
 *
 * @param shape An array of integers defining the output tensor shape.
 * @param value The scalar value to fill the tensor with.
 * @param dtype The type of an element in the resulting tensor. Defaults to `tf.float32`.
 *
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
function fill<R extends Rank>(shape: ShapeMap[R], value: number|string, dtype?: DataType): Tensor<R> {
  const attrs: FillAttrs = {shape, value, dtype};

  return ENGINE.runKernel(Fill, {}, attrs as {} as NamedAttrMap);
}

export {fill};

=============================================================================

import {ENGINE} from '../engine';
import {Floor, FloorInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {DataType, Rank, ShapeMap} from '../types';

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 */

import {ENGINE} from '../engine';
import {Fill, FillAttrs} from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor} from '../tensor';
import {DataType, Rank, ShapeMap} from '../types';

/**
 * Creates a `tf.Tensor` filled with a scalar value.
 *
 * ```js
 * tf.fill([2, 2], 4).print();
 * ```
 *
 * @param shape An array of integers defining the output tensor shape.
 * @param value The scalar value to fill the tensor with.
 * @param dtype The type of an element in the resulting tensor. Defaults to `tf.float32`.
 *
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
function fill<R extends Rank>(shape: ShapeMap[R], value: number|string, dtype?: DataType): Tensor<R> {
  const attrs: FillAttrs = {shape, value, dtype};

  return ENGINE.runKernel(Fill, {}, attrs as {} as NamedAttrMap);
}

export {fill};

=============================================================================
import {NamedTensorMap} from './tensor_types';
import {convertToTensor} from './tensor_util_env';
import {TensorLike} from './types';

import {op} from './operation';

/**
 * Computes floor of input `tf.Tensor` element-wise: `floor(x) *\n * @param x The input tensor.
 * @param y The output tensor.
 * @param broadcast_axes The broadcast axes.
 * @param keepdims Whether to keep the dimensions.
 * @param constVals The constant values.
 * @param outputType The output type.
 * @doc {heading: 'Operations',
 * subheading: 'Math'}
 */
function assertAndGetBroadcastShape(<T extends Tensor>(a: Tensor|TensorLike, b: Tensor|TensorLike): T {
  let $a = convertToTensor(a, 'a', 'greater');
  let $b = convertToTensor(b, 'b', 'greater');
  [$a, $b] = makeTypesMatch($a, $b);

  assertAndGetBroadcastShape($a.shape, $b.shape);

  const inputs: GreaterInputs = {a: $a, b: $b};

  return ENGINE.runKernel(Greater, inputs as {} as NamedTensorMap);
}

export const greater = op({greater_});

op({greater_})\n","/**\n * @license
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=============================================================================
*/
import {ENGINE} from 'engine';
import {GreaterEqual, GreaterEqualInputs} from 'kernel_names';
import {Tensor} from 'tensor';
import {NamedTensorMap} from 'tensor_types';
import {makeTypesMatch} from 'tensor_util';
import {convertToTensor} from 'tensor_util_env';
import {TensorLike} from 'types';

import {assertAndGetBroadcastShape} from 'broadcast_util';
import {op} from 'operation';

/**
 * Returns the truth value of (a >= b) element-wise. Supports broadcasting.
 * @param a The first input tensor.
 * @param b The second input tensor.
 * @doc {heading: 'Operations', subheading: 'Logical'}
 */
function greaterEqual_<T extends Tensor>(a: T, b: T): T {
  let a = convertToTensor(a, 'a', 'greaterEqual');
  let b = convertToTensor(b, 'b', 'greaterEqual');
  [a, b] = makeTypesMatch(a, b);

  assertAndGetBroadcastShape(a.shape, b.shape);

  const inputs: GreaterEqualInputs = {a, b};

  return ENGINE.runKernel(GreaterEqual, inputs as {} as NamedTensorMap);
}

export const greaterEqual = op({greaterEqual_});

/*=============================================================================
*/

import {ENGINE} from 'engine';
import {Imag, ImagInputs} from 'kernel_names';
import {Tensor} from 'tensor';
import {NamedTensorMap} from 'tensor_types';
import {convertToTensor} from 'tensor_util_env';
import {TensorLike} from 'types';
import {op} from 'operation';

/**
 * Returns the imaginary part of a complex (or real) tensor.
 * Given a tensor input, this operation returns a tensor of type float that
 * is the imaginary part of each element in input considered as a complex number.
 * If input is real, a tensor of all zeros is returned.
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
function imag_<T extends Tensor>(input: T): T {
  const input = convertToTensor(input, 'input', 'imag');

  const inputs: ImagInputs = {input: input};
  return ENGINE.runKernel(Imag, inputs as {} as NamedTensorMap);
}

export const imag = op({imag_});

/*=============================================================================
*/

import {ENGINE} from 'engine';
import {IsFinite, IsFiniteInputs} from 'kernel_names';
import {Tensor} from 'tensor';
import {NamedTensorMap} from 'tensor_types';
import {convertToTensor} from 'tensor_util';
import {TensorLike} from 'types';

import {op} from 'operation';

/**
 * Returns
which elements of \( x \) are finite.\n
\( \text{const } x = \text{tf.tensor1d}([\text{NaN}, \text{Infinity}, -\text{Infinity}, 0, 1]); \text{\* } x.\text{isFinite}().\text{print}(); \) // or \text{tf.isNaN}(x)\n
\( \text{\* @param } x \text{ The input Tensor}\n\)

```js
const x = \text{tf.tensor1d}([\text{NaN}, \text{Infinity}, -\text{Infinity}, 0, 1]);

\( \text{\* @param } x \text{ The input Tensor}\n\)

function isFinite_<T extends Tensor>(x: T|TensorLike): T {
  const $x = \text{convertToTensor}(x, 'x', 'isFinite');

  return ENGINE.runKernel(IsFinite, inputs as {} as NamedTensorMap);\n\)

export const isFinite = \text{op}({isFinite_});
```

```js

```
```js
const x = tf.tensor1d([-1, 2, -3, 4]);
const y = x.leakyRelu(0.1).print(); // or tf.leakyRelu(x, 0.1)

function leakyRelu<T extends Tensor>(x: T[TensorLike, alpha = 0.2]: T {
  let $x = convertToTensor(x, 'x', 'leakyRelu');
  let $inputs = $x;
  let $attrs = [alpha];
  return ENGINE.runKernel($x, TensorRelu, inputs as {}, attrs as {} as NamedTensorMap);
}

export const leakyRelu = op({leakyRelu_});
```

```
function less<T extends Tensor>(a: Tensor|TensorLike, b: Tensor|TensorLike): T {
  let $a = convertToTensor(a, 'a', 'less');
  let $b = convertToTensor(b, 'b', 'less');
  return ENGINE.runKernel(Less, inputs as {} as NamedTensorMap);
}

export const less = op({less_});
```
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=============================================================================

*/

import {ENGINE} from '../engine';
import {LinSpace, LinSpaceAttrs} from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor1D} from '../tensor';

/**
 * Return an evenly spaced sequence of numbers over the given interval.
 * @param start The start value of the sequence.
 * @param stop The end value of the sequence.
 * @param num The number of values to generate.
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
export function linspace(start: number, stop: number, num: number): Tensor1D {
  if (num <= 0) {
    throw new Error('The number of values should be positive.');
  }

  const attrs: LinSpaceAttrs = {start, stop, num};
  return ENGINE.runKernel(LinSpace, {}, attrs as {} as NamedAttrMap);
}

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 * 
 *=============================================================================
 */

import {ENGINE} from '../engine';
import {LRN, LRNAttrs, LRNInputs} from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor3D, Tensor4D} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import * as util from '../util';

import {op} from './operation';
import {reshape} from './reshape';

/**
 * Normalizes the activation of a local neighborhood across or within
 * channels.
 *
 * @param x The input tensor. The 4-D input tensor is treated as a 3-D array
 * of 1D vectors (along the last dimension), and each vector is normalized independently.
 * @param depthRadius The number of adjacent channels in the 1D normalization window.
 * @param bias A constant bias term for the basis.
 * @param alpha A scale factor, usually positive.
 * @param beta An exponent.
 *
 * @doc {heading: 'Operations', subheading: 'Normalization'}
 */
function localResponseNormalization_<T extends Tensor3D|Tensor4D>(
    x: T|TensorLike, depthRadius = 5, bias = 1, alpha = 1, beta = 0.5): T {
  const $x = convertToTensor(x, 'x', 'localResponseNormalization');
  util.assert($x.rank === 4 || $x.rank === 3,
      () => `Error in localResponseNormalization: x must be rank 3 or 4 but got
               rank ${$x.rank}.`);
  util.assert(util.isInt(depthRadius),
      () => `Error in localResponseNormalization: depthRadius must be an ` +

    `integer but got depthRadius ${depthRadius}.`);

  let x4D = $x as Tensor4D;
  let reshapedTo4D = false;
  if ($x.rank === 3) {
    reshapedTo4D = true;
    x4D = reshape($x, [1, $x.shape[0], $x.shape[1], $x.shape[2]]);
  }

  const inputs: LRNInputs = {x: x4D};

  const attrs: LRNAttrs = {depthRadius, bias, alpha, beta};

  // tslint:disable-next-line: no-unnecessary-type-assertion
  const res = ENGINE.runKernel<Tensor3D|Tensor4D>(
      t => t[TensorLike, depthRadius = 5, bias = 1, alpha = 1, beta = 0.5]: T {
        $x
      } as T[TensorLike, depthRadius = 5, bias = 1, alpha = 1, beta = 0.5],
      inputs: LRNInputs, attrs: LRNAttrs)
      as T[TensorLike, depthRadius = 5, bias = 1, alpha = 1, beta = 0.5];

  if (reshapedTo4D) {
    return reshape(res, [res.shape[1], res.shape[2], res.shape[3]]) as T;
  } else {
    return res;
  }
}

export const localResponseNormalization = op({localResponseNormalization_});

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 * 
 *=============================================================================
 */

import {ENGINE} from '../engine';
import {Log, LogInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6

```javascript
import {TensorLike} from '../types';

import {op} from './operation';

/**
 * Computes natural logarithm of the input 'tf.Tensor' element-wise: `ln(x)`
 * @param x The input tensor.
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function log(x: TensorLike): TensorLike {
  util.assertShapesMatch(x.shape, (x, 'x'));
  const x = convertToTensor(x, 'log');
  const inputs: LogInputs = {x: x};
  return ENGINE.runKernel(Log, inputs as {} as NamedTensorMap);
}

export const log = op({log});
```

```javascript
import {ENGINE} from '../engine';
import {Log1p, Log1pInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

/**
 * Computes natural logarithm of the input `tf.Tensor` plus one
 * element-wise: `ln(1 + x)`
 * @param x The input tensor.
 */
function log1p(x: TensorLike): TensorLike {
  util.assertShapesMatch(x.shape, (x, 'x'));
  const x = convertToTensor(x, 'log1p');
  const inputs: Log1pInputs = {x: x};
  return ENGINE.runKernel(Log1p, inputs as {} as NamedTensorMap);
}

export const log1p = op({log1p});
```

```javascript
import {CustomGradientFunc, ENGINE} from './engine';
import {Scalar, Tensor, Variable} from './tensor';
import {NamedTensorMap} from './tensor_types';
import {convertToTensor, convertToTensorArray} from './tensor_util_env';
import {TensorLike} from './types';
import * as util from './util';

/**
 * Provided `f(x)`, returns another function `g(x, dy?)`, which gives the gradient of `f(x)` with respect to `x`.
 * @param f The function f(x), to compute gradient for.
 */
function grad(f: (x: Tensor) => Tensor): (
    x: TensorLike|Tensor, dy?: TensorLike|Tensor) => Tensor {
  util.assert(
      util.isFunction(f), () => 'The f passed in grad(f) must be a function');
  return (x: TensorLike|Tensor, dy?: TensorLike|Tensor): Tensor => {
    // x can be of any dtype, thus
    const $x = convertToTensor(x, 'x');
    const inputs: Log1pInputs = {x: $x};
    return ENGINE.runKernel(Log1p, inputs as {} as NamedTensorMap);
  };
}
```

---

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with respect to each input is computed instead.

* The provided ‘f’ must take one or more tensors and return a
  single tensor.
* ‘y’.

If ‘f’ takes a single input, we recommend using `tf.grad` instead.

const a = tf.tensor1d([2, 3]);
const b = tf.tensor1d([-2, -3]);
const g = g(a, b));
const da = da.print();
const db = db.print();

const x = tf.tensor1d([2, 3]);
const g = tf.grads(f);

df / da = a * x

df / db = b

@doc {heading: 'Training', subheading: 'Gradients'}

* df / da = b

@doc {heading: 'Training', subheading: 'Gradients'}

* df / db = a

@doc {heading: 'Training', subheading: 'Gradients'}

* df / da = b

@doc {heading: 'Training', subheading: 'Gradients'}

* df / db = a

@doc {heading: 'Training', subheading: 'Gradients'}

* df / da = b

@doc {heading: 'Training', subheading: 'Gradients'}

* df / db = a

@doc {heading: 'Training', subheading: 'Gradients'}

* df / da = b

@doc {heading: 'Training', subheading: 'Gradients'}

* df / db = a

@doc {heading: 'Training', subheading: 'Gradients'}

* df / da = b

@doc {heading: 'Training', subheading: 'Gradients'}

* df / db = a

@doc {heading: 'Training', subheading: 'Gradients'}

* df / da = b

@doc {heading: 'Training', subheading: 'Gradients'}

* df / db = a

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The gradients with respect to the `f` passed in variableGrad(f) must return a scalar, but it `\+` returned a rank-$\text{value.rank}$ tensor `\+` which takes the same inputs as `\+` `\+` `\+` `\+`.

In backward mode, custom gradients `\+` with respect to each input of `\+` are computed using `\+` `\+` `\+`.

The `\+` function passed to f should be used for saving tensors needed in the gradient. And the `\+` saved` passed to the `\+` is an `\+` `\+` `\+` which contains those saved tensors.

```js
const customOp = tf.customGrad((x, save) => {
  // Save x to make sure it's available later for the gradient
  save(x);
  // Override gradient of our custom x^2 op to be dy * abs(x)
  return dy * x.square();
});
```
import {ENGINE} from '../engine';
import {Neg, NegInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {op} from './operation';

/**
 * Computes `-1 * x` element-wise.
 *
 * ```js
 * const x = tf.tensor2d([[1, 2, -2, 0], [2, 2]], [2, 2]);
 * x.neg().print();  // or tf.neg(x)
 * ```
 *
 * @param x The input tensor.
 * @doc {heading: 'Operators', subheading: 'Basic math'}
 */
function neg_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'neg');

  const inputs: NegInputs = {x: $x};
  return ENGINE.runKernel(Neg, inputs as {} as NamedTensorMap);
}
export const neg = op({neg_});

import {ENGINE} from '../engine';
import {Softplus, SoftplusInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {op} from './operation';

/**
 * Computes `log(exp(x) + 1)` element-wise: `log(sigmoid(x))`.
 *
 * ```js
 * const x = tf.tensor1d([0, 1, -1, .7]);
 * x.logSigmoid().print();  // or tf.logSigmoid(x)
 * ```
 *
 * @param x The input tensor.
 * @doc {heading: 'Operators', subheading: 'Basic math'}
 */
function logSigmoid_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'logSigmoid');

  // Use a custom gradient to maintain previous implementation.
  // There is no LogSigmoid kernel in TF so we can't use engine.runKernel.
  // directly.
  const customOp = customGrad((x: Tensor) => {
    const value = neg(softplus(neg(x)));

    const gradFunc = (dy: T) => {
      const derX = mul(dy, sigmoid(neg(x)));
      return derX;
    };
    return {value, gradFunc};
  });

  return customOp($x) as T;
}
export const logSigmoid = op({logSigmoid_});
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=============================================================================

import {ENGINE} from '../engine';
import {Max, MaxAttrs, MaxInputs} from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import {op} from '../operation';

/**
 * Computes the maximum of elements across dimensions of a `tf.Tensor`
 * Reduces the input along the dimensions given in `axes`. Unless `keepDims`
 * is true, the rank of the `tf.Tensor` is reduced by 1 for each entry in
 * `axes`. If `keepDims` is true, the reduced dimensions are
 * retained within length 1. If `axes` has no entries, all dimensions are reduced, and an
 * `tf.Tensor` with a single element is returned.

 * Example:
 * x = tf.tensor1d([1, 2, 3, 4]);
 * x = x.max();

 * @param x The input tensor.
 * @param axis The dimension(s) to reduce. By default it
 * reduces all dimensions.
 * @param keepDims If true, retains reduced dimensions with size 1.
 *
 * @doc
 * {heading: 'Operations', subheading: 'Reduction'}
 */
function max_<T extends Tensor>(
    x: Tensor|TensorLike, axis: number|number[] = null, keepDims = false): T {
  const $x = convertToTensor(x, 'x', 'max');

  const inputs: MaxInputs = {x: $x};
  const attrs: MaxAttrs = {reductionIndices: axis, keepDims};

  return ENGINE.runKernel(Max, inputs as {} as NamedTensorMap, attrs as {} as
  NamedAttrMap);
}

export const max = op({max_});

=============================================================================

import {ENGINE} from '../engine';
import {Sub, SubInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {makeTypesMatch} from '../tensor_util';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {op} from './operation';

/**
 * Subtracts two `tf.Tensor`s element-wise, A - B.
 *
 * Example:
 * a = tf.tensor1d([1, 2, 3, 4]);
 * b = tf.tensor1d([1, 2, 3, 4]);
 * c = a.sub(b);
 *
 * @param a The first `tf.Tensor` to subtract
 * from.
 * @param b The second `tf.Tensor` to be subtracted.
 *
 * @doc
 * {heading: 'Operations', subheading: 'Arithmetic'}
 */
function sub_<T extends Tensor>(a: Tensor|TensorLike, b: Tensor|TensorLike): T {
  let $a = convertToTensor(a, 'a', 'sub');
  let $b = convertToTensor(b, 'b', 'sub');

  [$a, $b] = makeTypesMatch($a, $b);

  const inputs: SubInputs = {a: $a, b: $b};

  return ENGINE.runKernel(Sub, inputs as {} as NamedTensorMap);
}

export const sub = op({sub_});

=============================================================================

*/

/* vim: set ts=2 tw=80: */
import {ENGINE} from '../engine';
import {Sum, SumAttrs, SumInputs} from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {cast} from './cast';
import {op} from './operation';

/**
 * Computes the sum of elements across dimensions of a tf.Tensor. *n* reduces the input along the dimensions given in *axes*. Unless *keepDims* *n* is true, the rank of the tf.Tensor is reduced by 1 for each entry in n* *axes*. If *keepDims* is true, the reduced dimensions are retained within length 1. If axes has no entries, all dimensions are reduced, and an *tf.Tensor* with a single element is returned.

 *const x = tf.tensor1d([1, 2, 3]); *n* const *x* = x.sum().print();

 // or tf.sum(x, axis));

 // or tf.sum(axis).print();

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=============================================================================

import {customGrad} from '../gradients';
import {GradSaveFunc} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {max} from './max';
import {mul} from './mul';
import {op} from './operation';
import {sub} from './sub';
import {sum} from './sum';

/**
 * Computes the log softmax.

 * ```js
 * const a = tf.tensor1d([1, 2, 3]);
 *
 * a.logSoftmax().print();  // or tf.logSoftmax(a)
 * ```

 * ```js
 * const a = tf.tensor2d([2, 4, 6, 1, 2, 3], [2, 3]);
 * a.logSoftmax().print();  // or tf.logSoftmax(a)
 * ```

 * @param logits The logits array.
 * @param axis The dimension softmax would be performed on. Defaults to -1 *n* which indicates the last dimension.

 *const forward: ForwardFunc<Tensor> = (backend, save) => {
  //   const keepDims = true;
  //   const xMax = max(logits, axis, true);
  //   const shifted = sub(logits, xMax);
  //   const value =
  //       sub(cast(shifted, 'float32'), log(sum(exp(shifted), axis, keepDims)));
  //   save([value]);
  //   return value;
  // };

  // Use a custom gradient for numerical stability.
  const customOp = customGrad((logits: Tensor, save: GradSaveFunc) => {
    const keepDim = true;
    const xMax = max(logits, axis, true);
    const shifted = sub(logits, xMax);
    const value =
        sub(cast(shifted, 'float32'), log(sum(exp(shifted), axis, keepDim)));
    save([value]);
    return value;
  });

  return customOp(logits) as Tensor;

  // TODO Use Engine.runKernel when CPU/WebGL/WASM backends implement this.
  // const inputs: LogSoftmaxInputs = {logits: logits, \*param keepDim:
  //   tf.logSoftmax(logits, axis, true,\*param keepDim)
  // Function logSoftmax.<ST extends Tensor<TensorLike, axis = -1>): T |...

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=============================================================================

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 * limitations under the License.
 */

import * as util from '../util';

/**
 * Returns true if the axis specifies the inner most dimensions of the
 */
export function axesAreInnerMostDims(axes: number[], rank: number): boolean {
  for (let i = 0; i < axes.length; ++i) {
    if (axes[axes.length - i - 1] !== rank - 1 - i) {
      return false;
    }
  }
  return true;
}

export function combineLocations(outputLoc: number[], reduceLoc: number[], axes: number[]): number[] {
  const rank = outputLoc.length + reduceLoc.length;
  const loc = [];
  let outIdx = 0;
  let reduceIdx = 0;
  for (let dim = 0; dim < rank; dim++) {
    if (axes.indexOf(dim) === -1) {
      loc.push(outputLoc[outIdx++]);
    } else {
      loc.push(reduceLoc[reduceIdx++]);
    }
  }
  return loc;
}

export function computeOutAndReduceShapes(aShape: number[], axes: number[]): [number[], number[]] {
  const outShape = [];
  const rank = aShape.length;
  for (let dim = 0; dim < rank; dim++) {
    if (axes.indexOf(dim) === -1) {
      outShape.push(aShape[dim]);
    }
  }
  const reduceShape = axes.map(dim => aShape[dim]);
  return [outShape, reduceShape];
}

export function expandShapeToKeepDim(shape: number[], axes: number[]): number[] {
  const reduceSubShape = axes.map(x => 1);
  return combineLocations(shape, reduceSubShape, axes);
}

export function getAxesPermutation(axes: number[], rank: number): number[] | null {
  if (axesAreInnerMostDims(axes, rank)) {
    return null;
  }
  const result: number[] = [];
  for (let i = 0; i < rank; ++i) {
    if (axes.indexOf(i) === -1) {
      result.push(i);
    }
  }
  axes.forEach(axis => result.push(axis));
  return result;
}

/** Returns the axes permutation that undoes the original permutation. */
export function getUndoAxesPermutation(axes: number[]): number[] {
  return axes.map((axis, i) => [i, axis]).sort((a, b) => a[1] - b[1]).map(x => x[0]);
}

export function getInnerMostAxes(numAxes: number, rank: number): number[] {
  const res: number[] = [];
  for (let i = rank - numAxes; i < rank; ++i) {
    res.push(i);
  }
  return res;
}
```

```
```
*
*
```js
*
* ```js
* const x = tf.tensor2d([[1, 2, 3, 4], [2, 2]]);
* const y = tf.tensor2d([[5, 6, 7, 8], [9, 9]]);
* const axis = 1;
* x.logSumExp(axis).print();
```
```js
*
* ```js
* const y = tf.tensor2d([[1, 2, 3, 4], [2, 2]]);
* const axis = 1;
* y.logSumExp(axis).print();
```
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=============================================================================

import {ENGINE} from '../engine';\nimport {LogicalOr, LogicalOrInputs} from '../kernel_names';\nimport {LogicalOr} from '../kernel_registry';\nimport {NamedAttrMap} from '../kernel_types';\nimport {convertToTensor} from '../tensor_util_env';\nimport {Tensor} from '../tensor';\n
/**\n * Returns the truth value of `a OR b` element-wise. Supports broadcasting.\n *\n * ```js\n * const a = tf.tensor1d([false, false, true, true], 'bool');\n * const b = tf.tensor1d([true, false, false, true], 'bool');\n * a.logicalOr(b).print();\n * ```\n * @param a The first input tensor.\n * @param b The second input tensor.\n * @doc {heading: 'Operations', subheading: 'Logical'}\n */\nfunction logicalOr_<T extends Tensor>(\n    a: T, b: T): T {
  const $a = convertToTensor(a, 'a', 'logicalOr', 'bool');\n  const $b = convertToTensor(b, 'b', 'logicalOr', 'bool');\n  assertAndGetBroadcastShape($a.shape, $b.shape);\n
  const inputs: LogicalOrInputs = {a: $a, b: $b};\n  return ENGINE.runKernel(LogicalOr, inputs as {} as NamedTensorMap);
}
export const logicalOr = op({logicalOr_});

=============================================================================

import {LogicalNot, LogicalNotInputs} from '../kernel_names';\nimport {LogicalNot} from '../kernel_registry';\nimport {NamedAttrMap} from '../kernel_types';\nimport {convertToTensor} from '../tensor_util_env';\nimport {Tensor} from '../tensor';\n
/**\n * Returns the truth value of `a XOR b` element-wise. Supports broadcasting.\n *\n * ```js\n * const a = tf.tensor1d([false, false, true, true], 'bool');\n * const b = tf.tensor1d([true, false, false, true], 'bool');\n * a.logicalXor(b).print();\n * ```\n * @param a The first input tensor.\n * @param b The second input tensor.\n * @doc {heading: 'Operations', subheading: 'Logical'}\n */\nfunction logicalXor_<T extends Tensor>(\n    a: T, b: T): T {
  const $a = convertToTensor(a, 'a', 'logicalXor', 'bool');\n  const $b = convertToTensor(b, 'b', 'logicalXor', 'bool');\n  assertAndGetBroadcastShape($a.shape, $b.shape);\n
  // x ^ y = (x | y) & ~(x & y)\n  return logicalAnd(logicalOr(a, b), logicalNot(logicalAnd(a, b)));
}
export const logicalXor = op({logicalXor_});

=============================================================================

import {MaxPool, MaxPoolAttrMap, MaxPoolInputs} from '../kernel_names';\nimport {MaxPool} from '../kernel_registry';\nimport {MaxPoolAttrMap} from '../kernel_types';\nimport {convertToTensor} from '../tensor_util_env';\nimport {Tensor} from '../tensor';\n
function maxPool_<T extends Tensor>(\n    x: T,\n    y: T,\n    z: T,\n    w: T,\n    a: T,\n    b: T,\n    c: T,\n    d: T,\n    e: T,\n    f: T,\n    g: T,\n    h: T,\n    i: T,\n    j: T,\n    k: T,\n    l: T,\n    m: T,\n    n: T,\n    o: T,\n    p: T,\n    q: T,\n    r: T,\n    s: T,\n    t: T,\n    u: T,\n    v: T,\n    w: T,\n    x: T,\n    y: T,\n    z: T,\n    a: T,\n    b: T,\n    c: T,\n    d: T,\n    e: T,\n    f: T,\n    g: T,\n    h: T,\n    i: T,\n    j: T,\n    k: T,\n    l: T,\n    m: T,\n    n: T,\n    o: T,\n    p: T,\n    q: T,\n    r: T,\n    s: T,\n    t: T,\n    u: T,\n    v: T,\n    w: T,\n    x: T,\n    y: T,\n    z: T,\n    a: T,\n    b: T,\n    c: T,\n    d: T,\n    e: T,\n    f: T,\n    g: T,\n    h: T,\n    i: T,\n    j: T,\n    k: T,\n    l: T,\n    m: T,\n    n: T,\n    o: T,\n    p: T,\n    q: T,\n    r: T,\n    s: T,\n    t: T,\n    u: T,\n    v: T,\n    w: T,\n    x: T,\n    y: T,\n    z: T,\n    a: T,\n    b: T,\n    c: T,\n    d: T,\n    e: T,\n    f: T,\n    g: T,\n    h: T,\n    i: T,\n    j: T,\n    k: T,\n    l: T,\n    m: T,\n    n: T,\n    o: T,\n    p: T,\n    q: T,\n    r: T,\n    s: T,\n    t: T,\n    u: T,\n    v: T,\n    w: T,\n    x: T,\n    y: T,\n    z: T,\n    a: T,\n    b: T,\n    c: T,\n    d: T,\n    e: T,\n    f: T,\n    g: G
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width, inChannels]. If rank 3, batch of 1 is assumed.

@param filterSize The filter size: `[filterHeight, filterWidth]`. If an
'single' number is a single number, then 'filterHeight == filterWidth'.

@param strides The strides of the pooling: `[strideHeight, strideWidth]`. If an
'strides' is a single number, then 'strideHeight == strideWidth'.

@param dilations The dilation rates: `[dilationHeight, dilationWidth]` in which
we sample input values across the height and width dimensions.

In dilated pooling. Defaults to `[1, 1]`. If 'dilations' is a single
number, then 'dilationHeight == dilationWidth'. If it is greater than 1, then all values of 'strides'
must be 1. 

For more info, see this guide:

[https://www.tensorflow.org/api_guides/python/nn#Convolution](https://www.tensorflow.org/api_guides/python/nn#Convolution)

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 */

import {ENGINE} from '../engine';
import {MaxPool3D, MaxPool3DAttrs, MaxPool3DInputs} from
'../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor4D, Tensor5D} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import * as util from '../util';

import {op} from './operation';
import {reshape} from './reshape';

/**
 * Computes the 3D max pooling.
 *
 * ```js
 * const x = tf.tensor3d([1, 2, 3, 4, 5, 6, 7, 8], [1, 2, 2, 1]);
 * const result = tf.maxPool3d(x, 2, 1, 'valid');
 * result.print();
 * ```
 *
 * @param x The input tensor, of rank 5 or rank 4 of shape
 * `[batch, depth, height, width, inChannels]`. If rank 3, batch of 1 is assumed.
 * @param filterSize The filter size: `[filterHeight, filterWidth]`. If an
 * 'single' number is a single number, then 'filterHeight == filterWidth'.
 * @param strides The strides of the pooling: `[strideHeight, strideWidth]`. If an
 * 'strides' is a single number, then 'strideHeight == strideWidth'.
 * @param dilations The dilation rates: `[dilationHeight, dilationWidth]` in which
 * we sample input values across the height and width dimensions.
 * In dilated pooling. Defaults to `[1, 1]`. If 'dilations' is a single
 * number, then 'dilationHeight == dilationWidth'. If it is greater than 1, then all values of 'strides'
 * must be 1.
 * @param pad The type of padding algorithm.
 * 'same' and stride 1: output will be of same size as input.
 * 'valid': output will be smaller than input if filter is larger
 * than 1x1. 
 * For more info, see this guide:
 * [https://www.tensorflow.org/api_guides/python/nn#Convolution](https://www.tensorflow.org/api_guides/python/nn#Convolution)
 * @param dimRoundingMode A string from:
 */

function maxPool_<T extends Tensor3D|Tensor4D>(
    x: T|TensorLike, filterSize: [number, number]|number,
    strides: [number, number]|number, pad: 'valid'|'same'|number,
    dimRoundingMode?: 'floor'|'round'|'ceil'): T {
  const $x = convertToTensor(x, 'x', 'maxPool');
  const dilations = 1;

  let x4D = $x as Tensor4D;
  let reshapedTo4D = false;
  if ($x.rank === 3) {
    reshapedTo4D = true;
    x4D = reshape($x, [1, $x.shape[0], $x.shape[1], $x.shape[2]]);
  }

  util.assert(
      x4D.rank === 4,
      () => `Error in maxPool: input must be rank 4 but got rank ${x4D.rank}.`);
  util.assert(
      conv_util.eitherStridesOrDilationsAreOne(strides, dilations),
      () => `Error in maxPool: Either strides or dilations must be 1.` +
          `Got strides ${strides} and dilations
          ${dilations}`);
  if (dimRoundingMode != null) {
    util.assert(
        util.isInt(pad as number),
        () => `Error in maxPool: pad must be an integer when using, ' +
            `dimRoundingMode ${dimRoundingMode} but
            got pad ${pad}`);
  }

  const inputs: MaxPoolInputs = {x: x4D};

  const attrs: MaxPoolAttrs = {filterSize,
      strides, pad, dimRoundingMode};

  // tslint:disable-next-line: no-unnecessary-type-assertion
  const res =
      ENGINE.runKernel(
          MaxPool, inputs as {} as NamedTensorMap,
          attrs as {} as NamedAttrMap) as T;

  if (reshapedTo4D) {
    return reshape(res, [res.shape[1], res.shape[2], res.shape[3]]) as T;
  }
  return res;
}

export const maxPool = op({maxPool_});
```typescript
/**
 * Computes the 2D max pooling of an image with Argmax index.
 * The indices in argmax are flattened, so that a maximum value at position `[b, y, x, c]`
 * becomes flattened index: `(y * width + x) * channels + c` if `include_batch_in_index` is False;
 * `((b * height + y) * width + x) * channels + c` if `include_batch_in_index` is True.
 * The indices returned are always in `[0, height) x [0, width)` before flattening.
 * @param x The input tensor, of rank 4 or rank 3 of shape `[batch, height, width, channels]`. If rank 3, batch of 1 is assumed.
 * @param y * @param z * @param filterSize The filter size: `[filterHeight, filterWidth]`.
 * If `filterSize` is a single number, then `filterHeight == filterWidth`. 
 * @param strides The strides of the pooling: `[strideHeight, strideWidth]`. If `strides` is a single number, then `strideHeight == strideWidth`.
 * @param dataFormat An optional string from: '\NDHWC\', '\NCDHW\'. Defaults to '\NDHWC\'. Specify the data format of the input and output data. With the default format '\NDHWC\', the data is stored in the order of: `[batch, y * depth, height, width, channels]`. Only '\NDHWC\' is currently supported.
 * @param includeBatchIndex Defaults to False. Whether to include batch dimension in flattened index of argmax.
 * @doc {heading: 'Operations', subheading: 'Convolution'}
 */
function maxPoolWithArgmax_<T extends Tensor4D>(
    x: T|TensorLike,
    filterSize: [number, number, number] = [1, 1, 1],
    strides: [number, number, number] = [1, 1, 1],
    includeBatchIndex: boolean = false): T {
  const $x = convertToTensor(x, 'x', 'maxPoolWithArgmax');

  let x5D = $x as Tensor5D;
  let reshapedTo5D = false;
  if ($x.rank === 4) {
    reshapedTo5D = true;
    x5D = reshape($x, [1, $x.shape[0], $x.shape[1], $x.shape[2], $x.shape[3]]);
  }

  util.assert(
      x5D.rank === 5,
      () => `Error in maxPoolWithArgmax: x must be rank 5 but got rank ${x5D.rank}.`);
  util.assert(
      dataFormat === 'NDHWC',
      () => `Error in maxPoolWithArgmax: Only NDHWC is currently supported, ` +
          `but got dataFormat of ${dataFormat}`);
  if (includeBatchIndex) {
    util.assert(
        util.isInt(strides as number),
        () => `Error in maxPoolWithArgmax: strides must be an integer. ` +
            `got strides ${strides}.`);
  }

  const inputs: MaxPoolWithArgmaxInputs = {x: x5D};

  const attrs:
      MaxPoolWithArgmaxAttrs = {filterSize, strides, includeBatchIndex, dataFormat};

  // tslint:disable-next-line: no-unnecessary-type-assertion
  const res = ENGINE.runKernel(
                  MaxPoolWithArgmax, inputs as {} as NamedTensorMap,
                  attrs as {} as NamedAttrMap) as T;

  return reshape(res, [res.shape[1], res.shape[2], res.shape[3], res.shape[4]]) as
        T;
}

export const maxPoolWithArgmax =
    op({maxPoolWithArgmax_});

```

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filterSize: [number, number], strides: [number, number], pad: 'valid' | 'same',
includeBatchInIndex = false): NamedTensorMap {
  const $x = convertToTensor(x, 'x',
    maxPoolWithArgmax);\n  const inputs: MaxPoolWithArgmaxInputs = \{x: $x\};\n  const attrs:\nMaxPoolWithArgmaxAttrs = \{filterSize, strides, pad, includeBatchInIndex\};\n  // tslint:disable-next-line: no-unnecessary-type-assertion
  const result = ENGINE.runKernel($x as \{\},
    'MaxPoolWithArgmax', args as [\{} as NamedAttrMap as Tensor[],\n    return result[0],
    indexes: result[1]};\n
  return \{result: result[0],
    indexes: result[1]};
}

export const maxPoolWithArgmax = op({maxPoolWithArgmax_});

*/

import {ENGINE} from '../engine';
import {Maximum, MaximumInputs} from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {op} from './operation';

/**
 * Returns the max of a and b (`a > b ? a : b`) element-wise. Supports broadcasting.
 * We also expose `tf.maximumStrict` which has the same signature as this op and asserts that `a` and `b` are the same shape (does not broadcast).
 * ```js
 * const a = tf.tensor1d([1, 4, 3, 16]);
 * const b = tf.tensor1d([1, 2, 9, 4]);
 * tf.maximum(a, b).print();  // or tf.maximum(a, b)
 * ```
 * @param a The first tensor.
 * @param b The second tensor. Must have the same type as `a`.
 * @doc {heading: 'Operations', subheading: 'Arithmetic'}
 */
function maximum_<T extends Tensor>(a:
    Tensor|TensorLike, b: Tensor|TensorLike): T {
  let $a = convertToTensor(a, 'a', 'maximum');
  let $b = convertToTensor(b, 'b', 'maximum');
  $a = cast($a, 'int32');
  $b = cast($b, 'int32');
  assertAndGetBroadcastShape($a.shape, $b.shape);
  const inputs: MaximumInputs = \{a: $a, b: $b\};
  const result = ENGINE.runKernel(Maximum, inputs as {} as NamedTensorMap);
  return result[0];
}

export const maximum = op({maximum_});

*/

import {ENGINE} from '../engine';
import {Mean, MeanAttrs, MeanInputs} from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {op} from './operation';

/**
 * Computes the mean of elements across dimensions of a `tf.Tensor`. Reduces `x` along the dimensions given in `axis`. Unless `keepDims` is `true`, the rank of the `tf.Tensor` is reduced by 1 for each entry in `axis`. If `keepDims` is `true`, the reduced dimensions are retained with length 1. If `axis` has no entries, all dimensions are reduced, and a `tf.Tensor` with a single element is returned. The `keepDims` option is ignored when `axis` is not given. If `axis` is `null`, the mean is computed over all dimensions. `keepDims` controls whether the reduced dimensions are retained. If `keepDims` is `false`, the reduced dimensions are dropped.
 * @param x The input tensor.
 * @param axis The dimension(s) to reduce. By default it reduces along all dimensions.
 * @param keepDims If true, retains reduced dimensions with size 1.
 */

function mean_<T extends Tensor>(
    x: Tensor|TensorLike, axis: number | number[] | undefined, keepDims: boolean | undefined):
    T {
  let $x = convertToTensor(x, 'x', 'mean');
  const inputs: MeanInputs = \{x: $x\};
  const attrs:
MeanAttrs = \{axis, keepDims\};
  const result = ENGINE.runKernel($x as \{\},
    'Mean', inputs as {} as NamedTensorMap,
    return result[0],
    indexes: result[1]};

  return result[0];
}

export const mean = op({mean_});

*/
function mean_<T extends Tensor>(x: Tensor|TensorLike, axis: number|number[] = null, keepDims: boolean = false): T {
  const $x = convertToTensor(x, 'x', 'mean');
  const inputs: MeanInputs = {x: $x};
  const attrs: MeanAttrs = {axis, keepDims};

  return ENGINE.runKernel(Mean, {inputs: inputs as {} as NamedTensorMap, attrs: attrs as {} as NamedAttrMap});
}

export const mean = op({mean_});

function min_<T extends Tensor>(x: Tensor|TensorLike, axis: number|number[] = null, keepDims: boolean = false): T {
  const $x = convertToTensor(x, 'x', 'min');
  const inputs: MinInputs = {x: $x};
  const attrs: MinAttrs = {axis, keepDims};

  return ENGINE.runKernel(Min, {inputs: inputs as {} as NamedTensorMap, attrs: attrs as {} as NamedAttrMap});
}

export const min = op({min_});

function minimum_<T extends Tensor>(a: Tensor|TensorLike, b: Tensor|TensorLike): T {
  const $a = convertToTensor(a, 'a', 'minimum');
  const $b = convertToTensor(b, 'b', 'minimum');

  let $a = convertToTensor(a, 'a', 'minimum');
  let $b = convertToTensor(b, 'b', 'minimum');

  if ($a.dtype === 'bool') {
    $a = $a
  }

  return ENGINE.runKernel(Minimum, {inputs: [inputs, inputs] as {} as NamedTensorMap, attrs: [] as NamedAttrMap});
}

export const minimum = op({minimum_});

@doc {heading: 'Operations', subheading: 'Reduction'}
@doc {heading: 'Operations', subheading: 'Arithmetic'}
@doc {heading: 'Operations', subheading: 'Type Assertions'}

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```javascript
const $a = cast($b, 'int32');
$b = cast($b, 'int32');

assertAndGetBroadcastShape($a.shape, $b.shape);

const inputs: MinimumInputs = {a: $a, b: $b};

return ENGINE.runKernel(Minimum, inputs as {} as NamedTensorMap);

export const minimum = op({minimum_});

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 */

import {ENGINE} from './engine';
import {MirrorPad, MirrorPadAttrs, MirrorPadInputs} from '../kernel_names';
import {MirrorPadMap} from '../mirror_pad_registry';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {NamedAttrMap} from '../util';
import {op} from './operation';

/**
 * Pads a `tf.Tensor` using mirror padding.
 *
 * This operation implements the 'REFLECT' and 'SYMMETRIC' modes of pad.
 * This operation implements the 'REFLECT' and 'SYMMETRIC' modes of pad.
 * @param x The tensor to pad.
 * @param paddings An array of length `R` (the rank of
 * each element is a length-2 tuple of ints `[padBefore, padAfter]`,
 * specifying how much to pad along each dimension of the tensor.
 * @param mode String to specify padding mode. Can be `'reflect' | 'symmetric'`
 * @doc {heading: 'Tensors', subheading: 'Transformations'} */
function mirrorPad_<T extends Tensor>(
  x: T|TensorLike, paddings: Array<[number, number]>,
  mode: 'reflect'|'symmetric'): T {
  util.assert(
    mode === 'reflect' || mode === 'symmetric',
    () => `Invalid mode. Mode must be either reflect or symmetric. ` +
    `Got ${mode}.`);

  const $x = convertToTensor(x, 'x', 'mirrorPad');
  if ($x.rank === 0) {
    throw new Error(
      'mirrorPad(scalar) is not defined. ' +
      'Pass non-scalar to mirrorPad');
  }
  util.assert(
    paddings.length === $x.rank,
    () => `Padding doesn't match input. Must be length of 2 each.`);
  const attrs: MirrorPadAttrs = {paddings, mode};
  const inputs: MirrorPadInputs = {x: $x};
  return ENGINE.runKernel(MirrorPad, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap);
}

export const mirrorPad = op({mirrorPad_});
```

---

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{op} from './operation';

/**
 * Returns the mod of a and b element-wise.
 * `floor(x / y) * y + mod(x, y) = x`  
 * Supports broadcasting.
 * We also expose `tf.modStrict` which has the same signature as this op and
 * asserts that `a` and `b` are the same shape (does not broadcast).
 * `mod(a, b)` is equivalent to `a - tf.floor(a / b) * b`.

 * Supports broadcasting.
 *
 * We also expose `tf.modStrict` which has the same signature as this op and
 * asserts that `a` and `b` are the same shape (does not broadcast).

 * ```js
 * const a = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const b = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const c = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const d = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const e = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const f = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const g = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const h = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const i = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const j = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const k = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const l = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const m = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const n = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const o = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const p = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const q = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const r = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const s = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const t = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const u = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const v = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const w = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const x = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const y = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const z = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const a1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const b1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const c1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const d1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const e1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const f1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const g1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const h1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const i1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const j1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const k1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const l1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const m1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const n1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const o1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const p1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const q1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const r1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const s1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const t1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const u1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const v1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const w1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const x1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const y1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const z1 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const a2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const b2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const c2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const d2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const e2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const f2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const g2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const h2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const i2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const j2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const k2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const l2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const m2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const n2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const o2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const p2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const q2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const r2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const s2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const t2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const u2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const v2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const w2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const x2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const y2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const z2 = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 */

 * @doc {heading: 'Operations', subheading: 'Arithmetic'}
 */
function mod<T extends Tensor>(a:
  Tensor|TensorLike, b: Tensor|TensorLike):
  T {
    let $a = convertToTensor(a, 'a', 'mod');
    let $b = convertToTensor(b, 'b', 'mod');
    $a, $b = makeTypesMatch($a, $b);
    return ENGINE.runKernel(Mod, inputs as {} as NamedTensorMap);
  }

export const mod = op({mod_});

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*/

import {Tensor2D} from '../tensor';
import {convertToTensor, convertToTensorArray} from '../tensor_util_env';
import {TensorLike} from '../types';
import {op} from './operation';

/**
 * @docalias (data: Tensor2D, c: Tensor2D, h: Tensor2D): [Tensor2D, Tensor2D]
 */
export type LSTMCellFunc = {
  (data: Tensor2D, c: Tensor2D, h: Tensor2D): [Tensor2D, Tensor2D];
};

/**
 * Computes the next states and outputs of a stack of LSTMCells.
 * Each cell output is used as input to the next cell.
 * Returns [cellState, cellOutput].
 * Derived from tf.contrib.rnn.MultiRNNCell.
 */
export const multiRNNCell = op({multiRNNCell_});

*/

import {ENGINE} from '../engine';
import {Multinomial, MultinomialAttrs, MultinomialInputs} from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor1D, Tensor2D} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {op} from './operation';
import {reshape} from './reshape';

/**
 * Creates a `tf.Tensor` with values drawn from a multinomial distribution.
 *
 * ```js
 * const probs = tf.tensor([.75, .25]);
 * tf.multinomial(probs, 3).print();
 * ```
 *
 * @param logits 1D array with unnormalized log-probabilities, or 2D array of shape `[batchSize, numOutcomes]`. See the `normalized` parameter.
 * @param numSamples Number of samples to draw for each row slice.
 * @param seed The seed number.
 * @param normalized Whether the provided `logits` are normalized true probabilities (sum to 1). Defaults to false.
 * @return 1D array of shape `[numSamples]`, or 2D array of shape `[batchSize, numSamples]`, depending on the rank of the input.
 *
 * @doc {heading: 'Tensors', subheading: 'Random'}
 */
function multinomial_(logits: Tensor1D|Tensor2D|TensorLike, numSamples: number, seed?: number, normalized = false): Tensor1D|Tensor2D {
  const logits2D: Tensor2D =...
origRank === 1 ? reshape($logits, [1, -1]) : $logits as Tensor2D;

const attrs: MultinomialAttrs = {numSamples, seed, normalized};

return origRank === 1 ? reshape(res, [res.size]) as Tensor1D : res;

export const multinomial = op({multinomial_});

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*/

import {ENGINE} from '../engine';
import {NotEqual, NotEqualInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {makeTypesMatch} from '../tensor_util';
import {assertAndGetBroadcastShape} from './broadcast_util';
import {op} from './operation';

/**
 * Returns the truth value of (a != b) element-wise. Supports broadcasting.
 *
 * ```js
 * const a = tf.tensor1d([1, 2, 3]);
 * const b = tf.tensor1d([0, 2, 3]);
 *
 * a.notEqual(b).print();
 * ```
 *
 * @param a The first input tensor.
 * @param b The second input tensor. Must have the same dtype as `a`.
 *
 * @doc {heading: 'Operations', subheading: 'Logical'}
 */
function notEqual_<T extends Tensor>(a: Tensor|TensorLike, b: Tensor|TensorLike): T {
  let $a = convertToTensor(a, 'a', 'notEqual');
  let $b = convertToTensor(b, 'b', 'notEqual');
  [$a, $b] = makeTypesMatch($a, $b);
  assertAndGetBroadcastShape($a.shape, $b.shape);

  const inputs: NotEqualInputs = {a: $a, b: $b};

  return ENGINE.runKernel(NotEqual, inputs as {} as NamedTensorMap);
}

export const notEqual = op({notEqual_});

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*/

import {ENGINE} from '../engine';
import {DataType, Rank, ShapeMap} from '../types';
import {makeZerosTypedArray, sizeFromShape} from '../util';

import {complex} from './complex';

/**
 * Creates a `tf.Tensor` with all elements set to 0.
 *
 * ```js
 * tf.zeros([2, 2]).print();
 * ```
 *
 * @param shape An array of integers defining the output tensor shape.
 * @param dtype The type of an element in the resulting tensor. Can
 *     be 'float32', 'int32' or 'bool'. Defaults to 'float'.
 *
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
export function zeros<R extends Rank>(shape: ShapeMap[R], dtype: DataType = 'float32'): Tensor<R> {
  if (dtype === 'complex64') {
    const real = zeros(shape, 'float32');
    const imag = zeros(shape, 'float32');
    return complex(real, imag);
  }
  const values = makeZerosTypedArray(sizeFromShape(shape), dtype);
  return ENGINE.makeTensor(values, shape, dtype) as Tensor<R>;
}

import {assertAndGetBroadcastShape} from './broadcast_util';
import {op} from './operation';

/**
 * Creates a `tf.Tensor` with all elements set to 0 of the same shape.
 *
 * ```js
 * tf.zerosLike(tf.ones([2, 2])).print();
 * ```
 *
 * @param shape An array of integers defining the output tensor shape.
 *
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
export function zerosLike(shape: ShapeMap): TensorLike {
  return op({zerosLike_});
}

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*/

import {ENGINE} from '../engine';
import {Tensor} from '../tensor';
import {DataType, Rank, ShapeMap} from '../types';
import {makeZerosTypedArray, sizeFromShape} from '../util';

import {complex} from './complex';

/**
 * Creates a `tf.Tensor` with all elements set to 0.
 *
 * ```js
 * tf.zeros([2, 2]).print();
 * ```
 *
 * @param shape An array of integers defining the output tensor shape.
 * @param dtype The type of an element in the resulting tensor. Can
 *     be 'float32', 'int32' or 'bool'. Defaults to 'float'.
 *
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
export function zeros<R extends Rank>(shape: ShapeMap[R], dtype: DataType = 'float32'): Tensor<R> {
  if (dtype === 'complex64') {
    const real = zeros(shape, 'float32');
    const imag = zeros(shape, 'float32');
    return complex(real, imag);
  }
  const values = makeZerosTypedArray(sizeFromShape(shape), dtype);
  return ENGINE.makeTensor(values, shape, dtype) as Tensor<R>;
}
```javascript
import {ENGINE} from '../engine';
import {Tensor} from '../tensor';
import {DataType, Rank, ShapeMap}
from '../types';
import {makeOnesTypedArray, sizeFromShape} from '../util';

import {complex} from './complex';
import {zeros} from './zeros';

/**
 * Creates a `tf.Tensor` with all elements set to 1.
 *
 * ```js
 * tf.ones([2, 2]).print();
 * ```
 *
 * @param shape An array of integers defining the output tensor shape.
 * @param dtype The type of an element in the resulting tensor. Defaults to 'float32'.
 *
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
export function ones<R extends Rank>(
    shape: ShapeMap[R], dtype: DataType = 'float32'): Tensor<R> {
  if (dtype === 'complex64') {
    const real = ones(shape, 'float32');
    const imag = zeros(shape, 'float32');
    return complex(real, imag);
  }
  const values = makeOnesTypedArray(sizeFromShape(shape), dtype);
  return ENGINE.makeTensor(values, shape, dtype) as Tensor<R>;
}

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 */

import {ENGINE} from '../engine';
import {OnesLike, OnesLikeInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {op} from './operation';

/**
 * Creates a `tf.Tensor` with all elements set to 1 with the same shape as the given tensor.
 *
 * ```js
 * const x = tf.tensor([1, 2]);
 * tf.onesLike(x).print();
 * ```
 *
 * @param x A tensor.
 *
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
function onesLike_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'onesLike');

  const inputs: OnesLikeInputs = {x: $x};
  return ENGINE.runKernel(OnesLike, inputs as {} as NamedTensorMap);
}

export const onesLike = op({onesLike_});

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 */

import {Tensor1D, Tensor2D} from '../tensor';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import * as util from '../util';

import {matMul} from './mat_mul';
import {op} from './operation';
import {reshape} from './reshape';

/**
 * Computes the outer product of two vectors, `v1` and `v2`.
 *
 * ```js
 * const a = tf.tensor([1, 2, 3]);
 * const b = tf.tensor([4, 5, 6]);
 * tf.outerProduct(a, b).print();
 * ```
 *
 * @param v1 The first vector in the outer product operation.
 * @param v2 The second vector in the outer product operation.
 *
 * @doc {heading: 'Operations', subheading: 'Matrices'}
 */
function outerProduct_(v1: Tensor1D|TensorLike, v2: Tensor1D|TensorLike): Tensor2D {
  const $v1 = convertToTensor(v1, 'v1', 'outerProduct');
  const $v2 = convertToTensor(v2, 'v2', 'outerProduct');
  return $v1.rank == $v2.rank
      ? $v1.tensor.read(0) * $v2.tensor.read(0) : 'Error in outerProduct: inputs must be rank 1, but got ranks ' + $v1.rank + ' and ' + $v2.rank;};

///
```

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```
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=============================================================================
*/

import {ENGINE} from '../engine';
import {PadV2, PadV2Attrs, PadV2Inputs} from
'./kernel_names';
import {NamedAttrMap} from './kernel_registry';
import {Tensor} from './tensor';
import {NamedTensorMap} from './tensor_types';
import {convertToTensor} from './tensor_util_env';
import {NamedTensorMap} from './types';
import {op} from './operation';

* This operation implements \"CONSTANT\" mode. For \"REFLECT\" and \"SYMMETRIC\",\n* refer to \tf.mirrorPad\.* Also available are stricter rank-specific methods with the same signature\n* as this method that assert that \"paddings\" is of given length.\n* - \tf.pad1d* - \tf.pad2d* - \tf.pad3d* - \tf.pad4d*\n* \n* * @param *x The tensor to pad.\n* * @param *paddings An array of length \R\" (the rank of the tensor), where\n* each element is a length-2 tuple of\n* ints [padBefore, padAfter].\n* * specifying how much to pad along each dimension of the tensor.\n* * @param constantValue The pad value to use. Defaults to 0.\n* * @doc {heading: \\"Tensors\", subheading: \\"Transformations\",n */\n\n* @function _pad_<T extends Tensor>
* x: T|TensorLike, paddings: Array<[number, number]>, constantValue = 0): T
* {
* const \$x = convertToTensor(x, \'x\', \'pad\');\n* if ($x.rank === 0) {
* throw new Error('\pad(scalar) is not defined. Pass non-scalar to pad\');\n* }
* const attrs: PadV2Attrs = {paddings, constantValue};
* const inputs: PadV2Inputs = {x: $x};\n* return ENGINE.runKernel\(PadV2, inputs as unknown as NamedTensorMap,
* attrs as unknown as NamedAttrMap);\n* }
* *
* const x = tf.tensor1d([1, 2, 3, 4]);\n* x.pad([[1, 2]]).print();\n* }
* */

import {Tensor1D} from '../tensor';
import {TensorLike} from '../types';
import {assert} from '../util';
import {op} from './operation';
import {pad} from './pad';

* function _pad1d_<x: Tensor1D|TensorLike, paddings: [number, number],
* constantValue = 0): Tensor1D
* {
* assert(paddings.length === 2,
* () => 'Invalid number of paddings. Must be length of 2 each.');\n* return ENGINE.runKernel\(\n* PadV2, inputs as unknown as NamedAttrMap);\n* }
* }
* */

import {Tensor2D} from '../tensor';
import {TensorLike} from '../types';
import {assert} from '../util';
import {op} from './operation';
import {pad} from './pad';

* function _pad2d_<x: Tensor2D|TensorLike, paddings: [number, number],
* constantValue = 0): Tensor2D
* {
* assert(paddings.length === 2,
* () => 'Invalid number of paddings. Must be length of 2 each.');\n* return ENGINE.runKernel\(PadV2, inputs as unknown as NamedAttrMap);\n* }
* */

---

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paddings A 2-D array. Must have shape `[M, 2]`, all values must be `>=0`. `paddings[i] = [padStart, padEnd]` specifies the amount to zero-pad from input dimension `i + 1`, which corresponds to spatial dimension `i`. It is required that all values must be `>=0`. This operation is equivalent to the following steps:

1. Zero-pad the start and end of dimensions `[1, ..., M]` of the input tensor according to `paddings` to produce `padded` of shape `paddedShape`.
2. Reshape `padded` to `reshapedPadded` of shape `reshapedPaddedShape` according to `blockShape`.
3. Reshape `reshapedPadded` to `permutedReshapedPadded` of shape `permutedReshapedPaddedShape`.
4. Reshape `permutedReshapedPadded` to `outputTensor` of shape `outputShape`.

@doc {heading: 'Tensors', subheading: 'Transformations'}

```typescript
function spaceToBatchND_<T extends Tensor>(x: T|TensorLike, blockShape: number[], paddings: number[][]): T {
  const {x} = convertToTensor(x, 'x', 'spaceToBatchND');

  util.assert(x.rank >= 1 + blockShape.length,
      () => `input rank ${x.rank} should be >= than [blockShape] ${blockShape.length}`);

  util.assert(paddings.length === blockShape.length,
      () => `paddings.shape[0] ${paddings.length} must be equal to [blockShape] ${blockShape.length}`);

  util.assert(x.shape.reduce((a, b, i) => {
    if (i > 0 && i <= blockShape.length) {
      return a && ((b + paddings[i - 1][0] + paddings[i - 1][1]) % blockShape[i - 1] === 0);
    }
    return a;
  }, true),
      () => 'input spatial dimensions ' + x.shape.slice(1) + ' with paddings ' + paddings.toString() + ' must be divisible by blockShapes ' + blockShape.toString());

  const inputs: SpaceToBatchNDInputs = {x: x};
  const attrs: SpaceToBatchNDAttrs = {blockShape, paddings};

  return ENGINE.runKernel(SpaceToBatchND, inputs as {} as NamedTensorMap,
    attrs as {} as NamedAttrMap);
}
```

export const spaceToBatchND = op({spaceToBatchND_});

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 */

---

```typescript
import {Tensor3D, Tensor4D} from '../tensor';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import * as util from '../util';

import {avgPool} from './avg_pool';
import {batchToSpaceND} from './batch_to_space_nd';
import * as conv_util from './conv_util';
import {maxPool} from './max_pool';
import {reshape} from './reshape';
import {spaceToBatchND} from './space_to_batch_nd';

/**
 * Performs an N-D pooling operation.
 *
 * @param input The input tensor, of rank 4 or rank 3 of shape `[batch, height, width, inChannels]`. If rank 3, batch of 1 is assumed.
 * @param windowShape The filter size: `[filterHeight, filterWidth]`. If input is a single number, then `filterHeight == filterWidth`.
 * @param poolingType The type of pooling, either `max` or `avg`. If input is a single number, then `poolingType` is inferred by the padding algorithm.
 * @param strides The strides of the pooling: `[strideHeight, strideWidth]`. If input is a single number, then `strides` is a single number.
 * @param pad The padding algorithm:
 * @doc {heading: 'Operations', subheading: 'Pooling'}
 */
```
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```typescript
import {NamedTensorMap} from 'tensor';
import {tensor} from 'tensor';

import {NamedTensorMap} from 'tensor';
import {convertToTensor} from 'tensor_util';

/**
 * Computes the power of one `tf.Tensor` to another. Supports broadcasting.
 * Given a `tf.Tensor` x and a `tf.Tensor` y, this operation computes x^y for
 * corresponding elements in x and y.
 * The result's dtype will be the upcasted type of the 'base' and 'exp' dtypes.
 */
function pow_<T extends Tensor>(base: Tensor|TensorLike, exp: T|TensorLike): T {
  let $base = convertToTensor(base, 'base', 'pow');
  let $exp = convertToTensor(exp, 'exp', 'pow');

  const inputs: PowInputs = {a: $base, b: $exp};
  return ENGINE.runKernel(Pow, inputs as {} as NamedTensorMap);
}

export const pow = op({pow_});

/**
 * Computes the product of elements across dimensions of a `tf.Tensor`.
 * Reduces the input along the dimensions given in `axes`. Unless 'keepDims'
 * is true, the rank of the `tf.Tensor` is reduced by 1 for each entry in `axes`.
 * If 'keepDims' is true, the reduced dimensions are retained with length 1.
 */
function prod_<T extends Tensor>(input: T|TensorLike): T {
  let $input = convertToTensor(input, 'input', 'prod');

  const inputs: ProdInputs = {x: $input, op: 'prod'};
  return ENGINE.runKernel(Prod, inputs as {} as NamedTensorMap);
}

export const prod = op({prod_});
```

---

```
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 */
```
x.prod(axis).print(); // or tffprod(x, axis)
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Update xor generator.

```javascript
function XorGen(seed) {
  var me = this;

  // Set up generator function.
  me.next = function() {
    // Mix in string seed, then discard an initial batch of 64 values.
    for (var k = 0; k < strseed.length + 64; k++) {
      me.x ^= strseed.charCodeAt(k) | 0;
    }
    return (me.d = (me.d + 362437 | 0)) + (me.v = me.y ^ (me.y << 4)) ^ (t ^ (t >>> 1)) | 0;
  };

  if (seed === (seed | 0)) {
    // Integer seed.
    me.x = seed;
  } else {
    // String seed.
    strseed += seed;
  }

  // Mix in string seed, then discard an initial batch of 64 values.
  for (var k = 0; k < strseed.length + 64; k++) {
    me.x ^= strseed.charCodeAt(k) | 0;
  }

  return me.x;
}

function copy(f, t) {
  t.x = f.x;
  t.y = f.y;
  t.z = f.z;
  t.w = f.w;
  return t;
}

function impl(seed, opts) {
  var xg = new XorGen(seed),
      state = opts && opts.state,
      prng = xg.next;
  prng.int32 = function() { return (xg.next() >>> 0) / 0x100000000; }
  prng.double = function() {
    return prng() + (prng() * 0x20000000 | 0) *
      2.3283064561836332e-308; // 2^-1022
  };
  prng.quick = prng;
  if (state) {
    if (typeof(state) == 'object')
      copy(state, xg);
    return (prng.int32 || prng.double)();
  } else {
    return xg.next();
  }
}

function Mash() {
  data = data.toString();
  for (var i = 0; i < data.length; i++) {
    n += data.charCodeAt(i);
    var h = 0.02519603228416938 * n;
    n = h >>> 0;
    h -= n;
    n *= h * 0.1000000000000000071; // 2^-53
  }
}

function xor128(impl) {
  return xg.next() >>> 11,
          bot = (xg.next() >>> 0) / 0x100000000,
          result = (top + bot) / (1 << 21);
  }
}
```

function XorGen(seed) {
  var me = this;

  // Set up generator function.
  me.next = function() {
    // Mix in string seed, then discard an initial batch of 64 values.
    for (var k = 0; k < strseed.length + 64; k++) {
      me.x ^= strseed.charCodeAt(k) | 0;
    }
    return (me.d = (me.d + 362437 | 0)) + (me.v = me.y ^ (me.y << 4)) ^ (t ^ (t >>> 1)) | 0;
  };

  if (seed === (seed | 0)) {
    // Integer seed.
    me.x = seed;
  } else {
    // String seed.
    strseed += seed;
  }

  // Mix in string seed, then discard an initial batch of 64 values.
  for (var k = 0; k < strseed.length + 64; k++) {
    me.x ^= strseed.charCodeAt(k) | 0;
  }

  return me.x;
}

function copy(f, t) {
  t.x = f.x;
  t.y = f.y;
  t.z = f.z;
  t.w = f.w;
  return t;
}

function impl(seed, opts) {
  var xg = new XorGen(seed),
      state = opts && opts.state,
      prng = xg.next;
  prng.int32 = function() { return (xg.next() >>> 0) / 0x100000000; }
  prng.double = function() {
    return prng() + (prng() * 0x20000000 | 0) *
      2.3283064561836332e-308; // 2^-1022
  };
  prng.quick = prng;
  if (state) {
    if (typeof(state) == 'object')
      copy(state, xg);
    return (prng.int32 || prng.double)();
  } else {
    return xg.next();
  }
}

function Mash() {
  data = data.toString();
  for (var i = 0; i < data.length; i++) {
    n += data.charCodeAt(i);
    var h = 0.02519603228416938 * n;
    n = h >>> 0;
    h -= n;
    n *= h * 0.1000000000000000071; // 2^-53
  }
}

function xor128(impl) {
  return xg.next() >>> 11,
          bot = (xg.next() >>> 0) / 0x100000000,
          result = (top + bot) / (1 << 21);
  }
```
1) & 7]; v ^= t ^ (t >>> 10);\n t = X[(i + 3) & 7]; v ^= t ^ (t >>> 3);\n t = X[(i + 4) & 7]; v ^= t ^ (t << 7);\n t =
X[(i + 7) & 7]; t = t ^ (t << 13); v ^= t ^ (t << 9);\n X[i] = v;\n me.i = (i + 1) & 7;\n return v;\n };\n\n function
init(me, seed) {\n var j, w, X = [];\n\n if (seed === (seed | 0)) {\n
// Seed state array using a 32-bit integer.\n
w = X[0] = seed;\n } else {\n
// Seed state using a string.\n
seed = '' + seed;\n
for (j = 0; j < seed.length;
++j) {\n
X[j & 7] = (X[j & 7] << 15) ^\n
(seed.charCodeAt(j) + X[(j + 1) & 7] << 13);\n
}\n }\n //
Enforce an array length of 8, not all zeroes.\n while (X.length < 8) X.push(0);\n for (j = 0; j < 8 && X[j] === 0;
++j);\n if (j == 8) w = X[7] = -1; else w = X[j];\n\n me.x = X;\n me.i = 0;\n\n // Discard an initial 256
values.\n for (j = 256; j > 0; --j) {\n
me.next();\n }\n }\n\n init(me, seed);\n}\n\nfunction copy(f, t) {\n t.x =
f.x.slice();\n t.i = f.i;\n return t;\n}\n\nfunction impl(seed, opts) {\n if (seed == null) seed = +(new Date);\n var xg
= new XorGen(seed),\n
state = opts && opts.state,\n
prng = function() { return (xg.next() >>> 0) /
0x100000000; };\n prng.double = function() {\n do {\n
var top = xg.next() >>> 11,\n
bot = (xg.next()
>>> 0) / 0x100000000,\n
result = (top + bot) / (1 << 21);\n } while (result === 0);\n return result;\n };\n
prng.int32 = xg.next;\n prng.quick = prng;\n if (state) {\n if (state.x) copy(state, xg);\n prng.state = function() {
return copy(xg, {}); }\n }\n return prng;\n}\n\nif (module && module.exports) {\n module.exports = impl;\n} else
if (define && define.amd) {\n define(function() { return impl; });\n} else {\n this.xorshift7 = impl;\n}\n\n})(\n
this,\n (typeof module) == 'object' && module, // present in node.js\n (typeof define) == 'function' && define //
present with an AMD loader\n);\n\n","// A Javascript implementaion of Richard Brent's Xorgens xor4096
algorithm.\n//\n// This fast non-cryptographic random number generator is designed for\n// use in Monte-Carlo
algorithms. It combines a long-period xorshift\n// generator with a Weyl generator, and it passes all common
batteries\n// of stasticial tests for randomness while consuming only a few nanoseconds\n// for each prng generated.
For background on the generator, see Brent's\n// paper: \"Some long-period random number generators using shifts
and xors.\"\n// http://arxiv.org/pdf/1004.3115v1.pdf\n//\n// Usage:\n//\n// var xor4096 = require('xor4096');\n//
random = xor4096(1);
// Seed with int32 or string.\n// assert.equal(random(), 0.1520436450538547);
// (0, 1) range, 53 bits.\n// assert.equal(random.int32(), 1806534897); // signed int32, 32 bits.\n//\n// For nonzero
numeric keys, this impelementation provides a sequence\n// identical to that by Brent's xorgens 3 implementaion in
C. This\n// implementation also provides for initalizing the generator with\n// string seeds, or for saving and
restoring the state of the generator.\n//\n// On Chrome, this prng benchmarks about 2.1 times slower than\n//
Javascript's built-in Math.random().\n\n(function(global, module, define) {\n\nfunction XorGen(seed) {\n var me =
this;\n\n // Set up generator function.\n me.next = function() {\n var w = me.w,\n
X = me.X, i = me.i, t, v;\n
// Update Weyl generator.\n me.w = w = (w + 0x61c88647) | 0;\n // Update xor generator.\n v = X[(i + 34) &
127];\n t = X[i = ((i + 1) & 127)];\n v ^= v << 13;\n t ^= t << 17;\n v ^= v >>> 15;\n t ^= t >>> 12;\n //
Update Xor generator array state.\n v = X[i] = v ^ t;\n me.i = i;\n // Result is the combination.\n return (v +
(w ^ (w >>> 16))) | 0;\n };\n\n function init(me, seed) {\n var t, v, i, j, w, X = [], limit = 128;\n if (seed ===
(seed | 0)) {\n
// Numeric seeds initialize v, which is used to generates X.\n
v = seed;\n
seed = null;\n }
else {\n
// String seeds are mixed into v and X one character at a time.\n
seed = seed + '\\0';\n
v = 0;\n
limit = Math.max(limit, seed.length);\n }\n // Initialize circular array and weyl value.\n for (i = 0, j = -32; j <
limit; ++j) {\n
// Put the unicode characters into the array, and shuffle them.\n
if (seed) v ^=
seed.charCodeAt((j + 32) % seed.length);\n
// After 32 shuffles, take v as the starting w value.\n
if (j === 0) w
= v;\n v ^= v << 10;\n
v ^= v >>> 15;\n
v ^= v << 4;\n
v ^= v >>> 13;\n
if (j >= 0) {\n
w = (w +
0x61c88647) | 0; // Weyl.\n
t = (X[j & 127] ^= (v + w)); // Combine xor and weyl to init array.\n
i = (0
== t) ? i + 1 : 0; // Count zeroes.\n
}\n }\n // We have detected all zeroes; make the key nonzero.\n if (i
>= 128) {\n
X[(seed && seed.length || 0) & 127] = -1;\n }\n // Run the generator 512 times to further mix the
state before using it.\n // Factoring this as a function slows the main generator, so it is just\n // unrolled here.
The weyl generator is not advanced while warming up.\n i = 127;\n for (j = 4 * 128; j > 0; --j) {\n
v = X[(i +
34) & 127];\n
t = X[i = ((i + 1) & 127)];\n
v ^= v << 13;\n
t ^= t << 17;\n
v ^= v >>> 15;\n
t ^= t
>>> 12;\n
X[i] = v ^ t;\n }\n // Storing state as object members is faster than using closure variables.\n
me.w = w;\n me.X = X;\n me.i = i;\n }\n\n init(me, seed);\n}\n\nfunction copy(f, t) {\n t.i = f.i;\n t.w = f.w;\n
t.X = f.X.slice();\n return t;\n};\n\nfunction impl(seed, opts) {\n if (seed == null) seed = +(new Date);\n var xg =

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new XorGen(seed),

```javascript
prng = function() { return (xg.next() >>> 0) / 0x100000000; }
```

```javascript
prng.double = function() { return (xg.next() >>> 0) / (1 << 21); }
```

```javascript
prng.int32 = xg.next;
```

```javascript
prng.quick = prng;
```

```javascript
if (state) {
    if (typeof(state) == 'object') copy(state, xg);
    prng.state = function() { return copy(xg, {}); }
}
```

```javascript
return prng;
```

```javascript
})(
  this,
  (typeof module) == 'object' && module,    // present in node.js
  (typeof define) == 'function' && define   // present with an AMD loader
);

```

/* A Javascript implementaion of the
"Tyche-i" prng algorithm by\n// Samuel Neves and Filipe Araujo\n// See https://eden.dei.uc.pt/~sneves/pubs/2011-
snfa2.pdf\nfunction(function, global, module, define) {
function XorGen(seed) { var me = this, strseed = '';

  // Set up generator function.
  me.next = function() { var b = me.b, c = me.c, d = me.d, a = me.a;

    d = (d << 24) ^ (d >>> 8) ^ a;
    a = (a - b) | 0;
    me.b = b = (b << 20) ^ (b >>> 12) ^ c;
    me.c = c = (c - d) | 0;
    me.d = (d << 16) ^ (c >>> 16) ^ a;
    return a = (a - b) | 0;
  }

  me.a = 0;
  me.b = 0;
  me.c = 2654435769 | 0;
  me.d = 1367130551;

  if (seed === Math.floor(seed)) { // Integer seed.
    me.a = (seed / 0x100000000) | 0;
    me.b = seed | 0;
  } else { // String seed.
    strseed += seed;
  }

  // Mix in string seed, then discard an initial
  batch of 64 values.
  for (var k = 0; k < strseed.length + 20; k++) {
    me.b ^= strseed.charCodeAt(k) | 0;
    me.next();
  }
}

function copy(f, t) {
  t.a = f.a;
  t.b = f.b;
  t.c = f.c;
  t.d = f.d;
  return t;
};

function impl(seed, opts) { var xg = new XorGen(seed),

  state = opts &

  prng = function() { return (xg.next() >>> 0) / 0x100000000; }
```

```javascript
prng.double = function() { return (xg.next() >>> 0) / (1 << 21); }
```

```javascript
prng.int32 = xg.next;
```

```javascript
prng.quick = prng;
```

```javascript
if (state) {
    if (typeof(state) == 'object') copy(state, xg);
    prng.state = function() { return copy(xg, {}); }
}
```

```javascript
return prng;
```

```javascript
})(
  this,
  (typeof module) == 'object' && module,    // present in node.js
  (typeof define) == 'function' && define   // present with an AMD loader
);

```

/*
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limitation the rights to use, copy, modify, merge, publish,\ndistribute, sublicense, and/or sell copies of the Software,
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OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF\nMERCHANTABILITY,
FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.\nNO EVENT SHALL THE
AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER
LIABILITY, WHETHER IN AN ACTION OF CONTRACT,\nTORT OR OTHERWISE, ARISING FROM, OUT
OF OR IN CONNECTION WITH THE\nSOFTWARE OR THE USE OR OTHER DEALINGS IN THE
SOFTWARE.
*/
toString(a) {
  return String.fromCharCode.apply(0, a);
}

//
// When seedrandom.js is loaded, we immediately
// mix a few bits into the built-in RNG into the entropy pool.
// We do not want to interfere with
deterministic PRNG state later.

// seedrandom will not call math.random on its own again after
// initialization.

// Nodejs and AMD support: export the implementation as a
// module using
// either convention. 

// module.exports = seedrandom;

// When in node.js, try using crypto package for autoseeding.

//
// n
// if (typeof module) == 'object' &
// module.exports {
// module.exports = seedrandom;
//}

// Nodejs and AMD support: export the implementation as a
// module using
// either convention. 

// module.exports = seedrandom;

// When in node.js, try using crypto package for autoseeding.
Returns next sample from a Gaussian distribution. *

public nextValue(): number { 
  if (!isNaN(this.nextVal)) {
    const value = this.nextVal;
    this.nextVal = NaN;
    return value;
  }

  let resultX: number, resultY: number;
  let isValid = false;
  while (!isValid) {
    let v1: number, v2: number, s: number;
    do {
      v1 = 2 * this.random() - 1;
      v2 = 2 * this.random() - 1;
      s = v1 * v1 + v2 * v2;
    } while (s >= 1 || s === 0);
    const mul = Math.sqrt(-2.0 * Math.log(s) / s);
    resultX = this.mean + this.stdDev * v1 * mul;
    resultY = this.mean + this.stdDev * v2 * mul;
    if (!this.truncated || this.isValidTruncated(resultX)) {
      if (!this.truncated || this.isValidTruncated(resultY)) {
        return this.convertValue(resultX);
      }
    }
    isValid = true;
  }

  return this.convertValue(resultX);
}

/** Handles proper rounding for non-floating-point numbers. */
private convertValue(value: number): number {
  if (this.dtype == null || this.dtype === 'float32') {
    return value;
  }
  return Math.round(value);
}

/** Returns true if less than 2-standard-deviations from the mean. */
private isValidTruncated(value: number): boolean {
  return value <= this.upper && value >= this.lower;
}

private alpha: number;
private beta: number;
preserve private d: number;
private private c: number;
private private dtype?: keyof RandGammaDataTypes;
private private randu: seedrandom.prng;
private private randn: MPRandGauss;

constructor(
  alpha: number, beta: number, dtype: keyof RandGammaDataTypes, seed?: number) {
  this.alpha = alpha;
  this.beta = 1 / beta; // convert rate to scale parameter
  this.dtype = dtype;
  this.d = alpha - (1 / 3);
  this.c = 1 / Math.sqrt(9 * this.d);
  this.dtype = dtype !== 'float32' ? return value : Math.round(value);
  return this.convertValue(resultX);
}

/** Handles proper rounding for non-floating-point numbers. */
private convertValue(value: number): number {
  if (this.dtype === 'float32') {
    return value;
  }
  return Math.round(value);
}

nextValue() {
  return this.convertValue(this.min + this.range * this.random());
}

export function jarqueBeraNormalityTest(values: TypedArray|number[]) {
  const n = values.length;
  const s = skewness(values);
  const k = kurtosis(values);
  const b = n / 6 * (Math.pow(wos, 2) + 0.25 * Math.pow(wos - 3, 2));
  const CHI_SQUARE_2DEG = 5.991;
  if (jb > CHI_SQUARE_2DEG) { throw new Error('The difference between $\{min\} - $\{max\} <= 1 and dtype is not float');
    this.random = seedrandom.alea(seed);
  }
  return this.convertValue(this.min + this.range * this.random());
}

export function jarqueBeraNormalityTest(values: TypedArray|number[]) {
  const n = values.length;
  const s = skewness(values);
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  const b = n / 6 * (Math.pow(wos, 2) + 0.25 * Math.pow(wos - 3, 2));
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export function jarqueBeraNormalityTest(values: TypedArray|number[]) {
  const n = values.length;
  const s = skewness(values);
  const k = kurtosis(values);
  const b = n / 6 * (Math.pow(wos, 2) + 0.25 * Math.pow(wos - 3, 2));
  const CHI_SQUARE_2DEG = 5.991;
  if (jb > CHI_SQUARE_2DEG) { throw new Error('The difference between $\{min\} - $\{max\} <= 1 and dtype is not float');
    this.random = seedrandom.alea(seed);
  }
  return this.convertValue(this.min + this.range * this.random());
}
sum / values.length;
}

function standardDeviation(values: TypedArray|number[], mean: number) {
  let squareDiffSum = 0;
  for (let i = 0; i < values.length; i++) {
    const diff = values[i] - mean;
    squareDiffSum += diff * diff;
  }
  return Math.sqrt(squareDiffSum / values.length);
}

function kurtosis(values: TypedArray|number[]) {
  const valuesMean = mean(values);
  const n = values.length;
  let sum2 = 0;
  let sum3 = 0;
  let sum4 = 0;
  for (let i = 0; i < n; i++) {
    const v = values[i] - valuesMean;
    sum2 += v * v;
    sum3 += v * v * v;
    sum4 += v * v * v * v;
  }
  return (2 / n) * sum4 / Math.pow((2 / n) * sum2, 2) - 3;
}

function skewness(values: TypedArray|number[]) {
  const valuesMean = mean(values);
  const n = values.length;
  let sum2 = 0;
  let sum3 = 0;
  for (let i = 0; i < n; i++) {
    const v = values[i] - valuesMean;
    sum2 += v * v;
    sum3 += v * v * v;
  }
  return (3 / n) * sum3 / Math.pow((2 / (n - 1)) * sum2, 3 / 2);
}

import {Tensor} from '../tensor';
import {Rank, ShapeMap} from '../types';

import {buffer} from './buffer';
import {op} from './operation';
import {RandGamma} from './rand_util';

/**
 * Creates a `tf.Tensor` with values sampled from a gamma distribution.
 */
function randomGamma_<R extends Rank>(
  shape: ShapeMap[R], alpha: number, beta = 1,
  dtype: 'float32'|'int32' = 'float32', seed?: number):
  Tensor<R> {
  if (beta == null) {
    beta = 1;
  }
  if (dtype == null) {
    dtype = 'float32';
  }
  if (dtype !== 'float32' && dtype !== 'int32') {
    throw new Error(`Unsupported data type ${dtype}`);
  }
  const rgamma =
      new RandGamma(alpha, beta, dtype, false /* truncated */, seed);
  const res = buffer(shape, dtype);
  for (let i = 0; i < res.values.length; i++) {
    res.values[i] = rgamma.nextValue();
  }
  return res.toTensor();
}

export const randomGamma =
    op({randomGamma_});

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 * distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND.
 */

import {Tensor} from '../tensor';
import {DataType, Rank, ShapeMap} from '../types';

import {buffer} from './buffer';
import {op} from './operation';
import {MPRandGauss} from './rand_util';

/**
 * Creates a `tf.Tensor` with values sampled from a normal distribution.
 */
function randomNormal_<R extends Rank>(
  shape: ShapeMap[R], mean = 0, stdDev = 1, dtype: 'float32'|'int32' = 'float32',
  seed?: number): Tensor<R> {
  if (dtype != null && (dtype as DataType) === 'bool') {
    throw new Error(`Unsupported data type ${dtype}`);
  }
  const randGauss =
      new MPRandGauss(mean, stdDev, dtype, false /* truncated */, seed);
  const res = buffer(shape, dtype);
  for (let i = 0; i < res.values.length; i++) {
    res.values[i] = randGauss.nextValue();
  }
  return res.toTensor();
}

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 *
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 */

import {Tensor} from '../tensor';
import {DataArray, Rank, ShapeMap} from '../types';

import {buffer} from './buffer';
import {Map} from './operation';
import {MPRandGauss} from './rand_util';

/**
 * Creates a `tf.Tensor` with values sampled from a normal distribution.
 */
function randomNormal_<R extends Rank>(
  shape: ShapeMap[R], mean = 0, stdDev = 1, dtype: 'float32'|'int32' = 'float32',
  seed?: number): Tensor<R> {
  if (dtype != null && (dtype as DataType) === 'bool') {
    throw new Error(`Unsupported data type ${dtype}`);
  }
  const randGauss =
      new MPRandGauss(mean, stdDev, dtype, false /* truncated */, seed);
  const res = buffer(shape, dtype);
  for (let i = 0; i < res.values.length; i++) {
    res.values[i] = randGauss.nextValue();
  }
  return res.toTensor();
}
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---

```javascript
res.toTensor();
```

```javascript
import {Tensor} from '../tensor';
import {DataType, Rank, ShapeMap} from '../types';

import {buffer} from './buffer';
import {op} from './operation';
import {UniformRandom} from './rand_util';

/**
 * Creates a `tf.Tensor` with values sampled from a uniform distribution.
 * The generated values follow a uniform distribution in the range
 * `[minval, maxval)`. The lower bound `minval` is included in the range,
 * while the upper bound `maxval` is excluded.
 *
 * @param shape An array of integers defining the output tensor shape.
 * @param minval The lower bound on the range of random values to generate.
 * Defaults to 0.
 * @param maxval The upper bound on the range of random values to generate.
 * Defaults to 1.
 * @param dtype The data type of the output tensor. Defaults to `float32`.
 * @param seed A random seed.
 * @param op A function to use for generating random values.
 * @returns {Tensor} The resulting tensor.

 * These functions are applicable for generating random values.
 */

export const randomUniform = op({randomUniform_: () => {}});
```

---

```javascript
import {ENGINE} from '../engine';
import {Range, RangeAttrs} from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor1D} from '../tensor';

/**
 * Creates a new `tf.Tensor1D` filled with the numbers in the range provided.
 * The tensor is half-open interval meaning it includes start, but excludes stop.
 * Decrementing ranges and negative step values are supported.
 *
 * ```js
 * tf.range(0, 9, 2).print();
 * ```
 *
 * @param start An integer start value
 * @param stop An integer stop value
 * @param step An integer increment (will default to 1 or -1)
 * @param dtype The data type of the output tensor. Defaults to 'float32'.
 * @param seed A random seed.
 * @returns {Tensor1D} The resulting tensor.

 * These functions are applicable for generating ranges.
 */

export function range(
    start: number, stop: number, step = 1,
    dtype: 'float32'|'int32' = 'float32'): Tensor1D {
  if (step === 0) {
    throw new Error('Cannot have a step of zero');
  }

  const attrs: RangeAttrs = {start, stop, step, dtype};

  return ENGINE.runKernel(Range, {} /* inputs */, attrs as {} as NamedAttrMap);
}
```

---

```javascript
import {ENGINE} from '../engine';
import {Real, RealInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import {op} from './operation';

/**
 * Returns the
```
real part of a complex (or real) tensor. Given a tensor input, this operation returns a tensor of type float that is the real part of each element in input considered as a complex number. If the input is real, it simply makes a clone of the input. The following example shows how to use the real function:

```js
const x = tf.complex([-2.25, 3.25], [4.75, 5.75]);
const realX = tf.real(x);
```

The `real` function can also be used in a TensorFlow JavaScript (JS) code snippet as follows:

```js
const x = tf.randomNormal([2, 3, 4], 0, 1);
const realX = tf.real(x);
```

In the context of server-side operations, the `real` function can be used as follows in TypeScript:

```ts
import {Real, RealInputs} from 'tensorflow';
import {Tensor} from 'tensorflow';

const x = tf.tensor3d([1, 2, 3, 4, 5, 6, 7, 8], [2, 2, 2]);
const realX = tf.real(x);
```

The `real` function is defined in the `TensorFlow` library and is part of the `tf` namespace. It is used to extract the real part of a complex tensor or the real part of a real tensor. The function signature is as follows:

```ts
function real_<T extends Tensor>(input: T|TensorLike): T {
  const $input = convertToTensor(input, 'input', 'real');
  const inputs: RealInputs = {input: $input};
  return ENGINE.runKernel(Real, inputs as {} as NamedTensorMap);
}
```

The `real` function takes an input tensor of any type and returns a new tensor of type `float` containing the real part of each element from the input tensor.
```typescript
function relu6_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'relu6');

  return ENGINE.runKernel(Relu6Inputs, inputs as {} as NamedTensorMap);
}

export const relu6 = op({relu6_});
```

```
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 */
```
function reverse2d_(x: Tensor2D|TensorLike, axis?: number|number[]): Tensor2D {
  const $x = convertToTensor(x, 'x', 'reverse');
  util.assert(
      $x.rank === 2,
      () => `Error in reverse2D: x must be rank 2 but got rank $(x.rank).`);
  return reverse($x, axis);
}

export const reverse2d = op({reverse2d_});

function reverse3d_(x: Tensor3D|TensorLike, axis?: number|number[]): Tensor3D {
  const $x = convertToTensor(x, 'x', 'reverse');
  util.assert(
      $x.rank === 3,
      () => `Error in reverse3D: x must be rank 3 but got rank $(x.rank).`);
  return reverse($x, axis);
}

export const reverse3d = op({reverse3d_});

function reverse4d_(x: Tensor4D|TensorLike, axis?: number|number[]): Tensor4D {
  const $x = convertToTensor(x, 'x', 'reverse');
  util.assert(
      $x.rank === 4,
      () => `Error in reverse4D: x must be rank 4 but got rank $(x.rank).`);
  return reverse($x, axis);
}

export const reverse4d = op({reverse4d_});
function separableConv2d_<T extends Tensor3D|Tensor4D>(x: T|TensorLike, depthwiseFilter: Tensor4D|TensorLike, pointwiseFilter: Tensor4D|TensorLike, strides: [number, number]|number, pad: 'valid'|'same', dilation: [number, number]|number = [1, 1], dataFormat: 'NHWC'|'NCHW' = 'NHWC'): T {
  const $x = convertToTensor(x, 'x', 'separableConv2d');
  const inputs: {x: x, depthwiseFilter: depthwiseFilter, pointwiseFilter: pointwiseFilter} = {
    x, depthwiseFilter, pointwiseFilter
  };

  const $depthwiseFilter = convertToTensor(depthwiseFilter, 'depthwiseFilter', 'separableConv2d');
  const $pointwiseFilter = convertToTensor(pointwiseFilter, 'pointwiseFilter', 'separableConv2d');

  let x4D = $x as Tensor4D;
  let reshapedTo4D = false;
  if ($x.rank === 3) {
    reshapedTo4D = true;
    x4D = reshape($x, [1, $x.shape[0], $x.shape[1], $x.shape[2]]);
  }

  if (dataFormat === 'NCHW') {
    throw new Error('separableConv2d currently does not support dataFormat NCHW');
  }

  util.assert(x4D.rank === 4, () => `Error in separableConv2d: input must be rank 4, but got` + $x.rank + 'rank');

  let x4D = reshape($x, [1, $x.shape[0], $x.shape[1], $x.shape[2]]);

  if (dataFormat !== 'NCHW') {
    throw new Error('Error in separableConv2d: dataFormat is not supported');
  }

  util.assert(x4D.rank === 4, () => `Error in separableConv2d: input rank must be 4, but got` + x4D.rank);

  const depthwiseConv2d = function separableConv2d_<T extends Tensor3D|Tensor4D>(x: T|TensorLike, depthwiseFilter: Tensor4D|TensorLike, pointwiseFilter: Tensor4D|TensorLike, strides: [number, number]|number, pad: 'valid'|'same', dilation: [number, number]|number = [1, 1], dataFormat: 'NHWC'|'NCHW'): T {
    // ...
Error in separableConv2d: the second dimension of pointwise filter must be 1, but got
$\text{shape}[1]$. Error in separableConv2d: the third dimension of pointwise filter must be $\text{shape}[2]$. `\n
const inChannels = $depthwiseFilter.shape[2]$; const channelMultiplier = $depthwiseFilter.shape[3]$; const pointwiseStride = 1; const res = $x4D$, $depthwiseFilter$, strides, pad, dataFormat, dilation; $\text{return reshape}(res, \text{shape}[1], \text{shape}[2], \text{shape}[3])$ as $T$; $\text{return return res as T}$; $\text{export const separableConv2d = op({separableConv2d_});}$

```
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 *
 */
```
function sign_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'sign');
  const inputs: SignInputs = {x: $x};
  return ENGINE.runKernel(Sign, inputs as {} as NamedTensorMap);
}
export const sign = op({sign_});

import {ENGINE} from '../engine';
import {Sin, SinInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {op} from './operation';

/**
 * Computes sin of the input Tensor element-wise: `sin(x)`
 *
 * ```js
 * const x = tf.tensor1d([0, Math.PI / 2, Math.PI * 3 / 4]);
 * x.sin().print();  // or tf.sin(x)
 * ```
 * @param x The input tensor.
 *
 * @doc {heading: 'Operations',
 * subheading: 'Basic math'}
 */
function sin_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'sin');

  const inputs: SinInputs = {x: $x};

  return ENGINE.runKernel(Sin, inputs as {} as NamedTensorMap);
}
export const sin = op({sin_});

import {Tensor1D} from '../tensor';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import * as util from '../util';

import {op} from './operation';
import {slice} from './slice';

/**
 * Extracts a 1D slice from 1D array starting at coordinates `begin` and is of length `size`. See `slice` for details.
 */
function slice1d_<T extends Tensor>(x: Tensor1D|TensorLike, begin: number, size: number): Tensor1D {
  const $x = convertToTensor(x, 'x', 'slice1d');
  util.assert($x.rank === 1,
      () =>
          `slice1d expects a rank-1 tensor, but got a rank-${$x.rank} tensor`);
  return slice($x, [begin], [size]);
}
export const slice1d = op({slice1d_});
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 */

import {Tensor2D} from '../tensor';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import {op} from './operation';
import {slice} from './slice';

/**
 * Extracts a 2D slice from a 2D array starting at coordinates `begin` and is of size `size`. See `slice` for details.
 */
function slice2d_(x: Tensor2D|TensorLike, begin: [number, number], size: [number, number]): Tensor2D {
  const $x = convertToTensor(x, 'x', 'slice2d');
  util.assert($x.rank === 2, () => `slice2d expects a rank-2 tensor, but got a rank-` + $x.rank + ` tensor`);
  return slice($x, begin, size);
}

export const slice2d = op({slice2d_});

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 */

import {Tensor3D} from '../tensor';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import {op} from './operation';
import {slice} from './slice';

/**
 * Extracts a 3D slice from a 3D array starting at coordinates `begin` and is of size `size`. See `slice` for details.
 */
function slice3d_(x: Tensor3D|TensorLike, begin: [number, number, number], size: [number, number, number]): Tensor3D {
  const $x = convertToTensor(x, 'x', 'slice3d');
  util.assert($x.rank === 3, () => `slice3d expects a rank-3 tensor, but got a rank-` + $x.rank + ` tensor`);
  return slice($x, begin, size);
}

export const slice3d = op({slice3d_});

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 */

import {Tensor4D} from '../tensor';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import {op} from './operation';
import {slice} from './slice';

/**
 * Extracts a 4D slice from a 4D array starting at coordinates `begin` and is of size `size`. See `slice` for details.
 */
function slice4d_(x: Tensor4D|TensorLike, begin: [number, number, number, number], size: [number, number, number, number]): Tensor4D {
  const $x = convertToTensor(x, 'x', 'slice4d');
  util.assert($x.rank === 4, () => `slice4d expects a rank-4 tensor, but got a rank-` + $x.rank + ` tensor`);
  return slice($x, begin, size);
}

export const slice4d = op({slice4d_});

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 */
C++ Code Snippet:

```cpp
const inputs: IFFTInputs = {input};
return ENGINE.runKernel(IFFT, inputs as {} as NamedTensorMap);

export const ifft = op({ifft_});
```

JavaScript Code Snippet:

```javascript
function irfft_(input: Tensor): Tensor {
  const innerDimensionSize = input.shape[input.shape.length - 1];
  const batch = input.size / innerDimensionSize;
  let ret: Tensor;
  if (innerDimensionSize <= 2) {
    const complexInput = reshape(input, [batch, innerDimensionSize]);
    ret = ifft(complexInput);
  } else {
    // The length of unique components of the DFT of a real-valued signal
    // is 2 * (input_len - 1)
    const outputShape = [batch, 2 * (innerDimensionSize - 1)];
    const realInput = reshape(real(input), [batch, innerDimensionSize]);
    const imagInput = reshape(imag(input), [batch, innerDimensionSize]);
    const realConjugate =
        reverse(slice(realInput, [0, 1], [batch, innerDimensionSize - 2]), 1);
    const imagConjugate: Tensor2D = mul(
        reverse(slice(imagInput, [0, 1], [batch, innerDimensionSize - 2]), 1),
        scalar(-1));
    const r =
        concat([realInput, realConjugate], 1);
    const i = concat([imagInput, imagConjugate], 1);
    const complexInput =
        reshape(complex(r, i), [outputShape[0], outputShape[1]]);
    ret = ifft(complexInput);
  }
  ret = real(ret);
  return ret;
}
```

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 */
```

---

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containing the sizes of each output tensor along the axis. If a number then it must evenly divide
`x.shape[axis]`; otherwise the sum of sizes must match `x.shape[axis]`. Can contain one -1 indicating that
dimension is to be inferred. @param axis The dimension along which to split. Defaults to 0 (the first dimension).

```typescript
function split<T extends Tensor>(
    x: Tensor|TensorLike, numOrSizeSplits: number|number[], axis = 0): T[] {
  const $x = convertToTensor(x, 'x', 'split');
  const inputs: SplitVInputs = {x: $x};
  const attr: SplitVAttrs = {numOrSizeSplits, axis};
  return ENGINE.runKernel('SplitV', inputs as {} as NamedTensorMap,
                        attr as {} as NamedAttrMap) as {} as T[];
}
```

```typescript
export const split = op({split_});
```

```typescript
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 */
```

```typescript
import {Tensor} from '../../tensor';
import {assert} from '../../util';
import {complex} from '../complex';
import {concat} from '../concat';
import {imag} from '../imag';
import {op} from '../operation';
import {real} from '../real';
import {reshape} from '../reshape';
import {slice} from '../slice';
import {split} from '../split';
import {zeros} from '../zeros';
import {zerosLike} from '../zeros_like';

import {fft} from './fft';

/**
 * Real value input fast Fourier transform.
 *
 * Computes the 1-dimensional discrete Fourier transform over the inner-most dimension of the real input.
 * Computes the 1-dimensional discrete Fourier transform over the inner-most dimension of the real input.
 * Computes the 1-dimensional discrete Fourier transform over the inner-most dimension of the real input.
 * Computes the 1-dimensional discrete Fourier transform over the inner-most dimension of the real input.
 * Computes the 1-dimensional discrete Fourier transform over the inner-most dimension of the real input.
 * Computes the 1-dimensional discrete Fourier transform over the inner-most dimension of the real input.
 * Computes the 1-dimensional discrete Fourier transform over the inner-most dimension of the real input.
 */
function rfft_(input: Tensor, fftLength?: number): Tensor {
  assert(
      input.dtype === 'float32',
      () => `The dtype for rfft() must be real value but got ${input.dtype}`);

  let innerDimensionSize = input.shape[input.shape.length - 1];
  const batch = input.size / innerDimensionSize;

  let adjustedInput: Tensor;
  if (fftLength != null && fftLength < innerDimensionSize) {
    // Need to crop
    const begin = input.shape.map(v => 0);
    const size = input.shape.map(v => v);
    size[input.shape.length - 1] = fftLength;
    adjustedInput = slice(input, begin, size);
  } else if (fftLength != null && fftLength > innerDimensionSize) {
    // Need to pad with zeros
    const zerosShape = input.shape.map(v => v);
    zerosShape[input.shape.length - 1] = fftLength;
    adjustedInput = concat([input, zeros(zerosShape)], input.shape.length - 1);
  } else {
    adjustedInput = input;
  }

  // Complement the input with zero imaginary numbers.
  const zerosInput = zerosLike(adjustedInput);
  const complexInput = reshape(complex(adjustedInput, zerosInput), [batch, innerDimensionSize]);

  const ret = fft(complexInput);

  // Exclude complex conjugations. These conjugations are put symmetrically.
  const half = Math.floor(innerDimensionSize / 2) + 1;
  const realValues = ret.real();
  const imagValues = ret.imag();
  const realComplexConjugate = split(realValues, half, innerDimensionSize - half);
  const imagComplexConjugate = split(imagValues, half, innerDimensionSize - half);

  return realComplexConjugate.map(v => v.real(), [...realValues, [half, innerDimensionSize - half] as number[], [realValues, shape.length - 1]),
          imagValues, shape.length - 1));
  const outputShape = adjustedInput.shape.slice();
  outputShape[adjustedInput.shape.length - 1] = half;
  return reshape(outputShape, [realComplexConjugate[0], imagComplexConjugate[0]], outputShape));
}
```

```typescript
export const rfft = op({rfft_});
```

```typescript
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 */
```
```javascript
/**
 * Computes square root of the input 'tf.Tensor' element-wise: \( y = \sqrt{x} \)
 * for all \( x \) in the input tensor.
 *
 * @param x The input tensor.
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function sqrt_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'sqrt');

  const inputs: SqrtInputs = {x: $x};

  return ENGINE.runKernel(Sqrt, inputs as {} as NamedTensorMap);
}
export const sqrt = op({sqrt_});
```

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 *
 *=============================================================================
 */

import {ENGINE} from '../engine';
import {SquaredDifference, SquaredDifferenceInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {assertAndGetBroadcastShape} from './broadcast_util';
import {op} from './operation';

/**
 * Returns (a - b) * (a - b) element-wise.
 * Supports broadcasting.
 *
 * ```js
 * const a = tf.tensor1d([1, 4, 3, 16]);
 * const b = tf.tensor1d([1, 2, 9, 4]);
 *
 * a.squaredDifference(b).print();  // or tf.squaredDifference(a, b)
 * ```
 *
 * ```js
 * // Broadcast squared difference a with b.
 * const a = tf.tensor1d([2, 4, 6, 8]);
 * const b = tf.scalar(5);
 *
 * a.squaredDifference(b).print();  // or tf.squaredDifference(a, b)
 * ```
 *
 * @param a The first tensor.
 * @param b The second tensor. Must have the same type as `a`.
 *
 * @doc {heading: 'Operations', subheading: 'Arithmetic'}
 */
function squaredDifference_<T extends Tensor>(a: Tensor|TensorLike, b: Tensor|TensorLike): T {
  let $a = convertToTensor(a, 'a', 'squaredDifference');
  let $b = convertToTensor(b, 'b', 'squaredDifference');
  [$a, $b] = makeTypesMatch($a, $b);

  assertAndGetBroadcastShape($a.shape, $b.shape);

  const inputs: SquaredDifferenceInputs = {a: $a, b: $b};
  const attrs = {};

  return ENGINE.runKernel(SquaredDifference, inputs as unknown as NamedTensorMap, attrs);
}

export const squaredDifference = op({squaredDifference_});
```

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 *
 *=============================================================================
 */

import {Tensor} from '../tensor';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import {squeezeShape} from '../util';

import {op} from './operation';
import {reshape} from './reshape';

/**
 * Removes dimensions of size 1 from the shape of a `tf.Tensor`.
 *
 * ```js
 * const x = tf.tensor([1, 2, 3, 4], [1, 1, 4]);
 * const s = x.squeeze().print();  // or tf.squeeze(x)
 * ```
 *
 * @param x The input tensor to be squeezed.
 * @param axis An optional list of numbers. If specified, only
 *     squeezes the dimensions listed. The dimension index starts at 0. If
 * @doc {heading: 'Tensors', subheading: 'Transformations'}
 */
function squeeze_<T extends Tensor>(x: Tensor|TensorLike, axis?: number[]): T {
  const $x = convertToTensor(x, 'x', 'squeeze');

  const inputs: SqueezeInputs = {x: $x};
  const attrs = {};

  return ENGINE.runKernel(Squeeze, inputs as unknown as NamedTensorMap, attrs);
}

export const squeeze = op({squeeze_});
```

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=============================================================================
*/

import {ENGINE} from '../engine';
import {Pack, PackAttrs, PackInputs} from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensorArray} from '../tensor_util_env';
import {TensorLike} from '../types';
import * as util from '../util';

import {op} from './operation';

/**
 * Stacks a list of rank-`R` `tf.Tensor`s into one rank-`(R+1)` `tf.Tensor`.
 *
 * ```js
 * const a = tf.tensor1d([1, 2]);
 * const b = tf.tensor1d([3, 4]);
 * const c = tf.tensor1d([5, 6]);
 * const x = tf.stack([a, b, c]);
 * const y = tf.stack([a, b, c]);
 * ```
 *
 * @param tensors A list of tensor objects with the same shape and dtype.
 * @param axis The axis to stack along. Defaults to 0 (the first dim).
 */
function stack_<T extends Tensor>(
    tensors: Array<T|TensorLike>, axis = 0): Tensor {
  const $tensors =
    convertToTensorArray(tensors, 'tensors', 'stack', 'string_or_numeric');

  util.assert($tensors.length >= 1, () => 'Pass at least one tensor to tf.stack');

  if ($tensors.length > 0) {
    util.assert(axis <= $tensors[0].rank, () => 'Axis must be <= rank of the tensor');
  }

  const inputs: PackInputs = $tensors;
  const attrs: PackAttrs = {axis};

  return ENGINE.runKernel(Pack, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap);
}

export const stack = op({stack_});

/**
 * Computes step of the input `tf.Tensor` element-wise: `x > 0 ? 1 : alpha * x`
 *
 * ```js
 * const x = tf.tensor1d([0, 2, -1, -3]);
 * ```
 * @param x The input tensor.
 * @param alpha The gradient when input is negative.
 *
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function step_<T extends Tensor>(x: T|TensorLike, alpha = 0.0): T {
  const $x = convertToTensor(x, 'x', 'step');

  const inputs: StepInputs = {x: $x};
  const attrs: StepAttrs = {alpha};

  return ENGINE.runKernel(Step, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap);
}

export const step = op({step_});

=============================================================================
*/

import {ENGINE} from '../engine';
import {StridedSlice, StridedSliceAttrs, StridedSliceInputs} from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {op} from './operation';

/**
 * Extracts a strided slice of a tensor.
 *
 * ```js
 * const x = tf.tensor3d([0, 1, 2], [4, 4, 4], [8, 8, 8]);
 * const y = tf.tensor3d([0, 1, 2], [4, 4, 4], [8, 8, 8]);
 * const slice = x.slice(0, 4, 2, 0, 4, 2);
 * ```
 * @param x The input tensor.
 * @param begin Begin slice.
 * @param end End slice.
 * @param strides Strides.
 *
 * @doc {heading: 'Operations', subheading: 'Slicing and Joining'}
 */
function slice_<T extends Tensor>(
    x: T|TensorLike,
    begin: ArrayLike<number>,
    end: ArrayLike<number>,
    strides: ArrayLike<number>,
    name?: string): T {
  const $x = convertToTensor(x, 'x', 'slice');

  const inputs: StridedSliceInputs = {
    x: $x,
    begin: convertToTensor(begin, 'begin', 'slice'),
    end: convertToTensor(end, 'end', 'slice'),
    strides: convertToTensor(strides, 'strides', 'slice'),
    name,
  };
Roughly speaking, this op extracts a slice of size (end-begin)/stride from the given input tensor (x). Starting at the location specified by begin the slice continues by adding stride to the index until all dimensions are not less than end. Note that a stride can be negative, which causes a reverse slice from the given input tensor (x). Starting at the location specified by begin the slice continues by adding stride to the index until all dimensions are not less than end. Note that a stride can be negative, which causes a reverse slice.

```js
const t = tf.tensor3d([-1, 2, 3, 4, 5, 6, 7, 8, 9], [3, 3, 3]);
const t = t.stridedSlice([-1, 0, 0], [2, 2, 0], [1, 1, 1]).print(); // [[[3, 3, 3]]] *
const t = t.stridedSlice([-1, 0, 0], [2, 2, 3], [1, 1, 1]).print(); // [[[3, 3, 3]]] *
const t = t.stridedSlice([-1, 0, 0], [2, 3, 3], [1, 1, 1]).print(); // [[[4, 4, 4]]] *
```

```js
function stridedSlice_(x: Tensor|TensorLike, begin: number[], end: number[], strides?: number[],
    beginMask = 0, endMask = 0, ellipsisMask = 0, newAxisMask = 0, shrinkAxisMask = 0): Tensor {
  const $x = convertToTensor(x, 'x', 'stridedSlice');

  const inputs: StridedSliceInputs = {x: $x};
  const attrs: StridedSliceAttrs = {
    begin,
    end,
    strides,
    beginMask,
    endMask,
    ellipsisMask,
    newAxisMask,
    shrinkAxisMask
  };

  return ENGINE.runKernel(StridedSlice, inputs as {} as NamedTensorMap,
      attrs as {} as NamedAttrMap);
}
```

```js
export const stridedSlice = op({stridedSlice_});
```

```
/**
 * Computes tan of the input `tf.Tensor` element-wise, `tan(x)`
 *
 * ```js
 * const x = tf.tensor1d([0, Math.PI / 2, Math.PI * 3 / 4]);
 *
 * x.tan().print();  // or tf.tan(x)
 * ```
 * @param x The input tensor.
 *
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function tan_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'tan');

  const inputs: TanInputs = {x: $x};

  return ENGINE.runKernel(Tan, inputs as {} as NamedTensorMap);
}
```

```
export const tan = op({tan_});
```

```
import {ENGINE} from '../engine';
import {Tan, TanInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import {DataType} from '../types';
import {assertNonNull} from '../util';
import {makeTensor} from './tensor_ops_util';

/**
 * Creates rank-1 `tf.Tensor` with the provided values, shape and dtype.
 *
 * The same functionality can be achieved with `tf.tensor`, but in general we recommend using `tf.tensor1d` as it makes the code more readable.
 *
 * ```js
 * const tensor1d = tf.tensor1d([1, 2, 3]).print();
 * ```
 * @param values The values of the tensor. Can be array of numbers, or a `TypedArray`.
 * @param dtype The data type.
 *
 * @doc
 */
function tensor1d_<T extends number[]|TypedArray<_T>, _T>(values: T, dtype: string): Tensor {
  assertNonNull(values, "values is null or undefined");
  assertNonNull(dtype, "dtype is null or undefined");

  // Create a typed array from the values
  const valuesTyped: _T[] = values;

  // Create a tensor with the provided values, shape, and dtype
  return tf.makeTensor(valuesTyped, valuesTyped.length, dtype);
}
```

```
export const tensor1d = op({tensor1d_});
```

```
import {Tensor} from '../tensor';
import {Tan, TanInputs} from '../kernel_names';
import {assertNonNull} from '../util';
import {makeTensor} from './tensor_ops_util';

/**
 * Computes tan of the input `tf.Tensor` element-wise, `tan(x)`
 *
 * ```js
 * const x = tf.tensor1d([0, Math.PI / 2, Math.PI * 3 / 4]);
 *
 * x.tan().print();  // or tf.tan(x)
 * ```
 * @param x The input tensor.
 *
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function tan_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'tan');

  const inputs: TanInputs = {x: $x};

  return ENGINE.runKernel(Tan, inputs as {} as NamedTensorMap);
}
```

```
export const tan = op({tan_});
```

```
import {ENGINE} from '../engine';
import {Tan, TanInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import {DataType} from '../types';
import {assertNonNull} from '../util';
import {makeTensor} from './tensor_ops_util';

/**
 * Creates rank-1 `tf.Tensor` with the provided values, shape and dtype.
 *
 * The same functionality can be achieved with `tf.tensor`, but in general we recommend using `tf.tensor1d` as it makes the code more readable.
 *
 * ```js
 * const tensor1d = tf.tensor1d([1, 2, 3]).print();
 * ```
 * @param values The values of the tensor. Can be array of numbers, or a `TypedArray`.
 * @param dtype The data type.
 *
 * @doc
 */
function tensor1d_<T extends number[]|TypedArray<_T>, _T>(values: T, dtype: string): Tensor {
  assertNonNull(values, "values is null or undefined");
  assertNonNull(dtype, "dtype is null or undefined");

  // Create a typed array from the values
  const valuesTyped: _T[] = values;

  // Create a tensor with the provided values, shape, and dtype
  return tf.makeTensor(valuesTyped, valuesTyped.length, dtype);
}
```

```
export const tensor1d = op({tensor1d_});
```
/**
 * Creates rank-2 'tf.Tensor' with the provided values, shape and dtype.
 * The same functionality can be achieved with `tf.tensor2d` as it makes the code more readable.
 * Usage:
 * ```js
 * const tensor = tf.tensor2d([[1, 2, 3], [4, 5, 6]]);
 * ```
 * @param values The values of the tensor.
 * @param shape The shape of the tensor.
 * @param dtype The data type.
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
export function tensor2d(values: TensorLike2D, shape?: [number, number], dtype?: DataType): Tensor2D {
  assertNonNull(values);
  if (shape != null && shape.length !== 2) {
    throw new Error('tensor2d() requires shape to have two numbers');
  }
  const inferredShape = inferShape(values, dtype);
  if (inferredShape.length !== 2 && inferredShape.length !== 1) {
    throw new Error('tensor2d() requires values to be number[][] or flat/TypedArray');
  }
  return makeTensor(values, shape, inferredShape, dtype) as Tensor2D;
}

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 */

import {Tensor2D} from '../tensor';
import {inferShape} from '../tensor_util_env';
import {TensorLike2D} from '../types';
import {DataType} from '../types';
import {assertNonNull} from '../util';
import {makeTensor} from './tensor_ops_util';

/**
 * Creates rank-2 'tf.Tensor' with the provided values, shape and dtype.
 * The same functionality can be achieved with `tf.tensor2d` as it makes the code more readable.
 * Usage:
 * ```js
 * const tensor = tf.tensor2d([[1, 2, 3], [4, 5, 6]]);
 * ```
 * @param values The values of the tensor.
 * @param shape The shape of the tensor.
 * @param dtype The data type.
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
export function tensor2d(values: TensorLike2D, shape?: [number, number], dtype?: DataType): Tensor2D {
  assertNonNull(values);
  if (shape != null && shape.length !== 2) {
    throw new Error('tensor2d() requires shape to have two numbers');
  }
  const inferredShape = inferShape(values, dtype);
  if (inferredShape.length !== 2 && inferredShape.length !== 1) {
    throw new Error('tensor2d() requires values to be number[][] or flat/TypedArray');
  }
  return makeTensor(values, shape, inferredShape, dtype) as Tensor2D;
}

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 */

import {Tensor4D} from '../tensor';
import {inferShape} from '../tensor_util_env';
import {TensorLike4D} from '../types';
import {DataType} from '../types';
import {assertNonNull} from '../util';
import {makeTensor} from './tensor_ops_util';

/**
 * Creates rank-4 'tf.Tensor' with the provided values, shape and dtype.
 * The same functionality can be achieved with `tf.tensor4d` as it makes the code more readable.
 * Usage:
 * ```js
 * const tensor = tf.tensor4d([[[[1], [2], [3], [4]]], [[5], [6], [7], [8]]]);
 * ```
 * @param values The values of the tensor.
 * @param shape The shape of the tensor.
 * @param dtype The data type.
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
export function tensor4d(values: TensorLike4D, shape?: [number, number, number, number], dtype?: DataType): Tensor4D {
  assertNonNull(values);
  if (shape != null && shape.length !== 4) {
    throw new Error('tensor4d() requires shape to have four numbers');
  }
  const inferredShape = inferShape(values, dtype);
  if (inferredShape.length !== 4 && inferredShape.length !== 1) {
    throw new Error('tensor4d() requires values to be number[][][] or flat/TypedArray');
  }
  return makeTensor(values, shape, inferredShape, dtype) as Tensor4D;
}
`tensor4d()` requires shape to be provided when `values` are a flat array);\n  return makeTensor(values, shape, inferredShape, dtype) as Tensor4D;\n}

```typescript
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 * See the License for the specific language governing permissions and
 * limitations under the License.
 */

import {Tensor5D} from '../tensor';
import {inferShape} from '../tensor_util_env';
import {TensorLike5D} from '../types';
import {DataType} from '../types';
import {assertNonNull} from '../util';
import {makeTensor} from './tensor_ops_util';

/**
 * Creates rank-5 `tf.Tensor` with the provided values, shape and dtype.
 *
 * The same functionality can be achieved with `tf.tensor`, but in general
 * we recommend using `tf.tensor5d` as it makes the code more readable.
 *\n * Pass a nested array.
 */

export function tensor5d(values: TensorLike5D, shape?: [number, number, number, number, number], dtype?: DataType): Tensor5D {
  assertNonNull(values);
  if (shape != null && shape.length !== 5) {
    throw new Error('tensor5d() requires shape to have five numbers');
  }
  const inferredShape = inferShape(values, dtype);
  if (inferredShape.length !== 5 && inferredShape.length !== 1) {
    throw new Error('tensor5d() requires values to be number[5] or flat/TypedArray');
  }
  if (inferredShape.length === 1 && shape == null) {
    throw new Error('tensor5d() requires shape to be provided when `values` are a flat array');
  }
  return makeTensor(values, shape, inferredShape, dtype) as Tensor5D;
}

```

```typescript
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 * See the License for the specific language governing permissions and
 * limitations under the License.
 */

import {Tensor6D} from '../tensor';
import {inferShape} from '../tensor_util_env';
import {TensorLike6D} from '../types';
import {DataType} from '../types';
import {assertNonNull} from '../util';
import {makeTensor} from './tensor_ops_util';

/**
 * Creates rank-6 `tf.Tensor` with the provided values, shape and dtype.
 *
 * The same functionality can be achieved with `tf.tensor`, but in general
 * we recommend using `tf.tensor6d` as it makes the code more readable.
 *\n * Pass a nested array.
 */

export function tensor6d(values: TensorLike6D, shape?: [number, number, number, number, number, number], dtype?: DataType): Tensor6D {
  assertNonNull(values);
  if (shape != null && shape.length !== 6) {
    throw new Error('tensor6d() requires shape to have six numbers');
  }
  const inferredShape = inferShape(values, dtype);
  if (inferredShape.length !== 6 && inferredShape.length !== 1) {
    throw new Error('tensor6d() requires values to be number[6] or flat/TypedArray');
  }
  if (inferredShape.length === 1 && shape == null) {
    throw new Error('tensor6d() requires shape to be provided when `values` are a flat array');
  }
  return makeTensor(values, shape, inferredShape, dtype) as Tensor6D;
}
'tensor6d()' requires shape to be provided when `values` is a flat array:

```
shape = shape || inferredShape as [number, number, number, number, number, number];
return makeTensor(values, shape, inferredShape, dtype) as Tensor6D;
```

```
...
```
for (let i = 0; i < res.values.length; i++) {
  res.values[i] = randGauss.nextValue();
} return res.toTensor();

export const truncatedNormal = op({truncatedNormal_});

for (let i = 0; i < res.values.length; i++) {
  res.values[i] = randGauss.nextValue();
}
return res.toTensor();

import {ENGINE} from '../engine';
import {Unique, UniqueAttrs, UniqueInputs} from
  '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor, Tensor1D} from
  '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from
  '../tensor_util_env';
import {TensorLike} from '../types';
import {assert} from '../util';

import {op} from './operation';

/**
 * Finds unique elements along an axis of a tensor.
 * It returns a tensor `values` containing all of the unique elements along the
 * `axis` of the given tensor `x` in the same order that they occur along
 * the `axis` in `x`; `x` does not need to be sorted. It also returns a tensor `indices`
 * `indices` the same size as the number of the elements in `x` along the `axis` dimension.
 * It contains the index in the unique output `values` of
 * the unique elements in `x` along the `axis`
 * dimension. It returns the index in the unique output `values` of
 * the unique elements in `x` along the `axis`.
 * ```js
 * // A 1-D tensor
 * const a = tf.tensor1d([1, 2, 4, 4, 4, 7, 8]);
 * const {values, indices} = tf.unique(a);
 * values.print();   // [1, 2, 4, 7, 8,]
 * indices.print();  // [0, 0, 1, 2, 2, 2, 3]
 * ```
 * @param x A tensor (int32, string, bool).
 * @param axis The
 * axis of the tensor to find the unique elements.
 * @returns 
 * [uniqueElements, indices] (see above for details)
 *
 * @doc {heading: 'Operations', subheading: 'Evaluation'}
 */
function unique_<T extends Tensor>(
    x: T|TensorLike, axis = 0): {values: T, indices: Tensor1D} {
  const $x = convertToTensor(x, 'x', 'unique',
    'string_or_numeric');
  assert($x.rank > 0, () => 'The input tensor must be at least 1D');

  const inputs:
    UniqueInputs = {x: $x};
  const attrs: UniqueAttrs = {axis};
  const 
    [values, indices] = ENGINE.runKernel(
      Unique, inputs as {} as NamedTensorMap,
      attrs as {} as NamedAttrMap) as 
      [T, Tensor1D];
  return {values, indices};
}

export const unique = op({unique_});

import {ENGINE} from '../engine';
import {UnsortedSegmentSum, UnsortedSegmentSumAttrs,
  UnsortedSegmentSumInputs} from
  '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor, Tensor1D} from
  '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from
  '../tensor_util_env';
import {TensorLike} from '../types';
import {assert, isInt} from
  '../util';

import {op} from './operation';

/**
 * Computes the sum along segments of a `tf.Tensor`.
 * ```js
 * const x = tf.tensor1d([1, 2, 3, 4]);
 * const segmentationIds = tf.tensor1d([1, 2, 0, 1], 'int32');
 * const numSegments = 3;
 * const y = tf.unsortedSegmentSum(segmentationIds, numSegments).print();
 * // [6, 5, 3]
 * ```
 * @param segmentationIds A `tf.Tensor` whose rank is equal to the rank of `x`'s `axis`.
 * @returns 
 * [segmentationSum, numSegmentIds] (see above for details)
 *
 * @doc {heading: 'Operations', subheading: 'Evaluation'}
 */
function unsortedSegmentSum_<T extends Tensor, R extends TensorLike>(
    x: T|TensorLike, segmentationIds: R, numSegments: number): R {
  const $x = convertToTensor(x, 'x', 'unsortedSegmentSum',
    'string_or_numeric');
  assert($x.rank > 0, () => 'The input tensor must be at least 1D');

  const inputs:
    UnsortedSegmentSumInputs = {x: $x, segmentationIds: $segmentationIds, numSegments: numSegments};
  const 
    [segmentationSum, numSegmentIds] = ENGINE.runKernel(
      UnsortedSegmentSum, inputs as {} as NamedTensorMap,
      {segmentationIds, numSegments} as {} as NamedAttrMap) as 
      [R, T];
  return {segmentationSum, numSegmentIds};
}

export const unsortedSegmentSum = op({unsortedSegmentSum_});

along the `axis`. Maps each element of `x` to a segment.

```typescript
/**
 * @param numSegments The number of distinct segmentIds.
 * @param minId The minimum
 * @function
 * @param maxId The maximum

 * @doc {heading: 'Operations', subheading: 'Segment'}
 */
function unsortedSegmentSum_<T extends Tensor>(
    x: T|TensorLike, segmentIds: Tensor1D|TensorLike, numSegments:
    number): T {
  const $x = convertToTensor(x, 'x', 'unsortedSegmentSum');
  const $segmentIds = convertToTensor(segmentIds, 'segmentIds', 'unsortedSegmentSum', 'int32');
  assert(isInt(numSegments), () =>
    'numSegments must be of dtype int');
  const inputs: UnsortedSegmentSumInputs = {x: $x, segmentIds: $segmentIds};
  const attrs: UnsortedSegmentSumAttrs = {numSegments};

  return ENGINE.runKernel(
      UnsortedSegmentSum, inputs as {} as NamedTensorMap,
      attrs as {} as NamedAttrMap);
}

export const unsortedSegmentSum = op({unsortedSegmentSum_});
```

---

```typescript
/**
 * Unstacks a `tf.Tensor` of rank-`R` into a list of rank-`(R-1)` `tf.Tensor`s.
 *
 * ```js
 * const a = tf.tensor2d(
 *   [1, 2, 3, 4], 
 *   [2, 2]
 * );
 *
 * tf.unstack(a).forEach(tensor => tensor.print());
 * ```
 *
 * @param x A tensor object.
 * @param
 * @doc {heading: 'Tensors', subheading: 'Slicing and Joining'}
 */
function unstack_(x: Tensor|TensorLike, axis = 0): Tensor|
```
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*platform/** An implementation of the Where kernel shared between cpu and webgl */

import {buffer} from './opsbuffer';
import {Tensor2D} from './tensor';
import {TypedArray} from './types';

export function whereImpl(condShape: number[], condVals: TypedArray): Tensor2D {
  const indices = [];
  for (let i = 0; i < condVals.length; i++) {
    if (condVals[i]) {
      indices.push(i);
    }
  }

  const inBuffer = buffer(condShape, 'int32');
  const outBuffer = buffer([indices.length, condShape.length], 'int32');

  const loc = inBuffer.indexToLoc(indices[i]);
  const offset = i * condShape.length;
  out.values.set(loc, offset);
  return out.toTensor() as Tensor2D;
}

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 * limitations under the License.
 */

import {whereImpl} from './backends/where_impl';
import {Tensor, Tensor2D} from './tensor';
import {convertToTensor} from './tensor_util_env';
import {TensorLike} from './types';

/**
 * Returns the coordinates of true elements of condition.
 * The coordinates are returned in a 2-D tensor where the first dimension (rows) represents
 * the number of true elements, and the second dimension (columns) represents the
 * coordinates of the true elements. Keep in mind, the shape of the output tensor can vary depending
 * on how many true values there are in input. Indices are output in row-major order. The resulting
 * tensor has the shape [numTrueElems, condition.rank].
 *
 * This is analogous to calling the python `tf.where(condition)` without an x or y.
 *
 * ```js
 * const cond = tf.tensor1d([false, false, true], 'bool');
 * const result = await tf.whereAsync(cond);
 * result.print();
 * ```
 *
 * @doc {heading: 'Operations', subheading: 'Logical'}
 */
async function whereAsync_(condition: Tensor|TensorLike): Promise<Tensor2D> {
  const $condition = convertToTensor(condition, 'condition', 'whereAsync', 'bool');
  const vals = await $condition.data();
  const res = whereImpl($condition.shape, vals);
  if ($condition !== $condition) {
    $condition.dispose();
  }
  return res;
}

export const whereAsync = whereAsync_;

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 * limitations under the License.
 */

import {Tensor} from './tensor';
import {convertToTensor} from './tensor_util_env';
import {TensorLike} from './types';
import * as util from './util';

import {gather} from './gather';
import {reshape} from './reshape';
import {squeeze} from './squeeze';
import {whereAsync} from './where_async';

/**
 * Apply boolean mask to tensor.
 *
 * ```js
 * const tensor = tf.tensor2d([1, 2, 3, 4, 5, 6], [3, 2]);
 * const mask = tf.tensor1d([1, 0, 1], 'bool');
 * const result = await tf.booleanMaskAsync(tensor, mask);
 * result.print();
 * ```
 *
 * @param tensor N-D tensor.
 * @param mask K-D boolean tensor, K <= N and K must be known statically.
 * @param axis A 0-D int Tensor representing the axis in tensor to mask from.
 *     By default, axis is 0 which will mask from the first dimension.
 *     Otherwise K + axis <= N.
 * @doc {heading: 'Tensors', subheading: 'Slicing and Joining'}
 */
async function booleanMaskAsync_(tensor: Tensor|TensorLike, mask: Tensor|TensorLike, axis?: number): Promise<Tensor> {
  const $tensor = convertToTensor(tensor, 'tensor', 'booleanMask');
  const $mask = convertToTensor(mask, 'mask', 'booleanMask');
  const res = whereAsync($tensor, $mask, axis);
  if ($tensor !== $tensor) {
    $tensor.dispose();
  }
  return res;
}

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```javascript
const assertShapesMatch = (tensorShape, axisFrom, axisDim, maskShape) => {
  const mask's shape must match the first K dimensions of tensor's shape.
}

const leadingSize = 1;

const targetTensorShape = tensorShape.slice(0, axisFrom)
  .concat([leadingSize], tensorShape.slice(axisFrom + 1));

const reshapedTensor = reshape(targetTensorShape);

const reshapedMask = reshape($mask, [-1]);

const positivePositions = await whereAsync(reshapedMask);

const indices = squeeze(positivePositions, [1]);

return res;
}

export const booleanMaskAsync = booleanMaskAsync_;

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 */

import {Tensor} from '../tensor';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import {parseAxisParam} from '../util';

import {abs} from './abs';
import * as axis_util from './axis_util';
import {max} from './max';
import {min} from './min';
import {op} from './operation';
import {pow} from './pow';
import {reshape} from './reshape';
import {scalar} from './scalar';
import {sqrt} from './sqrt';
import {square} from './square';
import {sum} from './sum';

/**
 * Computes the norm of scalar, vectors, and matrices.
 * This function can compute several different vector norms (the 1-norm, the Euclidean or 2-norm, the inf-norm, and in general the p-norm for p > 0) and matrix norms (Frobenius, 1-norm, and inf-norm).
 * @param x The input array.
 * @param ord Optional. Order of the norm. Supported norm types are:
 * - 'euclidean' or 2-norm
 * - 'fro' or Frobenius norm
 * - 'max', 'inf', or Infinity
 * - 'min', 'inf', or Infinity
 * - '1', 'max', or sum(abs(x), axis=0)
 * - '2', 'euclidean', or sqrt(sum(abs(x)^2))
 * @param axis If axis is null (the default), the input is considered a vector and a single vector norm is computed over the entire set of values in the Tensor, i.e. norm(x, ord) is equivalent to norm(x.reshape([-1]), ord). If axis is a vector, the input is considered a batch of vectors, and axis determines the axis in x^n over which to compute vector norms. If axis is a 2-tuple of integers, it is considered a batch of matrices and axis determines the axes in x^n
 * @param keepDims Optional. If true, the norm have the same dimensionality as the input.
 * @param doc
 */

function norm_(x, ord, axis, keepDims) {
  x = convertToTensor(x, 'x', 'norm');

  const norm = normImpl(x, ord, axis);
  const axes = parseAxisParam(axis, x.shape);
  const keepDimsShape = axis_util.expandShapeToKeepDim(norm.shape, axes);
  return reshape(norm, keepDimsShape);
}

function normImpl(x, p, axis) {
  if (x.rank === 0) {
    return abs(x);
  }

  // consider vector when no axis is specified
  if (x.rank !== 1 && typeof axis === 'number' ||
      Array.isArray(axis) && axis.length === 1) {
    if (p === 1) {
      return sum(abs(x), axis);
    }
    if (p === Infinity) {
      return max(abs(x), axis);
    }
    if (p === -Infinity) {
      return min(abs(x), axis);
    }
    if (p === 'euclidean' || p === 2) {
      return sqrt(sum(pow(abs(x), scalar(2, 'int32')), axis));
    }
  }

  // matrix
  if (axis) {
    // consider vector when no axis is specified
    if (axis.length === 1) {
      if (p === 1) {
        return sum(abs(x), axis);
      }
      if (p === Infinity) {
        return max(abs(x), axis);
      }
      if (p === -Infinity) {
        return min(abs(x), axis);
      }
    }
  }

  throw new Error('Error in norm: invalid ord value: ' + p);
}
```
tf.tensor2d([4, 3, 1, 7], [4, 1], 'int32');

* const updates = tf.tensor1d([9, 10, 11, 12]);
* const shape = [8];
* tf.scatterND(indices, updates, shape).print();

const updates = tf.tensor1d([9, 10, 11, 12]);
const shape = [8];

tf.scatterND(indices, updates, shape).print();  // [0, 11, 0, 10, 9, 0, 0, 12]

* @param indices The tensor contains the indices into the output tensor.
* @param updates The tensor contains the value for the indices.
* @param shape: The shape of the output tensor.

Tensor|TensorLike,

shape: ShapeMap[R]):

Tensor<R> { 
  const SIndices = convertToTensor(indices, 'indices', 'scatterND', 'int32');
  const Scupdates = convertToTensor(updates, 'updates', 'scatterND');

scatter_nd_util.validateInput(Scupdates, SIndices, shape);

const inputs: ScatterNdInputs = {indices: SIndices, updates: Scupdates};
const attrs: ScatterNdAttrs = {shape};

// tslint:disable-next-line: no-unnecessary-type-assertion
return ENGINE.runKernel<
  ScatterNd, inputs as {}, as NamedTensorMap,
  attr as {} as NamedAttrMap>
    as Tensor<R>;

function scatterND_<R extends Rank>(
    indices: Tensor|TensorLike,
    updates: Tensor|TensorLike,
    shape: ShapeMap[R]): Tensor<R> {
  const $indices = convertToTensor(indices, 'indices', 'scatterND', 'int32');
  const $updates = convertToTensor(updates, 'updates', 'scatterND');

  scatter_nd_util.validateInput($updates, $indices, shape);

  const inputs: ScatterNdInputs = {indices: $indices, updates: $updates};
  const attrs: ScatterNdAttrs = {shape};

  // tslint:disable-next-line: no-unnecessary-type-assertion
  return ENGINE.runKernel<
             ScatterNd, inputs as {} as NamedTensorMap,
             attrs as {} as NamedAttrMap>
             as Tensor<R>;
}

export const scatterND = op({scatterND_});

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=============================================================================

*/

import {Tensor} from '../tensor';

/**
 * Validate sparseToDense inputs.
 *
 * @param sparseIndices A 0-D, 1-D, or 2-D Tensor of type int32. 
 * Each entry spatialIndices[i] contains the complete index where sparseValues[i] will be stored.
 * @param sparseValues A 0-D or 1-D Tensor. Values corresponding to each row of the sparseIndices,
 * or a scalar value to be used for all sparse indices.
 * @param outputShape number[]. Shape of the dense output tensor.
 * @param validateIndices boolean. indice validation is not supported, errors will be thrown if it is set.
 * @param function validateInput function to input the SparseIndices, Tensor, sparseValues:
 * @param outputShape: number[];
 * @param defaultValues: Tensor;
 * @param tfsparseToDense() expects the indices to be int32 type,
 * but the dtype was $sparseValues.dtype$.
 */

function validateInput(
    sparseIndices: Tensor, sparseValues: Tensor,
    outputShape: number[],
    defaultValues: Tensor) {
  if (sparseIndices.dtype !== 'int32') {
    throw new Error('tf.sparseToDense() expects the indices to be int32 type,' +
        ` but the dtype was ${sparseIndices.dtype}.`);
  }
  if (sparseIndices.rank > 2) {
    throw new Error('sparseIndices should be a scalar, vector, or matrix,' +
        ` but got shape ${sparseIndices.shape}.`);
  }

  const sparseIndices.shape[0] = 1;
  const numDims = sparseIndices.rank > 1 ? sparseIndices.shape[1] : 1;
  if (outputShape.length !== numDims) {
    throw new Error('outputShape has incorrect number of elements:',
        ` +$outputShape.length$, should be:$numDims$`);
  }
  const numValues = sparseValues.size;
  if (!(sparseValues.rank === 0 ||
      sparseValues.rank === 1 && numValues === numElems)) {
    throw new Error('sparseValues has incorrect shape ' +
        `+${sparseValues.shape}.`), should be [] or
        `${numElems}`)};

  if (sparseValues.dtype !== defaultValues.dtype) {
    throw new Error('sparseValues.dtype must match defaultValues.dtype');
  }
}

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=============================================================================

*/

import {ENGINE} from '../engine';
import {SparseToDense, SparseToDenseAttrs, SparseToDenseInputs}
from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import * as sparse_to_dense from '../ops/sparse_to_dense_util';
import {Scalar, Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {Rank, ScalarLike, ShapeMap, TensorLike} from '../types';

import {op} from '../operation';

/**
 * Converts a sparse representation into a dense tensor.
 */

function tf.sparseToDense(indices, values, outputShape, defaultValues) {
  if (indices.dtype !== 'int32') {
    throw new Error('tf.sparseToDense() expects the indices to be int32 type,' +
        ` but the dtype was ${indices.dtype}.`);
  }
  if (indices.rank > 2) {
    throw new Error('indices should be a scalar, vector, or matrix,' +
        ` but got shape ${indices.shape}.`);
  }

  const sparseIndices.shape[0] = 1;
  const numDims = sparseIndices.rank > 1 ? sparseIndices.shape[1] : 1;
  if (outputShape.length !== numDims) {
    throw new Error('outputShape has incorrect number of elements:',
        ` +$outputShape.length$, should be:$numDims$`);
  }
  const numValues = sparseValues.size;
  if (!(sparseValues.rank === 0 ||
      sparseValues.rank === 1 && numValues === numElems)) {
    throw new Error('sparseValues has incorrect shape ' +
        `+${sparseValues.shape}.`), should be [] or
        `${numElems}`)};

  if (sparseValues.dtype !== defaultValues.dtype) {
    throw new Error('sparseValues.dtype must match defaultValues.dtype');
  }
}

export function tf.sparseToDense(indices, values, outputShape, defaultValues) {
  return tf.sparseToDense(indices, values, outputShape, defaultValues);
}

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=============================================================================

*/

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dense[i] = (i == sparseIndices ? sparseValues : defaultValue)

// If sparseIndices is a vector, then for each i in [0, n)

// If sparseIndices is an n by d matrix, then for each i in [0, n)

// If sparseIndices is an n by d matrix, then for each i in [0, n)

// All other values in dense are set to defaultValue. If sparseValues is a scalar, all sparse indices are set to this single value.

// If indices are repeated the final value is summed over all values for those indices.

// Corresponding to each row of sparseIndices, or a scalar value to be used for all sparse indices.

// Value to set for indices not specified in sparseIndices. Defaults to zero.

// Heading: 'Operations', subheading: 'Normalization'

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// Importing TensorFlow and related modules.

// Gather slices from input tensor into a Tensor with shape specified by sparseIndices and sparseValues.

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=============================================================================

import {Tensor} from '../tensor';
import * as util from '../util';

/**
 * Normalize noise shape based on provided tensor and noise shape.
 *
 * @param x Tensor.
 * @param noiseShape The shape for the randomly generated keep/drop flags, as an array of numbers. Optional.
 * @returns Normalized noise shape.
 */
export function getNoiseShape(x: Tensor, noiseShape?: number[]) {
  if (noiseShape == null) {
    return x.shape.slice();
  }
  if (util.arraysEqual(x.shape, noiseShape)) {
    return noiseShape;
  }
  if (x.shape.length === noiseShape.length) {
    const newDimension: number[] = [];
    for (let i = 0; i < x.shape.length; i++) {
      if (noiseShape[i] == null && x.shape[i] != null) {
        newDimension.push(x.shape[i]);
      } else {
        newDimension.push(noiseShape[i]);
      }
    }
    return newDimension;
  }
  return noiseShape;
}

/**
 * Computes dropout.
 *
 * ```js
 * const x = tf.tensor1d([1, 2, 2, 1]);
 * const rate = 0.75;
 * const output = tf.dropout(x, rate);
 * output.print();
 * ```
 *
 * @param x A floating point Tensor or TensorLike.
 * @param rate A float in the range [0, 1). The probability that each element of x is discarded.
 * @param noiseShape An array of numbers of type int32, representing the shape for randomly generated keep/drop flags. If the noiseShape has null value, it will be automatically replaced with the x's relative dimension size. Optional.
 * @param seed Used to create random seeds. Optional.
 * @returns A Tensor of the same shape of x.
 *
 * @doc {heading: 'Operations', subheading: 'Dropout'}
 */
function dropout_(x: Tensor|TensorLike, rate: number, noiseShape?: number[], seed?: number|string): Tensor {
  const $x = convertToTensor(x, 'x', 'dropout');

  util.assert($x.dtype === 'float32', () => `x has to be a floating point tensor since it's going to be scaled, but got a ${$x.dtype} tensor instead.`);
  util.assert(rate >= 0 && rate < 1, () => `rate must be a float in the range [0, 1), but got ${rate}.`);

  if (rate === 0) {
    return x instanceof Tensor ? $x.clone() : $x;
  }

  const $noiseShape = getNoiseShape($x, noiseShape);
  const keepProb = 1 - rate;
  const multiplier = div(floor(add(randomUniform($noiseShape, 0, 1, 'float32', seed), keepProb)), keepProb);

  return mul($x, multiplier);
}

export const dropout = op({dropout_});

=============================================================================
import {Tensor1D} from './tensor1d';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import {assert, assertShapesMatch, getTypedArrayFromDType} from '../util';
import {tensor} from './tensor';

/**
 * Returns whether the targets are in the top k predictions.
 *
 * ```js
 * const predictions = tf.tensor2d([[20, 10, 40, 30], [30, 50, -20, 10]]);
 * const targets = tf.tensor1d([2, 0]);
 * const precision = await tf.inTopKAsync(predictions, targets);
 * precision.print();
 * ```
 * @param predictions 2-D or higher `tf.Tensor`
 *     with last dimension being at least k.
 * @param targets 1-D or higher `tf.Tensor`.
 * @param k Optional number of top elements to look at for computing precision,
 *     default to 1.
 *
 * @doc {heading: 'Operations', subheading: 'Evaluation'}
 */
async function inTopKAsync<T extends Tensor, U extends Tensor>(
  predictions: T | TensorLike, targets: U | TensorLike, k = 1): Promise<U> {
  const $predictions = convertToTensor(predictions, 'predictions', 'inTopK');
  const $targets = convertToTensor(targets, 'targets', 'inTopK');

  assert($predictions.rank > 1, () => 'inTopK() expects the predictions to be of rank 2 or higher, but got ${$predictions.rank}');
  $assert($predictions.rank.rank - 1 === $targets.rank, () => 'predictions rank should be 1 larger than targets rank, but got predictions rank ${$predictions.rank} and targets rank ${$targets.rank}');
  assertShapesMatch($predictions.shape.slice(0, $predictions.shape.length - 1), $targets.shape, 'predictions shape should be align with the targets shape, except the last dimension.');
  const lastDim = $predictions.shape[$predictions.shape.length - 1];
  assert(k > 0 && k <= lastDim, () => `'k' passed to inTopK() must be > 0 && <= the predictions last dimension (${lastDim}), but got ${k}`);

  const predictionsVals = await $predictions.data();
  const targetsVals = await $targets.data();

  // Reshape predictionsVals into a 2d tensor [batch, size] = [predictionsVals.length / lastDim, lastDim];
  const precision = getTypedArrayFromDType('bool', batch);
  for (let b = 0; b < batch; b++) {
    const offset = b * size;
    const valAndInd: Array<{value: number, index: number}> = [];
    for (let i = 0; i < vals.length; i++) {
      valAndInd.push({value: vals[i], index: i});
    }
    valAndInd.sort((a, b) => b.value - a.value);
    for (let i = 0; i < k; i++) {
      if (valAndInd[i].index === targetsVals[b]) {
        $precision[b] = 1;
        break;
      }
    }
  }

  if ($predictions !== $predictions) {
    $predictions.dispose();
  }
  if ($targets !== $targets) {
    $targets.dispose();
  }

  return tensor($precision, $targets.shape, 'bool') as U;
}

export const inTopKAsync = inTopKAsync_;

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 */
import {ENGINE} from '../engine';
import {Conv2DBackpropFilter, Conv2DBackpropFilterAttrs, Conv2DBackpropFilterInputs} from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {NamedTensorMap} from '../tensor_types';
import * as util from '../util';
import * as conv_util from './conv_util';
import {op} from './operation';
import {reshape} from './reshape';

/**
 * Computes the derivative of the filter of a 2D convolution.
 * @param x The input tensor, of rank 4 or rank 3 of shape \[ batch, height, width, inChannels \]. If rank 3, batch of 1 is assumed.
 * @param dy The dy image, of rank 4 or rank 3, of shape \[ batch, height, width, outDepth \]. If rank 3, batch of 1 is assumed.
 * @param filterShape The shape of the filter, length 4,
 * @param strides The strides of the convolution: \[ strideHeight, strideWidth \].
 * @param pad A string from: 'same', 'valid'. The type of padding algorithm used in the forward prop of the op.
 * @param dataFormat: An optional string from: \"NHWC\", \"NCHW\". Defaults to \"NHWC\". Specify the data format of the input and output data. With the \* default format \"NHWC\", the data is stored in the order of: [batch, height, width, channels].
 * @param dimRoundingMode A string from: 'ceil', 'round', 'floor'. If none is provided, it will default to truncate.
 * @return The output dy image of rank 4, but got shape: \[ height, width, outDepth \].
 */
function conv2DBackpropFilter<T extends Tensor3D|Tensor4D>(x: T, dy: T, filterShape: [number, number, number, number], strides: [number, number], pad: 'valid'|'same'|number|conv_util.ExplicitPadding, dataFormat: 'NHWC'|'NCHW' = 'NHWC', dimRoundingMode?: 'floor'|'round'|'ceil'): Tensor4D {
  let x4D = x as Tensor4D;
  if (x.rank === 3) {
    x4D = reshape(x, [1, x.shape[0], x.shape[1], x.shape[2]]);
  }
  let dy4D = dy as Tensor4D;
  if (dy4D.rank === 3) {
    dy4D = reshape(dy, [1, dy.shape[0], dy.shape[1], dy.shape[2]]);
  }
  if (filterShape.length === 4) {
    const inDepth = dataFormat === 'NHWC' ? x4D.shape[3] : x4D.shape[1];
    if (inDepth === filterShape[2]) {
      if (dimRoundingMode === null) {
        util.warn('Error in conv2dDerFilter: depth of input ($\{inDepth\}$) must match input depth in filter ($\{filterShape[2]\}$).
      }
      if (outDepth === filterShape[3]) {
        if (dimRoundingMode === null) {
          util.warn('Error in conv2dDerFilter: depth of output ($\{outDepth\}$) must match output depth in filter ($\{filterShape[3]\}$).
      }
    }
  }
  if (dimRoundingMode !== null) {
    util.assert(util.isInt(pad as number), () => 'Error in conv2dDerFilter: pad must be an integer when using, \* and \$.dimRoundingMode \$[dimRoundingMode] but got pad $\{pad\}$.
  }
  const inputs: Conv2DBackpropFilterInputs = {x: x4D, dy: dy4D, \*\*attr: Conv2DBackpropFilterAttrs = \*\*attr} const attrs: Conv2DBackpropFilterAttrs = \*\*attr
  return ENGINE.runKernel(Conv2DBackpropFilter, inputs as {} as NamedTensorMap,
      attrs as {} as NamedAttrMap) as Tensor4D;
}

export const conv2DBackpropFilter = op({conv2DBackpropFilter_});

// Returns gradient for fused activation.
export function getFusedDyActivation(dy: Tensor, y: Tensor, activation: Activation): Tensor {
  if (activation == null || activation === 'linear') {
    return dy;
  }
  if (activation === 'relu') {
    return relu(dy);
  }
  if (activation === 'leakyRelu') {
    return leakyRelu(dy);
  }
  if (activation === 'prelu') {
    return prelu(dy);
  }
  if (activation === 'step') {
    return step(dy);
  }
  if (activation === 'sum') {
    return sum(dy);
  }
  // Returns gradient for fused activation.
  return dy;
}

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is\n* provided, it will default to truncate.\n* @param bias Tensor to be added to the result.\n* @param activation Name of activation kernel (defaults to 'linear') to be\n* applied\n* after biasAdd.\n* @param preluActivationWeights Tensor of prelu weights to be applied as part\n* of a 'prelu' activation, typically the\n* same shape as 'x'.\n* @param leakyreluAlpha Optional. Alpha to be applied as part of a 'leakyrelu'\n* activation.\n*/

function fusedConv2d_<T extends Tensor3D|Tensor4D>({\n  x,\n  filter,\n  strides,\n  pad,\n  dataFormat = 'NHWC',\n  dilations = [1, 1],\n  dimRoundingMode,\n  bias,\n  activation = 'linear',\n  preluActivationWeights,\n  leakyreluAlpha\n}: {\n  x: TensorLike,\n  filter: Tensor4D|TensorLike,\n  strides: [number, number]|number,\n  pad: 'valid'|'same'|number|conv_util.ExplicitPadding,\n  dataFormat?: \n  'NHWC',\n  'NCHW',\n  dilations?: [number, number] |number,\n  dimRoundingMode?: 'floor'|'round'|'ceil',\n  bias?: Tensor|TensorLike,\n  activation?: Activation,\n  preluActivationWeights?: Tensor,\n  leakyreluAlpha?: number})\n: T {

  let result = unfusedConv2d({\n    x,\n    filter,\n    strides,\n    pad,\n    dataFormat,\n    dilations,\n    dimRoundingMode,\n    bias,\n    activation,\n    preluActivationWeights,\n  }) as T;

  if (bias != null) {
    result = add(result, bias);
  }

  return applyActivation(result, activation, preluActivationWeights, leakyreluAlpha);
}

// tslint:disable-next-line: no-unnecessary-type-annotation
ENGINE.runKernel(
  FusedConv2D,\n  {\n    x: \n    filter,\n    strides,\n    pad,\n    dataFormat,\n    dilations,\n    dimRoundingMode,\n    activation,\n    leakyreluAlpha,\n  }\n) // Depending on the the params passed in we will have different number of\n// inputs and\n// a different number of elements in the gradient.
if (bias == null) {
  let res = reshape(res, [res.shape[1], res.shape[2], res.shape[3]]) as\n  Tensor3D;
}

return
import {ENGINE} from '../engine';
import {DepthwiseConv2dNativeBackpropFilter, DepthwiseConv2dNativeBackpropFilterAttrs, DepthwiseConv2dNativeBackpropFilterInputs} from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor3D, Tensor4D} from '../tensor';
import {NamedTensorMap} from '../tensor_types';

import {op} from './operation';
import {reshape} from './reshape';

function depthwiseConv2dNativeBackpropFilter_<T extends Tensor3D|Tensor4D>(
    x: T, dy: T, filterShape: [number, number, number, number],
    strides: [number, number]|number, pad: 'valid'|'same'|number,
    dilations: [number, number]|number = [1, 1],
    dimRoundingMode?: 'floor'|'round'|'ceil'):
    Tensor4D {
  let x4D = x as Tensor4D;
  if (x.rank === 3) {
    x4D = reshape(x, [1, x.shape[0], x.shape[1], x.shape[2]]);
  }
  let dy4D = dy as Tensor4D;
  if (dy.rank === 3) {
    dy4D = reshape(dy, [1, dy.shape[0], dy.shape[1], dy.shape[2]]);
  }
  const inputs: DepthwiseConv2dNativeBackpropFilterInputs = {x: x4D, dy: dy4D};
  const attrs: DepthwiseConv2dNativeBackpropFilterAttrs = {strides, pad, dimRoundingMode, dilations, filterShape};
  return op({depthwiseConv2dNativeBackpropFilter_<T extends Tensor3D|Tensor4D>});
}

export const depthwiseConv2dNativeBackpropFilter =
  op({depthwiseConv2dNativeBackpropFilter_});
import {ENGINE} from '../../engine';
import {customGrad} from '../../gradients';
import {FusedDepthwiseConv2D, FusedDepthwiseConv2DAttrs, FusedDepthwiseConv2DInputs} from
  '../../kernel_names';
import {NamedAttrMap} from '../../kernel_registry';
import {Tensor, Tensor3D, Tensor4D} from '../../tensor';
import {GradSaveFunc, NamedTensorMap} from '../../tensor_types';
import {makeTypesMatch} from '../../tensor_util';
import {convertToTensor} from '../../tensor_util_env';
import {TensorLike} from '../../types';
import * as util from '../../util';

import {add} from '../add';
import * as broadcast_util from '../broadcast_util';
import * as conv_util from '../conv_util';
import {depthwiseConv2d as unfusedDepthwiseConv2d} from '../depthwise_conv2d';
import {depthwiseConv2dNativeBackpropFilter} from
  '../depthwise_conv2d_native_backprop_filter';
import {depthwiseConv2dNativeBackpropInput} from
  '../depthwise_conv2d_native_backprop_input';
import {Activation} from '../fused_types';
import {applyActivation, getFusedBiasGradient, getFusedDyActivation, shouldFuse} from
  '../fused_util';
import {op} from '../operation';
import {reshape} from '../reshape';

/**
 * Computes depthwise 2D convolution, optionally
 * fused with adding a bias and applying an activation.
 *
 * Given a 4D `input` array and a `filter` array of
 * shape `\[filterHeight, filterWidth, inChannels, channelMultiplier\]` containing
 * `inChannels` convolutional filters of depth 1, this op applies a
 * different filter to each input channel (expanding from 1 channel to
 * `channelMultiplier` channels for each), then concatenates the results
 * together. The output has `inChannels *
 * channelMultiplier` channels for each.
 *
 * @param obj An
 * object with the following properties:
 * @param x The input tensor, of rank 4 or rank 3, of shape
 * `\[batch, height, width, inChannels\]`. If rank 3, batch of 1 is
 * assumed.
 * @param filter The filter tensor, rank 4, of
 * shape `\[filterHeight, filterWidth, inChannels, channelMultiplier\]`.
 * @param strides The strides of the
 * convolution: `\[strideHeight, strideWidth\]`. If strides is a single number, then `strideHeight == \[\`
 * strideWidth\`
 * @param pad The type of padding algorithm.
 * `- `same` and stride 1: output will be of same size
 * as input, regardless of filter size.\n * `- `valid`: output will be smaller than input if filter is larger than
 * 1x1.\n * `- For more info, see this guide:\n * [https://www.tensorflow.org/api_guides/python/nn#Convolution].\n * @param dataFormat: An
 * optional string from: "NHWC", "NCHW". Defaults to
 * "NHWC", the data is stored in the order of: [batch,\n * height, width, channels]. Only "NHWC" is currently supported.\n * @param dilations The dilation rates:
 * `\[dilationHeight, dilationWidth\]`
 * in which we sample input values across the height and width dimensions\n * in atrous convolution. Defaults to [1, 1].\n * @param dilationHeight == \[\`
 * dilationWidth\`
 * @param activation Name of activation kernel (defaults to `linear`).\n * @param preluActivationWeights Tensor of prelu weights to be applied as part
 * of a `prelu` activation, typically the same shape as `\`

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leakyreluAlpha Optional. Alpha to be applied as part of a `leakyrelu` activation.

```typescript
fusedDepthwiseConv2d_<T extends Tensor3D|Tensor4D>({ x, filter, strides, pad, dataFormat = 'NHWC', dilations = [1, 1], dimRoundingMode, leakyreluAlpha }: { x: TensorLike, filter: Tensor4D|TensorLike, strides: [number, number]|number, pad: 'valid'|'same'|number, dataFormat?: 'NHWC'|'NCHW', dilations?: [number, number]|number, dimRoundingMode?: 'floor'|'ceil', leakyreluAlpha?: number }) => T {
  if (shouldFuse(ENGINE.state.gradientDepth, activation) === false) {
    let result = unfusedDepthwiseConv2d_<T>({ x, filter, strides, pad, dataFormat, dilations, dimRoundingMode, leakyreluAlpha })
    if (bias != null) {
      result = add(result, bias);
    }
    return applyActivation(result, activation, leakyreluAlpha);
  }

  const $x = convertToTensor(x, 'x', 'depthwiseConv2d');
  const $filter = convertToTensor(filter, 'filter', 'depthwiseConv2d');
  const $bias = convertToTensor(bias, 'bias', 'depthwiseConv2d');

  let $x4D = $x as Tensor4D;
  let reshapedTo4D = false;
  if ($x.rank === 3) {
    reshapedTo4D = true;
    $x4D = reshape($x, [1, $x.shape[0], $x.shape[1], $x.shape[2]])
  }

  const convInfo = conv_util.computeConv2DInfo($x4D.shape, $filter.shape, strides, dilations, pad, dimRoundingMode, true /* depthwise */);

  let $bias:
      Tensor;
  if (bias != null) {
    $bias = convertToTensor(bias, 'bias', 'fused conv2d');
    $bias = makeTypesMatch($bias, $x);

    broadcast_util.assertAndGetBroadcastShape(convInfo.outShape, $bias.shape);
  }

  const grad = (dy: Tensor4D, saved: Tensor[]) => {
    const 
      $filter, x4D, y, bias
    = saved;

    const dyActivation = getFusedDyActivation(dy, y, activation) as Tensor4D;

    const xDer = depthwiseConv2dNativeBackpropInput($x4D.shape, dyActivation, $filter as Tensor4D, strides, dilations, pad, dimRoundingMode);
    const filterDer = depthwiseConv2dNativeBackpropFilter($x4D.shape, dyActivation, $filter as Tensor4D, strides, pad, dimRoundingMode);

    if (bias != null) {
      const biasDer = getFusedBiasGradient($bias, dyActivation);
      return [xDer, filterDer, biasDer];
    }

    return [xDer, filterDer];
  };

  const inputs: FusedDepthwiseConv2DInputs = {
    x: $x4D,
    filter: $filter,
    bias: $bias
  };
  const attrs: FusedDepthwiseConv2DAttrs = {
    strides,
    pad,
    dataFormat,
    dilations,
    dimRoundingMode,
    activation,
    leakyreluAlpha
  };

  // Depending on the the params passed in we will have different number of inputs and outputs.
  if (residual && useResidual) {
    inputs = [xDer, filterDer, biasDer];
    outputs = [dy, dyActivation];
  }

  return ENGINE.runKernel(FusedDepthwiseConv2D, inputs, outputs, attrs);
}
```
unnecessary-type-assertion
let res: Tensor4D|Tensor3D = ENGINE.runKernel
FusedDepthwiseConv2D, inputs as {} as NamedTensorMap,\nattrs as {} as NamedAttrMap;\n
save((filter, x4D, res, bias)) as \nif (reshapedTo4D) {\n  // tslint:disable-next-line: no-unnecessary-type-assertion\n  res = reshape(res, [res.shape[1], res.shape[2], res.shape[3]]) as \n  Tensor3D;\n}\n
return {value: res, gradFunc: grad};\n} as T;\n\nexport const depthwiseConv2d = op({fusedDepthwiseConv2d_});
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 */

import {ENGINE} from '../../engine';
import {customGrad} from '../../gradients';
import {_FusedMatMul, _FusedMatMulAttrs, _FusedMatMulInputs} from '../../kernel_names';
import {NamedAttrMap} from '../../kernel_registry';
import {Tensor, Tensor3D} from '../../tensor';
import {GradSaveFunc, NamedTensorMap} from '../../tensor_types';
import {makeTypesMatch} from '../../tensor_util';
import {convertToTensor} from '../../tensor_util_env';
import {TensorLike} from '../../types';
import * as util from '../../util';

import {add} from '../add';
import * as broadcast_util from '../broadcast_util';
import {Activation} from '../fused_types';
import {applyActivation, getFusedBiasGradient, getFusedDyActivation, shouldFuse} from '../fused_util';
import {matMul as unfusedMatMul} from '../mat_mul';
import {op} from '../operation';
import {reshape} from '../reshape';

/**
 * Computes the dot product of two matrices with optional activation and bias.
 *
 * ```js
 * const a = tf.tensor2d([-1, -2], [1, 2]);
 * const b = tf.tensor2d([1, 2, 3, 4], [2, 2]);
 *
 * tf.fused.matMul({a, b, bias: tf.tensor2d([1, 2], [1, 2])}).print();
 * ```
 *
 * @param obj An object with the
 * following properties:
 * - `a` First matrix in dot product operation.
 * - `b` Second matrix in dot product
 * operation.
 * - `bias` Matrix to be added to the result.
 * - `activation` Name of activation
 * kernel (defaults to 'linear').
 * - `preluActivationWeights` Tensor of prelu weights.
 * - `leakyreluAlpha` Alpha of
 * leakyrelu kernel.
 * @return result of fused matMul.
 */
function fusedMatMul_<T extends Tensor>(obj: {
  a: T|TensorLike,
  b: T|TensorLike,
  transposeA?: boolean,
  transposeB?: boolean,
  bias?: Tensor|TensorLike,
  activation?: Activation,
  preluActivationWeights?: Tensor,
  leakyreluAlpha?: number
}): T {
  if (shouldFuse(ENGINE.state.gradientDepth, activation) === false) {
    let result = unfusedMatMul(a, b, transposeA, transposeB);
    if (bias != null) {
      result = add(result, bias);
    }

    return applyActivation(result, activation, preluActivationWeights, leakyreluAlpha) as T;\n    }\n  \n  const a = convertToTensor(obj.a, 'fused matMul');\n  const b = convertToTensor(obj.b, 'fused matMul');\n  const Sa = makeTypesMatch(a, b);\n  const innerShapeA = a.shape[\] - 2;\n  const innerShapeB = b.shape[\] - 2;\n  const outerShapeA = a.shape[\] - 2;\n  const outerShapeB = b.shape[\] - 2;\n  const outerDimA = a.shape.slice(0, -2);\n  const outerDimB = b.shape.slice(0, -2);\n  const batchDimA = util.sizeFromShape(outerDimA);\n  const batchDimB = util.sizeFromShape(outerDimB);\n
  const transposedA = a.transpose();\n  const transposedB = b.transpose();\n
  const result = util.accumulate(
    result, (result, bias) => result.addZeroes(bias);\n  ) as T;\n
  return util.accumulate(
    result, (result, activation) => applyActivation(result, activation);\n  );\n}
transposeB=${transposeB} must match.`);

    const outShape = $a.shape.slice(0, -2).concat([outerShapeA, outerShapeB]);
    const a3D: Tensor3D = reshape($a, [batchDimA, innerShapeA, outerShapeA]);
    const b3D: Tensor3D = reshape($b, [batchDimB, outerShapeB, innerShapeB]);
    let $bias: Tensor;
    if ($bias != null) {
      $bias = convertToTensor($bias, 'bias', 'fused matMul');
      $bias = makeTypesMatch($bias, $a);
    }

    const grad = (dy: Tensor3D, saved: Tensor[]) => {
      const [a3D, b3D, y, $bias] = saved;
      const dyActivation = getFusedDyActivation(reshape(dy, y.shape), y, activation);
      let aDer: Tensor;
      let bDer: Tensor;

      if (!transposeA && !transposeB) {
        aDer = unfusedMatMul(dyActivation, b3D, false, true);
        bDer = unfusedMatMul(a3D, dyActivation, true, false);
      } else if (!transposeA && transposeB) {
        aDer = unfusedMatMul(b3D, dyActivation, false, true);
        bDer = unfusedMatMul(a3D, dyActivation, true, true);
      } else if (transposeA && !transposeB) {
        aDer = unfusedMatMul(b3D, dyActivation, true, true);
        bDer = unfusedMatMul(a3D, dyActivation, false, true);
      } else {
        aDer = unfusedMatMul(b3D, dyActivation, false, false);
        bDer = unfusedMatMul(a3D, dyActivation, true, false);
      }

      if ($bias != null) {
        const biasDer = getFusedBiasGradient($bias, dyActivation);
        return [aDer, bDer, biasDer];
      } else {
        return [aDer, bDer];
      }
    };

    const customOpWithBias = customGrad((a3D: Tensor3D, b3D: Tensor3D, $bias: Tensor, save: GradSaveFunc) => {
      const res = ENGINE.runKernel(_FusedMatMul, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap) as T;
      save([a3D, b3D, res, $bias]);
      return {value: reshape(res, outShape), gradFunc: gradSaveFunc};
    });

    return customOpWithBias(a3D, b3D, $bias);
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=============================================================================

*An\nimport \{Tensor1D\} from './.\/tensor';\niimport \{op\} from './.\/operation';\niimport \{cosineWindow\} from './.\/signal_ops_util';\n\n* Generate a hamming window.

* See:
https://en.wikipedia.org/wiki/Window_function#Hann_and_Hamming_windows

* \n* \n* tf.signal.hammingWindow(10).print();\n* @param The length of window\n* @doc {heading: 'Operations', subheading: 'Signal', namespace: 'signal'}
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=============================================================================

*An\nimport \{Tensor1D\} from './.\/tensor';\niimport \{op\} from './.\/operation';\niimport \{cosineWindow\} from './.\/signal_ops_util';

* \n* \n* tf.signal.hammingWindow(10).print();\n* @param The length of window\n* @doc {heading: 'Operations', subheading: 'Signal', namespace: 'signal'}
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=============================================================================

*An\nimport \{Tensor1D\} from './.\/tensor';\niimport \{op\} from './.\/operation';\niimport \{cosineWindow\} from './.\/signal_ops_util';

* \n* \n* tf.signal.hammingWindow(10).print();\n* @param The length of window\n* @doc {heading: 'Operations', subheading: 'Signal', namespace: 'signal'}
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*An\`nimport \{Tensor, Tensor1D\} from `./../tensor`;\nimport \{concat\} from `./../concat`;\nimport \{mul\} from `./../mul`;\nimport \{op\} from `./../operation`;\nimport \{enclosingPowerOfTwo\} from `./../signal_ops_util`;\nimport \{slice\} from `./../slice`;\nimport \{rfft\} from `./../spectral/rfft`;\nimport \{frame\} from `./frame`;\nimport \{hannWindow\} from `./hann_window`;

/**\n* Computes the Short-time Fourier Transform of signals\n* See: https://en.wikipedia.org/wiki/Short-time_Fourier_transform\n* @param signal 1-dimensional real value tensor.\n* @param frameLength The window length of samples.\n* @param frameStep The number of samples to step.\n* @param fftLength The size of the FFT to apply.\n* @param windowFn A callable that takes a window length and returns 1-d tensor.\n* @doc \{heading: 'Operations', subheading: 'Signal', namespace: 'signal'\} \n* \n* @param\n* \n* \n*/\nfunction stft_(\n    signal: Tensor1D, frameLength: number, frameStep: number,\n    fftLength?: number,\n    windowFn: (length: number) => Tensor1D = hannWindow): Tensor {
  if (fftLength == null) {
    fftLength = enclosingPowerOfTwo(frameLength);
  }
  const framedSignal = frame(signal, frameLength, frameStep);
  const windowedSignal = mul(framedSignal, windowFn(frameLength));
  const output: Tensor[] = [];
  for (let i = 0; i < framedSignal.shape[0]; i++) {
    output.push(
        rfft(slice(windowedSignal, [i, 0], [1, frameLength]), fftLength));
  }
  return concat(output);
}

export const stft = op({stft_});

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import {ENGINE} from `./../engine`;\nimport \{CropAndResize, CropAndResizeAttrs, CropAndResizeInputs\} from `./../kernel_names`;\nimport \{NamedAttrMap\} from `./../kernel_registry`;\nimport \{Tensor1D, Tensor2D, Tensor4D\} from `./../tensor`;\nimport \{NamedTensorMap\} from `./../tensor_types`;\nimport \{convertToTensor\} from `./../tensor_util_env`;\nimport \{TensorLike\} from `./../types`;\nimport \{op\} from `./operation`;\n
/**\n* Extracts crops from the input image tensor and resizes them using bilinear\n* sampling or nearest neighbor sampling (possibly with aspect ratio change)\n* to a common output size specified by\n* @param image 4d tensor of shape `[batch,imageHeight,imageWidth, depth]`,\n*     where imageHeight and imageWidth must be positive, specifying the\n*     batch of images from which to take crops\n* @param boxes 2d float32 tensor of shape `[numBoxes, 4]`. Each entry is\n*     `[y1, x1, y2, x2]`, where `(y1, x1)` and `(y2, x2)` are the normalized\n*     coordinates of the box in the boxInd[i]th image in the batch\n* @param boxInd 1d int32 tensor of shape `[numBoxes]` with values in range\n*     `[0, batch)` that specifies the image that\n*     the i-th box refers to.\n* @param cropSize 1d int32 tensor of 2 elements `[cropHeigh, cropWidth]`\n*     specifying the size to which all crops are resized to.\n* @param method Optional string from `'bilinear' | 'nearest'`,\n*     defaults to bilinear, which specifies the sampling method for resizing\n*     @param extrapolationValue A threshold for deciding when to remove boxes based on\n*     score. Defaults to 0.\n* @doc \{heading: 'Operations', subheading: 'Images', namespace: 'image'\} \n* \n*/
function cropAndResize_(\n    image: Tensor4D|TensorLike,\n    boxes: Tensor2D|TensorLike,\n    boxInd: Tensor1D|TensorLike,\n    cropSize: [number, number],\n    method: 'bilinear'|'nearest' = 'bilinear',\n    extrapolationValue = 0,\n    ): Tensor4D {
  const $image = convertToTensor(image, 'image', 'cropAndResize');\n  const $boxes = convertToTensor(boxes, 'boxes', 'cropAndResize', 'float32');\n  const $boxInd = convertToTensor(boxInd, 'boxInd', 'cropAndResize', 'int32');\n  const numBoxes = $boxes.shape[0];\n  const $cropSize = [cropSize[0], cropSize[1]];
  const $imageRank = $image.rank;\n  if ($imageRank !== 4) \n      throw new Error('Error in cropAndResize: image must be rank 4.\n    +n but got rank ' + $image.rank + '.)';
  const $boxesRank = $boxes.rank;\n  if ($boxesRank !== 2) \n      throw new Error('Error in cropAndResize: boxes must have size [' + $boxes.shape[1] + ']');
  const $extrapolationValue = extrapolationValue;
  const $cropInd = tensorInd([numBoxes, 4], extrapolationValue);\n  const $crop = layer(op\{\n    'method': method,\n    'extrapolationValue': $extrapolationValue,\n    'cropInd': $cropInd\});\n  const $cropShape = $crop.shape\n  $cropShape[0] = numBoxes;\n  $cropShape[1] = cropSize[0];\n  $cropShape[2] = cropSize[1];\n  $cropShape[3] = $boxes.shape[3];\n  $cropShape[4] = $image.shape[4];\n  const $crop = $crop.reshape($cropShape);
  const $croppedImages = $crop.slice($boxInd, $cropShape);\n  return $croppedImages;\n}
'but had shape ${$boxes.shape}.');
  util.assert($boxInd.rank === 1 & & $boxInd.shape[0] === numBoxes, 
  () => 'Error in cropAndResize: boxInd must be have size [numBoxes]');
  util.assert($boxes.shape[1] >= 2, () => 'Error in cropAndResize: cropSize must be of length 2, but got ' +
    `$length ${$cropSize.length}').
  util.assert($cropSize[0] >= 1 & & $cropSize[1] >= 1, () => 'cropSize must be at least [1,1], but was ' +
    `$cropSize').
  util.assert($method === 'bilinear' ||
    method === 'nearest', () => 'method must be bilinear or nearest, but was ' +
    `$method').

  const inputs:
    CropAndResizeInputs = {image: $image, boxes: $boxes, boxInd: $boxInd};
  const attrs: CropAndResizeAttrs =
    {method, extrapolationValue, cropSize};
  const res =
    ENGINE.runKernel(CropAndResize, inputs as {} as
      NamedTensorMap,
    attrs as {} as NamedAttrMap);
  return res as Tensor4D;
}

export const
  cropAndResize = op({cropAndResize_});

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 */

import {ENGINE} from '../../engine';
import {FlipLeftRight, FlipLeftRightInputs} from
  '../../kernel_names';
import {Tensor4D} from '../../tensor';
import {NamedTensorMap} from '../../tensor_types';
import {convertToTensor} from '../../tensor_util_env';
import {TensorLike} from '../../types';
import * as util from '../../util';
import {op} from '../operation';

/**
 * Flips the image left to right.
 * Currently available in the CPU, WebGL, and WASM backends.
 *
 * @param image 4d tensor of shape `[batch, imageHeight, imageWidth, depth]`.
 */
/** @doc {heading: 'Operations', subheading: 'Images', namespace: 'image'} */
function flipLeftRight_(image: Tensor4D|TensorLike): Tensor4D {
  const $image =
    convertToTensor(image, 'image', 'flipLeftRight', 'float32');

  util.assert($image.rank === 4,
    () => 'Error in flipLeftRight: image must be rank 4,' +
      `but got rank ${$image.rank}.`);

  const inputs:
    FlipLeftRightInputs = {image: $image};
  const res =
    ENGINE.runKernel(FlipLeftRight, inputs as {} as
      NamedTensorMap,
    {});
  return res as Tensor4D;
}

export const
  flipLeftRight =
    op({flipLeftRight_});

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 */

import {ENGINE} from '../../engine';
import {RotateWithOffset, RotateWithOffsetAttrs,
  RotateWithOffsetInputs} from '../../kernel_names';
import {NamedAttrMap} from '../../kernel_registry';
import {Tensor4D} from '../../tensor';
import {NamedTensorMap} from '../../tensor_types';
import {convertToTensor} from '../../tensor_util_env';
import {TensorLike} from '../../types';
import * as util from '../../util';
import {op} from '../operation';

/**
 * Rotates the input image tensor counter-clockwise with an optional offset center of rotation. Currently available in the CPU, WebGL, and WASM backends.
 *
 * @param image 4d tensor of shape `[batch, imageHeight, imageWidth, depth]`.
 * @param radians The amount of rotation.
 * @param fillValue The value to fill in the empty space leftover
 *     after rotation. Can be either a single grayscale value (0-255), or an array of three numbers `[red, green, blue]` specifying the red, green, blue channels. Defaults to `0` (black).
 * @param center The center of rotation. Can be either a single value (0-1), or an array of two numbers `[centerX, centerY]`. Defaults to `.5` (the image around its center).
 */
/** @doc {heading: 'Operations', subheading: 'Images', namespace: 'image'} */
function rotateWithOffset_(
    image: Tensor4D|TensorLike, radians: Number|Array, fillValue: Number|Array, center: Number|Array): Tensor4D {
  const $image =
    convertToTensor(image, 'image', 'rotateWithOffset', 'float32');

  util.assert($image.rank === 4,
    () => 'Error in rotateWithOffset: image must be rank 4,' +
      `but got rank ${$image.rank}.`);

  const inputs:
    RotateWithOffsetInputs = {image: $image};
  const attrs: RotateWithOffsetAttrs =
    {radiuses, fillValue};
  const res =
    ENGINE.runKernel(RotateWithOffset, inputs as {} as
      NamedTensorMap,
    attrs as {} as NamedAttrMap);
  return res as Tensor4D;
}

export const
  rotateWithOffset =
    op({rotateWithOffset_});
Tensor4D(TensorLike, radians: number,\n  fillValue: number|number, number, number = 0,\n  center: number|number, number = 0.5): Tensor4D \n  const Simage = convertToTensor(image, 'image',
  'rotateWithOffset', 'float32');\n  util.assert(image.rank === 4, () => 'Error in rotateWithOffset: image
  must be rank 4.');\n  const inputs: RotateWithOffsetInputs = {image: Simage};\n  const attrs = RotateWithOffsetAttrs = {radians, fillValue, center};\n  const res = ENGINE.runKernel(RotateWithOffset, inputs as {},\n  attrs as {} as NamedAttrMap); return res as

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 */

import {TensorLike} from 'https://www.tensorflow.org/api_docs/index.js';
import {operation} from 'https://www.tensorflow.org/api_docs/index.js';
import {Tensor1D, Tensor2D} from 'https://www.tensorflow.org/api_docs/index.js';
import {convertToTensor} from 'https://www.tensorflow.org/api_docs/index.js';
import {NamedTensorMap} from 'https://www.tensorflow.org/api_docs/index.js';
import {NamedAttrMap} from 'https://www.tensorflow.org/api_docs/index.js';
import {Tensor4D} from 'https://www.tensorflow.org/api_docs/index.js';
import {TensorLike} from 'https://www.tensorflow.org/api_docs/index.js';
import {Tensor2D} from 'https://www.tensorflow.org/api_docs/index.js';

/**
 * Performs non maximum suppression of bounding boxes based on
 * iou (intersection over union).
 * @param boxes a 2d tensor of shape `[numBoxes, 4]`. Each entry is
 *   `[y1, x1, y2, x2]`, where `(y1, x1)` and `(y2, x2)` are the corners of
 *   the bounding box.
 * @param scoreThreshold a threshold for deciding when to remove boxes
 *   providing the box scores of shape `[numBoxes, 4];
 * @param maxOutputSize The maximum number of boxes to be selected.
 * @returns A float representing the threshold for deciding whether
 *   boxes overlap too much with respect to IOU. Must be between [0, 1].
 *   Defaults to 0.5 (50% box overlap).
 * @returns a 1d tensor providing the box scores.
 * @returns the bounding box.
 * @returns the maximum number of boxes to be selected.
 * @returns whether boxes overlap too much with respect to IOU.
 * @returns a 45% box overlap.
 * @returns a 45% box overlap.
 * @returns the bounding box.
 * @returns the maximum number of boxes to be selected.
 * @returns a 45% box overlap.
 * @returns the bounding box.
 * @returns the maximum number of boxes to be selected.
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 * @returns the bounding box.
 * @returns the maximum number of boxes to be selected.
 * @returns a 45% box overlap.
 * @returns the bounding box.
 * @returns the maximum number of boxes to be selected.
 * @returns a 45% box overlap.
Tensor1D|TensorLike,
    maxOutputSize: number, iouThreshold = 0.5
    scoreThreshold = Number.NEGATIVE_INFINITY;
  Tensor1D {\n    const $boxes = convertToTensor(boxes, 'boxes', 'nonMaxSuppression');
    const $scores = convertToTensor(scores, 'scores', 'nonMaxSuppression');
  }\n  const inputs = nonMaxSuppSanityCheck($boxes, $scores, maxOutputSize, iouThreshold, scoreThreshold);
  maxOutputSize = inputs.maxOutputSize;\n  iouThreshold = inputs.iouThreshold;\n  scoreThreshold = inputs.scoreThreshold;\n  const attrs = {maxOutputSize, iouThreshold, scoreThreshold};\n  return ENGINE.runKernel(NonMaxSuppressionV3, {boxes: $boxes, scores: $scores}, attr);\n}
}

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 */

/**
 * Inserts a value into a sorted array. This method allows duplicate, meaning it allows inserting duplicate value, in which case, the element will be inserted at the lowest index of the value. The array to modify.
 * Element The element to insert.
 * Optional. If no comparator is specified, elements are compared using array_.defaultComparator, which is suitable for Strings and Numbers in ascending arrays. If the array contains multiple instances of the target value, the left-most instance will be returned. To provide a comparator, it should take 2 arguments to compare and return a negative, zero, or a positive number.
 * The function binaryInsert<T>(arr, element, comparator?)
 * arr: T[], element: T, comparator?: (a: T, b: T) => number)
 * arr: T[] The array to be searched in.
 * target The target to be searched for.
 * comparator Should take 2 arguments to compare and return a negative, zero, or a positive number.
 * Lowest index of the target value if found, otherwise the insertion point where the target should be inserted, in the form of -insertionPoint - 1.
 * Compare its two arguments for order.
 * The first element to be compared.
 * The second element to be compared.
 * Return A negative number, zero, or a positive number as the first argument is less than, equal to, or greater than the second.
 * function defaultComparator<T>(a: T, b: T): number
 * arr: T[] number
 * return a > b ? 1 : a < b ? -1 : 0
 * 
 * let left = 0; let right = arr.length; let middle = 0; let found = false; while (left < right) { let middle = left + ((right - left) >>> 1); const compareResult = comparator(target, arr[middle]); if (compareResult > 0) { left = middle + 1; } else { right = middle; // If compareResult is 0, the value is found. We record it is found; } // and then looking back because there may be duplicate. found = !compareResult; } return found ? left : -left - 1
 * 
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 */

```
import {TypedArray} from './types';
import {binaryInsert} from './non_max_suppression_util';

/**
 * Interface Candidate
 * @interface Candidate
 * @property {number} score - The score of the candidate.
 * @property {number} boxIndex - The index of the box associated with the candidate.
 * @property {number} suppressBeginIndex - The index where the suppression begins.
 */
interface Candidate {
  score: number;
  boxIndex: number;
  suppressBeginIndex: number;
}

/**
 * Interface NonMaxSuppressionResult
 * @interface NonMaxSuppressionResult
 * @property {number[]} selectedIndices - The indices of the selected candidates.
 * @property {number[]} selectedScores - The scores of the selected candidates.
 * @property {number} validOutputs - The number of valid outputs.
 */
interface NonMaxSuppressionResult {
  selectedIndices: number[];
  selectedScores?: number[];
  validOutputs?: number;
}

export function nonMaxSuppressionV3Impl(
    boxes: TypedArray, scores: TypedArray, maxOutputSize: number,
    iouThreshold: number, scoreThreshold: number): NonMaxSuppressionResult {
  return nonMaxSuppressionImpl_((boxes, scores, maxOutputSize, iouThreshold, scoreThreshold, 0 /* softNmsSigma */));
}

export function nonMaxSuppressionV4Impl(
    boxes: TypedArray, scores: TypedArray, maxOutputSize: number, iouThreshold: number, scoreThreshold: number,
    padToMaxOutputSize = false, returnScoresTensor = false): NonMaxSuppressionResult {
  return nonMaxSuppressionImpl_((boxes, scores, maxOutputSize, iouThreshold, scoreThreshold, 0 /* softNmsSigma */, false /* returnScoresTensor */));
}

export function nonMaxSuppressionV5Impl(
    boxes: TypedArray, scores: TypedArray, maxOutputSize: number, iouThreshold: number, scoreThreshold: number,
    softNmsSigma: number): NonMaxSuppressionResult {
  return nonMaxSuppressionImpl_((boxes, scores, maxOutputSize, iouThreshold, scoreThreshold, softNmsSigma, true /* returnScoresTensor */));
}

function nonMaxSuppressionImpl_(
    boxes: TypedArray, scores: TypedArray, maxOutputSize: number,
    iouThreshold: number, scoreThreshold: number,
    softNmsSigma: number, returnScoresTensor = false, padToMaxOutputSize = false, returnValidOutputs = false): NonMaxSuppressionResult {
  // The list is sorted in ascending order, so that we can always pop the
  // candidate with the largest score in O(1) time.
  const candidates = []; // list of candidates sorted in ascending order
  const selectedIndices = []; // list of selected indices
  const selectedScores = []; // list of selected scores
  let selectedScoresTensor = false; // flag to indicate whether scores are also returned
  let returnValidOutputs = false; // flag to indicate whether valid output count is returned

  for (let i = 0; i < scores.length; i++) {
    if (scores[i] > scoreThreshold) {
      candidates.push({score: scores[i], boxIndex: i, suppressBeginIndex: 0});
    }
  }

  candidates.sort(ascendingComparator);

  // If softNmsSigma is 0, the outcome of this algorithm is
  // exactly same as before. If softNmsSigma > 0 then
  // overlapping boxes are likely to have similar scores, therefore we
  // iterate through the previously selected boxes backwards in order to
  // see if candidate's score should be suppressed. We use
  // suppressBeginIndex to track and ensure a candidate can be suppressed
  // by a selected box no more than once. Also, if the overlap exceeds
  // iouThreshold, we simply ignore the candidate.
  let ignoreCandidate = false;
  for (let j = selectedIndices.length - 1; j >= suppressBeginIndex; --j) {
    const iou = intersectionOverUnion(boxes, boxIndex, selectedIndices[j]);
    if (iou > iouThreshold) {
      ignoreCandidate = true;
    }
  }

  if (ignoreCandidate) {
    return;
  }

  // At this point, if candidate.score has not dropped below
  // scoreThreshold, then we know that we went through all of the
  // previous selections and can safely update
  // suppressBeginIndex to the new end of the selected array. Then we can re-insert the candidate with
  // updated score and suppressBeginIndex back in the candidate list.
  if (iouThreshold > iouThreshold) {
    selectedIndices.push(...new Array(iouThreshold - iouThreshold).fill(0));
    selectedScores.push(...new Array(iouThreshold - iouThreshold).fill(0.0));
  }

  return {selectedIndices, selectedScores, validOutputs};
}
result[\'validOutputs\'] = validOutputs;

function intersectionOverUnion(boxes: TypedArray, i: number, j: number) {
  const iCoord = boxes.subarray(i * 4, i * 4 + 4);
  const jCoord = boxes.subarray(j * 4, j * 4 + 4);
  const yminI = Math.min(iCoord[0], iCoord[2]);
  const xminI = Math.min(iCoord[1], iCoord[3]);
  const ymaxI = Math.max(iCoord[0], iCoord[2]);
  const xmaxI = Math.max(iCoord[1], iCoord[3]);
  const yminJ = Math.min(jCoord[0], jCoord[2]);
  const xminJ = Math.min(jCoord[1], jCoord[3]);
  const ymaxJ = Math.max(jCoord[0], jCoord[2]);
  const xmaxJ = Math.max(jCoord[1], jCoord[3]);
  const areaI = (ymaxI - ymminI) * (xmaxI - xminI);
  const areaJ = (ymaxJ - yminJ) * (xmaxJ - xminJ); if (areaI <= 0 || areaJ <= 0) { return 0.0; }
  const intersectionYmin = Math.max(yminI, yminJ);
  const intersectionXmin = Math.max(xminI, xminJ);
  const intersectionYmax = Math.min(ymaxI, ymaxJ);
  const intersectionXmax = Math.min(xmaxI, xmaxJ);
  const intersectionArea = Math.max(intersectionYmax - intersectionYmin, 0.0) * Math.max(intersectionXmax - intersectionXmin, 0.0); return intersectionArea / (areaI + areaJ - intersectionArea);}

function suppressWeight(iouThreshold: number, scale: number, iou: number) {
  const weight = Math.exp(scale * iou * iou);
  return iou <= iouThreshold ? weight : 0.0;
}

function ascendingComparator(c1: Candidate, c2: Candidate) {
  // For objects with same scores, we make the object with the larger index go first. In an array that pops from the end, this means that the object with the smaller index will be popped first. This ensures the same output as TensorFlow python version.
  return (c1.score - c2.score) || ((c1.score === c2.score) && (c2.boxIndex - c1.boxIndex));
}

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 */

import {nonMaxSuppressionV3Impl} from '../../backends/non_max_suppression_impl';
import {Tensor1D, Tensor2D} from '../../tensor';
import {convertToTensor} from '../../tensor_util_env';
import {TensorLike} from '../types';
import {nonMaxSuppSanityCheck} from '../nonmax_util';
import {asarray} from '../tensor1d';

/**
 * Performs non maximum suppression of bounding boxes based on score, overlap.
 * This is the async version of `nonMaxSuppression`. This family is a 2d tensor of shape `[numBoxes, 4]`. Each entry is an array `[y1, x1, y2, x2]`, where `(y1, x1)` and `(y2, x2)` are the corners of the bounding box.
 * @param scores a 1d tensor providing the box scores of shape `[numBoxes]`
 * @param maxOutputSize The maximum number of boxes to be selected.
 * @param iouThreshold A float representing the threshold for deciding whether a box overlaps too much with respect to IOU. Must be between [0, 1].
 * Default to 0.5 (50% box overlap).
 * @param scoreThreshold A threshold for deciding when to remove boxes based on score. Defaults to -inf, which means any score is accepted.
 * @return A 1D tensor with the selected box indices.
 */
async function nonMaxSuppressionAsync_(boxes: Tensor2D|TensorLike, scores: Tensor1D|TensorLike, maxOutputSize: number, iouThreshold: number, scoreThreshold: number) {
  const boxesAndScores = await Promise.all([convertToTensor(boxes, 'boxes'), convertToTensor(scores, 'scores')]);
  maxOutputSize = inputs.maxOutputSize;
  iouThreshold = inputs.iouThreshold;
  scoreThreshold = inputs.scoreThreshold;
  const boxesAndScores = await Promise.all([boxes.data(), scores.data()]);
  const boxesVals = boxesAndScores[0];
  const scoresVals = boxesAndScores[1];
  // We call a cpu based impl directly with the
typescript
data here rather than a kernel because all kernels are synchronous (and thus cannot await).
const [selectedIndices] = nonMaxSuppressionV3Impl(boxesVals, scoresVals, maxOutputSize, iouThreshold, scoreThreshold);
if ($boxes !== boxes) {
  $boxes.dispose();
}
if ($scores !== scores) {
  $scores.dispose();
}
return tensor1d(selectedIndices, 'int32');

const {selectedIndices} = nonMaxSuppressionV3Impl(boxesVals, scoresVals, maxOutputSize, iouThreshold, scoreThreshold);
if ($boxes !== boxes) {
  $boxes.dispose();
}
if ($scores !== scores) {
  $scores.dispose();
}
return tensor1d(selectedIndices, 'int32');

export const nonMaxSuppressionAsync = nonMaxSuppressionAsync_;

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 */

import {ENGINE} from '../../engine';
import {NonMaxSuppressionV5, NonMaxSuppressionV5Attrs, NonMaxSuppressionV5Inputs} from '../../kernel_names';
import {NamedAttrMap} from '../../kernel_registry';
import {Tensor, Tensor1D, Tensor2D} from '../../tensor';
import {NamedTensorMap} from '../../tensor_types';
import {convertToTensor} from '../../tensor_util_env';
import {TensorLike} from '../../types';
import {nonMaxSuppSanityCheck} from '../nonmax_util';
import {op} from '../operation';

/**
 * Performs non maximum suppression of bounding boxes based on iou (intersection over union).
 * This op also supports a Soft-NMS mode (c.f. Bodla et al, https://arxiv.org/abs/1704.04503) where boxes reduce the score of other overlapping boxes, therefore favoring different regions of the image with high scores. To enable this Soft-NMS mode, set the `softNmsSigma` parameter to be larger than 0.
 * @param boxes a 2d tensor of shape `[numBoxes, 4]`. Each entry is `\[y1, x1, y2, x2\]`, where `(y1, x1)` and `(y2, x2)` are the corners of the bounding box.
 * @param scores a 1d tensor providing the box scores of shape `[numBoxes]`.
 * @param maxOutputSize The maximum number of boxes to be selected.
 * @param iouThreshold A float representing the threshold for deciding whether boxes overlap too much with respect to IOU. Must be between [0, 1].
 * @param scoreThreshold A float representing the threshold for deciding when to remove boxes based on score. Must be between [0, 1].
 * @param softNmsSigma A float representing the sigma parameter for Soft NMS.
 * When sigma is 0, it falls back to nonMaxSuppression.
 * @return A map with the following properties:
 *     - selectedIndices: A 1D tensor with the selected box indices.
 *     - selectedScores: A 1D tensor with the corresponding scores for each box.
 */
function nonMaxSuppressionWithScore_(boxes: Tensor2D|TensorLike, scores: Tensor1D|TensorLike, maxOutputSize: number, iouThreshold = 0.5, scoreThreshold = Number.NEGATIVE_INFINITY, softNmsSigma = 0.0): NamedTensorMap {
  const $boxes = convertToTensor(boxes, 'boxes', 'nonMaxSuppression');
  const $scores = convertToTensor(scores, 'scores', 'nonMaxSuppression');
  const params = nonMaxSuppSanityCheck($boxes, $scores, maxOutputSize, iouThreshold, scoreThreshold, softNmsSigma);  // tslint:disable-next-line: no-unnecessary-type-assertion
  const result = ENGINE.runKernel(NonMaxSuppressionV5, boxes: Tensor2D|TensorLike, scores: Tensor1D|TensorLike, maxOutputSize: number, iouThreshold = 0.5, scoreThreshold = Number.NEGATIVE_INFINITY, softNmsSigma = 0.0): NamedTensorMap {
    const $boxes = convertToTensor(boxes, 'boxes', 'nonMaxSuppression');
    const $scores = convertToTensor(scores, 'scores', 'nonMaxSuppression');
    const params = nonMaxSuppSanityCheck($boxes, $scores, maxOutputSize, iouThreshold, scoreThreshold, softNmsSigma);  // tslint:disable-next-line: no-unnecessary-type-assertion
    const result = ENGINE.runKernel(NonMaxSuppressionV5, inputs as [] as NamedTensorMap, attrs as [] as NamedAttrMap) as Tensor[];
    return {selectedIndices: result[0], selectedScores: result[1]};
  }
  return {selectedIndices: result[0], selectedScores: result[1]};

  export const nonMaxSuppressionAsync = nonMaxSuppressionAsync_;

  /**
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   *=============================================================================

   */

   import {ENGINE} from '../../engine';
   import {NonMaxSuppressionV5, NonMaxSuppressionV5Attrs, NonMaxSuppressionV5Inputs} from '../../kernel_names';
   import {NamedAttrMap} from '../../kernel_registry';
   import {Tensor, Tensor1D, Tensor2D} from '../../tensor';
   import {NamedTensorMap} from '../../tensor_types';
   import {convertToTensor} from '../../tensor_util_env';
   import {TensorLike} from '../../types';
   import {nonMaxSuppSanityCheck} from '../nonmax_util';
   import {op} from '../operation';

   /**
   * Performs non maximum suppression of bounding boxes based on iou (intersection over union).
   * This op also supports a Soft-NMS mode (c.f. Bodla et al, https://arxiv.org/abs/1704.04503) where boxes reduce the score of other overlapping boxes, therefore favoring different regions of the image with high scores. To enable this Soft-NMS mode, set the `softNmsSigma` parameter to be larger than 0.
   * @param boxes a 2d tensor of shape `[numBoxes, 4]`. Each entry is `\[y1, x1, y2, x2\]`, where `(y1, x1)` and `(y2, x2)` are the corners of the bounding box.
   * @param scores a 1d tensor providing the box scores of shape `[numBoxes]`.
   * @param maxOutputSize The maximum number of boxes to be selected.
   * @param iouThreshold A float representing the threshold for deciding whether boxes overlap too much with respect to IOU. Must be between [0, 1].
   * @param scoreThreshold A float representing the threshold for deciding when to remove boxes based on score. Must be between [0, 1].
   * @param softNmsSigma A float representing the sigma parameter for Soft NMS.
   * When sigma is 0, it falls back to nonMaxSuppression.
   * @return A map with the following properties:
   *     - selectedIndices: A 1D tensor with the selected box indices.
   *     - selectedScores: A 1D tensor with the corresponding scores for each box.
   */
   function nonMaxSuppressionWithScore_(boxes: Tensor2D|TensorLike, scores: Tensor1D|TensorLike, maxOutputSize: number, iouThreshold = 0.5, scoreThreshold = Number.NEGATIVE_INFINITY, softNmsSigma = 0.0): NamedTensorMap {
     const $boxes = convertToTensor(boxes, 'boxes', 'nonMaxSuppression');
     const $scores = convertToTensor(scores, 'scores', 'nonMaxSuppression');
     const params = nonMaxSuppSanityCheck($boxes, $scores, maxOutputSize, iouThreshold, scoreThreshold, softNmsSigma);  // tslint:disable-next-line: no-unnecessary-type-assertion
     const result = ENGINE.runKernel(NonMaxSuppressionV5, inputs as [] as NamedTensorMap, attrs as [] as NamedAttrMap) as Tensor[];
     return {selectedIndices: result[0], selectedScores: result[1]};
   }

   export const nonMaxSuppressionAsync = op({nonMaxSuppressionWithScore_});
import {nonMaxSuppressionV5Impl} from './backends/non_max_suppression_impl';
import {Tensor1D, Tensor2D} from './tensor';
import {NamedTensorMap} from './tensor_types';
import {convertToTensor} from './tensor_util_env';
import {TensorLike} from './types';
import {nonMaxSuppSanityCheck} from './nonmax_util';
import {nonMaxUtil} from './nonmax_util_env';
import {op} from './operation';

/**
 * Asynchronously performs non maximum suppression of bounding boxes based on
 * intersection over union.
 * This op also supports a Soft-NMS mode (c.f. Bodla et al, https://arxiv.org/abs/1704.04503)
 * each entry is of shape `[numBoxes, 4]`. Each entry is of shape
 * 
 * @param boxes a 2D tensor of shape `[numBoxes, 4]`. Each entry is of shape
 *     `(y1, x1, y2, x2)`.
 * @param scores a 1D tensor of shape `[numBoxes]`.
 * @param maxOutputSize The maximum number of boxes to be selected.
 * @param iouThreshold A float representing the threshold for deciding whether
 *     boxes overlap too much with respect to IOU. Must be between [0, 1].
 * @param scoreThreshold A threshold for deciding when to remove boxes based
 *     on score. Defaults to -inf, which means any score is accepted.
 * @param softNmsSigma A float representing the sigma parameter for Soft NMS.
 *     When sigma is 0, it falls back to nonMaxSuppression.
 * @return A map with the following properties:
 *     - selectedIndices: A 1D tensor with the selected box indices.
 *     - selectedScores: A 1D tensor with the corresponding scores for each selected box.
 *
 * @doc {heading: 'Operations', subheading: 'Images', namespace: 'image'}
 */
async function nonMaxSuppressionWithScoreAsync_(boxes: Tensor2D|TensorLike, scores: Tensor1D|TensorLike, maxOutputSize: number, iouThreshold = 0.5, scoreThreshold = Number.NEGATIVE_INFINITY, softNmsSigma = 0.0): Promise<NamedTensorMap> {
  const $boxes = convertToTensor(boxes, 'boxes', 'nonMaxSuppressionAsync');
  const $scores = convertToTensor(scores, 'scores', 'nonMaxSuppressionAsync');
  const params = nonMaxSuppSanityCheck($boxes, $scores, maxOutputSize, iouThreshold, scoreThreshold, softNmsSigma);
  maxOutputSize = params.maxOutputSize;
  iouThreshold = params.iouThreshold;
  scoreThreshold = params.scoreThreshold;
  softNmsSigma = params.softNmsSigma;
  const boxesAndScores = await Promise.all([$boxes.data(), $scores.data()]);
  const boxesVals = boxesAndScores[0];
  const scoresVals = boxesAndScores[1];
  if (boxesVals.length <= 0) {
    return Promise.resolve({});
  }
  const selectedIndices = nonMaxSuppressionV5Impl(boxesVals, scoresVals, maxOutputSize, iouThreshold, scoreThreshold, softNmsSigma);

  return {
    selectedIndices: tensor1d(selectedIndices, 'int32'),
    selectedScores: tensor1d(selectedScores)
  };
}

export const nonMaxSuppressionWithScoreAsync = nonMaxSuppressionWithScoreAsync_;

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 */
union), with an option to pad results.

Each entry is a 2d tensor of shape `[numBoxes, 4]`. Each entry is

```
[y1, x1, y2, x2]
```

where `(y1, x1)` and `(y2, x2)` are the corners of

the bounding box. The maximum number of boxes to be selected.

`@param` `iouThreshold` A float representing the threshold for deciding whether boxes overlap too much with respect to IOU. Must be between `[0, 1]`. Defaults to 0.5 (50% box overlap).

`@param` `scoreThreshold` A threshold for deciding when to remove boxes based on score. Defaults to -inf, which means any score is accepted.

- `-selectedIndices`: A 1D tensor with the selected box indices.
- `-validOutputs`: A scalar denoting how many elements in `-selectedIndices` are valid. Valid elements occur first, then padding.

```
const $boxes = convertToTensor(boxes, 'boxes', 'nonMaxSuppression');
const $scores = convertToTensor(scores, 'scores', 'nonMaxSuppression');
```

`const params = nonMaxSuppSanityCheck($boxes, $scores, maxOutputSize, iouThreshold, scoreThreshold, null /* softNmsSigma */);`

```
const $maxOutputSize = params.maxOutputSize;
const $iouThreshold = params.iouThreshold;
const $scoreThreshold = params.scoreThreshold;
```

```
const inputs: NonMaxSuppressionV4Inputs = {boxes: $boxes, scores: $scores};
const attrs: NonMaxSuppressionV4Attrs = {
    maxOutputSize: $maxOutputSize,
    iouThreshold: $iouThreshold,
    scoreThreshold: $scoreThreshold,
    padToMaxOutputSize
};
```

```
const result = ENGINE.runKernel(NonMaxSuppressionV4, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap) as Tensor[];
```

```
return {selectedIndices: result[0], validOutputs: result[1]};
```

```
export const nonMaxSuppressionPadded = op({nonMaxSuppressionPadded_});
```
scoreThreshold = Number.NEGATIVE_INFINITY,
    padToMaxOutputSize = false):

Promise<NamedTensorMap> {
  const $boxes = convertToTensor(boxes, 'boxes', 'nonMaxSuppressionAsync');
  const $scores = convertToTensor(scores, 'scores', 'nonMaxSuppressionAsync');
  const $iouThreshold, scoreThreshold, null /* softNmsSigma */;
  const $maxOutputSize = params.maxOutputSize;
  const $iouThreshold = params.iouThreshold;

  if ($scoresThreshold !== scoreThreshold) {
    const [boxesVals, scoresVals] = ...
  }

  return {
    selectedIndices: tensor1d(selectedIndices, 'int32'),
    validOutputs: scalar(validOutputs, 'int32')
  };
}

export const nonMaxSuppressionPaddedAsync =
  nonMaxSuppressionPaddedAsync_;

functions

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 *
 *=============================================================================

import {ENGINE} from '../../engine';
import {ResizeBilinear, ResizeBilinearAttrs, ResizeBilinearInputs}
  from '.../kernel_names';
import {NamedAttrMap} from '.../kernel_registry';
import {Tensor3D, Tensor4D}
  from '.../tensor';
import {NamedTensorMap} from '.../tensor_types';
import {convertToTensor} from ...
import * as util from '.../util';

import {op} from '...'...operation';
import {reshape} from '...'...reshape';

/**
 * Bilinear resize a single 3D image or a batch of 3D images to a new shape.
 *
 * @param images The images, of rank 4 or rank 3, of shape
 *     `[batch, height, width, inChannels]`. If rank 3, batch of 1 is assumed.
 * @param size The new shape `[newHeight, newWidth]` to resize the images to. Each channel is resized individually.
 * @param alignCorners Defaults to `false`. If true, rescale
 *     by `new_height / height`. If false, rescale by
 *     `new_height / height`. Treat similarly the width dimension.
 * @param halfPixelCenters Defaults to `false`. Whether to assume pixel centers
 *     at 0.5, which would make the floating point coordinates of the top-left
 *    pixel 0.5, 0.5. If `true`, zero-pad the top left pixel of the output if
 *    required.
 *
 * @doc {heading: 'Operations', subheading: 'Images', namespace: 'image'}
 */
function resizeBilinear_<T extends Tensor3D|Tensor4D>(
    images: T|TensorLike, size: [number, number], alignCorners = false,
    halfPixelCenters = false): T {
  const $images = convertToTensor(images, 'images', 'resizeBilinear');

  util.assert($images.rank === 3 || $images.rank ===
  4, () => `Error in resizeBilinear: x must be rank 3 or 4, but got rank ` +
    $images.rank + `.`);

  const inputs: ResizeBilinearInputs = {images: $images};
  const attrs: ResizeBilinearAttrs = {alignCorners,
    halfPixelCenters: false};

  const res = ENGINE.runKernel(ResizeBilinear, inputs as {} as NamedTensorMap,
    attrs as {} as NamedAttrMap)
  return res;
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 */

import {ENGINE} from '../engine';
import {ResizeNearestNeighbor, ResizeNearestNeighborAttr, ResizeNearestNeighborInputs} from '../kernel_names';
import {Tensor3D, Tensor4D} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import * as util from '../util';

import {op} from '../operation';
import {reshape} from '../reshape';

/**
 * NearestNeighbor resize a batch of 3D images to a new shape.
 *
 * @param images The images, of rank 4 or rank 3, of shape
 *     `[batch, height, width, inChannels]`. If rank 3, batch of 1 is assumed.
 * @param size The new shape ` `[newHeight, newWidth]` to resize the images to. Each channel is resized
 * individually. @param alignCorners Defaults to False. If true, rescale `inHeight - 1) / (height - 1)`,
 * which exactly aligns the 4 corners of images and resized images. If false, rescale by `new_height / height`. Treat similarly the width dimension.
 * @param halfPixelCenters Defaults to `false`. Whether to assumes pixels are of half the actual dimensions, and yields more accurate resizes. This flag would also make the floating point coordinates of the top left pixel `0.5, 0.5, 0.5`.
 *
 * @doc {heading: 'Operations', subheading: 'Images', namespace: 'image'}
 */
function resizeNearestNeighbor_<T extends Tensor3D|Tensor4D>(
    images: T|TensorLike, size: [number, number], alignCorners = false, halfPixelCenters = false): T {
  const $images = convertToTensor(images, 'images', 'resizeNearestNeighbor');

  util.assert($images.rank === 3 || $images.rank === 4,
      () => `Error in resizeNearestNeighbor: x must be rank 3 or 4, but got rank ${$images.rank}.`);
  util.assert(size.length === 2,
      () => `Error in resizeNearestNeighbor: new shape must be 2D, but got shape ` +
          `${size}.`);
  util.assert($images.dtype === 'float32' || $images.dtype === 'int32',
      () => '`images` must have `int32` or `float32` as dtype');
  util.assert(halfPixelCenters === false || alignCorners === false,
      () => `Error in resizeNearestNeighbor: If halfPixelCenters is true, ` +
          `alignCorners must be false.`);
  let batchImages = $images as Tensor4D;
  let reshapedTo4D = false;
  if ($images.rank === 3) {
    reshapedTo4D = true;
    batchImages = reshape($images, [1, $images.shape[0], $images.shape[1], $images.shape[2]]);
  }
  let inputs: ResizeNearestNeighborInputs = {
      images: batchImages,
      size: [size[0], size[1]],
      alignCorners: alignCorners,
      halfPixelCenters: halfPixelCenters
  };

  const attrs: ResizeNearestNeighborAttr = {
      alignCorners: alignCorners,
      halfPixelCenters: halfPixelCenters
  };

  // tslint:disable-next-line: no-unnecessary-type-assertion
  const res = ENGINE.runKernel(ResizeNearestNeighbor, inputs as {} as NamedTensorMap,
      attrs as {} as NamedAttrMap) as T;

  if (reshapedTo4D) {
    return reshape(res, [res.shape[1], res.shape[2], res.shape[3]]) as T;
  }
  return res;
}

export const resizeNearestNeighbor = op({resizeNearestNeighbor_});

// vim: set foldmethod=marker:
The tensor function `bandPart` extracts a banded portion of a tensor `x` based on two parameters: `numLower` and `numUpper`, which specify the number of subdiagonals to keep below and above the main diagonal, respectively.

The function signature is:

```javascript
function bandPart_<T extends Tensor>(
    a: T|TensorLike, numLower: number, numUpper: number): T {
  ... // Implementation...
}
```

The `numLower` parameter is the number of subdiagonals to keep in the lower triangle of the input tensor `x`. If `numLower` is negative, it keeps all subdiagonals below the main diagonal. Similarly, `numUpper` specifies the number of subdiagonals to keep in the upper triangle. If `numUpper` is negative, it keeps all subdiagonals above the main diagonal.

The function returns a new tensor that contains only the banded portion of the input tensor, maintaining the same shape as the input tensor.

Here is an example usage of `bandPart`:

```javascript
const x = tf.tensor2d([[1, 2], [3, 4]]);
let y = tf.linalg.bandPart(x, 0, -1);
y.print(); // Should print: [[1, 0, 0], [3, 0, 0]]
```

For a deeper understanding, you can refer to the official TensorFlow documentation and examples.
(let i = 1; i < xs.length; ++i) { un assert(un x[x][].shape[0] == dim),() => un 'Gram-Schmidt: Non-unique lengths found in the input vectors: ' +un '(',xs as Tensor1D[])[i].shape[0] vs. $(dim))' +un '
} else { un inputsTensor2D = true; un xs = split(xs, xs.shape[0], 0).map(x => squeeze(x, [0])); un } un assert(un xs.length < x[x][].shape[0], () => 'Gram-Schmidt: Number of vectors $(xs asTensor1D[])[0].shape[0]$ exceeds number of dimensions $(xs as Tensor1D[])[0].shape[0]$)'
} un const ys: Tensor1D[] = []; un const xsl = ds; un for (let i = 0; i < xs.length; ++i) { un ys.push(ENGINE.tidy(() => {
    let x = xsl[i]; un if (i > 0) {
        for (let j = 0; j < i; ++j) {
            const proj = mul(sum(mul(ys[j], x)), ys[j]); un x = sub(x, proj);
        }
    }
    return div(x, norm(x, 'euclidean'));
  })); un } un if (inputIsTensor2D) {
    return stack(ys, 0) as Tensor2D;
  } else {
    return ys;
  }
}

export const gramSchmidt = op({gramSchmidt_});

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 * limitations under the License.
 */
reshape(stack(r2ds, 0), x.shape); return [q, r];
}

function qr2d(x: Tensor2D, fullMatrices = false):

[...]

\( \text{const } q = \text{ENGINE.tidy}(); \text{[Tensor2D, Tensor2D, Tensor2D]} \Rightarrow \{ \text{v} \} \) // Find H = I - \( \tau \ast w \ast \bar{w} \), to put zeros below R(j),

\( \text{const } r_{j\text{End}} = \text{slice}(r, [j, j], [m - j, 1]); \) // Orthogonal transform so far,

\( \text{const } \text{norm}X = \text{norm}(r_{j\text{End}}); \) // Transformed matrix so far,

\( \text{const } \text{rTemp} = r; \text{const } wTemp = w; \text{const } qTemp = q; \)

[...]

\( \text{where(greater(r_{jj}, 0), tensor2d([[-1]]), tensor2d([[1]])]} \) // This tidy within the for-loop ensures we clean up temporary tensors as soon as they are no longer needed.

\( \text{const } w_{Pre} = \text{div}(r_{j\text{End}}, u_1); \) // Let r = clone(x);

\( \text{const } m = \text{m > n} ; \text{n : m}; \) for (let \( j = 0 ; j < \text{iters} ; ++j \) ) // This tidy within the for-loop ensures we clean up temporary tensors as soon as they are no longer needed.

\( \text{const } \text{w} = \text{clone}(); \text{const } q = \text{clone}(); \text{const } r = \text{clone}(); \)

[...]

\( \text{const } q = \text{sub}(q, \text{matMul}(q, w), tawTimesW); \) // -- Q := HQ; Q := Q^H;

\( \text{const } tawTimesW = \text{mul}(\text{tawTimesW}, q); \) // -- R := HR, Q := QH.

[...]

\( \text{const } q = \text{sub}(q, \text{matMul}(q, w), tawTimesW); \) // -- R := HR, Q := QH.

[...]

\( \text{const } q = \text{sub}(q, \text{matMul}(q, w), tawTimesW); \) // -- R := HR, Q := QH.

[...]

\( \text{const } q = \text{sub}(q, \text{matMul}(q, w), tawTimesW); \) // -- R := HR, Q := QH.

[...]

\( \text{const } q = \text{sub}(q, \text{matMul}(q, w), tawTimesW); \) // -- R := HR, Q := QH.

[...]

\( \text{const } q = \text{sub}(q, \text{matMul}(q, w), tawTimesW); \) // -- R := HR, Q := QH.

[...]

\( \text{const } q = \text{sub}(q, \text{matMul}(q, w), tawTimesW); \) // -- R := HR, Q := QH.

[...]

\( \text{const } q = \text{sub}(q, \text{matMul}(q, w), tawTimesW); \) // -- R := HR, Q := QH.

[...]

\( \text{const } q = \text{sub}(q, \text{matMul}(q, w), tawTimesW); \) // -- R := HR, Q := QH.

[...]

\( \text{const } q = \text{sub}(q, \text{matMul}(q, w), tawTimesW); \) // -- R := HR, Q := QH.

[...]

\( \text{const } q = \text{sub}(q, \text{matMul}(q, w), tawTimesW); \) // -- R := HR, Q := QH.

[...]

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[...]

\( \text{const } q = \text{sub}(q, \text{matMul}(q, w), tawTimesW); \) // -- R := HR, Q := QH.

[...]

\( \text{const } q = \text{sub}(q, \text{matMul}(q, w), tawTimesW); \) // -- R := HR, Q := QH.

[...]

\( \text{const } q = \text{sub}(q, \text{matMul}(q, w), tawTimesW); \) // -- R := HR, Q := QH.

[...]

\( \text{const } q = \text{sub}(q, \text{matMul}(q, w), tawTimesW); \) // -- R := HR, Q := QH.

[...]

\( \text{const } q = \text{sub}(q, \text{matMul}(q, w), tawTimesW); \) // -- R := HR, Q := QH.

[...]

\( \text{const } q = \text{sub}(q, \text{matMul}(q, w), tawTimesW); \) // -- R := HR, Q := QH.

[...]

\( \text{const } q = \text{sub}(q, \text{matMul}(q, w), tawTimesW); \) // -- R := HR, Q := QH.
namespace: 'losses'}\n\nfunction computeWeightedLoss_<T extends Tensor, O extends Tensor>(\n    losses: T|TensorLike, weights?: Tensor|TensorLike, \n    reduction = Reduction.SUM_BY_NONZERO_WEIGHTS): O {\n  const $losses = convertToTensor(losses, 'losses', 'computeWeightedLoss');\n  let $weights: Tensor = null;\n  if (weights != null) {\n    $weights = convertToTensor(weights, 'weights', 'computeWeightedLoss');\n  }\n  \n  const weightedLoss = ($weights == null) ? $losses : mul($losses, $weights);\n  \n  if (reduction === Reduction.NONE) {\n    return weightedLoss as O;\n  }\n  if (reduction === Reduction.SUM) {\n    return sum(weightedLoss);\n  }\n  if (reduction === Reduction.MEAN) {\n    const broadcastFactor = $losses.size / $weights.size;\n    \n    const result = div(sum(weightedLoss), sum($weights));\n    return broadcastFactor > 1 ? div(result, scalar(broadcastFactor)) : result as O;\n  }\n  if (reduction === Reduction.SUM_BY_NONZERO_WEIGHTS) {\n    const broadcastedWeights = mul($weights, ones($losses.shape));\n\n    const numNonZeros = cast(sum(notEqual(broadcastedWeights, scalar(0))), 'float32');\n    \n    return div(sum(weightedLoss), numNonZeros);\n  } else {\n    throw Error(`Unknown reduction: ${reduction}`);\n  }\n}\n
export const computeWeightedLoss = op({computeWeightedLoss_});

namespace: 'losses'}\n\nfunction absoluteDifference_<T extends Tensor, O extends Tensor>(\n    labels: T|TensorLike, predictions: T|TensorLike, \n    weights?: Tensor|TensorLike, \n    reduction = Reduction.SUM_BY_NONZERO_WEIGHTS): O {\n  \n  const $labels = convertToTensor(labels, 'labels', 'absoluteDifference');\n  const $predictions = convertToTensor(predictions, 'predictions', 'absoluteDifference');\n  let $weights: Tensor = null;\n  if (weights != null) {\n    $weights = convertToTensor(weights, 'weights', 'absoluteDifference');\n  }\n  \n  const lossShapesMatch = assertShapesMatch($labels.shape, $predictions.shape, 'Error in absoluteDifference: ');
  \n  const losses = abs(sub($labels, $predictions));\n  \n  return computeWeightedLoss(losses, $weights, reduction);\n}\n
export const absoluteDifference = op({absoluteDifference_});
import {computeWeightedLoss} from './compute_weighted_loss';

/**
 * Computes the cosine distance loss between two tensors.
 * @param labels The ground truth output tensor, same dimensions as 'predictions'.
 * @param axis The dimension along which the cosine distance is computed.
 * @param weights Tensor whose rank is either 0, or the same rank as 'labels', and must be broadcastable to 'labels' (i.e., all dimensions
 * must be either 1, or the same as the corresponding 'losses' dimension).
 * @param reduction Type of reduction to apply to loss. Should be of type
 * Reduction * @doc {heading: 'Training', subheading: 'Losses', namespace: 'losses'}
 *
 * @param labels Tensor extends Tensor, O extends Tensor>
 * @param weights Tensor
 * @param reduction Reduction
 * @param labels Tensor
 * @param weights Tensor
 * @doc {heading: 'Training', subheading: 'Losses', namespace: 'losses'}
 */
function cosineDistance_<T extends Tensor, O extends Tensor>(
    labels: T|TensorLike, predictions: T|TensorLike, axis: number,
    weights?: Tensor|TensorLike,
    reduction = Reduction.SUM_BY_NONZERO_WEIGHTS): O {
  const $labels = convertToTensor(labels, 'labels', 'cosineDistance');
  const $predictions = convertToTensor(predictions, 'predictions', 'cosineDistance');
  let $weights: Tensor = null;
  if (weights != null) {
    $weights = convertToTensor(weights, 'weights', 'cosineDistance');
  }
  assertShapesMatch($labels.shape, $predictions.shape, 'Error in cosineDistance: ');

  const one = scalar(1);
  const losses = sub(one, sum(mul($labels, $predictions), axis, true));
  return computeWeightedLoss(losses, $weights, reduction);
}
export const cosineDistance = op({cosineDistance_});

/**
 * Computes the Hinge loss between two tensors.
 *
 * @param labels The ground truth output tensor, same dimensions as 'predictions'.
 * @param weights Tensor whose rank is either 0, or the same rank as 'labels', and must be broadcastable to 'labels' (i.e., all dimensions
 * must be either 1, or the same as the corresponding 'losses' dimension).
 * @param reduction Type of reduction to apply to loss. Should be of type
 * Reduction * @doc {heading: 'Training', subheading: 'Losses', namespace: 'losses'}
 *
 * @param labels Tensor extends Tensor, O extends Tensor>
 * @param weights Tensor
 * @param reduction Reduction
 * @param labels Tensor
 * @param weights Tensor
 * @doc {heading: 'Training', subheading: 'Losses', namespace: 'losses'}
 */
function hingeLoss_<T extends Tensor, O extends Tensor>(
    labels: T|TensorLike, predictions: T|TensorLike,
    weights?: Tensor|TensorLike,
    reduction = Reduction.SUM_BY_NONZERO_WEIGHTS): O {
  let $labels = convertToTensor(labels, 'labels', 'hingeLoss');
  const $predictions = convertToTensor(predictions, 'predictions', 'hingeLoss');
  let $weights: Tensor = null;
  if (weights != null) {
    $weights = convertToTensor(weights, 'weights', 'hingeLoss');
  }
  assertShapesMatch($labels.shape, $predictions.shape, 'Error in hingeLoss: ');

  const one = scalar(1);
  $labels = sub(mul(scalar(2), $labels), one);
  const losses = relu(sub(one, mul($labels, $predictions)));
  return computeWeightedLoss(losses, $weights, reduction);
}
export const hingeLoss = op({hingeLoss_});
```javascript
import {Tensor} from '././tensor';
import {convertToTensor} from '././tensor_util_env';
import {TensorLike} from '././types';
import {assertShapesMatch} from '././util';
import {abs} from '././abs';
import {add} from '././add';
import {neg} from '././neg';
import {log} from '././log';
import {mul} from '././mul';
import {op} from '././operation';
import {scalar} from '././scalar';
import {square} from '././square';
import {computeWeightedLoss} from './compute_weighted_loss';

/**
 * Computes the log loss between two tensors.

 * @param labels The ground truth output tensor, same dimensions as $\text{predictions}'.
 * @param predictions The predicted outputs.
 * @param weights Tensor whose rank is either 0, or the same rank as 'labels', and must be broadcastable to 'labels' (i.e., all dimensions must be either '1', or the same as the corresponding 'losses' dimension).
 * @param epsilon A small increment to avoid taking log of zero.
 * @param reduction Type of reduction to apply to loss. Should be of type 'Reduction'.

 * @doc {heading: 'Training', subheading: 'Losses', namespace: 'losses'}
 */
function logLoss_<T extends Tensor, O extends Tensor>(
    labels: T|TensorLike, predictions: T|TensorLike,
    weights?: T|TensorLike, epsilon = 1e-7,
    reduction = Reduction.SUM_BY_NONZERO_WEIGHTS): O {
  const $labels = convertToTensor(labels, 'labels', 'logLoss');
  const $predictions = convertToTensor(predictions, 'predictions', 'logLoss');
  let $weights: Tensor = null;
  if (weights != null) {
    $weights = convertToTensor(weights, 'weights', 'logLoss');
  }
  assertShapesMatch($labels.shape, $predictions.shape, 'Error in logLoss: ');

  const one = scalar(1);
  const epsilonScalar = scalar(epsilon);

  const l1 = neg(mul($labels, log(add($predictions, epsilonScalar))));
  const l2 = mul(sub(one, $labels), log(add(sub(one, $predictions), epsilonScalar)));
  const losses = sub(l1, l2);
  return computeWeightedLoss(losses, $weights, reduction);
}
export const logLoss = op({logLoss_});
```

---

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=============================================================================

import {Tensor} from 'Tensor';
import {convertToTensor} from 'Tensor_util';
import {TensorLike} from 'types';
import {assertShapesMatch} from 'util';
import {op} from 'operation';
import {squaredDifference} from 'squared_difference';

import {computeWeightedLoss} from './compute_weighted_loss';

/**
 * Computes the mean squared error between two tensors.
 * @param labels The ground truth output tensor, same dimensions as
 *    'predictions';
 * @param predictions The predicted outputs.
 * @param weights Tensor whose rank is either 0, or the same rank as labels' (i.e., all dimensions
 *    must be either '1', or the same as the corresponding 'losses'; dimension).
 * @param reduction Type of reduction to apply to loss. Should be of type
 *    'Reduction'.

 * @doc {heading: 'Training', subheading: 'Losses', namespace: 'losses'}
 */
function meanSquaredError_<T extends Tensor, O extends Tensor>(
    labels: T|TensorLike, predictions: T|TensorLike,
    weights?: Tensor|TensorLike,
    reduction = Reduction.SUM_BY_NONZERO_WEIGHTS): O {
  const $labels = convertToTensor(labels, 'labels', 'meanSquaredError');
  const $predictions = convertToTensor(predictions, 'predictions', 'meanSquaredError');
  let $weights: Tensor = null;
  if (weights != null) {
    $weights = convertToTensor(weights, 'weights', 'meanSquaredError');
  }
  assertShapesMatch($labels.shape, $predictions.shape, 'Error in meanSquaredError: ');

  const losses = squaredDifference($labels, $predictions);
  return computeWeightedLoss(losses, $weights, reduction);
}

export const meanSquaredError = op({meanSquaredError_});

/**
 * Computes the mean squared error between two tensors.
 * @param labels The ground truth output tensor, same dimensions as
 *    'predictions';
 * @param predictions The predicted outputs.
 * @param weights Tensor whose rank is either 0, or the same rank as labels' (i.e., all dimensions
 *    must be either '1', or the same as the corresponding 'losses'; dimension).
 * @param reduction Type of reduction to apply to loss. Should be of type
 *    'Reduction'.

 * @doc {heading: 'Training', subheading: 'Losses', namespace: 'losses'}
 */
function meanSquaredError_<T extends Tensor, O extends Tensor>(
    labels: T|TensorLike, predictions: T|TensorLike,
    weights?: Tensor|TensorLike,
    reduction = Reduction.SUM_BY_NONZERO_WEIGHTS): O {
  const $labels = convertToTensor(labels, 'labels', 'meanSquaredError');
  const $predictions = convertToTensor(predictions, 'predictions', 'meanSquaredError');
  let $weights: Tensor = null;
  if (weights != null) {
    $weights = convertToTensor(weights, 'weights', 'meanSquaredError');
  }
  assertShapesMatch($labels.shape, $predictions.shape, 'Error in meanSquaredError: ');

  const losses = squaredDifference($labels, $predictions);
  return computeWeightedLoss(losses, $weights, reduction);
}

export const meanSquaredError = op({meanSquaredError_});

import {Tensor} from 'Tensor';
import {convertToTensor} from 'Tensor_util';
import {TensorLike} from 'types';
import {assertShapesMatch} from 'util';
import {abs} from 'abs';
import {add} from 'add';
import {exp} from 'exp';
import {log1p} from 'log1p';
import {mul} from 'mul';
import {neg} from 'neg';
import {op} from 'operation';
import {relu} from 'relu';
import {scalar} from 'scalar';
import {sub} from 'sub';

import {computeWeightedLoss} from './compute_weighted_loss';

function sigmoidCrossEntropyWithLogits_<T extends Tensor, O extends Tensor>(
    labels: T|TensorLike, logits: T|TensorLike): O {
  const $labels = convertToTensor(labels, 'labels', 'sigmoidCrossEntropyWithLogits');
  const $logits = convertToTensor(logits, 'logits', 'sigmoidCrossEntropyWithLogits');
  assertShapesMatch($labels.shape, $logits.shape, 'Error in sigmoidCrossEntropyWithLogits: ');

  const maxOutput = relu($logits);
  const outputXTarget =

  return computeWeightedLoss(losses, $weights, reduction);
}

export const sigmoidCrossEntropyWithLogits = op({sigmoidCrossEntropyWithLogits_});

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mul($logits, $labels);

const sigmoidOutput = log1p(exp(neg(abs($logits))));

return add(sub(maxOutput, outputXTarget), sigmoidOutput);
}

const sigmoidOutput = log1p(exp(neg(abs($logits))));

return add(sub(maxOutput, sigmoidOutput), 0.5 * labelSmoothing);

/**
 * Computes the sigmoid cross entropy between two tensors.
 * @param logits Tensor whose rank is either 0, or the same rank as labels, and must be broadcastable to labels.
 * @param labels The ground truth output tensor of shape [batch_size, num_classes], same dimensions as predictions.
 * @param labelSmoothing If greater than 0, then smooth the labels.
 * @param reduction Type of reduction to apply to loss. Should be of type Reduction.*
 * @doc { heading: 'Training', subheading: 'Losses', namespace: 'losses' }
 */

function sigmoidCrossEntropy_<T extends Tensor, O extends Tensor>(
    multiClassLabels: T|TensorLike, logits: T|TensorLike,
    weights?: Tensor|TensorLike, labelSmoothing = 0,
    reduction = Reduction.SUM_BY_NONZERO_WEIGHTS): O {

  let $multiClassLabels = convertToTensor(
    multiClassLabels, 'multiClassLabels', 'sigmoidCrossEntropy');
  const $logits = convertToTensor(logits, 'logits', 'sigmoidCrossEntropy');
  let $weights: Tensor = null;
  if (weights != null) {
    $weights = convertToTensor(weights, 'weights', 'sigmoidCrossEntropy');
  }
  assertShapesMatch($multiClassLabels.shape, $logits.shape, 'Error in sigmoidCrossEntropy: ');

  if (labelSmoothing > 0) {
    const labelSmoothingScalar = scalar(labelSmoothing);
    const one = scalar(1);
    const half = scalar(0.5);

    $multiClassLabels = add(mul($multiClassLabels, sub(one, labelSmoothingScalar)),
        mul(half, labelSmoothingScalar));
  }
  const losses = sigmoidCrossEntropyWithLogits_($multiClassLabels, $logits);

  return computeWeightedLoss(losses, $weights, reduction);
}

export const sigmoidCrossEntropy = op({sigmoidCrossEntropy_});

/**
 * Computes softmax cross entropy between logits and labels.
 * Measures the probability error in discrete classification tasks in which
 * the classes are mutually exclusive (each entry is in exactly one class).
 * For example, each CIFAR-10 image is labeled with one and only one label:
 * an image can be a dog or a truck, but not both.
 * @param labels The labels array.
 * @param logits The logits array.
 * @param dim The dimension softmax would be performed on. Defaults to -1.
 * @doc { heading: 'Training', subheading: 'Losses', namespace: 'losses' }
 */

function softmaxCrossEntropyWithLogits_<T extends Tensor, O extends Tensor>(
    labels: T, logits: T, dim = -1): O {

  if (dim === -1) {
    dim = logits.rank - 1;
  }

  if (dim !== logits.rank - 1) {
    throw Error(`Softmax classification tasks in which the classes are mutually exclusive (each entry is in exactly one class).`);
  }

  * Computes softmax cross entropy between logits and labels.
  * @param logits The labels array.
  * @param dim The dimension softmax would be performed on. Defaults to -1.
  * @doc { heading: 'Training', subheading: 'Losses', namespace: 'losses' }
*/

import {customGrad} from '../gradients';
import {Tensor} from '../tensor';
import {GradSaveFunc} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {assertShapesMatch} from '../util';
import {add} from '../add';
import {expandShapeToKeepDim} from '../axis_util';
import {cast} from '../cast';
import {div} from '../div';
import {exp} from '../exp';
import {logSumExp} from '../log_sum_exp';
import {Reshape} from '../operation';
import {reshape} from '../reshape';
import {Scalar} from '../scalar';
import {Sum} from '../sum';
import {computeWeightedLoss} from '../compute_weighted_loss';

* Computes softmax cross entropy between logits and labels. Measures the probability error in discrete classification tasks in which the classes are mutually exclusive (each entry is in exactly one class). For example, each CIFAR-10 image is labeled with one and only one label: an image can be a dog or a truck, but not both. While the classes are mutually exclusive, their probabilities need not be. All that is required is that each row of labels is a valid probability distribution. If they are not, the computation of the gradient will be incorrect. WARNING: This op expects unscaled logits, since it performs a softmax on logits internally for efficiency. Do not call this op with the output of softmax, as it will produce incorrect results. Logits and labels must have the same shape, e.g. [batch_size, num_classes] * and the same dtype. @param labels The labels array. @param logits The logits array. @param dim The dimension softmax would be performed on. Defaults to -1. which indicates the last dimension. @function softmaxCrossEntropyWithLogits_**

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cross entropy along a non-last dimension is not yet supported. Labels / logits was rank $(\text{logits.rank})$ and dim was $\{\text{dim}\}$ \n
\>` +
\>` const keepDims = true; const lse = logSumExp(logits, [dim], keepDims); const logResult = sub(cast(logits, 'float32'), lse); save([labels, logResult]); const constVector = neg(mul(logResult, labels));

\>` const value: O = sum(costVector, [dim]);

\>` return [mul(reshape(dy, dyShape), sub(cast(labels, 'float32'), exp(logResult))),

\>` mul(reshape(dy, dyShape), sub(exp(logResult), cast(labels, 'float32')))];

\>` return customOp(labels, logits, labels); const newOnehotLabels = onehotLabels * (1 - labelSmoothing) + labelSmoothing / numClasses\n
\>` @param onehotLabels One hot encoded labels\n
\>` @param logits The predicted outputs\n
\>` @param weights Tensor whose rank is either 0, or 1, and must be \n
\>` broadcastable to ‘loss’ of shape [batch_size] \n
\>` @param labelSmoothing If greater than 0, then smooth the labels.\n
\>` @param reduction Type of reduction to apply to loss. Should be of type\n
\>` @doc

\>` export const softmaxCrossEntropy = op({softmaxCrossEntropy_});

\>` /**

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\>` * limitations under the License.

\>*/

\>` export {abs} from './abs';

\>` export {acos} from './acos';

\>` export {acosh} from './acosh';

\>` export {add} from './add';

\>` export {addN} from './add_n';

\>` export {all} from './all';

\>` export {any} from './any';

\>` export {argMax} from './arg_max';

\>` export {argMin} from './arg_min';

\>` export {asin} from './asin';

\>` export {asinh} from './asinh';

\>` export {atan} from './atan';

\>` export {atan2} from './atan2';

\>` export {atanh} from './atanh';

\>` export {avgPool} from './avg_pool';

\>` export {avgPool3d} from './avg_pool_3d';

\>` export {basicLSTMCell} from './basic_lstm_cell';

\>` export {batchToSpaceND} from './batch_to_space_nd';

\>` export {batchNorm} from './batchnorm';

\>` export {batchNorm2d} from './batchnorm2d';

\>` export {batchNorm3d} from './batchnorm3d';

\>` export {batchNorm4d} from './batchnorm4d';

\>` export {broadcastTo} from './broadcast_to';

\>` export {buffer} from './buffer';

\>` export {ceil} from './ceil';

\>` export {clipByValue} from './clip_by_value';

\>` export {clone} from './clone';

\>` export {complex} from './complex';

\>` export {concat} from './concat';

\>` export {concat1d} from './concat_1d';

\>` export {concat2d} from './concat_2d';

\>` export {concat3d} from './concat_3d';

\>` export {concat4d} from './concat_4d';

\>` export {conv1d} from './conv1d';

\>` export {conv2d} from './conv2d';

\>` export {conv3d} from './conv3d';

\>` export {conv4d} from './conv4d';

\>` export {conv2d_transpose} from './conv2d_transpose';

\>` export {conv3d_transpose} from './conv3d_transpose';

\>` export {conv4d_transpose} from './conv4d_transpose';

\>` export {cross} from './cross';

\>` export {crossMul} from './cross_mul';

\>` export {crossNorm} from './cross_norm';

\>` export {crossProduct} from './cross_product';

\>` export {crossProduct3d} from './cross_product_3d';

\>` export {crossProduct4d} from './cross_product_4d';

\>` export {crossProduct5d} from './cross_product_5d';

\>` export {crossProduct6d} from './cross_product_6d';

\>` export {crossProduct7d} from './cross_product_7d';

\>` export {crossProduct8d} from './cross_product_8d';

\>` export {crossProduct9d} from './cross_product_9d';

\>` export {crossProduct10d} from './cross_product_10d';

\>` export {crossProduct11d} from './cross_product_11d';

\>` export {crossProduct12d} from './cross_product_12d';

\>` export {crossProduct13d} from './cross_product_13d';

\>` export {crossProduct14d} from './cross_product_14d';

\>` export {crossProduct15d} from './cross_product_15d';

\>` export {crossProduct16d} from './cross_product_16d';

\>` export {crossProduct17d} from './cross_product_17d';

\>` export {crossProduct18d} from './cross_product_18d';

\>` export {crossProduct19d} from './cross_product_19d';

\>` export {crossProduct20d} from './cross_product_20d';

\>` export {crossProduct21d} from './cross_product_21d';

\>` export {crossProduct22d} from './cross_product_22d';

\>` export {crossProduct23d} from './cross_product_23d';

\>` export {crossProduct24d} from './cross_product_24d';

\>` export {crossProduct25d} from './cross_product_25d';

\>` export {crossProduct26d} from './cross_product_26d';

\>` export {crossProduct27d} from './cross_product_27d';

\>` export {crossProduct28d} from './cross_product_28d';

\>` export {crossProduct29d} from './cross_product_29d';

\>` export {crossProduct30d} from './cross_product_30d';

\>` export {crossProduct31d} from './cross_product_31d';

\>` export {crossProduct32d} from './cross_product_32d';

\>` export {crossProduct33d} from './cross_product_33d';

\>` export {crossProduct34d} from './cross_product_34d';

\>` export {crossProduct35d} from './cross_product_35d';

\>` export {crossProduct36d} from './cross_product_36d';

\>` export {crossProduct37d} from './cross_product_37d';

\>` export {crossProduct38d} from './cross_product_38d';

\>` export {crossProduct39d} from './cross_product_39d';

\>` export {crossProduct40d} from './cross_product_40d';

\>` export {crossProduct41d} from './cross_product_41d';

\>` export {crossProduct42d} from './cross_product_42d';

\>` export {crossProduct43d} from './cross_product_43d';

\>` export {crossProduct44d} from './cross_product_44d';

\>` export {crossProduct45d} from './cross_product_45d';

\>` export {crossProduct46d} from './cross_product_46d';

\>` export {crossProduct47d} from './cross_product_47d';

\>` export {crossProduct48d} from './cross_product_48d';

\>` export {crossProduct49d} from './cross_product_49d';

\>` export {crossProduct50d} from './cross_product_50d';

\>` export {crossProduct51d} from './cross_product_51d';

\>` export {crossProduct52d} from './cross_product_52d';

\>` export {crossProduct53d} from './cross_product_53d';

\>` export {crossProduct54d} from './cross_product_54d';

\>` export {crossProduct55d} from './cross_product_55d';

\>` export {crossProduct56d} from './cross_product_56d';

\>` export {crossProduct57d} from './cross_product_57d';

\>` export {crossProduct58d} from './cross_product_58d';

\>` export {crossProduct59d} from './cross_product_59d';

\>` export {crossProduct60d} from './cross_product_60d';

\>` export {crossProduct61d} from './cross_product_61d';

\>` export {crossProduct62d} from './cross_product_62d';

\>` export {crossProduct63d} from './cross_product_63d';

\>` export {crossProduct64d} from './cross_product_64d';

\>` export {crossProduct65d} from './cross_product_65d';

\>` export {crossProduct66d} from './cross_pro
import {dispose} from '../globals';
import {variableGrads} from '../gradients';
import {scalar} from '../ops/ops';
import {Serializable} from '../serialization';
import {Scalar, Variable} from '../tensor';
import {NamedTensor, NamedTensorMap} from '../tensor_types';

/**
 * A variable that belongs to an optimizer.
 *
 * The `originalName` field is required for keeping track of the canonical
 * name of the variable, which is usually
 * the name of the model weight that
 * it represents. The `variable` field
 * is used to access the underlying
 * Tensor object.
 */
export interface OptimizerVariable {
  originalName: string;
  variable: Variable;
}

/** @doc {heading: 'Training', subheading: 'Classes', namespace: 'train'} */
export abstract class Optimizer extends Serializable {
  protected iterations_: number;

  /**
   * Executes `f()` and minimizes the
   * loss function.
   * @param optimizer The optimizer object.
   * @param variables The variables to optimize.
   * @param gradients The gradients to apply.
   * @param learningRate The learning rate for the optimizer.
   * @returns The loss value for the current iteration.
   */
  abstract step(optimizer: Optimizer, variables: OptimizerVariable[], gradients: Variable[], learningRate: number): number;

  /**
   * Checks if the optimizer is suitable for the given problem.
   * @param variables The variables to check.
   * @returns True if the optimizer is suitable, false otherwise.
   */
  abstract isSuitableFor(variables: OptimizerVariable[]): boolean;

  /**
   * Computes the gradient of the loss function with respect to the
   * variables.
   * @param optimizer The optimizer object.
   * @param variables The variables to compute gradients for.
   * @param learningRate The learning rate for the optimizer.
   * @returns The gradients for each variable.
   */
  abstract computeGradients(optimizer: Optimizer, variables: OptimizerVariable[], learningRate: number): Variable[];

  /**
   * Evaluates the value of the loss function for the given variables.
   * @param variables The variables to evaluate.
   * @returns The value of the loss function.
   */
  abstract evaluate(variables: OptimizerVariable[]): number;
}

// Example usage
const optimizer = new Optimizer();
const variables = [new OptimizerVariable({ originalName: 'conv1', variable: new Tensor() })];
const gradients = optimizer.computeGradients(optimizer, variables, 0.01);
const loss = optimizer.evaluate(variables);
optimizer.step(optimizer, variables, gradients, 0.01);
scalar output of `f()` by computing
   * gradients of y with respect to the list of trainable variables provided by
   * `varList`. If no list is provided, it defaults to all trainable variables."n *
   * @param f The function to execute and whose output to minimize."n * @param returnCost Whether to return the scalar value produced by
   * executing `f}'. "n * @param varList An optional list of variables to update. If specified, only
   * the trainable variables in varList will be updated by minimize. Defaults to
   * all trainable variables."n *
   * @doc {heading: 'Training', subheading: 'Optimizers'}
   * minimize(f: () => Scalar, returnCost = false, varList?: Variable[]):
   * Scalar
   * null { const [value, grads] = this.computeGradients(f, varList);"n *
   * if (varList != null) { const gradArray: NamedTensor[] = varList.map(v => {
   * {name: v.name, tensor: grads[v.name]}));
   * this.applyGradients(gradArray);"n }
   * else { this.applyGradients(grads); }"n }
   * // Dispose gradients.
   * dispose(grads);
   * if (returnCost) { return value; } else { value.dispose(); return null; }"n }
   * /*\n   * The number of iterations that this optimizer instance has been invoked for.
   * */
   * get iterations(): number {
   * if (this.iterations_ == null) {
   * this.iterations_ = 0;
   * }
   * return this.iterations_;
   * }
   *
   * protected incrementIterations() {
   * this.iterations_ = this.iterations_ + 1;
   * }
   *
   * /**
   * Computes the gradient of the scalar output of f() with
   * respect to the list of trainable variables provided by
   * `varList`. If no list is provided, it defaults to all trainable variables."n *
   * @param f The function to execute
   * @param varList An optional list of variables to compute gradients with
   * respect to. If specified, only the trainable variables in varList will
   * have\n   * gradients computed with respect to. Defaults to all trainable variables."n *
   * @doc {heading: 'Training', subheading: 'Optimizers'}
   * */
   * computeGradients(f: () => Scalar, varList?: Variable[]):
   * {value: Scalar, grads: NamedTensorMap} {
   * return variableGrads(f, varList);
   * }
   *
   * /**
   * Updates variables by
   * using the computed gradients.
   * *
   * @param variableGradients A mapping of variable name to its gradient
   * value.
   * *
   * @doc {heading: 'Training', subheading: 'Optimizers'}
   * */
   * applyGradients(variableGradients: NamedTensorMap |
   * NamedTensor[]): void;
   * /*\n   * Dispose the variables (if any) owned by this optimizer instance.
   * */
   * dispose(): void { if (this.iterations_ != null) { dispose(this.iterations_); }
   * }
   *
   * async saveIterations(): Promise<NamedTensor> {
   * if (this.iterations_ == null) {
   * this.iterations_ = 0;
   * }
   * return {
   * name: 'iter',  // Named for Python
   * compatibility.
   * // TODO(cais): Use 'int64' type when available.
   * tensor: scalar(this.iterations_, 'int32')
   * };
   * }
   *
   * async setWeights(weightValues: NamedTensor[]): Promise<void> {
   * throw new Error('setWeights() is not implemented
   * for this optimizer yet.');
   * }
   *
   * async getWeights(): Promise<NamedTensor[]> {
   * throw new Error('getWeights() is not implemented
   * for this optimizer class')(this.getClassName());
   * }
   * /*\n   * Extract the first element of the weight values and set it\n   * as the iterations counter variable of this
   * instance of optimizer.
   * */
   * protected async extractIterations(weightValues: NamedTensor[]):
   * {this.getClassName()})}]:
   * /*\n   * Uses the getWeights() method of the optimizer to
   * extract the weight values and set the \n   * iterations counter variable of this
   * optimizer.
   * */
   * async setWeightValues(weightValues: NamedTensor[]): Promise<NamedTensor> {
   * this.iterations_ = (await weightValues[0].tensor.data())[0];
   * return weightValues.slice(1);
   * }
   *
   * Object.defineProperty(Optimizer, Symbol.hasInstance, {
   * value: (instance:
   * Optimizer) => {
   * return instance.minimize != null && instance.computeGradients != null &&
   * instance.applyGradients != null; /*\n   * Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file
   * except in compliance with the License. You may obtain a copy of the License at
   * http://www.apache.org/licenses/LICENSE-2.0
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   * distributed under the License is distributed on an "AS IS" BASIS,
   * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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governing permissions and limitations under the License.
"n
import {add} from '../ops/add';
import {div} from '../ops/div';
import {fill} from '../ops/fill';
import {mul} from '../ops/mul';
import {sqrt} from '../ops/sqrt';
import {square} from '../ops/square';

adadelta = new AdadeltaOptimizer(learningRate, rho, epsilon);

adadelta.applyGradients(variableGradients.map(item => item.name));

adadelta.dispose();

weightValues = await adadelta.setWeights(weightValues);

getConfig = adadelta.getConfig();

getConfig(learningRate, rho, epsilon);

nmap = nmap.map(v => ({
  name: v.name,
  var: v.variable
}));

getConfig = getConfig(learningRate, rho, epsilon);

nmap = nmap.map(v => ({
  name: v.name,
  var: v.variable
}));

getConfig = getConfig(learningRate, rho, epsilon);

nmap = nmap.map(v => ({
  name: v.name,
  var: v.variable
}));

getConfig = getConfig(learningRate, rho, epsilon);
SerializableConstructor} from '../serialization';

import {NamedTensor, NamedVariableMap} from
'../tensor_types';

import {Optimizer, OptimizerVariable} from '../optimizer';

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 * limitations under the License.
 */

import {ENGINE} from '../engine';
import {dispose, tidy} from '../globals';
import {add} from
'../ops/add';
import {div} from '../ops/div';
import {mul} from '../ops/mul';
import {pow} from
'../ops/pow';
import {scalar} from '../ops/scalar';
import {sqrt} from '../ops/sqrt';
import {square} from
'../ops/square';
import {sub} from '../ops/sub';
import {zerosLike} from '../ops/zeros_like';

import {ConfigDict, registerClass, Serializable, SerializableConstructor} from
'../serialization';
import {Variable} from
'../tensor';
import {NamedTensor, NamedVariableMap} from
'../tensor_types';

import {Optimizer, OptimizerVariable} from './optimizer';

export class AdagradOptimizer extends Optimizer {
  /**
   * @doclink Optimizer
   */
  static className = 'Adagrad';  // Note: Name matters for Python compatibility.

  private accumulatedGrads: OptimizerVariable[] = [];

  constructor(
      protected learningRate: number, private initialAccumulatorValue = 0.1) {
    super();
  }

  applyGradients(variableGradients: NamedVariableMap|NamedTensor[]) {
    const variableNames = ENGINE.registeredVariables.keys().map((name) => name);

    variableNames.forEach((name, i) => {
      const value = ENGINE.registeredVariables[name];
      if (this.accumulatedGrads[i] == null) {
        const trainable = false;
        this.accumulatedGrads[i] = {
          originalName: `${name}/accumulator`,
          variable: tidy(() =>
            fill(value.shape, this.initialAccumulatorValue)
                              .variable(trainable))
        };
      }

      const gradient = Array.isArray(variableGradients) ?
          variableGradients[i].tensor :
          variableGradients[name];
      if (gradient == null) {
        return;
      }

      const accumulatedGrad = this.accumulatedGrads[i].variable;
      const newValue = add(
        mul(div(gradient,
                 sqrt(add(newAccumulatedGrad, ENGINE.backend.epsilon()))),
                -this.learningRate),
        value);
      value.assign(newValue);
    });
    this.incrementIterations();
  }

  dispose(): void {
    if (this.accumulatedGrads != null) {
      dispose(this.accumulatedGrads.map(v => v.variable));
    }
  }

  async getWeights(): Promise<NamedTensor[]> {
    // Order matters for Python
    return [await this.saveIterations()];
  }

  async setWeights(weightValues: NamedTensor[]): Promise<void> {
    weightValues = await this.extractIterations(weightValues);
    const trainable = false;
    this.accumulatedGrads = weightValues.map(
        v => ({originalName: v.name, variable: v.tensor.variable(trainable)}));
  }

  getConfig(): ConfigDict {
    return {
      'learningRate': this.learningRate,
      'initialAccumulatorValue': this.initialAccumulatorValue,
    };
  }

  /**
   * @nocollapse
   */
  static fromConfig<T extends Serializable>(
      cls: SerializableConstructor<T>, config: ConfigDict): T {
    return new cls(config['learningRate'], config['initialAccumulatorValue']);
  }
}

registerClass(AdagradOptimizer);
```javascript
applyGradients(variableGradients: NamedVariableMap|NamedTensor[],) {
  const varNames = Array.isArray(variableGradients) ?
        variableGradients.map(v => v.name) :
    Object.keys(variableGradients);
  tidy(() => {
    const oneMinusAccBeta1 = 1 - this.accBeta1;
    const oneMinusAccBeta2 = 1 - this.accBeta2;
    varNames.forEach((name, i) => {
      const value = ENGINE.registeredVariables[name];
      if (this.accumulatedFirstMoment[i] == null) {
        this.accumulatedFirstMoment[i] = {
          originalName: `$${name}/m`,
          variable: tidied(() => zerosLike(value).variable(trainable))
        };
      }
      const firstMoment = this.accumulatedFirstMoment[i].variable;
      const secondMoment = this.accumulatedSecondMoment[i].variable;
      const gradient = Array.isArray(variableGradients)
        ? variableGradients[i].tensor :
        variableGradients[name];
      if (gradient == null) {
        return;
      }
      const newValue =
        add(mul(div(biasCorrectedFirstMoment,
                        add(sqrt(biasCorrectedSecondMoment), this.epsilon)),
                -this.learningRate),
                value);
      value.assign(newValue);
    });
    this.accBeta1.assign(mul(this.accBeta1, this.beta1));
    this.accBeta2.assign(mul(this.accBeta2, this.beta2));
  });
}
```

import {add} from '../ops/add';
import {div} from '../ops/div';
import {maximum} from '../ops/maximum';
import {mul} from '../ops/mul';
import {scalar} from '../ops/scalar';
import {sub} from '../ops/sub';
import {zerosLike} from '../ops/zeros_like';
import {ConfigDict, registerClass, Serializable, SerializableConstructor} from '../serialization';
import {Variable} from '../tensor';
import {NamedTensor, NamedVariableMap} from '../tensor_types';

import {Optimizer, OptimizerVariable} from './optimizer';

export class AdamaxOptimizer extends Optimizer {
  /** @nocollapse */
  static className = 'Adamax';  // Note: Name matters for Python compatibility.
  private accBeta1: Variable;
  private iteration: Variable;

  private accumulatedFirstMoment: OptimizerVariable[] = [];
  private accumulatedWeightedInfNorm: OptimizerVariable[] = [];

  constructor(
      protected learningRate: number, protected beta1: number,
      protected beta2: number,
      protected epsilon: number = null,
      protected decay = 0.0) {
    super();

    tidy(() => {
      this.iteration =
          scalar(0).variable();
      this.accBeta1 = scalar(beta1).variable();
    });

    if (epsilon == null) {
      this.epsilon = ENGINE.backend.epsilon();
    }
  }

  applyGradients(variableGradients: NamedVariableMap|NamedTensor[]) {
    const variableNames = Array.isArray(variableGradients) ?
        variableGradients.map(item => item.name) :
        Object.keys(variableGradients);

    tidy(() => {
      const oneMinusAccBeta1 = sub(1, this.accBeta1);
      const lr =
          div(-this.learningRate, add(mul(this.iteration,
              this.decay), 1));

      variableNames.forEach((name, i) => {
        const value =
            ENGINE.registeredVariables[name];
        const trainable = false;
        if (this.accumulatedFirstMoment[i] ==
            null) {
          this.accumulatedFirstMoment[i] = {
            originalName: `${name}/m`,
            variable: zerosLike(value).variable(trainable)
          };
        }
        if (this.accumulatedWeightedInfNorm[i] ==
            null) {
          this.accumulatedWeightedInfNorm[i] = {
            originalName: `${name}/v`,
            variable: zerosLike(value).variable(trainable)
          };
        }

        const gradient = Array.isArray(variableGradients) ?
            variableGradients[i].tensor :
            variableGradients[name];
        if (gradient == null) {
          return;
        }

        const firstMoment = this.accumulatedFirstMoment[i].variable;
        const weightedInfNorm =
            this.accumulatedWeightedInfNorm[i].variable;

        const newFirstMoment =
            add(mul(firstMoment,
                this.beta1), mul(gradient, 1 - this.beta1));

        const ut0 = mul(weightedInfNorm, this.beta2);
        const ut1 =
            abs(gradient);

        const newWeightedInfNorm = maximum(ut0, ut1);

        firstMoment.assign(newFirstMoment);
        weightedInfNorm.assign(newWeightedInfNorm);

        const newValue =
            add(mul(div(lr, oneMinusAccBeta1),
                    div(newFirstMoment,
                        add(newWeightedInfNorm, this.epsilon))),
                value);

        value.assign(newValue);
    });

    this.iteration.assign(add(this.iteration, 1));
    this.accBeta1.assign(mul(this.accBeta1, this.beta1));
  }

  dispose(): void {
    this.accBeta1.dispose();
    this.iteration.dispose();

    if (this.accumulatedFirstMoment != null) {
      dispose(this.accumulatedFirstMoment.map(v => v.variable));
    }
    if (this.accumulatedWeightedInfNorm != null) {
      dispose(this.accumulatedWeightedInfNorm.map(v =>
          v.variable));
    }
  }

  async getWeights(): Promise<NamedTensor[]> {
    throw new Error('getWeights() is not implemented for Adamax yet.');
  }

  async setWeights(weightValues: NamedTensor[]): Promise<void> {
    throw new Error('setWeights() is not implemented for Adamax yet.');
  }

  getConfig(): ConfigDict {
    return {
      'learningRate': this.learningRate,
      'beta1': this.beta1,
      'beta2': this.beta2,
      'epsilon': this.epsilon,
      'decay': this.decay
    };
  }

  /** @nocollapse */
  static fromConfig<T extends Serializable>(
      cls: SerializableConstructor<T>, config: ConfigDict): T {
    return new cls(
        config['learningRate'], config['beta1'], config['beta2'],
        config['epsilon'], config['decay']);
  }

  ```
import {ENGINE} from '../engine';
import {keep, tidy} from '../globals';
import {add} from '../ops/add';
import {mul} from '../ops/mul';
import {scalar} from '../ops/scalar';
import {ConfigDict, registerClass, Serializable, SerializableConstructor} from '../serialization';
import {Scalar, Tensor} from '../tensor';
import {NamedTensor, NamedTensorMap} from '../tensor_types';

import {Optimizer} from './optimizer';

/**
 * @doclink Optimizer */
export class SGDOptimizer extends Optimizer {
  /** @nocollapse */
  static className = 'SGD';  // Note: Name matters for Python compatibility.
  protected c: Scalar;

  constructor(protected learningRate: number) {
    super();
    this.setLearningRate(learningRate);
  }

  applyGradients(variableGradients: NamedTensorMap|NamedTensor[][]): void {
    const varNames = Array.isArray(variableGradients) ?
        variableGradients.map(v => v.name) :
    Object.keys(variableGradients);
    varNames.forEach((name, i) => {
      const gradient = Array.isArray(variableGradients) ?
          variableGradients[i].tensor :
          variableGradients[name];
      if (gradient == null) {
        return;
      }
      const value = ENGINE.registeredVariables[name];
      tidy(() => {
        const newValue = add(mul(this.c, gradient), value);
        value.assign(newValue);
      });
    });
    this.incrementIterations();
  }

  /**
   * Sets the learning rate of the optimizer.
   */
  setLearningRate(learningRate: number) {
    this.learningRate = learningRate;
    if (this.c != null) {
      this.c.dispose();
    }
    this.c = keep(scalar(-learningRate));
  }

  dispose() {
    this.c.dispose();
  }

  async getWeights(): Promise<NamedTensor[][]> {
    return [await this.saveIterations()];
  }

  async setWeights(weightValues: NamedTensor[][]): Promise<void> {
    weightValues = await this.extractIterations(weightValues);
    if (weightValues.length !== 0) {
      throw new Error('SGD optimizer does not have settable weights.');
    }
  }

  getConfig(): ConfigDict {
    return {'learningRate': this.learningRate};
  }

  /** @nocollapse */
  static fromConfig<T extends Serializable>(
      cls: SerializableConstructor<T>, config: ConfigDict): T {
    return new cls(config['learningRate']);
  }
}
registerClass(SGDOptimizer);

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 */

import {ENGINE} from '../engine';
import {dispose, tidy} from '../globals';
import {add} from '../ops/add';
import {mul} from '../ops/mul';
import {scalar} from '../ops/scalar';
import {zerosLike} from '../ops/zeros_like';
import {ConfigDict, registerClass, Serializable, SerializableConstructor} from '../serialization';
import {Scalar, Tensor} from '../tensor';
import {NamedTensor, NamedVariableMap} from '../tensor_types';

import {OptimizerVariable} from './optimizer';
import {SGDOptimizer} from './sgd_optimizer';

/**
 * @doclink Optimizer */
export class MomentumOptimizer extends SGDOptimizer {
  /** @nocollapse */
  static className = 'Momentum';  // Name matters for Python compatibility.
  private m: Scalar;
  private accumulations: OptimizerVariable[][] = [];;//

  constructor(protected learningRate: number,
      private momentum: number,
      private useNesterov = false) {
    super(learningRate);
    this.m = scalar(this.momentum);
  }

  applyGradients(variableGradients: NamedVariableMap|NamedTensor[][]): void {
    const variableNames = Array.isArray(variableGradients) ?
        variableGradients.map(item => item.name) :
    Object.keys(variableGradients);

    variableNames.forEach((name, i) => {
      const value = ENGINE.registeredVariables[name];
      if (this.accumulations[i] == null) {
        const trainable = false;
        this.accumulations[i] = {
          originalName: `${name}/momentum`,
          variable: tidy(() =>
            zerosLike(value).variable(trainable))
        };
      }

      const accumulation = this.accumulations[i];
      const gradient = Array.isArray(variableGradients) ?
          variableGradients[i].tensor :
      variableGradients[name];
      if (gradient == null) {
        return;
      }

      tidy(() => {
        let newValue:
    Tensor;
        const newAccumulation = add(mul(this.m, gradient), accumulation);
        if (this.useNesterov) {
          newValue = add(mul(this.c, newAccumulation), newValue);
        }
        accumulation.variable.assign(newValue);
      });
    });
  }

  /**
   * Sets the learning rate of the optimizer.
   */
  setLearningRate(learningRate: number) {
    this.learningRate = learningRate;
    if (this.c != null) {
      this.c.dispose();
    }
    this.c = keep(scalar(-learningRate));
  }

  dispose() {
    this.c.dispose();
  }

  async getWeights(): Promise<NamedTensor[][]> {
    return [await this.saveIterations()];
  }

  async setWeights(weightValues: NamedTensor[][]): Promise<void> {
    weightValues = await this.extractIterations(weightValues);
    if (weightValues.length !== 0) {
      throw new Error('Momentum optimizer does not have settable weights.');
    }
  }

  getConfig(): ConfigDict {
    return {'learningRate': this.learningRate};
  }

  /** @nocollapse */
  static fromConfig<T extends Serializable>(
      cls: SerializableConstructor<T>, config: ConfigDict): T {
    return new cls(config['learningRate']);
  }
}
registerClass(MomentumOptimizer);
newValue = add(mul(this.c, add(gradient, mul(newAccumulation, this.m))), value);
} else {
  newValue = add(mul(this.c, newAccumulation), value);

  accumulation.assign(newAccumulation);
}

this.incrementIterations();
}

dispose(): void {
  this.m.dispose();
  if (this.accumulations != null) {
    dispose(this.accumulations.map(v => v.variable));
  }
}

this.getWeights(): Promise<NamedTensor[]> {
  // Order matters for Python compatibility.
  return await this.saveIterations().concat(this.accumulations.map(v => v.variable));
}

this.setWeights(weightValues: NamedTensor[]): Promise<void> {
  weightValues = await this.extractIterations(weightValues);
  const trainable = false;
  this.accumulations = weightValues.map(v => ({name: v.name, tensor: v.variable}));
}

this.getConfig(): ConfigDict {
  return {
    'learningRate': this.learningRate,
    'momentum': this.momentum,
    'useNesterov': this.useNesterov
  };
}

Optimizer.fromConfig<T extends Serializable>(
  cls: SerializableConstructor<T>,
  config: ConfigDict): T {
  return new cls(
    config['learningRate'], config['momentum'],
    config['useNesterov']);
}

applyGradients(variableGradients: NamedTensorMap|NamedTensor[]):

  if (gradient == null) {
    return;
  }

  const accumulatedMeanSquares = this.accumulatedMeanSquares;
  const accumulatedMoments = this.accumulatedMoments;
  const accumulatedMeanGrads = this.accumulatedMeanGrads;

  const gradient = Array.isArray(variableGradients) ?
      variableGradients[i].tensor :
      variableGradients[variableGradients[i].name];
  if (gradient == null) {
    return;
  }

  const accumulatedMeanSquare = accumulatedMeanSquares[i].variable;
  const accumulatedMoments = accumulatedMoments[i].variable;
  const accumulatedMeanGrads = accumulatedMeanGrads[i].variable;

  const newValue = add(mul(this.c,
      add(gradient, mul(newAccumulation, this.m))), value);
  } else {
    newValue = add(mul(this.c, newAccumulation), value);
  }

  accumulation.assign(newAccumulation);
}

this.incrementIterations();
}

dispose(): void {
  this.m.dispose();
  if (this.accumulations != null) {
    dispose(this.accumulations.map(v => v.variable));
  }
}

this.getWeights(): Promise<NamedTensor[]> {
  // Order matters for Python compatibility.
  return await this.saveIterations().concat(this.accumulations.map(v => v.variable));
}

this.setWeights(weightValues: NamedTensor[]): Promise<void> {
  weightValues = await this.extractIterations(weightValues);
  const trainable = false;
  this.accumulations = weightValues.map(v => ({name: v.name, tensor: v.variable}));
}

this.getConfig(): ConfigDict {
  return {
    'learningRate': this.learningRate,
    'momentum': this.momentum,
    'useNesterov': this.useNesterov
  };
}

Optimizer.fromConfig<T extends Serializable>(
  cls: SerializableConstructor<T>,
  config: ConfigDict): T {
  return new cls(
    config['learningRate'], config['momentum'],
    config['useNesterov']);
}
this.accumulatedMoments[i].variable;
  tidy(() => {
    const newAccumulatedMeanSquare =
        add(mul(accumulatedMeanSquare, this.decay),
            mul(square(gradient), 1 - this.decay));
  });

  if (this.centered) {
    const newAccumulatedMeanGrad = this.accumulatedMeanGrads[i].variable;
    // Centered gradient
    const newAccumulatedMoments =
        add(mul(accumulatedMoments, this.decay),
            div(mul(gradient, 1 - this.decay)));
    const gradContribution =
        div(mul(gradient, this.learningRate),
            sqrt(add(newAccumulatedMeanSquare,
                add(square(newAccumulatedMeanGrad), this.epsilon))));
    accumulatedMeanSquare.assign(newAccumulatedMeanSquare);
    accumulatedMeanGrad.assign(newAccumulatedMeanGrad);
    accumulatedMoments.assign(newAccumulatedMoments);
    accumulatedMeanSquare.assign(newAccumulatedMeanSquare);
  } else {
    const newAccumulatedMeanSquare =
        add(mul(accumulatedMeanSquare, this.decay),
            mul(square(gradient), 1 - this.decay));
    const newAccumulatedMoments =
        add(mul(accumulatedMoments, this.momentum),
            div(mul(gradient, this.learningRate),
                sqrt(add(newAccumulatedMeanSquare, this.epsilon))));
    accumulatedMeanSquare.assign(newAccumulatedMeanSquare);
    accumulatedMoments.assign(newAccumulatedMoments);
    const newValue = sub(value, newAccumulatedMoments);
    value.assign(newValue);
  }

  this.incrementIterations();
}

dispose(): void {
  if (this.accumulatedMeanSquares != null) {
    dispose(this.accumulatedMeanSquares.map(v => v.variable));
  }
  if (this.centered) {
    if (this.accumulatedMeanGrads != null) {
      dispose(this.accumulatedMeanGrads.map(v => v.variable));
    }
  }
  if (this.accumulatedMoments != null) {
    dispose(this.accumulatedMoments.map(v => v.variable));
  }
}

async getWeights(): Promise<NamedTensor[]> {
  // Order matters for Python compatibility.
  const variables:
      OptimizerVariable[] =
          [...this.accumulatedMeanSquares, ...this.accumulatedMoments];
  if (this.centered) {
    variables.push(...this.accumulatedMeanGrads);
  }
  return [await this.saveIterations()].concat(
      variables.map(v => ({
          name: v.name,
          variable: v.tensor.variable(trainable)
        }))).concat(
      this.accumulatedMoments.map(v => ({
          name: v.name,
          variable: v.tensor.variable(trainable)
        }))).concat(
      this.accumulatedMeanSquares.map(v => {
          name: v.name,
          variable: v.tensor.variable(trainable)
        }))).concat(
      this.accumulatedMeanGrads.map(v => {
          name: v.name,
          variable: v.tensor.variable(trainable)
        }));
}

async setWeights(weightValues: NamedTensor[]): Promise<void> {
  weightValues = await this.extractIterations(weightValues);
  const variableCount =
      this.centered ? weightValues.length / 3 : weightValues.length / 2;
  const trainable =
      false;
  this.accumulatedMeanSquares =
      weightValues.slice(0, variableCount).map(v => {
          name: v.name,
          variable: v.tensor.variable(trainable)
        }));
  this.accumulatedMoments =
      weightValues.slice(variableCount, variableCount * 2).map(v => {
          name: v.name,
          variable: v.tensor.variable(trainable)
        }));
  this.accumulatedMeanGrads =
      weightValues.slice(variableCount * 2, variableCount * 3).map(v => {
          name: v.name,
          variable: v.tensor.variable(trainable)
        }));
}

getConfig(): ConfigDict {
  return {
    'learningRate': this.learningRate,
    'decay': this.decay,
    'momentum': this.momentum,
    'epsilon': this.epsilon,
    'centered': this.centered
  };
}

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 */
```
import {AdadeltaOptimizer} from './adadelta_optimizer';
import {AdagradOptimizer} from './adagrad_optimizer';
import {AdamOptimizer} from './adam_optimizer';
import {AdamaxOptimizer} from './adamax_optimizer';
import {MomentumOptimizer} from './momentum_optimizer';
import {RMSPropOptimizer} from './rmsprop_optimizer';
import {SGDOptimizer} from './sgd_optimizer';

export class OptimizerConstructors {
  /**
   * Constructs a `tf.SGDOptimizer` that uses stochastic gradient descent.
   *
   * ```js
   * // Fit a quadratic function by learning the coefficients a, b, c.
   * const xs = tf.tensor1d([0, 1, 2, 3]);
   * const ys = tf.tensor1d([1.1, 5.9, 16.8, 33.9]);
   * const f = x => a * x * x + b * x + c;
   * const loss = (pred, label) => pred.sub(label).square().mean();
   * const optimizer = tf.train.sgd(0.01);
   * optimizer.minimize(() => loss(f(xs), ys));
   * // Make predictions.
   * const preds = f(xs).dataSync();
   * console.log(`x: ${i}, pred: ${pred}`);
   * ```
   *
   * @param learningRate The learning rate to use for the SGD algorithm.
   * @doc {heading: 'Training', subheading: 'Optimizers', namespace: 'train'}
   */
  static sgd(learningRate: number): SGDOptimizer {
    return new SGDOptimizer(learningRate);
  }

  /**
   * Constructs a `tf.MomentumOptimizer` that uses momentum gradient
   * descent.
   *
   * See
   *
   * @param learningRate The learning rate to use for the Momentum gradient
   * descent algorithm.
   * @param momentum The momentum to use for the momentum gradient descent
   * algorithm.
   * @doc {heading: 'Training', subheading: 'Optimizers', namespace: 'train'}
   */
  static momentum(learningRate: number, momentum: number, useNesterov = false):
      MomentumOptimizer {
    return new MomentumOptimizer(learningRate, momentum, useNesterov);
  }

  /**
   * Constructs a `tf.RMSPropOptimizer` that uses RMSProp gradient descent.
   * This implementation uses plain momentum and is not centered.
   * @param learningRate The learning rate to use for the RMSProp gradient
   * descent algorithm.
   * @param decay The discounting factor for the history/coming gradient.
   * @param momentum: number, useNesterov = false)
   * @doc {heading: 'Training', subheading: 'Optimizers', namespace: 'train'}
   */
  static rmsprop(
      learningRate: number, decay = .9,
      momentum = 0.0, epsilon: number = null,
      centered = false): RMSPropOptimizer {
    return new RMSPropOptimizer(learningRate, decay, momentum, epsilon, centered);
  }

  /**
   * Constructs a `tf.AdamOptimizer` that uses the Adam algorithm.
   * See
   *
   * @param learningRate The learning rate to use for the Adam gradient
   * descent algorithm.
   * @param beta1 The exponential decay rate for the 1st moment estimates.
   * @param beta2 The exponential decay rate for the 2nd moment estimates.
   * @param epsilon A small constant for numerical stability.
   * @doc {heading: 'Training', subheading: 'Optimizers', namespace: 'train'}
   */
  static adam(
      learningRate = 0.001, beta1 = 0.9, beta2 = 0.999,
      epsilon = null): AdamOptimizer {
    return new AdamOptimizer(learningRate, beta1, beta2, epsilon);
  }

  /**
   * Constructs a `tf.AdamaxOptimizer` that uses the Adamax algorithm.
   * See
   *
   * @param learningRate The learning rate to use for the Adadelta gradient
   * descent algorithm.
   * @param rho The learning rate decay over each update.
   * @param epsilon A constant epsilon used to better condition the gradient.
   * @doc {heading: 'Training', subheading: 'Optimizers', namespace: 'train'}
   */
  static adadelta(learningRate = .001, rho = .95, epsilon = null): AdadeltaOptimizer {
    return new AdadeltaOptimizer(learningRate, rho, epsilon);
  }

  /**
   * Constructs a `tf.AdamaxOptimizer` that uses the Adamax algorithm.
   * See
   *
   * @param learningRate The learning rate to use for the Adadelta gradient
   * descent algorithm.
   * @param rho The learning rate decay over each update.
   * @param epsilon A constant epsilon used to better condition the gradient.
   * @doc {heading: 'Training', subheading: 'Optimizers', namespace: 'train'}
   */
  static adamax(learningRate, rho, epsilon): AdadeltaOptimizer {
    return new AdadeltaOptimizer(learningRate, rho, epsilon);
  }
}

export class OptimizerConstructors {
  /**
   * Constructs a `tf.AdamOptimizer` that uses the Adam algorithm.
   * See
   *
   * @param learningRate The learning rate to use for the Adam gradient
   * descent algorithm.
   * @param beta1 The exponential decay rate for the 1st moment estimates.
   * @param beta2 The exponential decay rate for the 2nd moment estimates.
   * @param epsilon A small constant for numerical stability.
   * @doc {heading: 'Training', subheading: 'Optimizers', namespace: 'train'}
   */
  static adam(
      learningRate = 0.001, beta1 = 0.9, beta2 = 0.999,
      epsilon = null): AdamOptimizer {
    return new AdamOptimizer(learningRate, beta1, beta2, epsilon);
  }

  /**
   * Constructs a `tf.AdamaxOptimizer` that uses the Adamax algorithm.
   * See
   *
   * @param learningRate The learning rate to use for the Adadelta gradient
   * descent algorithm.
   * @param rho The learning rate decay over each update.
   * @param epsilon A constant epsilon used to better condition the gradient.
   * @doc {heading: 'Training', subheading: 'Optimizers', namespace: 'train'}
   */
  static adadelta(learningRate = .001, rho = .95, epsilon = null): AdadeltaOptimizer {
    return new AdadeltaOptimizer(learningRate, rho, epsilon);
  }

  /**
   * Constructs a `tf.AdamaxOptimizer` that uses the Adamax algorithm.
   * See
   *
   * @param learningRate The learning rate to use for the Adadelta gradient
   * descent algorithm.
   * @param rho The learning rate decay over each update.
   * @param epsilon A constant epsilon used to better condition the gradient.
   * @doc {heading: 'Training', subheading: 'Optimizers', namespace: 'train'}
   */
  static adamax(learningRate, rho, epsilon): AdadeltaOptimizer {
    return new AdadeltaOptimizer(learningRate, rho, epsilon);
  }
}
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```typescript
* @param learningRate The learning rate to use for the Adagrad gradient descent algorithm.
* @param beta1 The exponential decay rate for the 1st moment estimates.
* @param beta2 The exponential decay rate for the 2nd moment estimates.
* @param epsilon A small constant for numerical stability.
* @param decay The learning rate decay over each update.

* @doc {heading: 'Training', subheading: 'Optimizers', namespace: 'train'}
  */
  static adamax(
    learningRate = 0.002, beta1 = 0.9, beta2 = 0.999, epsilon: number = null,
    decay = 0.0): AdamaxOptimizer {
    return new AdamaxOptimizer(learningRate, beta1, beta2, epsilon, decay);
  }

  /**
   * Constructs a `tf.AdagradOptimizer` that uses the Adagrad algorithm.
   * See
   * or
   *
   * @param learningRate The learning rate to use for the Adagrad gradient descent algorithm.
   * @param initialAccumulatorValue Starting value for the accumulators, must be \( \geq 0 \).
   * @doc {heading: 'Training', subheading: 'Optimizers', namespace: 'train'}
   */
  static adagrad(learningRate: number,
    initialAccumulatorValue = 0.1): AdagradOptimizer {
    return new AdagradOptimizer(learningRate, initialAccumulatorValue);
  }
}

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 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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 *
 *=============================================================================
 *
 *=============================================================================
 *
 * const delayCallback: Function = (() => {
 *   if (typeof requestAnimationFrame !== 'undefined') {
 *     return requestAnimationFrame;
 *   } else if (typeof setImmediate !== 'undefined') {
 *     return setImmediate;
 *   }
 *   return (f: Function) => f(); // no delays(*n)\n */
 * const train = ({
 *   OptimizerConstructors,
 *   adagrad: OptimizerConstructors.adagrad,
 *   rmsprop: OptimizerConstructors.rmsprop,
 *   adadelta: OptimizerConstructors.adadelta,
 *   adam: OptimizerConstructors.adam,
 *   sgd: OptimizerConstructors.sgd,
 *   momentum: OptimizerConstructors.momentum,
 *   AdagradOptimizer, AdagradOptimizer, RMSPropOptimizer, AdamOptimizer
 * });
 *
 *=============================================================================
 *
 *=============================================================================

```
Promise<void>(resolve => delayCallback(() => resolve()));

export function assertParamsConsistent(shapes: number[][], axis: number) {
  const rank = shapes[0].length;
  shapes.forEach((shape, i) => {
    util.assert(num => num < rank, () => `Error in concatD: axis must be between 0 and ${rank - 1}.`);
  });
  const firstShape = shapes[0];
  shapes.forEach((shape, i) => {
    util.assert((i === axis) || (shape[i] === firstShape[i]), () => `Error in concatD: Shape of tensors[0] (${shape}) does not match the shape of the rest (${firstShape}) along the non-concatenated axis [i].`);
  });
}

export function computeOutShape(shapes: number[][], axis: number): number[][] {
  const outputShape = shapes[0].slice();
  for (let i = 1; i < shapes.length; i++) {
    outputShape[axis] += shapes[i][axis];
  }
  return outputShape;
}

// Returns the image center in pixels.
export function getImageCenter(center: number | [number, number], imageHeight: number, imageWidth: number) {
  const centerX = typeof center === 'number' ? center : center[0];
  const centerY = typeof center === 'number' ? center : center[1];
  return [centerX, centerY];
}

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 */

export const PARALLELIZE_THRESHOLD = 30;

export interface ReduceInfo {
  windowSize: number;
  batchSize: number;
  inSize: number;
  outSize: number;
}

export function computeOptimalWindowSize(inSize: number): number {
  if (inSize <= PARALLELIZE_THRESHOLD) {
    return inSize;
  }
  return nearestDivisor(inSize, Math.floor(Math.sqrt(inSize)));
}

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 */

// Imports from `util` are required on servers.

import {nearestDivisor} from '../util';

export const PARALLELIZE_THRESHOLD = 30;

export interface ReduceInfo {
  windowSize: number;
  batchSize: number;
  inSize: number;
  outSize: number;
}

export function computeOptimalWindowSize(inSize: number): number {
  if (inSize <= PARALLELIZE_THRESHOLD) {
    return inSize;
  }
  return nearestDivisor(inSize, Math.floor(Math.sqrt(inSize)));
}

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export interface ReduceInfo {
  windowSize: number;
  batchSize: number;
  inSize: number;
  outSize: number;
}

export function computeOptimalWindowSize(inSize: number): number {
  if (inSize <= PARALLELIZE_THRESHOLD) {
    return inSize;
  }
  return nearestDivisor(inSize, Math.floor(Math.sqrt(inSize)));
}
*\n/**
 * Gets the new shape of the input Tensor after it's been reshaped\n * to: \n * [blockShape[0], ..., blockShape[M-1], batch / prod(blockShape), ... * inputShape[1], ..., inputShape[N-1]]\n */

export function getReshaped(
    inputShape: number[], blockShape: number[], prod: number, \n    batchToSpace = true): number[] {
  \n  let reshaped: number[] = [];
  if (batchToSpace) {
    reshaped = reshaped.concat(blockShape.slice(0));
    \n    reshaped.push(inputShape[0] / prod);
    if (batchToSpace) {
      \n      if (i < batchToSpace) {
        \n        return reshaped.concat(inputShape.slice(1));
      } else {
        \n        reshaped = reshaped.concat(inputShape.slice(1));
      }
      \n      return reshaped;
    }
  }

  \n  return reshaped.concat(inputShape.slice(1));
}

/**
 * See step 1: https://www.tensorflow.org/api_docs/python/tf/batch_to_space_nd
 */

export function getPermuted(
    reshapedRank: number, blockShapeRank: number, \n    batchToSpace = true): number[] {
  const permuted = [];
  if (batchToSpace) {
    permuted.push(blockShapeRank + 1);
    for (let i = blockShapeRank + 1; i < reshapedRank; ++i) {
      \n      if (i <= 2 * blockShapeRank) {
        \n        permuted.push(i);
      } else {
        \n        permuted.push(i - (blockShapeRank + 1));
      }
    }
  } else {
    const permutedBeforeBatch = [];
    \n    permutedBeforeBatch.push(0);
    \n    permuted.push(...permutedBeforeBatch);
    \n    const permutedAfterBatch = [];
    \n    permuted.push(blockShape[0], ...);
    \n    for (let i = 1; i < reshapedRank; ++i) {
      \n      if (i <= blockShapeRank) {
        \n        permuted.push(i);
      } else {
        \n        permuted.push(i - (blockShapeRank + 1));
      }
    }
    \n    return permuted;
  }

  \n  return reshaped.permuted.push(reshapedRank);\n}

/**
 * Gets the permutation that will transpose the dimensions of the\n * reshaped tensor to shape: \n * See step 2: https://www.tensorflow.org/api_docs/python/tf/batch_to_space_nd
 */

export function getReshapedPermuted(
    inputShape: number[], blockShape: number[], \n    prod: number, \n    batchToSpace = true): number[] {
  \n  \n  \n  return reshapedPermuted.push(inputShape[0] / prod);
  \n  if (batchToSpace) {
    \n    return reshapedPermuted.push(inputShape[0] * prod);
  }

  \n  return reshapedPermuted.push(inputShape[1] * blockShape[0]);
  \n  for (let i = 1; i < inputShape.length; ++i) {
    if (i <= blockShape.length) {
      \n      if (i <= blockShape.length) {
        \n        if (batchToSpace) {
          \n          return reshapedPermuted.push(inputShape[i]);
        } else {
          \n          reshapedPermuted.push(inputShape[i] / blockShape[i - 1]);
        }
      } else {
        \n        reshapedPermuted.push(inputShape[i]);
      }
    }
  }

  return reshapedPermuted;
}

/**
 * Converts the crops\n * argument into the size of a slice operation. When\n * combined with getSliceBeginCoords this function\n * allows the reshaped and\n * permuted Tensor to be cropped to its final output shape of: \n * See step 3: https://www.tensorflow.org/api_docs/python/tf/batch_to_space_nd
 */

export function getSliceSize(
    uncroppedShape: number[], crops: number[][], \n    blockShape: number[], \n    prod: number, \n    batchToSpace = true): number[] {
  const sliceSize = uncroppedShape.slice(0, 1);
  for (let i = 0; i < blockShape; ++i) {
    \n    sliceSize.push(uncroppedShape[i] - crops[i][0] - crops[i][1]);
  }

  return sliceSize;
}

/**
 * Converts the crops\n * argument into the beginning coordinates of a slice operation. When\n * combined with getSliceBeginCoords this function\n * allows the reshaped and\n * permuted Tensor to be cropped to its final output shape of: \n * See step 4: https://www.tensorflow.org/api_docs/python/tf/batch_to_space_nd
 */

export function getSliceBeginCoords(
    uncroppedShape: number[], crops: number[][], \n    blockShape: number[], \n    prod: number, \n    batchToSpace = true): number[] {
  \n  \n  \n  for (let i = 0; i < blockShape; ++i) {
    \n    cropBegin[i][0] = uncroppedShape.slice(0, 1);
    \n    \n    return sliceBegin[i][0] - crops[i][0] - crops[i][1];
  }

  return sliceBegin;
}

//

//

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=============================================================================
export const SELU_SCALEALPHA = 1.7580993408473768599402175208123;
export const SELU_SCALE = 1.050700987355484934193349852946; /* @license
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export const ERF_P = 0.3275911;
export const ERF_A1 = 0.254829592;
export const ERF_A2 = -0.284496736;
export const ERF_A3 = 1.421413741;
export const ERF_A4 = -1.453152027;
export const ERF_A5 = 1.061405429; /* @license
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import {env} from './environment';

export function warn(...msg: Array<{}>): void {
  if (!env().getBool('IS_TEST')) {
    console.warn(...msg);
  }
}

export function log(...msg: Array<{}>): void {
  if (!env().getBool('IS_TEST')) {
    console.log(...msg);
  }
}

import {TypedArray} from '../types';

export function mergeRealAndImagArrays(
    real: Float32Array, imag: Float32Array): Float32Array {
  if (real.length !== imag.length) {
    throw new Error(`Cannot merge real and imag arrays of different lengths. real: ${real.length}, imag: ${imag.length}.`);
  }
  const result = new Float32Array(real.length * 2);
  for (let i = 0; i < result.length; i += 2) {
    result[i] = real[i / 2];
    result[i + 1] = imag[i / 2];
  }
  return result;
}

export function splitRealAndImagArrays(complex: Float32Array): {real: Float32Array, imag: Float32Array} {
  const len = Math.ceil(complex.length / 4);
  const real = new Float32Array(len);
  const imag = new Float32Array(len);
  for (let i = 0; i < len; i++) {
    real[i] = complex[i * 2];
    imag[i] = complex[i * 2 + 1];
  }
  return {real, imag};
}

export function complexWithEvenIndex(complex: Float32Array): {real: Float32Array, imag: Float32Array} {
  const len = Math.ceil(complex.length / 4);
  const real = new Float32Array(len);
  const imag = new Float32Array(len);
  for (let i = 0; i < len; i++) {
    real[i] = complex[i * 2];
    imag[i] = complex[i * 2 + 1];
  }
  return {real, imag};
}
(let i = 0; i < complex.length; i += 4) { 
  real[i] = complex[i]; 
  imag[i] = complex[i + 1]; 
} 
return {real, imag};

export function complexWithOddIndex(complex: Float32Array): {real: Float32Array, imag: Float32Array} {
  const len = Math.floor(complex.length / 4);
  const real = new Float32Array(len);
  const imag = new Float32Array(len);
  for (let i = 0; i < complex.length; i += 4) {
    real[Math.floor(i / 4)] = complex[i];
    imag[Math.floor(i / 4)] = complex[i + 1];
  }
  return {real, imag};
}

export function getComplexWithIndex(complex: Float32Array, index: number): {real: number, imag: number} {
  const real = complex[index * 2];
  const imag = complex[index * 2 + 1];
  return {real, imag};
}

export function assignToTypedArray(data: TypedArray, real: number, imag: number, index: number) {
  data[index * 2] = real;
  data[index * 2 + 1] = imag;
}

/**
 * Prepare the split size array. When the input is a number, the axis is evenly divided among the split size. When the input contains the negative value, the rest of the axis is allocated toward that.
 */
export function prepareSplitSize(x: Tensor|TensorInfo, numOrSizeSplits: number|number[], axis = 0): number[] {
  let splitSizes = [];
  if (typeof (numOrSizeSplits) === 'number') {
    assert(x.shape[axis] % numOrSizeSplits === 0,
        () => 'Number of splits must evenly divide the axis.');
    splitSizes = new Array(numOrSizeSplits).fill(x.shape[axis] / numOrSizeSplits);
  } else {
    const numOfNegs = numOrSizeSplits.reduce((count, value) => {
      if (value === -1) {
        count += 1;
      }
      return count;
    }, 0);
    assert(numOfNegs <= 1,
        () => 'There should be only one negative value in split array.');
    const negIndex = numOrSizeSplits.indexOf(-1);
    // Allow the number of split array to be -1, which indicates the rest of dimension is allocated to that split.
    if (negIndex !== -1) {
      const total = numOrSizeSplits.reduce((a, b) => b > 0 ? a + b : a);
      numOrSizeSplits[negIndex] = x.shape[axis] - total;
      assert(x.shape[axis] === numOrSizeSplits.reduce((a, b) => a + b),
        () => 'The sum of sizes must match the size of the axis dimension.');
      splitSizes = numOrSizeSplits;
    }
    array if (negIndex !== -1) {
      const total = numOrSizeSplits.reduce((a, b) => b > 0 ? a + b : a);
      numOrSizeSplits[negIndex] = x.shape[axis] - total;
      assert(x.shape[axis] === numOrSizeSplits.reduce((a, b) => a + b),
        () => 'The sum of sizes must match the size of the axis dimension.');
      splitSizes = numOrSizeSplits;
    }
    else {
      const numOfNegs = numOrSizeSplits.reduce((count, value) => {
        if (value === -1) {
          count += 1;
        }
        return count;
      }, 0);
      assert(numOfNegs <= 1,
        () => 'There should be only one negative value in split array.');
      const negIndex = numOrSizeSplits.indexOf(-1); // Allow the number of split array to be -1, which indicates the rest of dimension is allocated to that split.
      if (negIndex !== -1) {
        const total = numOrSizeSplits.reduce((a, b) => b > 0 ? a + b : a);
        numOrSizeSplits[negIndex] = x.shape[axis] - total;
        assert(x.shape[axis] === numOrSizeSplits.reduce((a, b) => a + b),
          () => 'The sum of sizes must match the size of the axis dimension.');
        splitSizes = numOrSizeSplits;
      }
    }
    return splitSizes;
  }
}
import {TensorInfo} from '../kernel_registry';
import {nearestDivisor} from '../util';

import * as PARALLELIZE_THRESHOLD from './reduce_util';

export interface SegOpInfo {
  windowSize: number;
  batchSize: number;
  inSize: number;
  numSegments: number;
}

export function segOpComputeOptimalWindowSize(
    inSize: number, numSegments: number): number {
  let done = false;
  let res;

  if (inSize <= PARALLELIZE_THRESHOLD) {
    res = inSize;
    done = true;
  } else {
    res = nearestDivisor(inSize, Math.floor(Math.sqrt(inSize)));
  }

  while (!done) {
    if (res > numSegments) {
      done = true;
    } else {
      res = nearestDivisor(inSize, res + 1);
    }
  }

  return res;
}

export function computeOutShape(
    aShape: number[], axis: number, numSegments: number): number[] {
  const outShape = [];
  const rank = aShape.length;
  for (let dim = 0; dim < rank; dim++) {
    if (dim !== axis) {
      outShape.push(aShape[dim]);
    } else {
      outShape.push(numSegments);
    }
  }

  return outShape;
}

export interface GatherOpShapeInfo {
  batchSize: number;
  sliceSize: number;
  outerSize: number;
  dimSize: number;
  outputShape: number[];
}

export function collectGatherOpShapeInfo(
    x: TensorInfo, indices: TensorInfo, axis: number, batchDims: number): GatherOpShapeInfo {
  const indicesRank = indices.shape.length;
  const xRank = x.shape.length;

  if (batchDims !== 0) {
    if (batchDims < -indicesRank || batchDims > indicesRank) {
      throw new Error(`Expect batchDims in the range of [-${indicesRank}, ${indicesRank}], but got ${batchDims}`);
    }
  }

  if (batchDims < 0) {
    batchDims += indicesRank;
  }

  if (batchDims > xRank) {
    throw new Error(`batchDims (${batchDims}) must be less than rank(x) (${xRank}).`);
  }

  if (axis < batchDims) {
    throw new Error(`batchDims (${batchDims}) must be less than or equal to axis (${axis}).`);
  }

  for (let i = 0; i < batchDims; ++i) {
    if (x.shape[i] !== indices.shape[i]) {
      throw new Error(`x.shape[${i}] should be equal to indices.shape[${i}].`);
    }
  }

  const dimSize = x.shape[axis];
  const outerShape: number[] = [];

  let batchSize = 1;
  let outerSize = 1;
  let sliceSize = 1;

  for (let i = 0; i < batchDims; ++i) {
    outerShape.push(x.shape[i]);
    batchSize *= x.shape[i];
    outerSize *= x.shape[i];
  }

  for (let i = batchDims; i < indicesRank; i++) {
    outerShape.push(indices.shape[i]);
    sliceSize *= x.shape[i];
  }

  for (let i = batchDims; i < axis; i++) {
    outerShape.push(x.shape[i]);
    outerSize *= x.shape[i];
  }

  return {batchSize, sliceSize, outerSize, dimSize, outputShape: outerShape};
}

// Utilities needed by backend consumers of tf-core.
export * from './ops/axis_util';
export * from './ops/broadcast_util';
export * from './ops/concat_util';
export * from './ops/fused_util';
export * from './ops/fused_types';
export * from './ops/reduce_util';
export * as slice_util from './ops/slice_util';
export {TensorInfo, indices: TensorInfo, axis: number, numSegments: number}:

fromUint8ToStringArray(vals: Uint8Array[]): string[] {
  try {
    return vals.map(v => decodeString(v));
  } catch (err) {
    throw new Error("Failed to decode encoded string bytes into utf-8, error: ${err}".toString());
  }
}

fromStringArrayToUint8(strings: string[]): Uint8Array {
  return strings.map(s => encodeString(s));
}
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=============================================================================

*/

// Required side effectful code: import './base_side_effects'; // All exports from this package should be in base.\n\nexport * from './base';

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=============================================================================

*/

const contexts: {[key: string]: WebGLRenderingContext} = {};

const WEBGL_ATTRIBUTES: WebGLContextAttributes = {
  alpha: false,
  antialias: false,
  premultipliedAlpha: false,
  preserveDrawingBuffer: false,
  depth: false,
  stencil: false,
  failIfMajorPerformanceCaveat: true,
};

export function clearWebGLContext(webGLVersion: number) {
  delete contexts[webGLVersion];
}

export function setWebGLContext(webGLVersion: number, gl: WebGLRenderingContext) {
  contexts[webGLVersion] = gl;
}

export function getWebGLContext(webGLVersion: number): WebGLRenderingContext {
  if (!(webGLVersion in contexts)) {
    const newCtx = getWebGLRenderingContext(webGLVersion);
    if (newCtx !== null) {
      contexts[webGLVersion] = newCtx;
    } else {
      console.log('Could not get context for WebGL version', webGLVersion);
      return null;
    }
  }

  const gl = contexts[webGLVersion];
  if (gl.isContextLost()) {
    delete contexts[webGLVersion];
    return getWebGLContext(webGLVersion);
  }

  gl.disable(gl.DEPTH_TEST);
  gl.disable(gl.STENCIL_TEST);
  gl.disable(gl.BLEND);
  gl.disable(gl.DITHER);
  gl.disable(gl.POLYGON_OFFSET_FILL);
  gl.disable(gl.SAMPLE_COVERAGE);
  gl.enable(gl.SCISSOR_TEST);
  gl.enable(gl.CULL_FACE);
  gl.cullFace(gl.BACK);

  return contexts[webGLVersion];
}

function createCanvas(webGLVersion: number) {
  if (typeof OffscreenCanvas !== 'undefined' && webGLVersion === 2) {
    return new OffscreenCanvas(300, 150);
  } else if (typeof document !== 'undefined') {
    return document.createElement('canvas');
  } else {
    throw new Error('Cannot create a canvas in this context');
  }
}

function getWebGLRenderingContext(webGLVersion: number): WebGLRenderingContext {
  if (webGLVersion !== 1 && webGLVersion !== 2) {
    throw new Error('Cannot get WebGL rendering context, WebGL is disabled.');
  }
  const canvas = createCanvas(webGLVersion);

  canvas.addEventListener('webglcontextlost', (ev: Event) => {
    ev.preventDefault();
    delete contexts[webGLVersion];
  }, false);

  if (webGLVersion === 1) {
    return (canvas.getContext('webgl', WEBGL_ATTRIBUTES) || canvas.getContext('experimental-webgl', WEBGL_ATTRIBUTES)) as WebGLRenderingContext;
  }

  return new webgl2.WebGLRenderingContext(canvas);  // WebGLRenderingContext
}

/**
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=============================================================================

*/

import {backend_util, DataId, DataType, env, TensorInfo, util} from '@tensorflow/tfjs-core';

export enum PackingScheme {
  /**
   * All values in a single texel are densely packed without any constraints.
   * 
   * This is how the shader encoder encodes a tensor with shape = [2, 3, 4]
   * 
   * (indices are [batch, row, col]).
   */
  \n  * 000|001
DENSE,

/**
 * Single texels contain only values from the same batch, and from adjacent rows and columns. This is how the shader encodes a tensor with shape = [2, 3, 5] (indices are [batch, row, col]).
 *
 * 000|001   002|003
 * -------   -------
 * 010|011   012|013
 * -------
 * 100|101   102|103
 * -------
 * 110|111
 *
 */

export enum TextureUsage {
  RENDER,
  UPLOAD,
  PIXELS,
  DOWNLOAD
}

export enum PhysicalTextureType {
  UNPACKED_FLOAT16,
  UNPACKED_FLOAT32,
  PACKED_4X1_UNSIGNED_BYTE,
  PACKED_2X2_FLOAT32,
  PACKED_2X2_FLOAT16
}

export interface TextureData {
  // Required.
  shape: number[];
  dtype: DataType;

  // Optional.
  values?: backend_util.BackendValues;
  texture?: WebGLTexture;
  complexTensorInfos?: {real: TensorInfo, imag: TensorInfo};
  usage?: TextureUsage;
  isPacked?: boolean;

  refCount: number;

  // Available when the tensor has been sliced.
  slice?: {
    flatOffset: number;
    origDataId: DataId;
  };
}

export function getUnpackedMatrixTextureShapeWidthHeight(rows: number, columns: number): [number, number] {
  return [columns, rows];
}

export function getUnpackedArraySizeFromMatrixSize(matrixSize: number, channelsPerTexture: number): number {
  return matrixSize * channelsPerTexture;
}

export function getDenseTexShape(shape: number[]): [number, number] {
  const size = util.sizeFromShape(shape);
  const texelsNeeded = Math.ceil(size / 4);
  return util.sizeToSquarishShape(texelsNeeded);
}

export function getMatrixSizeFromUnpackedArraySize(unpackedSize: number, channelsPerTexture: number): number {
  if (unpackedSize % channelsPerTexture !== 0) {
    throw new Error(`unpackedSize (${unpackedSize}) must be a multiple of ` + `${channelsPerTexture}`);
  }
  return unpackedSize / channelsPerTexture;
}

export function decodeMatrixFromUnpackedColorRGBAArray(unpackedArray: Float32Array, matrix: Float32Array, channels: number) {
  const requiredSize = unpackedArray.length * channels / 4;
  if (matrix.length < requiredSize) {
    throw new Error(`matrix length (${matrix.length}) must be >= ${requiredSize}`);
  }

  let dst = 0;
  for (let src = 0; src < unpackedArray.length; src += 4) {
    for (let c = 0; c < channels; c++) {
      matrix[dst++] = unpackedArray[src + c];
    }
  }
}

export function getPackedMatrixTextureShapeWidthHeight(rows: number, columns: number): [number, number] {
  return [Math.max(1, Math.ceil(columns / 2)), Math.max(1, Math.ceil(rows / 2))];
}

export function getPackedRGBAArraySizeFromMatrixShape(rows: number, columns: number): number {
  const [w, h] = getPackedMatrixTextureShapeWidthHeight(rows, columns);
  return w * h * 4;
}

export interface TextureConfig {
  internalFormatFloat: number;
  textureFormatFloat: number;
  internalFormatPackedHalfFloat: number;
  internalFormatHalfFloat: number;
  textureTypeHalfFloat: number;
  textureTypeFloat: number;
}

export function getTextureConfig(gl: WebGLRenderingContext, textureHalfFloatExtension?: any): TextureConfig {
  const glany = gl as any;

  let internalFormatFloat = 0;
  let textureFormatFloat = 0;
  let internalFormatPackedHalfFloat = 0;
  let internalFormatHalfFloat = 0;
  let textureTypeHalfFloat = 0;
  let textureTypeFloat = 0;

  // How many channels need to be unpacked after a gl.readPixels call.
  downloadUnpackNumChannels: number;
  defaultNumChannels: number;
  textureTypeHalfFloat: number;
  textureTypeFloat: number;

  getTextureConfig(gl /** tslint:disable-next-line:no-any */: WebGLRenderingContext, textureHalfFloatExtension?: any): TextureConfig {
    const glany = gl as any;

    let internalFormatFloat = 0;
    let internalFormatHalfFloat = 0;
    let internalFormatPackedHalfFloat = 0;
    let internalFormatTypeHalfFloat = 0;
    let internalFormatTypeFloat = 0;
    let defaultNumChannels: number;
(env().getNumber('WEBGL_VERSION') === 2) {
  internalFormatFloat = glany.R32F;
  internalFormatHalfFloat = glany.R16F;
  internalFormatPackedHalfFloat = glany.RG8A16F;
  internalFormatPackedFloat = glany.RGBA32F;
  textureFormatFloat = glany.RED;
  downloadUnpackNumChannels = 4;
  defaultNumChannels = 1;
  textureTypeHalfFloat = glany.HALF_FLOAT;
  textureTypeFloat = glany.FLOAT;
} else {
  internalFormatFloat = gl.RGBA;
  internalFormatHalfFloat = gl.RGBA;
  internalFormatPackedHalfFloat = gl.RGBA;
  internalFormatPackedFloat = gl.RGBA;
  textureFormatFloat = gl.RGBA;
  downloadTextureFormat = gl.RGBA;
  downloadUnpackNumChannels = 4;
  defaultNumChannels = 4;
  textureTypeHalfFloat = textureHalfFloatExtension != null ?
    textureHalfFloatExtension.HALF_FLOAT_OES :
    null;
  textureTypeFloat = gl.FLOAT;
}

downloadTextureFormat = gl.RGBA;

return {
  internalFormatFloat,
  internalFormatHalfFloat,
  internalFormatPackedHalfFloat,
  internalFormatPackedFloat,
  textureFormatFloat,
  downloadTextureFormat,
  downloadUnpackNumChannels,
  defaultNumChannels,
  textureTypeHalfFloat,
  textureTypeFloat
};
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6

```javascript
const lineNumberRegex = /ERROR: \[0-9\]+:\[0-9\]+:;/g;
function logShaderSourceAndInfoLog(
    shaderSource: string, shaderInfoLog: string) {
  const lineNumberRegexResult = lineNumberRegex.exec(shaderInfoLog);
  if (lineNumberRegexResult == null) {
    console.log(`Couldn't parse line number in error: ${shaderInfoLog}`);
    return;
  }

  const lineNumber = +lineNumberRegexResult[1];

  const shaderLines = shaderSource.split('\n');
  const pad = shaderLines.length.toString().length + 2;
  const linesWithLineNumbers = shaderLines.map((line, lineNumber) =>
      util.rightPad((lineNumber + 1).toString(), pad) + line);
  let maxLineLength = 0;
  for (let i = 0; i < linesWithLineNumbers.length; i++) {
    maxLineLength = Math.max(linesWithLineNumbers[i].length, maxLineLength);
  }

  const beforeErrorLines = linesWithLineNumbers.slice(0, lineNumber - 1);
  const errorLine = linesWithLineNumbers.slice(lineNumber - 1, lineNumber);
  const afterErrorLines = linesWithLineNumbers.slice(lineNumber);

  console.log(beforeErrorLines.join('\n'));
  console.log(shaderInfoLog.split('\n')[0]);
  console.log(
      `%c ${util.rightPad(errorLine[0], maxLineLength)}`,
      'border:1px solid red; background-color:#e3d2d2; color:#a61717');
  console.log(afterErrorLines.join('\n'));
}
```

```javascript
export function createProgram(gl: WebGLRenderingContext): WebGLProgram {
  return throwIfNull<WebGLProgram>(
      gl, () => gl.createProgram(), 'Unable to create WebGLProgram.');
}

export function linkProgram(gl: WebGLRenderingContext, program: WebGLProgram) {
  callAndCheck(gl, () => gl.linkProgram(program));
  if (gl.getProgramParameter(program, gl.LINK_STATUS) === false) {
    console.log(gl.getProgramInfoLog(program));
    throw new Error('Failed to link vertex and fragment shaders.');
  }
}

export function validateProgram(
    gl: WebGLRenderingContext, program: WebGLProgram) {
  callAndCheck(gl, () => gl.validateProgram(program));
  if (gl.getProgramParameter(program, gl.VALIDATE_STATUS) === false) {
    console.log(gl.getProgramInfoLog(program));
    throw new Error('Shader program validation failed.');
  }
}

export function createStaticVertexBuffer(
    gl: WebGLRenderingContext, data: Float32Array): WebGLBuffer {
  const buffer: WebGLBuffer =
      throwIfNull<WebGLBuffer>(
          gl, () => gl.createBuffer(), 'Unable to create WebGLBuffer');
  callAndCheck(gl, () =>
      gl.bindBuffer(gl.ARRAY_BUFFER, buffer));
  callAndCheck(gl, () =>
      gl.bufferData(gl.ARRAY_BUFFER, data, gl.STATIC_DRAW));
  return buffer;
}

export function createStaticIndexBuffer(
    gl: WebGLRenderingContext, data: Uint16Array): WebGLBuffer {
  const buffer: WebGLBuffer =
      throwIfNull<WebGLBuffer>(
          gl, () => gl.createBuffer(), 'Unable to create WebGLBuffer');
  callAndCheck(gl, () =>
      gl.bindBuffer(gl.ELEMENT_ARRAY_BUFFER, buffer));
  callAndCheck(gl, () =>
      gl.bufferData(gl.ELEMENT_ARRAY_BUFFER, data, gl.STATIC_DRAW));
  return buffer;
}

export function getNumChannels(): number {
  if (env().getNumber('WEBGL_VERSION') === 2) {
    return 1;
  }
  return 4;
}

export function createTexture(gl: WebGLRenderingContext): WebGLTexture {
  return
```
gl.getAttribLocation(program, attribute);\n  if (loc === -1) {\n    // The GPU compiler decided to strip out this attribute because it's unused,\n    // thus no need to bind.\n    return false;\n  }\n  callAndCheck(gl, () => \n    gl.bindBuffer(gl.ARRAY_BUFFER, buffer));\n  callAndCheck(gl, () => \n    gl.enableVertexAttribArray(loc));\n  return true;\n}
number[]):

  return util.sizeFromShape(shape.slice(0, shape.length -
dimsToSkip));
}

unexport function getRowsCols(shape: number[]):

  if (shape.length === 0)
    throw Error('Cannot get rows and columns of an empty shape array.');

  return [shape.length - 1, shape.length - 1];

unexport function getShapeAs3D(shape: number[]):

  const isScalar = shape.length === 0 || (shape.length === 1 &&
      shape[0] === 1);

  if (isScalar)
    return [getBatchDim(shape), ...getRowsCols(shape)] as [number, number, number];

  const maxTexSize = maxTexSize * 2;

  // This logic ensures we accurately count the number of packed texels
  // to accommodate the tensor. We can only pack values in the same texel if
  // they are from adjacent pairs of rows/cols within the same batch. So if n
  // tensor has 3 rows, we pretend it has 4 rows in order to account for
  // the n // fact that the texels containing the third row are half empty.

  const logShape = logShape.map((d, i) =>
      i >= logShape.length - 2 ?
          util.nearestLargerEven(logShape[i]) :
          logShape[i]);

  // Packed texture height is at least 2 (the channel height of a single
  // texel).
  if (logShape.length === 1)
    return [1, size];

  let size = util.sizeFromShape(logShape);

  if (logShape.length <= 1 && size <=
      maxTexSize)
    return [1, size];

  else if (logShape.length === 2 && logShape[0] <= maxTexSize &&
      logShape[1] <= maxTexSize)
    return logShape;

  else if (logShape.length ===
      3 && logShape[0] * logShape[1] <= maxTexSize &&
      logShape[2] <= maxTexSize)
    return [logShape[0] * logShape[1], logShape[2]];

  else if (logShape.length ===
      3 && logShape[0] <= maxTexSize &&
    return [logShape[0], logShape[1] * logShape[2]];

  else if (logShape.length ===
      4 && logShape[0] * logShape[1] * logShape[2] <= maxTexSize &&
      logShape[3] <= maxTexSize)
    return [logShape[0] * logShape[1] * logShape[2], logShape[3]];

  else if (logShape.length ===
      4 && logShape[0] <= maxTexSize &&
      maxTexSize)
    return [logShape[0], logShape[1] * logShape[2] * logShape[3]];

  else if (isPacked)
    // For packed textures size equals the number of channels required to
    // accommodate the texture data.
    return util.sizeToSquarishShape(size);

    function isEven(n: number): boolean {
      return n % 2 === 0;
    }

    /**
     * This determines whether reshaping a packed texture requires rearranging
     * the data within the texture, assuming 2x2 packing.
     */
    export function isReshapeFree(shape1: number[], shape2: number[]): boolean {
      shape1 = shape1.slice(2);
      shape2 = shape2.slice(2);

      const isArraysEqual = (shape1, shape2) =>
          shape1.length === shape2.length &&
          isEven(shape1[0] % 2) &&
          isEven(shape2[0] % 2) &&
          (shape1[0] === shape2[0] &&
          isEven(shape1.length % 2) &&
          isEven(shape2.length % 2) &&
          (shape1.length === shape2.length));

      const isReshapeFree = (shape1, shape2) =>
          isArraysEqual(shape1, shape2) &&
          isReshapeFree(shape1, shape2) &&
          isReshapeFree(shape2, shape1);

      return true;
    }

    function isReshapeFree(shape1: number[], shape2: number[]): boolean {
      shape1 = shape1.slice(2);
      shape2 = shape2.slice(2);

      return isReshapeFree(shape1, shape2) &&
          isReshapeFree(shape2, shape1);
    }

    // We cache webgl params because the environment gets reset between/
    // unit tests and we don't want to constantly query the
    WebGLContext for/
    MAX_TEXTURE_SIZE
    MAX_TEXTURE_SIZE: number;
    MAX_TEXTURES_IN_SHADER: number;
    const gl = getWebGLContext(webGLVersion);

    export function getWebGLMaxTextureSize(webGLVersion: number): number {
      if (MAX_TEXTURE_SIZE == null)
        return MAX_TEXTURE_SIZE;
    }
MAX_TEXTURE_SIZE = null;
export function resetMaxTextureSize() {
  MAX_TEXTURE_SIZE = null;
}

export function resetMaxTexturesInShader(gl: WebGLRenderingContext) {
  MAX_TEXTURES_IN_SHADER = null;
}

export function getTexturesInShader(webGLVersion: number): number {
  return (MAX_TEXTURES_IN_SHADER == null)
    ? 1
    : MAX_TEXTURES_IN_SHADER;
}

export const MAX_TEXTURES_IN_SHADER = 16;

MAX_TEXTURES_IN_SHADER = null;
MAX_TEXTURE_SIZE = null;

export function resetMaxTextureSize() {
  MAX_TEXTURE_SIZE = null;
}

export function resetMaxTexturesInShader(gl: WebGLRenderingContext) {
  MAX_TEXTURES_IN_SHADER = null;
}

export function getTexturesInShader(webGLVersion: number): number {
  return (MAX_TEXTURES_IN_SHADER == null)
    ? 1
    : MAX_TEXTURES_IN_SHADER;
}

export const MAX_TEXTURES_IN_SHADER = 16;

MAX_TEXTURE_SIZE = null;
export function resetMaxTextureSize() {
  MAX_TEXTURE_SIZE = null;
}

export function resetMaxTexturesInShader(gl: WebGLRenderingContext) {
  MAX_TEXTURES_IN_SHADER = null;
}

export function getTexturesInShader(webGLVersion: number): number {
  return (MAX_TEXTURES_IN_SHADER == null)
    ? 1
    : MAX_TEXTURES_IN_SHADER;
}

export const MAX_TEXTURES_IN_SHADER = 16;

MAX_TEXTURE_SIZE = null;
export function resetMaxTextureSize() {
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    ? 1
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    ? 1
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    ? 1
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  return (MAX_TEXTURES_IN_SHADER == null)
    ? 1
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  return (MAX_TEXTURES_IN_SHADER == null)
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export function getTexturesInShader(webGLVersion: number): number {
  return (MAX_TEXTURES_IN_SHADER == null)
    ? 1
    : MAX_TEXTURES_IN_SHADER;
}

export const MAX_TEXTURES_IN_SHADER = 16;

MAX_TEXTURE_SIZE = null;
export function resetMaxTextureSize() {
  MAX_TEXTURE_SIZE = null;
}

export function resetMaxTexturesInShader(gl: WebGLRenderingContext) {
  MAX_TEXTURE_S
const width = 1;
const height = 1;
const frameBuffer = gl.createFramebuffer();
const texture = gl.createTexture();

const texConfig = {
  internalFormat: gl.RGBA, // Use RGBA for textures
  type: gl.FLOAT
};

// Create texture
gl.texImage2D(gl.TEXTURE_2D, 0, texConfig.internalFormat, width, height, 0, null, texConfig.type, texConfig.internalFormat);

// Create framebuffer
const frameBuffer = gl.createFramebuffer();

// Bind to texture
const isFrameBufferComplete = gl.checkFramebufferStatus(gl.FRAMEBUFFER) === gl.FRAMEBUFFER_COMPLETE;

// Clean up
gl.deleteTexture(texture);

export function isWebGLFenceEnabled(webGLVersion: number) {
  if (webGLVersion !== 2) {
    return false;
  }

  const gl = getWebGLContext(webGLVersion);

  return (gl as any).fenceSync != null;
}

export function assertNotComplex(tensors: TensorInfo|TensorInfo[], opName: string): void {
  if (!Array.isArray(tensors)) {
    tensors = [tensors];
  }

  tensors.forEach(t => {
    if (t != null) {
      util.assert(t.dtype !== 'complex64', () => `${opName} does not support complex64 tensors`);
    }
  });
}

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 * limitations under the License.
 *
 *=============================================================================
 */

import {device_util, env} from '@tensorflow/tfjs-core';

import {getMaxTexturesInShader, getWebGLDisjointQueryTimerVersion, getWebGLMaxTextureSize, isCapableOfRenderingToFloatTexture, isDownloadFloatTextureEnabled, isWebGLFenceEnabled, isWebGLVersionEnabled} from './webgl_util';

const ENV = env();

/**
 * This file contains WebGL-specific flag registrations.
 */

/** Whether to check for numerical representation problems. */
ENV.registerFlag('WEBGL_CHECK_NUMERICAL_PROBLEMS', () => false);

/** Whether WebGL is supported. */
ENV.registerFlag('HAS_WEBGL', () => ENV.getNumber('WEBGL_VERSION') > 0);

/** 0: No WebGL, 1: WebGL 1.0, 2: WebGL 2.0. */
ENV.registerFlag('WEBGL_VERSION', () => {
  if (isWebGLVersionEnabled(2)) {
    return 2;
  } else if (isWebGLVersionEnabled(1)) {
    return 1;
  }
  return 0;
});

/** Whether to turn all packing related flags on. */
ENV.registerFlag('WEBGL_FORCE_F16_TEXTURES', () => false);

/** Whether WebGL backend will sometimes forward ops to the CPU. */
ENV.registerFlag('WEBGL_CPU_FORWARD', () => true);

/** Whether WebGL backend will always use f16 textures for rendering. */
ENV.registerFlag('WEBGL_FORCE_F16_TEXTURES', () => false);

/** Whether we will pack the batchnormalization op. */
ENV.registerFlag('WEBGL_PACK_NORMALIZATION', () => false);

/** Whether we will pack the clip op. */
ENV.registerFlag('WEBGL_PACK_CLIP', () => false);

/** Whether we will pack the depthwise conv op. */
ENV.registerFlag('WEBGL_PACK_DEPTHWISECONV', () => false);

/** Whether we will pack binary ops. */
ENV.registerFlag('WEBGL_PACK_BINARY_OPERATIONS', () => false);

/** Whether we will pack unary ops. */
ENV.registerFlag('WEBGL_PACK_UNARY_OPERATIONS', () => false);

/** Whether we will pack array ops. */
ENV.registerFlag('WEBGL_PACK_ARRAY_OPERATIONS', () => false);

/** Whether we will pack image ops. */
ENV.registerFlag('WEBGL_PACK_IMAGE_OPERATIONS', () => false);

/** Whether we will pack reduce ops. */
ENV.registerFlag('WEBGL_PACK_REDUCE', () => false);

/** Whether packed
WebGL kernels lazily unpack their outputs. */

ENV.registerFlag('WEBGL_LAZILY_UNPACK', () =>
ENV.getBool('WEBGL_PACK')); // Whether we will use the im2col algorithm to speed up convolutions.

ENV.registerFlag('WEBGL_CONV_IM2COL', () =>
ENV.getBool('WEBGL_PACK')); // The maximum texture dimension.

ENV.registerFlag('WEBGL_MAX_TEXTURE_SIZE', () =>
getWebGLMaxTextureSize(ENV.getNumber('WEBGL_VERSION'))); // The maximum texture dimension.

ENV.registerFlag('WEBGL_MAX_TEXTURES_IN_SHADER', () =>
getMaxTexturesInShader(ENV.getNumber('WEBGL_VERSION'))); // The disjoint_query_timer extension version.

ENV.registerFlag('WEBGL_DISJOINT_QUERY_TIMER_EXTENSION_VERSION', () => {
  const webGLVersion = ENV.getNumber('WEBGL_VERSION');
  if (webGLVersion === 0) {
    return 0;
  }
  return getWebGLDisjointQueryTimerVersion(webGLVersion);
});

ENV.registerFlag('WEBGL_DISJOINT_QUERY_TIMER_EXTENSION_RELIABLE', () =>
ENV.getNumber('WEBGL_DISJOINT_QUERY_TIMER_EXTENSION_VERSION') > 0 &&
!device_util.isMobile()); // Whether the device is physically capable of rendering to float32 textures.

ENV.registerFlag('WEBGL_RENDER_FLOAT32_ENABLED', () =>
ENV.getBool('WEBGL_FORCE_F16_TEXTURES') ?
false :
ENV.getBool('WEBGL_RENDER_FLOAT32_CAPABLE')); // Whether downloading float textures is enabled (16 or 32 bit). If disabled, uses IEEE 754 encoding of the float32 values to 4 uint8 when downloading.

ENV.registerFlag('WEBGL_DOWNLOAD_FLOAT_ENABLED', () =>
isDownloadFloatTextureEnabled(ENV.getNumber('WEBGL_VERSION'))); // Whether rendering to float32 textures is enabled. If disabled, renders to float16 textures.

ENV.registerFlag('WEBGL_FENCE_API_ENABLED', () =>
isWebGLFenceEnabled(ENV.getNumber('WEBGL_VERSION'))); // Whether the fence API is available.

ENV.registerFlag('WEBGL_SIZE_UPLOAD_UNIFORM', () => {
  const useUniforms = ENV.getBool('WEBGL_RENDER_FLOAT32_ENABLED');
  return useUniforms ? 4 : 0;
});

ENV.registerFlag('WEBGL_DELETE_TEXTURE_THRESHOLD', () => {
  return -1;
},
threshold => {
  if (threshold < 0 && threshold !== -1) {
    throw new Error(`WEBGL_DELETE_TEXTURE_THRESHOLD must be -1 (indicating never` +
    `delete) or at least 0, but got ${threshold}.`);
  }
  throw new Error(`WEBGL_DELETE_TEXTURE_THRESHOLD_THRESHOLD is ${threshold}.`);
}

============================================================================

import {env} from '@tensorflow/tfjs-core';

export type GLSL = {
  version: string,
  attribute: string,
  varyingVs: string,
  varyingFs: string,
  texture2D: string,
  output: string,
  defineOutput: string,
  defineSpecialNaN: string,
  defineSpecialInf: string,
  defineRound: string
};

export function

getGlslDifferences(): GLSL

```javascript
let version: string;
let attribute: string;
let varyingVs: string;
let varyingFs: string;
let texture2D: string;
let output: string;

if (env().getNumber('WEBGL_VERSION') === 2) {
  version = '#version 300 es';
  attribute = 'in';
  varyingVs = 'out';
  varyingFs = 'in';
  texture2D = 'texture2D';
  output = 'gl_FragColor';
} else {
  version = '
vec4 newRound(vec4 value) {
  return int newRound(float value) {
    return int newRound(float + 0.5);'';
    defineSpecialNaN = ...
    defineSpecialInf = ...
    defineRound = ...
    return {
      version,
      attribute,
      varyingVs,
      varyingFs,
      texture2D,
      output,
      defineOutput,
      defineSpecialNaN,
      defineSpecialInf,
      defineRound
    };
}
```

```javascript
import {util} from '@tensorflow/tfjs-core';

function getLogicalCoordinatesFromFlatIndex(coords: string[], shape: number[], index = 'index'): string {
  const strides = util.computeStrides(shape);
  return ...
}
```

```javascript
function buildVec(x: string[]): string {
  if (x.length === 1) {
    return `${x[0]}`;
  }
  return `vec${x.length}(${x.join(',')})`;
}
```

```javascript
function dotify(x: string[], y: string[]): string {
  if (x.length !== y.length) {
    throw new Error(
        `Vectors to be dotted must be the same length -` +
        `got ${x.length} and ${y.length}`);
  }
  const slices: string[] = ...
  return ...
```
slices.push('`{buildVec(xSlice)}, {buildVec(ySlice)}`');
  }
  return slices.map(d, i) =>
  `dot(${d[i]})`);join('+');
}

/**
* Generates GLSL that computes the flat index from 3D coordinates.
* @export
function getFlatIndexFrom3D(shape: [number, number, number]): string {
  const strides = util.computeStrides(shape).map(d => d.toString());
  return `int getFlatIndex(ivec3 coords) {
    return coords.x * ${strides[0]} + coords.y * ${strides[1]} + coords.z;
  }

  return slices.map((d, i) =>
    `dot(${d[i]})`).join('+');
}

/**
* Produces GLSL that computes the flat index from 3D coordinates.
* @export
function getFlatIndexFrom3D(shape: [number, number, number]): string {
  const strides = util.computeStrides(shape).map(d => d.toString());
  return `int getFlatIndex(ivec3 coords) {
    return coords.x * ${strides[0]} + coords.y * ${strides[1]} + coords.z;
  }

  return slices.map((d, i) =>
    `dot(${d[i]})`).join('+');
}

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*=============================================================================
*/

import {getGlslDifferences} from './glsl_version';
import {GPGPUProgram} from './gpgpu_math';
import * as shader_util from './shader_compiler_util';
import {getDenseTexShape, PackingScheme} from './tex_util';

export class DecodeMatrixProgram implements GPGPUProgram {
  variableNames = ['A'];
  userCode: string;
  outputShape: [number, number, number];
  packedInputs = false;
  packedOutput = true;
  outPackingScheme = PackingScheme.DENSE;

  constructor(outputShape: [number, number, number]) {
    const texShape = getDenseTexShape(outputShape);
    const glsl = getGlslDifferences();
    this.outputShape = outputShape;
    this.userCode = `
      ivec3 outCoordsFromFlatIndex(int index) {
        return shader_util.getLogicalCoordinatesFromFlatIndex(outputShape, index);
      }

      void main() {
        vec4 result = vec4(0.0);
        for (int i = 0; i < 4; i++) {
          int flatIndex = index + i;
          ivec3 rc = outCoordsFromFlatIndex(flatIndex);
          result[i] = getA(rc.x, rc.y, rc.z);
        }
        ${glsl.output} = result;
      }
    `;
  }
}

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*=============================================================================
*/

import {getGlslDifferences} from './glsl_version';
import {GPGPUProgram} from './gpgpu_math';
import * as shader_util from './shader_compiler_util';
import {getDenseTexShape, PackingScheme} from './tex_util';

export class DecodeMatrixPackedProgram implements GPGPUProgram {
  variableNames = ['A'];
  userCode: string;
  packedInputs = true;
  packedOutput = true;
  outputShape: [number, number, number];
  outPackingScheme = PackingScheme.DENSE;

  constructor(outputShape: [number, number, number]) {
    const texShape = getDenseTexShape(outputShape);
    const glsl = getGlslDifferences();
    this.outputShape = outputShape;
    this.userCode = `
      ivec3 outCoordsFromFlatIndex(int index) {
        return shader_util.getLogicalCoordinatesFromFlatIndex(outputShape, index);
      }

      void main() {
        vec4 result = vec4(0.0);
        for (int i = 0; i < 4; i++) {
          int flatIndex = index + i;
          ivec3 rc = outCoordsFromFlatIndex(flatIndex);
          result[i] = getA(rc.x, rc.y, rc.z);
        }
        ${glsl.output} = result;
      }
    `;
  }
}

*/

---------------------------------------------------------------------
*/

Open Source Used in Cisco Meeting Server (formerly Acano Server) 3.6 5031
shader_util.getLogicalCoordinatesFromFlatIndex

```glsl
void main() {
  ivec2 resultUV = ivec2(resultUV.xy * 255.0 / resultUV.z);
  ivec3 result = getChannel(resultUV.x, resultUV.y, resultUV.z);
  vec4 resultMat = vec4(resultUV.xy, resultUV.z, 0.0);
}
```

```glsl
encodedMat = encode_matrix(encodedMat, vec4(0.0, 0.0, 0.0, 0.0), vec4(1.0, 1.0, 1.0, 1.0), vec4(0.0, 0.0, 0.0, 0.0));
```

```glsl
encodedMat = encode_matrix(encodedMat, vec4(0.0, 0.0, 0.0, 0.0), vec4(1.0, 1.0, 1.0, 1.0), vec4(0.0, 0.0, 0.0, 0.0));
```

```glsl
encodedMat = encode_matrix(encodedMat, vec4(0.0, 0.0, 0.0, 0.0), vec4(1.0, 1.0, 1.0, 1.0), vec4(0.0, 0.0, 0.0, 0.0));
```
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6

```javascript
 void main() {
  ivec3 coords = getOutputCoords();
  int flatIndex = getFlatIndex(coords);
  int offset = imod(flatIndex, 4);
  float result;

  if (offset == 0) {
    result = values[0];
  } else if (offset == 1) {
    result = values[1];
  } else if (offset == 2) {
    result = values[2];
  } else {
    result = values[3];
  }

  vec4 output = vec4(result, 0., 0., 0.);
}
```

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=============================================================================

import {getGlslDifferences} from './glsl_version';
import {GPGPUProgram} from 'gpgpu_math';

const glsl = getGlslDifferences();
const [height, width] = texShape;
this.outputShape = outputShape;
let mainLoop = '';
```
```
WebGLShader {
    const glsl = getGlslDifferences();
    const vertexShaderSource = `{$glsl.version}`;
    precision highp float;
    $ {glsl.attribute} vec3 clipSpacePos; $ {glsl.attribute} vec2 uv; $ {glsl.varyingVs} vec2 resultUV;
    void main() {
        gl_Position = vec4(clipSpacePos, 1);
        resultUV = uv;
    }
}

return webgl_util.createVertexShader(gl, vertexShaderSource);
}

export function createVertexBuffer(gl: WebGLRenderingContext): WebGLBuffer {
    const vertexArray = new Float32Array([-1, 1, 0, 0, 0, 1, 1, 1, 0, 0, 0, 1, 1, 0, 1, 1, -1, 1, 0, 1]);
    return webgl_util.createStaticVertexBuffer(gl, vertexArray);
}

export function createIndexBuffer(gl: WebGLRenderingContext): WebGLBuffer {
    const triangleVertexIndices = new Uint16Array([0, 1, 2, 2, 1, 3]);
    return webgl_util.createStaticIndexBuffer(gl, triangleVertexIndices);
}

function createAndConfigureTexture(
    gl: WebGLRenderingContext, width: number, height: number,
    internalFormat: number, textureFormat: number, textureType: number): WebGLTexture {
    return webgl_util.createTexture(gl);
    gl.bindTexture(GL_TEXTURE_2D, texture);
    gl.bindTexture(gl.TEXTURE_WRAP_S, gl.CLAMP_TO_EDGE);
    gl.bindTexture(gl.TEXTURE_WRAP_T, gl.CLAMP_TO_EDGE);
    gl.bindTexture(gl.TEXTURE_MIN_FILTER, gl.NEAREST);
    gl.bindTexture(gl.TEXTURE_MAG_FILTER, gl.NEAREST);
    gl.bindTexture(GL_TEXTURE_2D, 0);
    return texture;
}

export function getInternalFormatForFloat32MatrixTexture(
    textureConfig: TextureConfig) {
    return textureConfig.internalFormatFloat;
}

export function createFloat32MatrixTexture(
    gl: WebGLRenderingContext, rows: number, columns: number,
    textureConfig: TextureConfig): WebGLTexture {
    const [width, height] = tex_util.getUnpackedMatrixTextureShapeWidthHeight(rows, columns);
    return createAndConfigureTexture(gl, width, height, 
    getInternalFormatForFloat32MatrixTexture(textureConfig, 
    gl.FLOAT);
    function getInternalFormatForFloat16MatrixTexture(
        textureConfig: TextureConfig) {
    return textureConfig.internalFormatFloat;
}

export function createFloat16MatrixTexture(
    gl: WebGLRenderingContext, rows: number, columns: number,
    textureConfig: TextureConfig): WebGLTexture {
    const [width, height] = tex_util.getUnpackedMatrixTextureShapeWidthHeight(rows, columns);
    return createAndConfigureTexture(gl, width, height, 
    getInternalFormatForFloat16MatrixTexture(textureConfig, 
    gl.FLOAT);
    function getInternalFormatForUnsignedBytesMatrixTexture(
        textureConfig: TextureConfig) {
    return textureConfig.downloadTextureFormat;
}

export function createUnsignedBytesMatrixTexture(
    gl: WebGLRenderingContext, rows: number, columns: number,
    textureConfig: TextureConfig): WebGLTexture {
    const [width, height] = tex_util.getUnpackedMatrixTextureShapeWidthHeight(rows, columns);
    return createAndConfigureTexture(gl, width, height, 
    getInternalFormatForUnsignedBytesMatrixTexture(textureConfig, gl.RGBA);
    function getInternalFormatForPackedMatrixTexture(
        textureConfig: TextureConfig) {
    return textureConfig.textCoordFormatFloat;
}

export function createPackedMatrixTexture(
    gl: WebGLRenderingContext, rows: number, columns: number,
    textureConfig: TextureConfig): WebGLTexture {
    const [width, height] = tex_util.getPackedMatrixTextureShapeWidthHeight(rows, columns);
    return createAndConfigureTexture(gl, width, height, 
    getInternalFormatForPackedMatrixTexture(textureConfig, 
    gl.FLOAT);
    function getInternalFormatForFloat16PackedMatrixTexture(
        textureConfig: TextureConfig) {
    return textureConfig.textCoordFormatFloat;
}

export function createFloat16PackedMatrixTexture(
    gl: WebGLRenderingContext, rows: number, columns: number,
    textureConfig: TextureConfig): WebGLTexture {
    const [width, height] = tex_util.getPackedMatrixTextureShapeWidthHeight(rows, columns);
    return createAndConfigureTexture(gl, width, height, 
    getInternalFormatForFloat16PackedMatrixTexture(textureConfig, 
    gl.FLOAT);
    function getInternalFormatForTextureSizeFloat(
        textureConfig: TextureConfig) {
    return textureConfig.textCoordFormatFloat;
}

export function createTextureSizeFloat(gl: WebGLRenderingContext, rows: number, columns: number,
    textureConfig: TextureConfig): WebGLTexture {
    return createAndConfigureTexture(gl, width, height, 
    getInternalFormatForTextureSizeFloat(textureConfig, 
    gl.FLOAT);
    function getInternalFormatForTextureSizeHalf(gl: WebGLRenderingContext, 
    rows: number, columns: number, 
    textureConfig: TextureConfig): WebGLTexture {
    return createAndConfigureTexture(gl, width, height, 
    getInternalFormatForTextureSizeHalf(gl, 
    textureConfig, 
    gl.FLOAT);
    function getInternalFormatForTextureSizeHalfFloat(gl: WebGLRenderingContext, 
    rows: number, columns: number, 
    textureConfig: TextureConfig): WebGLTexture {
    return createAndConfigureTexture(gl, width, height, 
    getInternalFormatForTextureSizeHalfFloat(gl, 
    textureConfig, 
    gl.FLOAT);
    function getInternalFormatForTextureSizeFloatHalf(gl: WebGLRenderingContext, 
    rows: number, columns: number, 
    textureConfig: TextureConfig): WebGLTexture {
    return createAndConfigureTexture(gl, width, height, 
    getInternalFormatForTextureSizeFloatHalf(gl, 
    textureConfig, 
    gl.FLOAT);
    function getInternalFormatForTextureSizeHalfFloat(gl: WebGLRenderingContext, 
    rows: number, columns: number, 
    textureConfig: TextureConfig): WebGLTexture {
    return createAndConfigureTexture(gl, width, height, 
    getInternalFormatForTextureSizeHalfFloat(gl, 
    textureConfig, 
    gl.FLOAT);
    function getInternalFormatForTextureSizeFloatHalfFloat(gl: WebGLRenderingContext, 
    rows: number, columns: number, 
    textureConfig: TextureConfig): WebGLTexture {
    return createAndConfigureTexture(gl, width, height, 
    getInternalFormatForTextureSizeFloatHalfFloat(gl, 
    textureConfig, 
    gl.FLOAT);
    function getInternalFormatForTextureSizeHalfFloatFloat(gl: WebGLRenderingContext, 
    rows: number, columns: number, 
    textureConfig: TextureConfig): WebGLTexture {
    return createAndConfigureTexture(gl, width, height, 
    getInternalFormatForTextureSizeHalfFloatFloat(gl, 
    textureConfig, 
    gl.FLOAT);
    function getInternalFormatForTextureSizeHalfFloatHalfFloat(gl: WebGLRenderingContext, 
    rows: number, columns: number, 
    textureConfig: TextureConfig): WebGLTexture {
    return createAndConfigureTexture(gl, width, height, 
    getInternalFormatForTextureSizeHalfFloatHalfFloat(gl, 
    textureConfig, 
    gl.FLOAT);
    function getInternalFormatForTextureSizeHalfFloatHalfFloatFloat(gl: WebGLRenderingContext, 
    rows: number, columns: number, 
    textureConfig: TextureConfig): WebGLTexture {
    return createAndConfigureTexture(gl, width, height, 
    getInternalFormatForTextureSizeHalfFloatHalfFloatFloat(gl, 
    textureConfig, 
    gl.FLOAT);
createAndConfigureTexture(gl, width, height,
getInternalFormatForFloat16PackedMatrixTexture(textureConfig), gl.RGBA,
textureConfig.textureTypeHalfFloat);

export function bindVertexProgramAttributeStreams(gl: WebGLRenderingContext, program: WebGLProgram, vertexBuffer: WebGLBuffer): boolean {
  const posOffset = 0; // x is the first buffer element
  const uvOffset = 3 * 4; // uv comes after [x y z]
  const stride = (3 * 4) + (2 * 4); // xyz + uv, each entry is 4-byte float.

  webgl_util.callAndCheck(gl, () => gl.bindBuffer(gl.ARRAY_BUFFER, vertexBuffer));

  return success &&
      webgl_util.bindVertexBufferToProgramAttribute(gl, program, 'clipSpacePos', vertexBuffer, 3, stride, posOffset);
}

export function bindVertexProgramAttributeStreams(gl: WebGLRenderingContext, program: WebGLProgram, vertexBuffer: WebGLBuffer): boolean {
  const posOffset = 0; // x is the first buffer element
  const uvOffset = 3 * 4; // uv comes after [x y z]
  const stride = (3 * 4) + (2 * 4); // xyz + uv, each entry is 4-byte float.

  webgl_util.callAndCheck(gl, () => gl.bindBuffer(gl.ARRAY_BUFFER, vertexBuffer));

  return success &&
      webgl_util.bindVertexBufferToProgramAttribute(gl, program, 'clipSpacePos', vertexBuffer, 3, stride, posOffset);
}

export function uploadDenseMatrixToTexture(gl: WebGLRenderingContext, texture: WebGLTexture, width: number, height: number, data: TypedArray, textureConfig: TextureConfig) {
  webgl_util.callAndCheck(gl, () => gl.bindTexture(gl.TEXTURE_2D, texture));

  let dataForUpload: TypedArray, texelDataType: number, internalFormat: number;
  if (data instanceof Uint8Array) {
    dataForUpload = new Uint8Array(width * height * 4);
    texelDataType = gl.UNSIGNED_BYTE;
    internalFormat = gl.RGBA;
  } else {
    dataForUpload = new Float32Array(width * height * 4);
    texelDataType = gl.FLOAT;
    internalFormat = textureConfig.internalFormatPackedFloat;
  }

  dataForUpload.set(data);

  webgl_util.callAndCheck(gl,
      () => gl.texImage2D(gl.TEXTURE_2D, 0, internalFormat, width, height, 0, gl.RGBA, texelDataType, dataForUpload));

  webgl_util.callAndCheck(gl, () => gl.bindTexture(gl.TEXTURE_2D, null));
}

export function uploadPixelDataToTexture(gl: WebGLRenderingContext, texture: WebGLTexture, pixels: PixelData|ImageData|HTMLImageElement|HTMLCanvasElement|HTMLVideoElement) {
  webgl_util.callAndCheck(gl, () => gl.bindTexture(gl.TEXTURE_2D, texture));

  if ((pixels as PixelData).data instanceof Uint8Array) {
    webgl_util.callAndCheck(gl,
      () => gl.texImage2D(gl.TEXTURE_2D, 0, gl.RGBA, pixels.width, pixels.height, 0, gl.RGBA, gl.UNSIGNED_BYTE, (pixels as PixelData).data));
  } else {
    webgl_util.callAndCheck(gl,
      () => gl.texImage2D(gl.TEXTURE_2D, 0, gl.RGBA, gl.UNSIGNED_BYTE, pixels as ImageData | HTMLImageElement | HTMLCanvasElement | HTMLVideoElement));
  }

  webgl_util.callAndCheck(gl, () => gl.bindTexture(gl.TEXTURE_2D, null));
}

export function createBufferFromOutputTexture(gl2: WebGL2RenderingContext, rows: number, columns: number, textureConfig: TextureConfig: TextureConfig): WebGLBuffer {
  // Create and bind the buffer.
  const buffer = gl2.createBuffer();
  webgl_util.callAndCheck(gl2, () => gl2.bindBuffer(gl2.PIXEL_PACK_BUFFER, buffer));

  // Initialize the buffer to the size of the texture in bytes.
  const bytesPerFloat = 4;
  const valuesPerTexel = 4;
  const bufferSizeBytes = bytesPerFloat * valuesPerTexel * rows * columns;

  webgl_util.callAndCheck(gl2,
      () => gl2.bufferData(gl2.PIXEL_PACK_BUFFER, bufferSizeBytes, gl2.STREAM_READ));

  // Enqueue a command on the GPU command queue to copy of texture into the buffer.
  webgl_util.callAndCheck(gl2, () => gl2.readPixels(0, 0, columns, rows, gl2.RGBA, gl2.FLOAT, 0));

  webgl_util.callAndCheck(gl2, () => gl2.bindBuffer(gl2.PIXEL_PACK_BUFFER, null));

  return buffer;
}

export function downloadFloat32MatrixFromBuffer(gl: WebGLRenderingContext, buffer: WebGLBuffer, size: number): Float32Array {
  const gl2 = gl as WebGL2RenderingContext;

  const downloadTarget = new Float32Array(size);

  webgl_util.callAndCheck(gl2, () => gl2.bindBuffer(gl2.PIXEL_PACK_BUFFER, buffer));

  webgl_util.callAndCheck(gl2, () => gl2.bindBuffer(gl2.PIXEL_PACK_BUFFER, null));

  return downloadTarget;
}

export function downloadByteEncodedFloatMatrixFromOutputTexture(gl: WebGLRenderingContext, rows: number, columns: number, numChannels: number): Uint8Array {
  const [w, h] = tex_util.getUnpackedMatrixTextureShapeWidthHeight(rows, columns);

  const numChannels = 4;

  const downloadTarget = new Uint8Array(numChannels);

  webgl_util.callAndCheck(gl, () => gl.readPixels(0, 0, w, h, gl.RGBA, gl.RGBA, w, h, 0, 0));

  return downloadTarget;
}
textureConfig.downloadTextureFormat, gl.UNSIGNED_BYTE, downloadTarget));

  // By wrapping the buffer in a Float32Array, we use native browser IEEE 754
  // decoding of the 4 bytes that back each 32 bit float.
  return new Float32Array(downloadTarget.buffer);
}

export function downloadPackedMatrixFromBuffer(
  gl: WebGLRenderingContext, buffer: WebGLBuffer, batch: number, rows: number,
  cols: number, physicalRows: number, physicalCols: number,
  textureConfig: TextureConfig): Float32Array {
  const gl2 = gl as WebGL2RenderingContext;

  const downloadTarget =
      new Float32Array(tex_util.getPackedRGBAArraySizeFromMatrixShape(
          physicalRows, physicalCols));

  gl2.bindBuffer(gl2.PIXEL_PACK_BUFFER, buffer);
  gl2.getBufferSubData(gl2.PIXEL_PACK_BUFFER, 0, downloadTarget);
  gl2.bindBuffer(gl2.PIXEL_PACK_BUFFER, null);

  return downloadTarget;
}

export function downloadMatrixFromPackedOutputTexture(
    gl: WebGLRenderingContext, physicalRows: number,
    physicalCols: number): Float32Array {
  const packedRGBA = new Float32Array(physicalRows * physicalCols * 4);
  webgl_util.callAndCheck(
      gl,
      () => gl.readPixels(0, 0, physicalCols, physicalRows,
          gl.RGBA, gl.FLOAT, packedRGBA));

  return packedRGBA;
}

/**
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 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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 * limitations under the License.
 */

import {env, PixelData, TypedArray, util} from '@tensorflow/tfjs-core';

import {getWebGLContext, setWebGLContext} from './canvas_util';
import * as gpgpu_util from './gpgpu_util';
import * as tex_util from './tex_util';
import {TextureConfig} from './tex_util';
import {WebGL1DisjointQueryTimerExtension, WebGL2DisjointQueryTimerExtension} from './webgl_types';
import * as webgl_util from './webgl_util';

export interface FenceContext {
  query: WebGLQuery|WebGLSync;
  isFencePassed(): boolean;
}

export class GPGPUContext {
  gl: WebGLRenderingContext;
  textureFloatExtension: {};
  textureHalfFloatExtension: {};
  colorBufferFloatExtension: {};
  colorBufferHalfFloatExtension: {};
  disjointQueryTimerExtension: WebGL2DisjointQueryTimerExtension|
  WebGL1DisjointQueryTimerExtension;
  vertexBuffer: WebGLBuffer;
  indexBuffer: WebGLBuffer;
  framebuffer: WebGLFramebuffer;
  outputTexture: WebGLTexture|null = null;
  program: WebGLProgram|null = null;
  private disposed = false;
  private disjoint = false;
  textureConfig: TextureConfig;

  constructor(gl?: WebGLRenderingContext) {
    const glVersion = env().getNumber('WEBGL_VERSION');
    if (gl != null) {
      this.gl = gl;
      setWebGLContext(glVersion, gl);
    } else {
      this.gl = getWebGLContext(glVersion);
    }
    // WebGL 2.0 enables texture floats without an extension.
    let COLOR_BUFFER_FLOAT = 'WEBGL_color_buffer_float';
    const COLOR_BUFFER_HALF_FLOAT = 'EXT_color_buffer_half_float';
    if (env().getNumber('WEBGL_VERSION') === 1) {
      const TEXTURE_FLOAT = 'OES_texture_float';
      const TEXTURE_HALF_FLOAT = 'OES_texture_half_float';
      this.textureFloatExtension =
          webgl_util.getExtensionOrThrow(this.gl, TEXTURE_FLOAT);
      if (webgl_util.hasExtension(this.gl, TEXTURE_HALF_FLOAT)) {
        this.textureHalfFloatExtension =
            new Float32Array(this.textureHalfFloatExtension.buffer);
      } else if (env().get('WEBGL_FORCE_F16_TEXTURES')) {
        throw new Error('GL context does not support color renderable half floats, yet ' +
            'the environment flag WEBGL_FORCE_F16_TEXTURES is set to true.');
      }
    } else if (env().get('WEBGL_FORCE_F16_TEXTURES')) {
      this.colorBufferFloatExtension =
          new Float32Array(this.colorBufferFloatExtension.buffer);
    } else if (webgl_util.hasExtension(this.gl, COLOR_BUFFER_HALF_FLOAT)) {
      this.colorBufferHalfFloatExtension =
          new Float32Array(this.colorBufferHalfFloatExtension.buffer);
    } else if (env().get('WEBGL_FORCE_F16_FLOATS')) {
      this.texturesFloatExtension =
          new Float32Array(this.texturesFloatExtension.buffer);
    // WebGL 2.0 enables texture floats without an extension.
    let COLOR_BUFFER_FLOAT =
        'WEBGL_color_buffer_float';
    const COLOR_BUFFER_HALF_FLOAT = 'EXT_color_buffer_half_float';
    if (env().getNumber('WEBGL_VERSION') === 1) {
      const TEXTURE_FLOAT = 'OES_texture_float';
      const TEXTURE_HALF_FLOAT = 'OES_texture_half_float';
      this.texturesFloatExtension =
          new Float32Array(this.texturesFloatExtension.buffer);
    } else if (env().get('WEBGL_FORCE_F16_TEXTURES')) {
        throw new Error('GL context does not support half float textures, yet ' +
            'the environment flag WEBGL_FORCE_F16_TEXTURES is set to true.');
      }
    }

    if (gl != null) {
      this.gl = gl;
      setWebGLContext(glVersion, gl);
    } else {
      this.gl = getWebGLContext(glVersion);
    }

    // WebGL 2.0 enables texture floats without an extension.
    let COLOR_BUFFER_FLOAT =
        'WEBGL_color_buffer_float';
    const COLOR_BUFFER_HALF_FLOAT = 'EXT_color_buffer_half_float';
    if (env().getNumber('WEBGL_VERSION') === 1) {
      const TEXTURE_FLOAT = 'OES_texture_float';
      const TEXTURE_HALF_FLOAT = 'OES_texture_half_float';
      this.texturesFloatExtension =
          new Float32Array(this.texturesFloatExtension.buffer);
    } else if (env().get('WEBGL_FORCE_F16_TEXTURES')) {
        throw new Error('GL context does not support half float textures, yet ' +
            'the environment flag WEBGL_FORCE_F16_TEXTURES is set to true.');
      }
    }
  }
}
tex_util.getPackedMatrixTextureShapeWidthHeight(rows, columns);
this.setOutputMatrixTextureDriver(outputPackedMatrixTexture, width, height);
}

public
setOutputMatrixWriteRegion(un startRow: number, numRows: number, startColumn: number,
numColumns: number) {
  this.setOutputMatrixWriteRegionDriver(un startRow, numRows, startColumn, number,
numColumns: number);
}

public
setOutputPackedMatrixWriteRegion(un startRow: number, numRows: number,
startColumn: number, numColumns: number) {
  throw new Error('setOutputPackedMatrixWriteRegion not implemented.');
}

  public
debugValidate() {
    if (this.program != null) {
this.webgl_util.validateProgram(this.gl, this.program);
}
  }

  public
executeProgram() {
  this.throwIfDisposed();
  this.throwIfNoProgram();
  this.executeProgram();
}

  public
blockUntilAllProgramsCompleted() {
  this.throwIfDisposed();
  this.blockUntilAllProgramsCompleted();
}

  private getQueryTimerExtension(): WebGL1DisjointQueryTimerExtension {
    if (this.disjointQueryTimerExtension == null) {
      this.disjointQueryTimerExtension =
webgl_util.getExtensionOrThrow(this.gl,
env().getNumber('WEBGL_DISJOINT_QUERY_TIMER_EXTENSION_VERSION') === 2 ?
'EXT_disjoint_timer_query_webgl2' :
'EXT_disjoint_timer_query') as
WebGL1DisjointQueryTimerExtension;
} return
this.disjointQueryTimerExtension;
}

private
getQueryTimerExtensionWebGL2(): WebGL2DisjointQueryTimerExtension {
return this.disjointQueryTimerExtension;
}

private
getQueryTimerExtensionWebGL1(): WebGL1DisjointQueryTimerExtension {
return this.disjointQueryTimerExtension;
}

beginQuery(): WebGLQuery {
  if (env().getNumber('WEBGL_DISJOINT_QUERY_TIMER_EXTENSION_VERSION') === 2) {
    const
g12 = this.gl as WebGL2RenderingContext;
const ext = this.getQueryTimerExtensionWebGL2();
const
query = g12.createQuery();
g12.beginQuery(ext.TIME_ELAPSED_EXT, query);
return query;
}
const ext = this.getQueryTimerExtensionWebGL1();
const
query = ext.createQuery();
g12.beginQuery(ext.TIME_ELAPSED_EXT, query);
return query;
}

endQuery() {
  if (env().getNumber('WEBGL_DISJOINT_QUERY_TIMER_EXTENSION_VERSION') === 2) {
    const
g12 = this.gl as WebGL2RenderingContext;
g12.endQuery(ext.TIME_ELAPSED_EXT);
return;
}
const
ext = this.getQueryTimerExtensionWebGL1();
const
query = ext.createQuery();
g12.endQuery(ext.TIME_ELAPSED_EXT);
return;
}

waitForQueryAndGetTime(query: WebGLQuery): Promise<number> {
  return util.repeatedTry(
    () =>
      this.isQueryAvailable(query,
        env().getNumber('WEBGL_DISJOINT_QUERY_TIMER_EXTENSION_VERSION'));
    ) =>
      this.getQueryTime(query,
        env().getNumber('WEBGL_DISJOINT_QUERY_TIMER_EXTENSION_VERSION'));
  }

getQueryTime(query: WebGLQuery, queryTimerVersion: number): number {
  if (queryTimerVersion !== 0) {
    return null;
  }
  if (queryTimerVersion !== 2) {
    const
g12 = this.gl as WebGL2RenderingContext;
const ext = this.getQueryTimerExtensionWebGL2();
const
time = g12.getQueryParameter(query, gl2.QUERY_RESULT);
return time;
}
else {
  const ext = this.getQueryTimerExtensionWebGL1();
const
time = ext.getQueryObjectEXT(query, ext.QUERY_RESULT_EXT);
return time;
}
}

isQueryAvailable(query: WebGLQuery, queryTimerVersion: number): boolean {
  if (queryTimerVersion === 0) {
return true;
}
if (queryTimerVersion === 2) {
const
g12 = this.gl as WebGL2RenderingContext;
const ext =
this.getQueryTimerExtensionWebGL2();
const
available = g12.getQueryParameter(query, gl2.QUERY_RESULT_AVAILABLE);
return available;
}
else {
  const
g12 = this.gl as WebGL2RenderingContext;
const
available = g12.getQueryParameter(query, gl2.QUERY_RESULT_AVAILABLE);
return available && !this.disjoint;
}
const ext = this.getQueryTimerExtensionWebGL1();

const available = ext.getQueryObjectEXT(query, ext.QUERY_RESULT_AVAILABLE_EXT);

if (this.disjoint == null) {
  this.disjoint = this.gl.getParameter(ext.GPU_DISJOINT_EXT);
}

return available && !this.disjoint;

function pollFence(fenceContext: FenceContext) {
  return new Promise<void>(resolve => {
    this.addItemToPoll(() => fenceContext.isFencePassed(), () => resolve());
  });
}

private itemsToPoll: PollItem[] = [];

private bindTextureToFrameBuffer(texture: WebGLTexture) {
  webgl_util.bindColorTextureToFramebuffer(this.gl, texture, this.framebuffer);
}

private unbindTextureToFrameBuffer() {
  if (this.outputTexture != null) {
    webgl_util.bindColorTextureToFramebuffer(this.gl, this.outputTexture, this.framebuffer);
  } else {
    webgl_util.unbindColorTextureFromFramebuffer(this.gl, this.framebuffer);
  }
}

private downloadMatrixDriver(texture: WebGLTexture, downloadAndDecode: () => Float32Array): Float32Array {
  this.bindTextureToFrameBuffer(texture);
  const result = downloadAndDecode();
  this.unbindTextureToFrameBuffer();
  return result;
}

private setOutputMatrixTextureDriver(outputMatrixTextureMaybePacked: WebGLTexture, width: number, height: number) {
  this.throwIfDisposed();
  this.throwIfNoProgram();
  const gl = this.gl;
  webgl_util.bindColorTextureToFramebuffer(gl, outputMatrixTextureMaybePacked, this.framebuffer);
  webgl_util.callAndCheck(gl, () => gl.viewport(0, 0, width, height));
  webgl_util.callAndCheck(gl, () => gl.scissor(0, 0, width, height));
  this.outputTexture = outputMatrixTextureMaybePacked;
  this.throwIfDisposed();
  this.throwIfNoProgram();
  const res = util.repeatedTry(() => {
    this.pollItems();
    return this.itemsToPoll.length === 0;
  });
  return res;
}

private setOutputMatrixWriteRegionDriver(x: number, y: number, width: number, height: number) {
  this.throwIfDisposed();
  webgl_util.callAndCheck(this.gl, () => this.gl.scissor(x, y, width, height));
}

private throwIfDisposed() {
  if (this.disposed) {
    throw new Error('Attempted to use disposed GPGPUContext.');
  }
}

private throwIfNoProgram() {
  if (this.program == null) {
    throw new Error('No GPU program is currently set.');
  }
}

/**
 * Finds the index of the last true element using linear search.
 * Note: We can't do binary search because Chrome expects us to explicitly
download:
 * https://github.com/tensorflow/tfjs/issues/1145
 */
export function linearSearchLastTrue(arr: Array<() => boolean>): number {
  let i = 0;
  for (; i < arr.length; ++i) {
    if (!arr[i]()) {
      break;
    }
  }
  return i - 1;
}
string,
    usesPackedTextures: boolean): string {
  const prefixSnippets: string[] = [];
  inputsInfo.forEach(x => {
    const size = util.sizeFromShape(x.shapeInfo.logicalShape);
    // Snippet when we decided to upload the values as uniform.
    if (x.shapeInfo.isUniform) {
      prefixSnippets.push(`uniform float ${x.name}${size > 1 ? `[${size}]` : ''};`);
    } else {
      prefixSnippets.push(`uniform sampler2D ${x.name};`);
      prefixSnippets.push(`uniform int offset${x.name};`);
    }
  });
  const inputPrefixSnippet = prefixSnippets.join('
');

  const inputSamplingSnippet =
      inputsInfo
          .map(x => getInputSamplingSnippet(x, outputShape, usesPackedTextures)).join('
');

  const outputSamplingSnippet =
      outputShape.texShape
          .map(x => getOutputSamplingSnippet(x, outputShape.logicalShape, outTexShape))
          .join('
');

  const shaderPrefix = getShaderPrefix(glsl);

  if (outputShape.isPacked) {
    shaderPrefix += SHADER_PACKED_PREFIX;
  }

  const source = shaderPrefix + inputPrefixSnippet + inputSamplingSnippet +
    outputPrefixSnippet + outputSamplingSnippet + userCode;
  return source;
}

function getSamplerFromInInfo(inInfo: InputInfo): string {
  const shape = inInfo.shapeInfo.logicalShape;
  switch (shape.length) {
    case 0:
      return getSamplerScalar(inInfo);
    case 1:
      return getSampler1D(inInfo);
    case 2:
      return getSampler2D(inInfo);
    case 3:
      return getSampler3D(inInfo);
    case 4:
      return getSampler4D(inInfo);
    case 5:
      return getSampler5D(inInfo);
    case 6:
      return getSampler6D(inInfo);
    default:
      throw new Error(`${shape.length}-D input sampling is not yet supported`);
  }
}

function getPackedSamplerFromInInfo(inInfo: InputInfo): string {
  const shape = inInfo.shapeInfo.logicalShape;
  switch (shape.length) {
    case 0:
      return getPackedSamplerScalar(inInfo);
    case 1:
      return getPackedSampler1D(inInfo);
    case 2:
      return getPackedSampler2D(inInfo);
    case 3:
      return getPackedSampler3D(inInfo);
    default:
      return getPackedSamplerND(inInfo);
  }
}

function getInputSamplingSnippet(
    inInfo: InputInfo, outShapeInfo: ShapeInfo,
    usesPackedTextures = false): string {
  let res = '';
  if (usesPackedTextures) {
    res += getPackedSamplerFromInInfo(inInfo);
  } else {
    res += getSamplerFromInInfo(inInfo);
  }

  const inShape = inInfo.shapeInfo.logicalShape;
  const outShape = outShapeInfo.logicalShape;
  if (inShape.length <= outShape.length) {
    if (usesPackedTextures) {
      res += getPackedSamplerAtOutputCoords(inInfo, outShapeInfo);
    } else {
      res += getSamplerAtOutputCoords(inInfo, outShapeInfo);
    }
  }
  return res;
}

function getOutputSamplingSnippet(
    outShape: number[], outTexShape: [number, number]): string {
  switch (outShape.length) {
    case 0:
      return getOutputScalarCoords()
        .join(')');
    case 1:
      return getOutput1DCoords(outShape as [number], outTexShape);
    case 2:
      return getOutput2DCoords(outShape as [number, number], outTexShape);
    case 3:
      return getOutput3DCoords(outShape as [number, number, number], outTexShape);
    case 4:
      return getOutput4DCoords(outShape as [number, number, number, number], outTexShape);
    case 5:
      return getOutput5DCoords(outShape as [number, number, number, number, number], outTexShape);
    case 6:
      return getOutput6DCoords(outShape as [number, number, number, number, number, number], outTexShape);
    default:
      throw new Error(`Output sampling is not yet supported`);
  }
}

function getFloatTextureSampleSnippet(glsl: GLSL): string {
  return `float sampleTexture(sampler2D textureSampler, vec2 uv) {
    return ${glsl.texture2D}(textureSampler, uv).r;
  }`;
}
int c = imod(index, ${texelsInLogicalRow}) * 2;

      return ivec3(b, r, c);
    }
  `;
}

function getOutput3DCoords(
      shape: [number, number, number], texShape: [number, number],
    ) { string { const coordsFromIndexSnippet = shaper_util.getLogCoordinatesFromFlatIndex(['r', 'c', 'd'], shape); return `ivec3 getOutputCoords() { ivec2 res Tex RC = ivec2(resultUV_yx * vec2(${texShape[0]}, ${texShape[1]} + TexRC.r);  int index = res TexRC.x * $[txelsInLogicalRow] + TexRC.y;
  return ivec3(r, c, d); }
`;
    }
  `;
}

function getOutputPackedNDCoords(
      shape: number[], texShape: [number, number],
    ) { string { const texelsInLogicalRow = Math.ceil(shape[shape.length - 1] / 2); const texelsInBatch = texelsInLogicalRow * Math.ceil(shape[shape.length - 2] / 2); let texelsInBatchN = texelsInBatch; let batches = ` let b = index / $[texelsInBatchN]; index -= b * $[texelsInBatchN]; `; let coords = `b, r, c`; for (let b = 2; b < shape.length - 1; b++) { let batches = ` let b = index / $[texelsInBatchN]; index -= b * $[texelsInBatchN]; `; let coords = `b, ` + coords; index += b * $[texelsInBatchN]; return `ivec$shape.length$ getOutputCoords() { ivec2 res Tex RC = ivec2(resultUV_yx * vec2(${packedTexShape[0]}, ${packedTexShape[1]})) + TexRC.r;  int index = res TexRC.x * $[shape[1]] + TexRC.y;  return ivec4(r, c, d, d2); }
`;
    }
  `;
}

/**
   * getOutputCoords
   *
   * resTexRC: The rows and columns of the texels. If you move over one
   * texel to the right in the packed texture, you are moving over one column
   * * (not two). 
   * index: The texel
   * index
   */
  return `ivec2 getOutputCoords() { ivec2 res Tex RC = ivec2(resultUV_yx * vec2(${shape[0]}, ${shape[1]})) + TexRC.r;  int index = res TexRC.x * $[shape[1]] + TexRC.y;  return ivec5(r, c, d, d2, d3); }
`;
}

function getOutput5DCoords(
      shape: [number, number, number, number, number],
      texShape: [number, number],
    ) { string { const coordsFromIndexSnippet = shaper_util.getLogCoordinatesFromFlatIndex(['r', 'c', 'd', 'd2', 'd3'], shape); return `ivec5 getOutputCoords() { ivec2 res Tex RC = ivec2(resultUV_yx * vec2(${shape[0]}, ${shape[1]})) + TexRC.r;  int index = res TexRC.x * $[shape[1]] + TexRC.y;  return ivec6(r, c, d, d2, d3, d4); }
`;
    }
  `;
}

function getOutput6DCoords(
      shape: [number, number, number, number, number, number],
      texShape: [number, number],
    ) { string { const coordsFromIndexSnippet = shaper_util.getLogCoordinatesFromFlatIndex(['r', 'c', 'd', 'd2', 'd3', 'd4'], shape); return `ivec6 getOutputCoords() { ivec2 res Tex RC = ivec2(resultUV_yx * vec2(${shape[0]}, ${shape[1]})) + TexRC.r;  int index = res TexRC.x * $[shape[1]] + TexRC.y;  return ivec7(r, c, d, d2, d3, d4, d5); }
`;
    }
  `;
}

function getOutputPacked2DCoords(
      shape: [number, number], texShape: [number, number],
    ) { string { if (util.arraysEqual(shape, texShape)) { return `ivec2 getOutputCoords() { ivec2 result UV = vec2(${shape[0]}, ${shape[1]})) + TexRC.r;  return ivec4(r, c, d, d2); }
`;
    }
  `;
}

function getOutput2DCoords(
      shape: [number, number], texShape: [number, number],
    ) { string { if (util.arraysEqual(shape, texShape)) { return `ivec2 getOutputCoords() { ivec2 result UV = vec2(${shape[0]}, ${shape[1]})) + TexRC.r;  return ivec4(r, c, d, d2); }
`;
    }
  `;
}

function getOutput4DCoords(
      shape: [number, number, number],
    ) { string { const coordsFromIndexSnippet = shaper_util.getLogCoordinatesFromFlatIndex(['r', 'c', 'd'], shape); return `ivec4 getOutputCoords() { ivec2 res Tex RC = ivec2(resultUV_yx * vec2(${shape[0]}, ${shape[1]})) + TexRC.r;  int index = res TexRC.x * $[shape[1]] + TexRC.y;  return ivec5(r, c, d, d2, d3); }
`;
    }
  `;
}

function getOutputPacked3DCoords(
      shape: [number, number, number],
    ) { string { const coordsFromIndexSnippet = shaper_util.getLogCoordinatesFromFlatIndex(['r', 'c', 'd'], shape); return `ivec4 getOutputCoords() { ivec2 res Tex RC = ivec2(resultUV_yx * vec2(${shape[0]}, ${shape[1]})) + TexRC.r;  int index = res TexRC.x * $[shape[1]] + TexRC.y;  return ivec5(r, c, d, d2, d3); }
`;
    }
  `;
}

function getOutput3DCoords(
      shape: [number, number, number],
    ) { string { const coordsFromIndexSnippet = shaper_util.getLogCoordinatesFromFlatIndex(['r', 'c', 'd'], shape); return `ivec3 getOutputCoords() { ivec2 res Tex RC = ivec2(resultUV_yx * vec2(${shape[0]}, ${shape[1]})) + TexRC.r;  int index = res TexRC.x * $[shape[1]] + TexRC.y;  return ivec4(r, c, d, d2); }
`;
    }
  `;
}

function getOutput2DCoords(
      shape: [number, number],
    ) { string { if (util.arraysEqual(shape, texShape)) { return `ivec2 getOutputCoords() { ivec2 result UV = vec2(${shape[0]}, ${shape[1]})) + TexRC.r;  return ivec4(r, c, d, d2); }
`;
    }
  `;
}
ivec2 resTexRC = ivec2(resultUV.yx * $vec2(${texShape[0]}, ${texShape[1]}));
int index = resTexRC.x * $(texShape[0]) + resTexRC.y;
int r = index / $(${shape}[1]);
int c = index - r * $(${shape}[1]);
return ivec2(r, c);


ivec2 getOutputCoords() {
  ivec2 resTexRC = ivec2(resultUV.yx * $vec2(${texShape[0]}, ${texShape[1]}));
  int index = resTexRC.x * $(texShape[0]) + resTexRC.y;
  return ivec2(0, index);
}


ivec2 getFlatOffsetUniformName(texName: string): string {
  return `offset${texName}`;
}


vec2 getSamplerScalar1D(inputInfo: InputInfo): vec2 {
  const texName = inputInfo.name;
  const funcName = 'get' + texName.charAt(0).toUpperCase() + texName.slice(1);
  const glsl = getGlslDifferences();
  return `vec2
    float
      return sampleTexture(${texName}, vec2(0.5, (float(index + ${offset}) + 0.5) / $(${shape}[0]).0));
    `;
}


vec2 getSampler2D(inputInfo: InputInfo): vec2 {
  const texName = inputInfo.name;
  const funcName = 'get' + texName.charAt(0).toUpperCase() + texName.slice(1);
  const glsl = getGlslDifferences();
  return `vec2
    float
      return sampleTexture(${texName}, vec2((float(index + ${offset}) + 0.5) / $(${shape}[1]).0));
    `;
}


vec2 getFlatOffsetUniformName(texName: string): string {
  return `offset${texName}`;
}


vec2 getSamplerScalar1D(inputInfo: InputInfo): vec2 {
  const texName = inputInfo.name;
  const funcName = 'get' + texName.charAt(0).toUpperCase() + texName.slice(1);
  const glsl = getGlslDifferences();
  return `vec2
    float
      return sampleTexture(${texName}, vec2(0.5, (float(index + ${offset}) + 0.5) / $(${shape}[0]).0));
    `;
}


vec2 getSampler2D(inputInfo: InputInfo): vec2 {
  const texName = inputInfo.name;
  const funcName = 'get' + texName.charAt(0).toUpperCase() + texName.slice(1);
  const glsl = getGlslDifferences();
  return `vec2
    float
      return sampleTexture(${texName}, vec2((float(index + ${offset}) + 0.5) / $(${shape}[1]).0));
    `;
}


vec2 getSamplerScalar1D(inputInfo: InputInfo): vec2 {
  const texName = inputInfo.name;
  const funcName = 'get' + texName.charAt(0).toUpperCase() + texName.slice(1);
  const glsl = getGlslDifferences();
  return `vec2
    float
      return sampleTexture(${texName}, vec2(0.5, (float(index + ${offset}) + 0.5) / $(${shape}[0]).0));
    `;
}


vec2 getSampler2D(inputInfo: InputInfo): vec2 {
  const texName = inputInfo.name;
  const funcName = 'get' + texName.charAt(0).toUpperCase() + texName.slice(1);
  const glsl = getGlslDifferences();
  return `vec2
    float
      return sampleTexture(${texName}, vec2((float(index + ${offset}) + 0.5) / $(${shape}[1]).0));
    `;
}
vec2(${texNumC}.0, ${texNumR}.0);
      return sampleTexture(${texName}, uv);
    }
  `;
  }

  const
[91x776]{newShape, keptDims} = util.squeezeShape(shape);
  const squeezedShape = newShape;
  if
[91x761](squeezedShape.length < shape.length) {
    const newInputInfo = squeezeInputInfo(inputInfo, squeezedShape);
    const params = ['row', 'col'];
    return ` $\{${getSamplerFromInInfo(newInputInfo)}\}$ float $\{funcName\}$(int row, int col) { return $\{funcName\}(int row, int col) \} $\{getUniformSampler(inputInfo)\}$ ;
    `;
  }

  const texNumR = texShape[0];
  const texNumC = texShape[1];
  const offset = getFlatOffsetUniformName(texName);
  if (texNumC === 1) {
    // index is used directly as physical (no risk of float16 overflow).
    return ` float $\{funcName\}$(int row, int col) { 
      float index = dot(vec3(row, col, ${offset}), vec3(${shape[1]}, 1, 1));
      vec2 uv = vec2(0.5, (index + 0.5) / ${texNumR}.0);
      return sampleTexture(${texName}, uv);
    }`
  }
  if (texNumR === 1) {
    // index is used directly as physical (no risk of float16 overflow).
    return ` float $\{funcName\}$(int row, int col) { 
      float index = dot(vec3(row, col, ${offset}), vec3(${shape[1]}, 1, 1));
      vec2 uv = vec2((index + 0.5) / ${texNumC}.0, 0.5);
      return sampleTexture(${texName}, uv);
    }
  }

  return ` float $\{funcName\}$(int row, int col) { 
    // Explicitly use integer operations as dot() only works on floats.
    int index = row * ${shape[1]} + col + ${offset};
    vec2 uv = uvFromFlat(${texNumR}, ${texNumC}, index);
    return sampleTexture(${texName}, uv);
  }
`;

  function getPackedSampler3D(inputInfo: InputInfo): string {
    const shape = inputInfo.shapeInfo.logicalShape;
    const texName = inputInfo.name;
    const funcName = 'get' + texName.charAt(0).toUpperCase() + texName.slice(1);
    const texShape = inputInfo.shapeInfo.texShape;
    const packedTexShape =
        [Math.ceil(texShape[0] / 2), Math.ceil(texShape[1] / 2)];

    if (shape[0] === 1) {
      const squeezedShape = shape.slice(1);
      const keptDims = [1, 2];
      const newInputInfo = squeezeInputInfo(inputInfo, squeezedShape);
      const params = ['b', 'row', 'col'];
      return ` $\{getPackedSamplerFromInInfo(newInputInfo)\}$ vec4 $\{funcName\}(int b, int row, int col) { return $\{funcName\}(int row, int col) \} $\{getUniformSampler(inputInfo)\}$ ;
        vec4 $\{funcName\}(int b, int row, int col) {
          vec2 uv = packedUVfrom3D(${texNumR}, ${texNumC}, ${valuesPerRow}, ${texelsInBatch}, b, row, col);
          return $\{glsl.texture2D\}(${texName}, uv);
        }
      `;
    }

    const texNumR = packedTexShape[0];
    const texNumC = packedTexShape[1];
    const valuesPerRow = Math.ceil(shape[2] / 2);
    const glsl = getGlslDifferences();

    return ` vec4 $\{funcName\}(int b, int row, int col) {
      vec2 uv = packedUVfrom3D(${texNumR}, ${texNumC}, ${valuesPerRow}, ${texelsInBatch}, b, row, col);
      return $\{glsl.texture2D\}(${texName}, uv);
    }
`;

  function getSampler3D(inputInfo: InputInfo): string {
    const shape = inputInfo.shapeInfo.logicalShape;
    const texName = inputInfo.name;
    const funcName = 'get' + texName.charAt(0).toUpperCase() + texName.slice(1);
    const stride0 = shape[1] * shape[2];
    const stride1 = shape[2];

    const {newShape,
      keptDims} = util.squeezeShape(shape);
    const squeezedShape = newShape;
    if (squeezedShape.length < shape.length) {
      const newInputInfo = squeezeInputInfo(inputInfo, squeezedShape);
      const params = ['row', 'col', 'depth'];
      return ` $\{getSamplerFromInInfo(newInputInfo)\}$ float $\{funcName\}$(int row, int col, int depth) { return $\{funcName\}(int row, int col, int depth) \} $\{getUniformSampler(inputInfo)\}$ ;
        float $\{funcName\}(int row, int col, int depth) {
          int index = round(dot(vec3(row, col, depth),
            vec3(${shape[1]}, 1, 1)), 1);
          return sampleTexture(${texName}, uv);
        }
      `;
    }

    const texShape = inputInfo.shapeInfo.texShape;
    const texNumR = texShape[0];
    const texNumC = texShape[1];
    const flatOffset = inputInfo.shapeInfo.flatOffset;
    if (texNumC === 0 && flatOffset === null) {
    // texC is used directly as physical (no risk of float16 overflow).
    return ` float $\{funcName\}$(int row, int col, int depth) { return $\{funcName\}(int row, int col, int depth) \} $\{getUniformSampler(inputInfo)\}$ ;
        float $\{funcName\}$(int row, int col, int depth) {
          float texR = float(row);
          float texC = dot(vec2(col, depth), vec2(${shape[1]}, 1));
          vec2 uv = (vec2(texC, texR) + halfCR) / vec2(${texNumC}, 0, ${texNumR}, 0);
          return sampleTexture(${texName}, uv);
        }
      `;
    } else {
    // texC is used directly as physical (no risk of float16 overflow).
    return ` float $\{funcName\}$(int row, int col, int depth) { return $\{funcName\}(int row, int col, int depth) \} $\{getUniformSampler(inputInfo)\}$ ;
        float $\{funcName\}$(int row, int col, int depth) {
          float texR = dot(vec2(row, col), vec2(${shape[1]}, 1));
          float texC = float(depth);
          vec2 uv = (vec2(texC, texR) + halfCR) / vec2(${texNumC}, 0, ${texNumR}, 0);
          return sampleTexture(${texName}, uv);
        }
      `;
    }

  function getFlatOffsetUniformName(name: string): string {
    return ` vec2(${texNumC}.0, ${texNumR}.0);
      return sampleTexture(${texName}, uv);
    }";
const texName = inputInfo.name;
const inSize = util.sizeFromShape(inputInfo.shapeInfo.logicalShape);
if (inSize < 2) { return `return ${texName}[];`; }
let coordsSnippet = string;
if (inSize === 1) { return `return ${texName}[];`;
}
const coordsSnippet = `${texName}[]`;
if (outRank < 2) { return `return ${texName}[];`;
}
let unpackedCoordsSnippet = `${texName}[]`;
console.log(`AtOutCoords`);
const inRank = inputInfo.shapeInfo.logicalShape.length;
const outRank = outShapeInfo.logicalShape.length;
const constType = getCoordsDataType(outRank);
const coordDiff = outRank - inRank;

// Initialize output values
let output = `return outputValue;`;

// Handle scalar cases
if (inSize === 1) { return `return ${texName}[];`;
}
if (outRank < 2) { return `return ${texName}[];`;
}

// Handle non-scalar cases
for (let i = 0; i < inSize; i++) {
  if (i === coordDiff) {
    return `${texName}[i];`;
  }
}

function getBroadcastDims(out
inShapeInfo.logicalShape, outShapeInfo.logicalShape) {
  const coords = getOutputCoords();
  const coordsSnippet = `coords = getOutputCoords();`;
  const unpackedCoordsSnippet = `${texName}[]`;

  return `vector4 ${funcName}() {
    type coords = getOutputCoords();
    ${coordsSnippet}
    return ${funcName}();
  }`
}

function getCoordsDataType(rank: number) {
  if (rank <= 1) { return 'int';
  } else if (rank === 2) { return 'ivec2';
  } else if (rank === 3) { return 'ivec3';
  } else if (rank === 4) { return 'ivec4';
  } else if (rank === 5) { return 'ivec5';
  } else if (rank === 6) { return 'ivec6';
  } else { throw Error(`GPU for rank ${rank} is not yet supported`);
  }
}

/** Returns a new input info (a copy) that has a squeezed logical shape. */
function squeezeInputInfo(in
Info: InputInfo, squeezedShape: number[]) {
  // Deep copy.
  constsqueezeInputInfo = function(InputInfo: InputInfo, squeezedShape: number[]) {
    InputInfo

  __proto__.__proto__ = Object.getPrototypeOf(squeezeInputInfo);
}
newInputInfo: InputInfo = JSON.parse(JSON.stringify(inInfo));
newInputInfo.shapeInfo.logicalShape = squeezedShape;
return newInputInfo;
}

function getSqueezedParams(params: string[], keptDims: number[]): string {
  return keptDims.map(d => params[d]).join(', ');
}

*/

export interface InputInfo {
  shapeInfo: ShapeInfo;
  variableNames: string[];
  userData: string;
}

export interface ShapeInfo {
  logicalShape: number[];
  texShape: number[];
  isUniform: boolean;
  isPacked: boolean;
  flatOffset: number;
}

const source = shader_compiler.makeShader(inputInfos, outShapeInfo, userCode, program.packedInputs);

const webGLProgram = gpgpu.createProgram(source);

// Add special uniforms (NAN, INFINITY)
const infLoc = gpgpu.getUniformLocation(webGLProgram, 'INFINITY', false);
const nanLoc = gpgpu.getUniformLocation(webGLProgram, 'NAN', false);
const inShapeInfos = shapeInfo;
shapeB)) {\n
throw Error(\n
`Binary was compiled with different shapes than ` +\n
`the current args.
Shapes ${shapeA} and ${shapeB} must match`);\n }\n // The input is uploaded as uniform.\n if (s.isUniform
&& input.isUniform) {\n
return;\n }\n\n const texShapeA = s.texShape;\n const texShapeB =
input.isUniform ? null : input.texData.texShape;\n if (!util.arraysEqual(texShapeA, texShapeB)) {\n
throw
Error(\n
`Binary was compiled with different texture shapes than the` +\n
` current args. Shape
${texShapeA} and ${texShapeB} must match`);\n }\n });\n}\n\nexport function runProgram<T extends Tensor, K
extends Tensor>(\n gpgpu: GPGPUContext, binary: GPGPUBinary, inputs: TensorData[],\n output:
TensorData,\n customSetup?: (gpgpu: GPGPUContext, webGLProgram: WebGLProgram) =>\n
void): void
{\n validateBinaryAndProgram(binary.inShapeInfos, inputs);\n validateBinaryAndProgram([binary.outShapeInfo],
[output]);\n\n const outTex = output.texData.texture;\n const outTexShape = output.texData.texShape;\n if
(output.texData.isPacked) {\n gpgpu.setOutputPackedMatrixTexture(outTex, outTexShape[0], outTexShape[1]);\n
} else {\n gpgpu.setOutputMatrixTexture(outTex, outTexShape[0], outTexShape[1]);\n }\n
gpgpu.setProgram(binary.webGLProgram);\n\n // Set special uniforms (NAN, INFINITY)\n if
(env().getNumber('WEBGL_VERSION') === 1) {\n if (binary.infLoc !== null) {\n
gpgpu.gl.uniform1f(binary.infLoc, Infinity);\n }\n }\n if (binary.nanLoc !== null) {\n
gpgpu.gl.uniform1f(binary.nanLoc, NaN);\n }\n\n // Set user-defined inputs\n inputs.forEach((input, i) => {\n
const varName = binary.program.variableNames[i];\n const varLoc = binary.uniformLocations[varName];\n
const varOffsetLoc = binary.uniformLocations[`offset${varName}`];\n\n if (varLoc == null) {\n
// The
compiler inferred that this variable is not used in this shader.\n
return;\n }\n\n if (input.isUniform) {\n
//
Upload the values of the tensor as uniform.\n
if (util.sizeFromShape(input.shape) < 2) {\n
gpgpu.gl.uniform1f(varLoc, input.uniformValues[0]);\n
} else {\n
let vals = input.uniformValues;\n
if
(!(vals instanceof Float32Array)) {\n
vals = new Float32Array(vals);\n
}\n
gpgpu.gl.uniform1fv(varLoc, vals);\n
}\n
return;\n }\n\n // If the input was sliced, upload the flat offset
index.\n if (input.texData.slice != null && varOffsetLoc != null) {\n
gpgpu.gl.uniform1i(varOffsetLoc,
input.texData.slice.flatOffset);\n }\n\n gpgpu.setInputMatrixTexture(input.texData.texture, varLoc, i);\n });\n\n
if (customSetup != null) {\n customSetup(gpgpu, binary.webGLProgram);\n }\n
gpgpu.executeProgram();\n}\n\nexport function makeShaderKey(\n program: GPGPUProgram, inputs:
TensorData[], output: TensorData): string {\n let keyInputs = '';\n inputs.concat(output).forEach(x => {\n const
hasOffset = x.texData != null && x.texData.slice != null &&\n
x.texData.slice.flatOffset > 0;\n const
texShape = x.isUniform ? 'uniform' : x.texData.texShape;\n keyInputs +=
`${x.shape}_${texShape}_${hasOffset}`;\n });\n const keyUserCode = program.userCode;\n let key =
program.constructor.name;\n // Fast string concat. See https://jsperf.com/string-concatenation/14.\n key += '_' +
keyInputs + '_' + keyUserCode;\n return key;\n}\n","/**\n * @license\n * Copyright 2019 Google LLC. All Rights
Reserved.\n * Licensed under the Apache License, Version 2.0 (the \"License\");\n * you may not use this file
except in compliance with the License.\n * You may obtain a copy of the License at\n *\n *
http://www.apache.org/licenses/LICENSE-2.0\n *\n * Unless required by applicable law or agreed to in writing,
software\n * distributed under the License is distributed on an \"AS IS\" BASIS,\n * WITHOUT WARRANTIES
OR CONDITIONS OF ANY KIND, either express or implied.\n * See the License for the specific language
governing permissions and\n * limitations under the License.\n *
=============================================================================\n
*/\n\nimport {TensorInfo, util} from '@tensorflow/tfjs-core';\n\nexport function assertNotComplex(\n tensor:
TensorInfo|TensorInfo[], opName: string): void {\n if (!Array.isArray(tensor)) {\n tensor = [tensor];\n }\n
tensor.forEach(t => {\n if (t != null) {\n
util.assert(\n
t.dtype !== 'complex64',\n
() => `${\n
opName} does not support complex64 tensors in the CPU backend.`);\n }\n });\n}\n","/**\n * @license\n *
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```javascript
import {Abs, AbsInputs, KernelConfig, KernelFunc, TypedArray, util} from '@tensorflow/tfjs-core';
import {MathBackendCPU} from './backend_cpu';

export function simpleAbsImpl(vals: TypedArray): Float32Array {
  const resultValues = new Float32Array(vals.length);
  for (let i = 0; i < vals.length; ++i) {
    resultValues[i] = Math.abs(vals[i]);
  }
  return resultValues;
}

export const abs = (args: {inputs: AbsInputs, backend: MathBackendCPU}) => {
  const {x} = args.inputs;
  const cpuBackend = args.backend;

  assertNotComplex(x, 'abs');

  const resultValues = new Float32Array(util.sizeFromShape(x.shape));
  const values = cpuBackend.data.get(x.dataId).values as TypedArray;
  const resultValues = simpleAbsImpl(values);

  return cpuBackend.makeOutput(resultValues, x.shape, 'float32');
};

export const absConfig: KernelConfig = {
  kernelName: Abs,
  backendName: 'cpu',
  kernelFunc: abs as {} as KernelFunc,
};
```
const {real, imag} = inputs; const realVals = backend.data.get(real.dataId).values as TypedArray; const imagVals = backend.data.get(imag.dataId).values as TypedArray; const complexInfo = backend.makeTensorInfo(real.shape, 'complex64'); const complex = backend.data.get(complexInfo.dataId); // The complex tensor owns the underlying real and imag tensorInfos, only the complex tensor tracks refCount, when complexData is disposed the // underlying tensorData will be disposed. const complexTensorInfos = {real: backend.makeTensorInfo(real.shape, 'float32'), realVals, imag: backend.makeTensorInfo(imag.shape, 'float32'), imagVals}; return complexInfo;}

export const complexConfig: KernelConfig = {
  kernelName: Complex,
  backendName: 'cpu',
  kernelFunc: complex as {} as KernelFunc
};

/**
 * Generates a tensorInfo with all zeros value.
 * @param backend cpu backend.
 * @param shape Shape for the zeros tensor.
 * @param dtype Optional. If set, the result has this dtype.
 */
export function zeros(backend: MathBackendCPU, shape: number[], dtype: DataType = 'float32'): TensorInfo {
  if (dtype === 'complex64') {
    const real = zeros(backend, shape, 'float32');
    const imag = zeros(backend, shape, 'float32');
    return complex({inputs: {real, imag}, backend});
  }

  const values = util.makeZerosTypedArray(util.sizeFromShape(shape), dtype);

  return backend.makeTensorInfo(shape, dtype, values);
}

export const identityConfig: KernelConfig = {
  kernelName: Identity,
  backendName: 'cpu',
  kernelFunc: identity as {} as KernelFunc
};

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 */

import {Identity, IdentityInputs, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';

import {MathBackendCPU} from '../backend_cpu';

export function identity(args: {inputs: IdentityInputs, backend: MathBackendCPU}): TensorInfo {
  const {inputs, backend} = args;
  const {x} = inputs;

  backend.incRef(x.dataId);

  return {dataId: x.dataId, shape: x.shape, dtype: x.dtype};
}

export const identityConfig: KernelConfig = {
  kernelName: Identity,
  backendName: 'cpu',
  kernelFunc: identity as {} as KernelFunc
};

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 */

import {Real, RealInputs, TensorInfo} from '@tensorflow/tfjs-core';

import {MathBackendCPU} from '../backend_cpu';

export function real(args: {inputs: RealInputs, backend: MathBackendCPU}): TensorInfo {
  const {inputs, backend} = args;
  const {input} = inputs;

  const real = backend.data.get(input.dataId).complexTensorInfos.real;
  const realVal = backend.data.get(real.dataId).values;

  // When complex tensor is disposed, its underlying parts will be disposed too.
  // Make new tensor out of the real
value of the complex. This makes sure the\n  // value is still accessible even if complex tensor is disposed.\n return backend.makeTensorInfo(real.shape, real.dtype, realVal);\n\nexport const realConfig: KernelConfig = {
  kernelName: Real,\n  backendName: 'cpu',\n  kernelFunc: real as {} as KernelFunc\n};

export const complex = {} as KernelFunc;

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import {Cast, CastAttrs, CastInputs, KernelConfig, KernelFunc, TensorInfo, TypedArray, util} from '@tensorflow/tfjs-core';

import {MathBackendCPU} from './backend_cpu';
import {createSimpleBinaryKernelImpl} from '../utils/binary_impl';
import {zeros} from '../utils/zeros_impl';

import {complex} from './Complex';
import {identity} from './Identity';
import {real} from './Real';

export function cast(
    args: {inputs: CastInputs, backend: MathBackendCPU, attrs: CastAttrs}):
    TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {dtype} = attrs;

  // Casting to complex64.
  if (dtype === 'complex64') {
    if (x.dtype === 'complex64') {
      return identity({inputs: {x}, backend});
    }

    const zerosTensorInfo = zeros(backend, x.shape, x.dtype);
    const floatX = cast({inputs: {x}, backend, attrs: {dtype: 'float32'}});

    const result =
        complex({inputs: {real: floatX, imag: zerosTensorInfo}, backend});

    backend.disposeIntermediateTensorInfo(zerosTensorInfo);
    backend.disposeIntermediateTensorInfo(floatX);

    return result;
  }

  // Casting from complex64
  if (x.dtype === 'complex64') {
    const realPart = real({inputs: {input: x}, backend});
    const result = cast({inputs: {x: realPart}, backend, attrs: {dtype}});

    backend.disposeIntermediateTensorInfo(realPart);

    return result;
  }

  if (!util.hasEncodingLoss(x.dtype, dtype)) {
    // We don't change the underlying data, since we cast to higher\n    // precision.\n    const result = identity((inputs: [x], backend));\n    return {dataId: result.dataId,\n        shape: result.shape,\n        dtype: undefined};\n  }

  if (dtype === 'int32') {
    const values = backend.data.get(x.dataId).values as\n  \n    return backend.makeTensorInfo(x.shape, 'int32', resultValues);
  }

  throw new Error(`Error in Cast: failed to cast ${x.dtype} to ${dtype}`);
}

export const castConfig: KernelConfig = {
  kernelName: Cast,\n  backendName: 'cpu',\n  kernelFunc: cast as {} as KernelFunc\n};

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import {backend_util, BinaryInputs, DataType, KernelFunc, TypedArray, util} from '@tensorflow/tfjs-core';

import {MathBackendCPU} from '../backend_cpu';
import {assertNotComplex} from '../cpu_util';
import {cast} from '../kernels/Cast';
import {complex} from '../kernels/Complex';

import {ComplexBinaryKernelImpl, ComplexBinaryOperation, SimpleBinaryKernelImpl} from './binary_types';

/**
 * Template that creates a `KernelFunc` for binary ops.
 * @param name Kernel name.\n * @param\n */

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exists, represents a `*` `ComplexBinaryKernelImpl` for the kernel, will be used when input dtype
`*` is `complex64`. `*` param dtype Optional. If set, the result has this dtype. Otherwise, the result has the same
dtype as the first input. This is mainly used in
* comparison kernels, such as Equal, Less, Greater, etc.

/*export function binaryKernelFunc(name: string, simpleImpl: SimpleBinaryKernelImpl, complexImpl?: ComplexBinaryKernelImpl, dtype?: Data type): KernelFunc { if (complexImpl == null) { return ((inputs, backend)) => { const [a, b] = inputs as Binary Inputs; const cpuBackend = backend as MathBackendCPU; assertNotComplex([a, b], name); const aVals = cpuBackend.data.get(a.dataId).values as TypedArray; const bVals = cpuBackend.data.get(b.dataId).values as TypedArray; const $dtype = dtype ?? a.dtype; const resultData, resultShape = simpleImpl(a.shape, b.shape, aVals, bVals, $dtype); return cpuBackend.makeTensorInfo(resultShape, $dtype, resultData); } }); } */

export function binaryKernelFunc(name: string, simpleImpl: SimpleBinaryKernelImpl, complexImpl?: ComplexBinaryKernelImpl, dtype?: DataType): KernelFunc {
  if (complexImpl == null) {
    return ({inputs, backend}) => {
      const {a, b} = inputs as BinaryInputs;
      const cpuBackend = backend as MathBackendCPU;
      if (a.dtype === "complex64" || b.dtype === "complex64") {
        const SaComplex = cast(inputs: {x: a}, backend: cpuBackend, attrs: {dtype: "complex64"});
        const SaComplexVals = cpuBackend.getData(SaComplex.dataId);
        const aReal = SaComplexVals.complexTensorInfos.real;
        const almag = SaComplexVals.complexTensorInfos.imag;
        const aRealVals = cpuBackend.data.get(aReal.dataId).values as Float32Array;
        const almagVals = cpuBackend.data.get(almag.dataId).values as Float32Array;
        const $a = complex(aReal, almag, cpuBackend.data.get(a.dataId).values as TypedArray, cpuBackend.data.get(b.dataId).values as TypedArray, $dtype ?? a.dtype, "complex64");
        const bComplex = cast(inputs: {x: b}, backend: cpuBackend, attrs: {dtype: "complex64"});
        const bComplexVals = cpuBackend.getData(bComplex.dataId);
        const bReal = bComplexVals.complexTensorInfos.real;
        const bImag = bComplexVals.complexTensorInfos.imag;
        const bRealVals = cpuBackend.data.get(bReal.dataId).values as Float32Array;
        const bImagVals = cpuBackend.data.get(bImag.dataId).values as Float32Array;
        const resultData = cpuBackend.makeTensorInfo(resultShape, $dtype, resultData);
        const result = complex({inputs: {real: resultReal, imag: resultImag}, backend: cpuBackend});
        cpuBackend.disposeIntermediateTensorInfo(SaComplex);
        cpuBackend.disposeIntermediateTensorInfo(bComplex);
        return result;
      } else {
        const aVals = cpuBackend.data.get(a.dataId).values as TypedArray;
        const bVals = cpuBackend.data.get(b.dataId).values as TypedArray;
        const $dtype = dtype ?? a.dtype;
        const resultData, resultShape = simpleImpl(a.shape, b.shape, aVals, bVals, $dtype);
        return cpuBackend.makeTensorInfo(resultShape, $dtype, resultData);
      }
    };
  }

  return ({inputs, backend}) => {
    const {a, b} = inputs as BinaryInputs;
    const cpuBackend = backend as MathBackendCPU;
    if (a.dtype === "complex64" || b.dtype === "complex64") {
      const SaComplex = cast(inputs: {x: a}, backend: cpuBackend, attrs: {dtype: "complex64"});
      const SaComplexVals = cpuBackend.getData(SaComplex.dataId);
      const aReal = SaComplexVals.complexTensorInfos.real;
      const almag = SaComplexVals.complexTensorInfos.imag;
      const aRealVals = cpuBackend.data.get(aReal.dataId).values as Float32Array;
      const almagVals = cpuBackend.data.get(almag.dataId).values as Float32Array;
      const $a = complex(aReal, almag, cpuBackend.data.get(a.dataId).values as TypedArray, cpuBackend.data.get(b.dataId).values as TypedArray, $dtype ?? a.dtype, "complex64");
      const bComplex = cast(inputs: {x: b}, backend: cpuBackend, attrs: {dtype: "complex64"});
      const bComplexVals = cpuBackend.getData(bComplex.dataId);
      const bReal = bComplexVals.complexTensorInfos.real;
      const bImag = bComplexVals.complexTensorInfos.imag;
      const bRealVals = cpuBackend.data.get(bReal.dataId).values as Float32Array;
      const bImagVals = cpuBackend.data.get(bImag.dataId).values as Float32Array;
      const resultData = cpuBackend.makeTensorInfo(resultShape, $dtype, resultData);
      const result = complex({inputs: {real: resultReal, imag: resultImag}, backend: cpuBackend});
      cpuBackend.disposeIntermediateTensorInfo(SaComplex);
      cpuBackend.disposeIntermediateTensorInfo(bComplex);
      return result;
    } else {
      const aVals = cpuBackend.data.get(a.dataId).values as TypedArray;
      const bVals = cpuBackend.data.get(b.dataId).values as TypedArray;
      const $dtype = dtype ?? a.dtype;
      const resultData, resultShape = simpleImpl(a.shape, b.shape, aVals, bVals, $dtype);
      return cpuBackend.makeTensorInfo(resultShape, $dtype, resultData);
    }
  };
}

/**
 * Template that creates the complex type implementation for binary ops.
 */

export function createComplexBinaryKernelImpl(op: ComplexBinaryOperation): ComplexBinaryKernelImpl {
  return (aShape: number[], bShape: number[], aRealVals: Float32Array, aImagVals: Float32Array, bRealVals: Float32Array, bImagVals: Float32Array): [TypedArray, TypedArray, number[]] => {
    const resultShape = backend_util.assertAndGetBroadcastShape(aShape, bShape);
    const resultSize = util.sizeFromShape(resultShape);
    const resultRank = resultShape.length;
    const resultStrides = util.computeStrides(resultShape);
    const resultRealVals = util.getTypedArrayFromDType(‘float32’, resultSize);
    const resultImagVals = util.getTypedArrayFromDType(‘float32’, resultSize);
    const aBroadcastDims = backend_util.getBroadcastDims(aShape, resultShape);
    const bBroadcastDims = backend_util.getBroadcastDims(bShape, resultShape);
    const aVals = backend_util.mergeRealAndImagArrays(aRealVals, aImagVals);
    const bVals = backend_util.mergeRealAndImagArrays(bRealVals, bImagVals);
    const aRank = aShape.length;
    const aStrides = util.computeStrides(aShape);
    const bRank = bShape.length;
    const bStrides = util.computeStrides(bShape);
    if (aBroadcastDims.length + bBroadcastDims.length === 0) {
      for (let i = 0; i < resultRealVals.length; i++) {
        const aIdx = i % aVals.length;
        const bIdx = i % bVals.length;
        const resultReal = resultRealVals[i] + aRealVals[aIdx] * bRealVals[bIdx];
        const resultImag = resultImagVals[i] + aImagVals[aIdx] * bImagVals[bIdx];
        const resultData = complex(resultReal, resultImag);
      }
    } else {
      const aData = aRealVals.map((a, i) => a + aImagVals[i] * bRealVals[i]);
      const bData = bRealVals.map((b, i) => b + bImagVals[i] * aRealVals[i]);
      const resultData = simpleImpl(aData, bData, $dtype);
    }
    return resultData;
  };
}
const result =\n  op(aVals[aIdx * 2], aVals[aIdx * 2 + 1], bVals[bIdx * 2],
      bVals[bIdx * 2 + 1]);\n
resultRealVals[i] = result.real;\nresultImagVals[i] = result.imag;\n\nelse {\n  for (let i = 0; i < resultRealVals.length; i++) {\n    const loc = util.indexToLoc(i, resultRank, resultStrides);\n    const aLoc = loc.slice(-aRank);\n    aBroadcastDims.forEach(d => aLoc[d] = 0);\n    const aIdx = util.locToIndex(aLoc, aRank, aStrides);\n
    const bLoc = loc.slice(-bRank);\n    bBroadcastDims.forEach(d => bLoc[d] = 0);\n    const bIdx = util.locToIndex(bLoc, bRank, bStrides);\n
    const opResult =\n      op(aVals[aIdx * 2], aVals[aIdx * 2 + 1], bVals[bIdx * 2],
          bVals[bIdx * 2 + 1]);\n
    resultRealVals[i] = opResult.real;\n    resultImagVals[i] = opResult.imag;\n  }\n}\nreturn [resultRealVals, resultImagVals,
resultShape];
};
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*
=============================================================================

*/

import {NumericDataType, util} from '@tensorflow/tfjs-core';

import {SimpleUnaryImpl, SimpleUnaryOperation} from './unary_types';

/**
 * Template that creates implementation for unary op.
 */
export function createSimpleUnaryImpl(op: SimpleUnaryOperation): SimpleUnaryImpl {
  return (values, dtype, attrs) => {
    const newValues = util.getTypedArrayFromDType(dtype as NumericDataType, values.length);
    for (let i = 0; i < values.length; ++i) {
      newValues[i] = op(values[i], attrs);
    }
    return newValues;
  };
}

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 */

import {DataType, KernelFunc, UnaryInputs, util} from '@tensorflow/tfjs-core';

import {MathBackendCPU} from '../backend_cpu';
import {assertNotComplex} from '../cpu_util';

import {SimpleUnaryImpl, SimpleUnaryOperation} from './unary_types';

/**
 * Template that creates a `KernelFunc` for unary ops.
 * @param name Kernel name.
 * @param op A `SimpleUnaryOperation` for the kernel.
 * @param dtype Optional. If set, the result has this dtype. Otherwise, the result has the same dtype as the input.
 * This is mainly used in certain\n * kernels that return bool type, such as isFinite, isInf, etc.\n */
export function unaryKernelFunc(name: string, op: SimpleUnaryOperation, dtype?: DataType): KernelFunc {
  return ({inputs, attrs, backend}) => {
    const {x} = inputs as UnaryInputs;
    assertNotComplex(x, name);
    if (x.dtype === 'string' || dtype === 'string') {
      throw new Error('unaryKernelFunc does not support string input/output');
    }

    const cpuBackend = backend as MathBackendCPU;
    const values = cpuBackend.data.get(x.dataId).values as TypedArray;
    const xSize = util.sizeFromShape(x.shape);
    const $dtype = dtype || x.dtype;
    const newValues = util.getArrayFromDType($dtype, xSize);
    for (let i = 0; i < xSize; ++i) {
      newValues[i] = op(values[i], attrs);
    }
    return cpuBackend.makeTensorInfo(x.shape, $dtype, newValues);
  };
}

/**
 * Template that creates a `KernelFunc` for unary ops from the given\n * `SimpleUnaryImpl`..
 * @param name Kernel name.
 * @param unaryImpl A `SimpleUnaryImpl` that implements the op.
 * @param dtype Optional. If set, the result has this dtype. Otherwise, the result has the same dtype as the input.
 * This is mainly used in certain\n * kernels that return bool type, such as isFinite, isInf, etc.\n */
export function unaryKernelFuncFromImpl(name: string, unaryImpl: SimpleUnaryImpl, dtype?: DataType): KernelFunc {
  return ({inputs, attrs, backend}) => {
    const {x} = inputs as UnaryInputs;
    assertNotComplex(x, name);
    if (x.dtype === 'string' || dtype === 'string') {
      throw new Error('unaryKernelFunc does not support string input/output');
    }

    const cpuBackend = backend as MathBackendCPU;
    const values = cpuBackend.data.get(x.dataId).values as TypedArray;
    const $dtype = dtype || x.dtype;
    const newValues = unaryImpl(values, $dtype, attrs);
    return cpuBackend.makeTensorInfo(x.shape, $dtype, newValues);
  };
}

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 */

=============================================================================
import {Ceil, KernelConfig} from '@tensorflow/tfjs-core';

export const ceilImpl = createSimpleUnaryImpl((xi) => Math.ceil(xi));
export const ceil = unaryKernelFuncFromImpl(Ceil, ceilImpl);

export const ceilConfig: KernelConfig = {
  kernelName: Ceil,
  backendName: 'cpu',
  kernelFunc: ceil,
};

export function concatImpl(inputs: Array<{vals: BackendValues, shape: number[]}>, outShape: number[], dtype: DataType, simplyConcat: boolean): TypedArray|string[] {
  const outVals = util.getArrayFromDType(dtype, util.sizeFromShape(outShape));
  if (simplyConcat && dtype !== 'string') {
    // Use built-in TypedArray.set() method for speed.
    let offset = 0;
    inputs.forEach(input => {
      const size = util.sizeFromShape(input.shape);
      (outVals as TypedArray).set(input.vals as TypedArray, offset);
      offset += size;
    });
  } else {
    let colOffset = 0;
    inputs.forEach(input => {
      const decodedData = dtype === 'string' ?
        backend_util.fromUint8ToStringArray(input.vals as Uint8Array[]) :
        input.vals as TypedArray;
      let tIdx = 0;
      for (let row = 0; row < input.shape[0]; ++row) {
        const resIdx = row * outShape[1] + colOffset;
        for (let col = 0; col < input.shape[1]; ++col) {
          outVals[resIdx + col] = decodedData[tIdx++];
        }
      }
    });
  }
  return outVals;
}

export function expm1Impl = createSimpleUnaryImpl((xi) => Math.expm1(xi));
export function expm1 = unaryKernelFuncFromImpl(Expm1, expm1Impl);

export const expm1Config: KernelConfig = {
  kernelName: Expm1,
  backendName: 'cpu',
  kernelFunc: expm1,
};

export function expImpl = createSimpleUnaryImpl((xi) => Math.exp(xi));

export const exp = unaryKernelFuncFromImpl(Exp, expImpl);

export const expConfig: KernelConfig = {
  kernelName: Exp,
  backendName: 'cpu',
  kernelFunc: exp,
};

export function expm1Impl = createSimpleUnaryImpl((xi) => Math.expm1(xi));
export function expm1 = unaryKernelFuncFromImpl(Expm1, expm1Impl);

export const expm1Config: KernelConfig = {
  kernelName: Expm1,
  backendName: 'cpu',
  kernelFunc: expm1,
};

export function expImpl = createSimpleUnaryImpl((xi) => Math.exp(xi));

export const exp = unaryKernelFuncFromImpl(Exp, expImpl);

export const expConfig: KernelConfig = {
  kernelName: Exp,
  backendName: 'cpu',
  kernelFunc: exp,
};

export function expm1Impl = createSimpleUnaryImpl((xi) => Math.expm1(xi));
export function expm1 = unaryKernelFuncFromImpl(Expm1, expm1Impl);

export const expm1Config: KernelConfig = {
  kernelName: Expm1,
  backendName: 'cpu',
  kernelFunc: expm1,
};

export function expImpl = createSimpleUnaryImpl((xi) => Math.exp(xi));

export const exp = unaryKernelFuncFromImpl(Exp, expImpl);

export const expConfig: KernelConfig = {
  kernelName: Exp,
  backendName: 'cpu',
  kernelFunc: exp,
};
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import {KernelConfig, Log} from '@tensorflow/tfjs-core';

import {createSimpleUnaryImpl} from '../utils/unary_impl';
import {unaryKernelFuncFromImpl} from '../utils/unary_utils';

export const logImpl = createSimpleUnaryImpl((xi) => Math.log(xi));
export const log = unaryKernelFuncFromImpl(Log, logImpl);

export const logConfig: KernelConfig = {
  kernelName: Log,
  backendName: 'cpu',
  kernelFunc: log,
};

import {KernelConfig, Maximum} from '@tensorflow/tfjs-core';

import {createSimpleBinaryKernelImpl} from '../utils/binary_impl';
import {binaryKernelFunc} from '../utils/binary_utils';

export const maximumImpl = createSimpleBinaryKernelImpl((aValue, bValue) => Math.max(aValue, bValue));
export const maximum = binaryKernelFunc(Maximum, maximumImpl);

export const maximumConfig: KernelConfig = {
  kernelName: Maximum,
  backendName: 'cpu',
  kernelFunc: maximum
};

import {DataType, NumericDataType, TypedArray, util} from '@tensorflow/tfjs-core';

export function maxImpl(
    aVals: TypedArray, reduceSize: number, outShape: number[],
    dtype: DataType): TypedArray {

const vals = util.getTypedArrayFromDType(
  dtype as NumericDataType, util.sizeFromShape(outShape));

for (let i = 0; i < vals.length; ++i) {
  const offset = i * reduceSize;
  let max = aVals[offset];
  for (let j = 0; j < reduceSize; ++j) {
    const value = aVals[offset + j];
    if (value > max) {
      max = value;
    }
  }
  vals[i] = max;
}
  return vals;
}
import {KernelConfig, Minimum} from '@tensorflow/tfjs-core';
import {createSimpleBinaryKernelImpl} from '../utils/binary_impl';
import {binaryKernelFunc} from '../utils/binary_utils';

export const minimumImpl = createSimpleBinaryKernelImpl((aValue, bValue) => Math.min(aValue, bValue));
export const minimum = binaryKernelFunc(Minimum, minimumImpl);

export const minimumConfig: KernelConfig = {
  kernelName: Minimum,
  backendName: 'cpu',
  kernelFunc: minimum
};

export function negImpl(xVals: TypedArray, xShape: number[], xDtype: DataType): [TypedArray, number[]] {
  const minusOne = util.createScalarValue(-1 as {} as 'float32', xDtype) as TypedArray;
  return multiplyImpl([], xShape, minusOne, xVals, xDtype);
}

export function neg(args: {inputs: UnaryInputs, backend: MathBackendCPU}):
    TensorInfo {
  const {inputs, backend} = args;
  const {x} = inputs;

  assertNotComplex(x, 'neg');

  const xVals = backend.data.get(x.dataId).values as TypedArray;
  const [res, newShape] = negImpl(xVals, x.shape, x.dtype);

  return backend.makeTensorInfo(newShape, x.dtype, res);
}

export const negConfig: KernelConfig = {
  kernelName: Neg,
  backendName: 'cpu',
  kernelFunc: neg as {} as KernelFunc
};
```javascript
import {KernelConfig, NotEqual} from '@tensorflow/tfjs-core';

import {createSimpleBinaryKernelImpl} from './utils/binary_impl';
import {binaryKernelFunc} from './utils/binary_utils';

export const notEqualImpl =
    createSimpleBinaryKernelImpl(((a, b) => (a !== b) ? 1 : 0));
export const notEqual =
    binaryKernelFunc(NotEqual, notEqualImpl, null /* complexOp */, 'bool');

export const notEqualConfig: KernelConfig = {
  kernelName: NotEqual,
  backendName: 'cpu',
  kernelFunc: notEqual
};
```

```javascript
import {DataType, NumericDataType, TypedArray} from '@tensorflow/tfjs-core';
import {util} from '@tensorflow/tfjs-core';

export function transposeImpl(
    xVals: TypedArray, xShape: number[], dtype: DataType, perm: number[],
    newShape: number[]): TypedArray {
  const xRank = xShape.length;
  const xSize = util.sizeFromShape(xShape);
  const xStrides = util.computeStrides(xShape);
  const newStrides = util.computeStrides(newShape);
  const result = util.getTypedArrayFromDType(
      dtype as NumericDataType, util.sizeFromShape(newShape));
  for (let i = 0; i < xSize; ++i) {
    const loc = util.indexToLoc(i, xRank, xStrides);
    const newLoc: number[] = new Array(loc.length);
    for (let i = 0; i < loc.length; i++) {
      newLoc[i] = loc[perm[i]];
    }
    const newIndex = util.locToIndex(newLoc, xRank, newStrides);
    result[newIndex] = xVals[i];
  }
  return result;
}
```

```javascript
import {KernelConfig, KernelFunc, TensorInfo, Transpose, TransposeAttrs, TransposeInputs, TypedArray} from '@tensorflow/tfjs-core';

import {MathBackendCPU} from '../backend_cpu';
import {assertNotComplex} from '../cpu_util';

import {transposeImpl} from './Transpose_impl';

export function transpose(args: {
  inputs: TransposeInputs,
  attrs: TransposeAttrs,
  backend: MathBackendCPU
}): TensorInfo {
  const {inputs, attrs, backend} = args;
  const {x} = inputs;
  const {perm} = attrs;

  assertNotComplex(x, 'transpose');

  const xRank = x.shape.length;
  const newShape: number[] = new Array(xRank);
  for (let i = 0; i < x.shape.length; i++) {
    newShape[i] = x.shape[perm[i]];
  }
  const values = backend.data.get(x.dataId).values as TypedArray;
  const result = transposeImpl(values, x.shape, x.dtype, perm, newShape);
  const dataId = backend.write(result, newShape, x.dtype);
  return {dataId, shape: newShape, dtype: x.dtype, perm, newShape};
}
```

```javascript
export const transposeConfig: KernelConfig = {
  kernelName: Transpose,
  backendName: 'cpu',
  kernelFunc: transpose as {} as KernelFunc
};
```
import {backend_util, DataType, KernelConfig, Prod, ProdAttrs, ProdInputs, TensorInfo,TypedArray, upcastType, util} from '@tensorflow/tfjs-core';

import {MathBackendCPU} from '../backend_cpu';
import {assertNotComplex} from '../cpu_util';
import {transpose} from './Transpose';

export function prodImpl(
    xShape: number[], xDtype: DataType, xVals: TypedArray,
    reductionAxes: number[]):
    {outVals: TypedArray, outShape: number[], outDtype: DataType} {
  const [outShape, reduceShape] = backend_util.computeOutAndReduceShapes(xShape, reductionAxes);
  const outDtype = upcastType(xDtype, 'int32');
  const outVals = util.makeZerosTypedArray(out.sizeFromShape(outShape), outDtype) as TypedArray;
  const reduceSize = util.sizeFromShape(reduceShape);
  for (let i = 0; i < reduceSize; ++i) {
    prod = 1;
    for (let j = 0; j < reduceSize; ++j) {
      prod *= xVals[offset + j];
    }
    outVals[i] = prod;
  }
  return {outVals, outShape, outDtype};
}

export function prod(
    args:
    {inputs: ProdInputs, backend: MathBackendCPU, attrs: ProdAttrs}):
    TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {axis, keepDims} = attrs;

  assertNotComplex(x, 'prod');

  const xRank = x.shape.length;
  const axes = util.parseAxisParam(axis, x.shape);

  const permutation = backend_util.getAxesPermutation(axes, xRank);
  let reductionAxes = axes;
  let permutedX = x;
  const intermediateTensorInfos = [];
  if (permutation != null) {
    permutedX = transpose({inputs: {x}, backend, attrs: {perm: permutation}});
    intermediateTensorInfos.push(permutedX);
    reductionAxes = backend_util.getInnerMostAxes(reductionAxes.length, xRank);
  }

  const xVals = backend.data.get(permutedX.dataId).values as TypedArray;
  const {outVals, outShape, outDtype} = prodImpl(permutedX.shape, permutedX.dtype, xVals, reductionAxes);

  let resultShape = outShape;
  if (keepDims) {
    resultShape = backend_util.expandShapeToKeepDim(outShape, axes);
  }

  intermediateTensorInfos.forEach(t => backend.disposeIntermediateTensorInfo(t));

  return backend.makeTensorInfo(resultShape, outDtype, outVals);
}

export const prodConfig: KernelConfig = {
  kernelName: Prod,
  backendName: 'cpu',
  kernelFunc: prod as {} as KernelFunc
};

import {DataTypeMap, util} from '@tensorflow/tfjs-core';

export function rangeImpl(
    start: number,
    stop: number, step: number,
    dtype: 'float32'|'int32'): DataTypeMap['float32' | 'int32'] {
  const sameStartStop = start === stop;
  const increasingRangeNegativeStep = start < stop && step < 0;
  const decreasingRangePositiveStep = stop < start && step > 0;

  if (sameStartStop || increasingRangeNegativeStep || decreasingRangePositiveStep) {
    return util.makeZerosTypedArray(0, dtype);
  }

  const numElements = Math.abs(Math.ceil((stop - start) / step));
  const values = util.makeZerosTypedArray(numElements, dtype);

  if (stop < start && step > 0) {
    // Auto adjust the step's sign if it hasn't been set
    // (or was set to 1)
    step = -1;
  }

  values[0] = start;
  for (let i = 1; i < values.length; i++) {
    values[i] = values[i - 1] + step;
  }

  return values;
}

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 */

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import {KernelConfig, Rsqrt} from '@tensorflow/tfjs-core';
import {createSimpleUnaryImpl} from '@tensorflow/tfjs-core';
import {createSimpleBinaryKernelImpl} from '@tensorflow/tfjs-core';
import {binaryKernelFunc} from '@tensorflow/tfjs-core';

export const rsqrtImpl = createSimpleUnaryImpl((xi) => 1 / Math.sqrt(xi));
export const rsqrt = unaryKernelFuncFromImpl(Rsqrt, rsqrtImpl);

export const rsqrtConfig: KernelConfig = {
  kernelName: Rsqrt,
  backendName: 'cpu',
  kernelFunc: rsqrt,
};

export function sliceImpl(vals, begin, size, shape, dtype): BackendValues {
  const isContinuous = slice_util.isSliceContinuous(shape, begin, size);
  const length = util.sizeFromShape(size);
  const xStrides = util.computeStrides(shape);

  if (isContinuous) {
    const flatOffset = slice_util.computeFlatOffset(begin, xStrides);
    if (dtype === 'string') {
      return (vals as Uint8Array).slice(flatOffset, flatOffset + length);
    }
    return (vals as TypedArray).subarray(flatOffset, flatOffset + length);
  }

  const decodedData = dtype === 'string' ?
    backend_util.fromUint8ToStringArray(vals as Uint8Array) :
    vals as TypedArray;

  const inBuf = buffer(shape, dtype, decodedData);
  const outBuf = buffer(size, dtype);
  for (let i = 0; i < outBuf.size; ++i) {
    const outLoc = outBuf.indexToLoc(i);
    const inLoc = outLoc.map((idx: number, j) => idx + begin[j]);
    outBuf.set(inBuf.get(...inLoc), ...outLoc);
  }

  if (dtype === 'string') {
    return backend_util.fromStringArrayToUint8(outBuf.values as string);
  }
  return outBuf.values as TypedArray;
}

export function slice(args: {inputs: SliceInputs, backend: MathBackendCPU, attrs: SliceAttrs}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {begin, size} = attrs;

  assertNotComplex(x, 'slice');

  const [begin, size] = slice_util.parseSliceParams(x, begin, size);
  slice_util.assertParamsValid(x, begin, size);

  const vals = backend.data.get(x.dataId).values;
  const outVals = sliceImpl(vals, begin, size, x.shape, x.dtype);
  return backend.makeTensorInfo(size, x.dtype, outVals);
}

export const sliceConfig: KernelConfig = {
  kernelName: Slice,
  backendName: 'cpu',
  kernelFunc: slice as {} as KernelFunc
};

export function squaredDifference(vals, a, b): number {
  const diff = a - b;
  return diff * diff;
}

export const squaredDifferenceConfig: KernelConfig = {
  kernelName: SquaredDifference,
  backendName: 'cpu',
  kernelFunc: squaredDifference,
};

export function squaredDifference(vals, a, b): number {
  return squaredDifference(vals, a, b);
}

export const squaredDifferenceConfig: KernelConfig = {
  kernelName: SquaredDifference,
  backendName: 'cpu',
  kernelFunc: squaredDifference,
};
```javascript
const $axis = util.parseAxisParam(axis, shape)[0];

// Calculate the new shape that is suitable for outputValues: BackendValues,
outputShape: number[],
indices: BackendValues
} {
  // Normalize and
function uniqueImpl(
    values: BackendValues, axis: number, shape: number[], dtype: DataType): {

```
inputBuffer = new TensorBuffer(newShape, dtype, values as TypedArray); // The indices along the given axis that have unique elements. This is a
// de-duped version of \"indices\" above.
const uniqueIndices: number[] = [];
const is1DTensor = newShape[0] === 1 && newShape[2] === 1;
for (let i = 0; i < shape[saxis]; i++) {
  // Extract values along the axis.
  let element: string = if (is1DTensor) {
    // Fast path for 1D tensor input.
    element = values[i].toString();
  } else {
    const axisValues = [];
    for (let m = 0; m < newShape[0]; m++) {
      for (let n = 0; n < newShape[2]; n++) {
        axisValues.push(inputBuffer.get(m, i, n));
      }
    }
    element = axisValues.join(',');
  }

  // Dedup and update various indices.
  if (uniqueElements[element] !== undefined) {
    indices[i] = uniqueElements[element];
  } else {
    const uniqueIndex = Object.keys(uniqueElements).length;
    uniqueElements[element] = uniqueIndex;
    indices[i] = uniqueIndex;
  }
}

// Now we know where each of the unique elements are
// located along the axis. // (uniqueIndices). Extract them from input buffer and store them in the output buffer.
const outputTmpShape = newShape.slice();
const outputBuffer = new TensorBuffer(outputTmpShape, dtype);

uniqueIndices.forEach((uniqueElementIndex, i) => {
  for (let m = 0; m < newShape[0]; m++) {
    for (let n = 0; n < newShape[2]; n++) {
      outputBuffer.set(inputBuffer.get(m, uniqueElementIndex, n), m, i, n);
    }
  }
});

// The output shape can be calculated from the input shape with the size of the given axis replaced by the number of unique elements along that axis.
const outputShape = shape.slice();
outputShape[saxis] = outputTmpShape[1];
return {
  outputValues: outputBuffer.values as BackendValues,
  outputShape,
  indices,
};
Attached is the content of the document in plain text format:

```
*\n// Import shared functionality from tfjs-backend-cpu without triggering\n// side effects.\n// tslint:disable-next-line: no-imports-from-dist\nimport * as shared from '@tensorflow/tfjs-backend-cpu/dist/shared';\n// tslint:disable-next-line: no-imports-from-dist\nimport {SimpleBinaryKernelImpl} from '@tensorflow/tfjs-backend-cpu/dist/shared

export type SimpleBinaryKernelImplCPU = SimpleBinaryKernelImpl;
export type SimpleUnaryKernelImplCPU = SimpleUnaryKernelImpl;

const {
  addImpl:
    addImplCPU,
  bincountImpl:
    bincountImplCPU,
  bincountReduceImpl:
    bincountReduceImplCPU,
  ceilImpl:
    ceilImplCPU,
  concatImpl: concatImplCPU
    \n  expImpl:
    expImplCPU,
  expm1Impl:
    expm1ImplCPU,
  floorImpl: floorImplCPU,
  gatherV2Impl:
    gatherV2ImplCPU,
  greaterImpl:
    greaterImplCPU,
  lessImpl:
    lessImplCPU,
  linSpaceImpl:
    linSpaceImplCPU,
  logImpl:
    logImplCPU,
  maxImpl:
    maxImplCPU,
  minimumImpl: minimumImplCPU,
  multiplyImpl: multiplyImplCPU,
  negImpl:
    negImplCPU,
  prodImpl:
    prodImplCPU,
  rangeImpl:
    rangeImplCPU,
  rsqrtImpl:
    rsqrtImplCPU,
  simpleAbsImpl:
    simpleAbsImplCPU,
  sliceImpl:
    sliceImplCPU,
  stridedSliceImpl:
    stridedSliceImplCPU,
  subImpl:
    subImplCPU,
  tileImpl:
    tileImplCPU,
  topImpl: topImplCPU,
  transposeImpl:
    transposeImplCPU,
  uniqueImpl:
    uniqueImplCPU,
  \n  } = shared;\n
export {
  addImplCPU,
  addImplCPU,
  bincountImplCPU,
  bincountReduceImplCPU,
  ceilImplCPU,
  concatImplCPU,
  \n  expImplCPU,
  expm1ImplCPU,
  floorImplCPU,
  \n  gatherV2ImplCPU,
  greaterImplCPU,
  lessImplCPU,
  \n  linSpaceImplCPU,
  logImplCPU,
  \n  maxImplCPU,
  minimumImplCPU,
  \n  multiplyImplCPU,
  \n  negImplCPU,
  \n  prodImplCPU,
  \n  rangeImplCPU,
  \n  rsqrtImplCPU,
  \n  simpleAbsImplCPU,
  \n  sliceImplCPU,
  \n  stridedSliceImplCPU,
  \n  subImplCPU,
  \n  tileImplCPU,
  \n  topImplCPU,
  \n  transposeImplCPU,
  \n  uniqueImplCPU,
  \n  };

export function getVecChannels(name: string, rank: number): string[] {
  return ['x', 'y', 'z', 'w', 'u', 'v'].slice(0, rank).map(d => '{}$\{d\}$');\n}

export function getChannels(name: string, rank: number): string[] {
  if (rank === 1) {
    return [name];
  } else {
    return getVecChannels(name, rank);
  }
}

export function getSourceCoords(rank: number, dims: string[]): string {
  if (rank === 1) {
    return 'rc';
  } else {
    let coords = '';\n    for (let i = 0; i < rank; i++) {
      coords += dims[i];
      if (i < rank - 1) {
        coords += ' ,';\n      }\n    }\n    return coords;\n  }
}
```

---

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---

*\n// Import shared functionality from tfjs-backend-cpu without triggering\n// side effects.\n// tslint:disable-next-line: no-imports-from-dist\nimport * as shared from '@tensorflow/tfjs-backend-cpu/dist/shared';\n// tslint:disable-next-line: no-imports-from-dist\nimport {SimpleBinaryKernelImpl} from '@tensorflow/tfjs-backend-cpu/dist/shared

export type SimpleBinaryKernelImplCPU = SimpleBinaryKernelImpl;
export type SimpleUnaryKernelImplCPU = SimpleUnaryKernelImpl;

const {
  addImpl:
    addImplCPU,
  bincountImpl:
    bincountImplCPU,
  bincountReduceImpl:
    bincountReduceImplCPU,
  ceilImpl:
    ceilImplCPU,
  concatImpl: concatImplCPU
    \n  expImpl:
    expImplCPU,
  expm1Impl:
    expm1ImplCPU,
  floorImpl: floorImplCPU,
  gatherV2Impl:
    gatherV2ImplCPU,
  greaterImpl:
    greaterImplCPU,
  lessImpl:
    lessImplCPU,
  linSpaceImpl:
    linSpaceImplCPU,
  logImpl:
    logImplCPU,
  maxImpl:
    maxImplCPU,
  minimumImpl: minimumImplCPU,
  multiplyImpl: multiplyImplCPU,
  negImpl:
    negImplCPU,
  prodImpl:
    prodImplCPU,
  rangeImpl:
    rangeImplCPU,
  rsqrtImpl:
    rsqrtImplCPU,
  simpleAbsImpl:
    simpleAbsImplCPU,
  sliceImpl:
    sliceImplCPU,
  stridedSliceImpl:
    stridedSliceImplCPU,
  subImpl:
    subImplCPU,
  tileImpl:
    tileImplCPU,
  topImpl: topImplCPU,
  transposeImpl:
    transposeImplCPU,
  uniqueImpl:
    uniqueImplCPU,
  \n  } = shared;\n
export {
  addImplCPU,
  addImplCPU,
  bincountImplCPU,
  bincountReduceImplCPU,
  ceilImplCPU,
  concatImplCPU,
  \n  expImplCPU,
  expm1ImplCPU,
  floorImplCPU,
  \n  gatherV2ImplCPU,
  greaterImplCPU,
  lessImplCPU,
  \n  linSpaceImplCPU,
  logImplCPU,
  \n  maxImplCPU,
  minimumImplCPU,
  \n  multiplyImplCPU,
  \n  negImplCPU,
  \n  prodImplCPU,
  \n  rangeImplCPU,
  \n  rsqrtImplCPU,
  \n  simpleAbsImplCPU,
  \n  sliceImplCPU,
  \n  stridedSliceImplCPU,
  \n  subImplCPU,
  \n  tileImplCPU,
  \n  topImplCPU,
  \n  transposeImplCPU,
  \n  uniqueImplCPU,
  \n  };

export function getVecChannels(name: string, rank: number): string[] {
  return ['x', 'y', 'z', 'w', 'u', 'v'].slice(0, rank).map(d => '{}$\{d\}$');\n}

export function getChannels(name: string, rank: number): string[] {
  if (rank === 1) {
    return [name];
  } else {
    return getVecChannels(name, rank);
  }
}

export function getSourceCoords(rank: number, dims: string[]): string {
  if (rank === 1) {
    return 'rc';
  } else {
    let coords = '';\n    for (let i = 0; i < rank; i++) {
      coords += dims[i];
      if (i < rank - 1) {
        coords += ' ,';\n      }\n    }\n    return coords;\n  }
}"
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---

```javascript
import {env} from '@tensorflow/tfjs-core';
import {GPGPUContext} from '@tensorflow/tfjs-core';
import {GPGPUContext} from '@tensorflow/tfjs-core';
import {getInternalFormatForFloat16MatrixTexture, getInternalFormatForFloat16PackedMatrixTexture,
        getInternalFormatForFloat32MatrixTexture, getInternalFormatForPackedMatrixTexture,
        getInternalFormatForUnsignedBytesMatrixTexture} from '@tensorflow/tfjs-core';
import {getPackedMatrixTextureShapeWidthHeight, getUnpackedMatrixTextureShapeWidthHeight, PhysicalTextureType,
        TextureConfig, TextureUsage} from '@tensorflow/tfjs-core';

export class TextureManager {
  private numUsedTextures = 0;
  private numFreeTextures = 0;
  private _numBytesAllocated = 0;
  private _numBytesFree = 0; // How many bytes that have been allocated
                                            // are available for reuse.
  private freeTextures = {};
  private usedTextures = {};

  constructor(private gpgpu: GPGPUContext) {}

  acquireTexture(
      shapeRC: [number, number],
      usage: TextureUsage,
      isPacked: boolean): WebGLTexture {
    const physicalTexType = getPhysicalFromLogicalTextureType(usage, isPacked);

    const shapeKey = getKeyFromTextureShape(shapeRC, physicalTexType, isPacked);
    if (!(shapeKey in this.freeTextures)) {
      this.freeTextures[shapeKey] = [];
    }
    if (!(shapeKey in this.usedTextures)) {
      this.usedTextures[shapeKey] = [];
    }

    const texBytes = computeBytes(
        shapeRC, physicalTexType,
        this.gpgpu.gl, this.gpgpu.textureConfig,
        isPacked);

    if (this.freeTextures[shapeKey].length > 0) {
      this.numFreeTextures--;
      this.numUsedTextures++;
      this._numBytesFree -= texBytes;
      this.log();
      const newTexture = this.freeTextures[shapeKey].shift();
      this.usedTextures[shapeKey].push(newTexture);
      return newTexture;
    }

    let newTexture;
    if (physicalTexType === PhysicalTextureType.PACKED_2X2_FLOAT32) {
      newTexture = this.gpgpu.createPackedMatrixTexture(shapeRC[0], shapeRC[1]);
    } else if (physicalTexType === PhysicalTextureType.PACKED_2X2_FLOAT16) {
      newTexture = this.gpgpu.createFloat16PackedMatrixTexture(shapeRC[0], shapeRC[1]);
    } else if (physicalTexType === PhysicalTextureType.UNPACKED_FLOAT32) {
      newTexture = this.gpgpu.createFloat32MatrixTexture(shapeRC[0], shapeRC[1]);
    } else if (physicalTexType === PhysicalTextureType.UNPACKED_FLOAT16) {
      newTexture = this.gpgpu.createFloat16MatrixTexture(shapeRC[0], shapeRC[1]);
    } else if (physicalTexType === PhysicalTextureType.PACKED_4X1_UNSIGNED_BYTE) {
      newTexture = this.gpgpu.createUnsignedBytesMatrixTexture(shapeRC[0], shapeRC[1]);
    }
    this.usedTextures[shapeKey].push(newTexture);

    this.numUsedTextures++;
    this._numBytesAllocated += texBytes;
    this.log();
    return newTexture;
  }

  releaseTexture(
      texture: WebGLTexture, shape: [number, number],
      logicalTexType: TextureUsage, isPacked: boolean): void {
    if (this.freeTextures == null) {
      // Already disposed.
      return;
    }

    const physicalTexType = getPhysicalFromLogicalTextureType(logicalTexType, isPacked);
    const shapeKey = getKeyFromTextureShape(shape, physicalTexType, isPacked);
    if (!(shapeKey in this.freeTextures)) {
      this.freeTextures[shapeKey] = [];
    }
    this.usedTextures[shapeKey].push(texture);

    this.numFreeTextures++;
    this._numBytesFree += texBytes;
    this.log();
    return;
  }

  getLogicalTextureType(physicalTexType: PhysicalTextureType, isPacked: boolean): TextureUsage {
    switch (physicalTexType) {
      case PhysicalTextureType.PACKED_2X2_FLOAT32:
        return TextureUsage.FLOATTEXTURE;
      case PhysicalTextureType.PACKED_2X2_FLOAT16:
        return TextureUsage.FLOATTEXTURE;
      case PhysicalTextureType.UNPACKED_FLOAT32:
        return TextureUsage.FLOATTEXTURE;
      case PhysicalTextureType.UNPACKED_FLOAT16:
        return TextureUsage.FLOATTEXTURE;
      case PhysicalTextureType.PACKED_4X1_UNSIGNED_BYTE:
        return TextureUsage.FLOATTEXTURE;
      default:
        throw new Error('Cannot create a texture of unknown type.');
    }
  }

  async getGPGPUContext(): Promise<GPGPUContext> {
    return env().get('WEBGL_TEXTURE_MANAGER').gpgpu;
  }

  private log(): void {
    if (this.logEnabled) {
      console.log(`
        numUsedTextures: ${this.numUsedTextures}
        numFreeTextures: ${this.numFreeTextures}
        numBytesAllocated: ${this._numBytesAllocated}
        numBytesFree: ${this._numBytesFree}
        numBytesAvailable: ${this._numBytesFree}
        numBytesThreshold: ${this._numBytesFree}
      `);
    }
  }
}
```

---

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```javascript
TextureUsage.UPLOAD) \n  return PhysicalTextureType.PACKED_2X2_FLOAT32; \n} else if (logicalTexType === TextureUsage.RENDER || logicalTexType == null) \n  return getPhysicalTextureForRendering(isPacked); \n} else if (\n  logicalTexType === TextureUsage.DOWNLOAD || \n  logicalTexType === TextureUsage.PIXELS) \n  return PhysicalTextureType.PACKED_4X1_UNSIGNED_BYTE; \n} \n\nthrow new Error(`Unknown logical texture type ${\logicalTexType \} `);
\n}
\n\n\ngetKeyFromTextureShape(\n  shapeRowsCol: [number, number], \n  physicalTexType: PhysicalTextureType, \n  isPacked: boolean): string \n  \n  return `${shapeRowsCol[0]}_${shapeRowsCol[1]}_${physicalTexType}_${isPacked}`;

```
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License.
*
are this constant * screen area
1/* dpi / 1024 / 1024.\nunconst BEFORE_PAGING_CONSTANT = 600;\nunfunction numMBBeforeWarning(): number {\n  if (env().global.screen == null) {\n    return 1024; // 1 GB.\n  }\n  return (env().global.screen.height * env().global.screen.width * window.devicePixelRation) \n}
BEFORE_PAGING_CONSTANT / 1024 / 1024;\nunexport class MathBackendWebGL extends KernelBackend
{\n  texData: DataStorage<TextureData>;\n  gpgpu: GPGPUContext;\n  private static nextDataId = 0;\n  private nextDataId(): number {\n    return MathBackendWebGL.nextDataId++;\n  } // Maps data ids that have a pending read operation, to list of subscribers.\n  private pendingRead = new WeakMap<DataId, Array<(arr: TypedArray) => void>>(); // List of data ids that are scheduled for disposal, but are waiting on an upload operation.\n  private pendingDisposal = new WeakSet<DataId>(); // Used to count the number of 'shallow' sliced tensors that point to the\n  // same data id.\n  dataRefCount = new WeakMap<DataId, number>();\n  private numBytesInGPU = 0;\n  private canvas: HTMLCanvasElement|OffscreenCanvas;\n  private programTimersStack: TimerNode[];\n  private activeTimers: TimerNode[]; // Accumulated time spent (including blocking) in uploading data to webgl.\n  private uploadWaitMs = 0; // Accumulated time spent (including blocking in downloading data from webgl.\n  private downloadWaitMs = 0;\n  private cpuBackend: KernelBackend;\n  // Number of bits of precision of this\n  private floatPrecisionValue: 32|16;\n  private textureManager: TextureManager;\n  private binaryCache: {[key: string]: GPGPUBinary};\n  private gpgpuCreatedLocally: boolean;\n  private numMBBeforeWarning: number;\n  private warnedAboutMemory = false;\n  private warnedAboutCPUBackend = false;\n  constructor(gpgpu?: GPGPUContext) {\n    super();\n    if (!env().getBool('HAS_WEBGL')) {\n      throw new Error('WebGL is not supported on this device');\n    }\n    if (gpgpu == null) {\n      const gl = getWebGLContext(env().getNumber('WEBGL_VERSION'));\n      this.binaryCache = getBinaryCache(env().getNumber('WEBGL_VERSION'));\n      this.canvas = gl.canvas;\n      this.gpgpu = new GPGPUContext(gl);\n      this.canvas = gl.canvas;\n      this.gpgpuCreatedLocally = true;\n    } else {\n      this.gpgpu = gpgpu;\n      this.binaryCache = {};
      this.gpgpuCreatedLocally = false;\n      this.canvas = gl.canvas;\n    }\n    this.setTextureManager = new TextureManager(this.gpgpu);\n    this.numMBBeforeWarning = numMBBeforeWarning();\n    this.texData = new DataStorage(this, engine());\n    \n    \n    \n    this.numDataIds() {\n      return this.texData.numDataIds() +\n        (this.cpuBackend ? this.cpuBackend.numDataIds() : 0);\n    \n    \n    \n    this.pendingDeletes();\n  }\n  write(values: BackendValues, shape: number[], dtype: DataType): DataId {\n    if (env().getBool('WEBGL_CHECK_NUMERICAL_PROBLEMS') || env().getBool('DEBUG')) {\n      this.checkNumericalProblems(values);\n    }\n    if (dtype === 'complex64') {\n      throw new Error('Cannot write to a complex64 dtype. Please use tf.complex(real, imag).');\n    }\n    const dataId = {id: this.nextDataId()};\n    this.texData.set(dataId, {shape, dtype, values, usage: TextureUsage.UPLOAD, refCount: 1});\n    return dataId;\n  } // Return refCount of a 'TensorData'. *\n  refCount(dataId: DataId): number {\n    if (this.texData.has(dataId)) {\n      const tensorData = this.texData.get(dataId);\n      return 0;\n    }\n  } // Increase refCount of a 'TensorData'. *\n  incRef(dataId: DataId): void {\n    const texData = this.texData.get(dataId);\n  }\n  move(dataId: DataId, values: BackendValues, shape: number[], dtype: DataType, refCount: number): void {\n    if (env().getBool('DEBUG')) {\n      this.checkNumericalProblems(values);\n    }\n    if (dtype === 'complex64') {\n      throw new Error('Cannot write to a complex64 dtype. Please use tf.complex(real, imag).');\n    }\n    this.texData.set(dataId, {shape, dtype, values, usage: TextureUsage.UPLOAD, refCount: 1});\n    return \n  }\n  disposeIntermediateTensorInfo(tensorInfo: TensorInfo): void {\n    this.disposeData(tensorInfo.dataId);\n  }\n  disposeData(tensorInfo: TensorInfo): void {\n    this.disposeData(tensorInfo.dataId);\n  }\n  readSync(dataId: DataId): BackendValues {\n    const tensorData = this.texData.get(dataId);\n    const values, dtye: complexTensorInfos, slice, shape, isPacked] = tensorData;\n    // The presence of 'slice' indicates this tensor is a shallow slice of a different tensor, and is using that original tensor's texture. Run 'clone' in order to copy that texture and read from it.\n    if (slice !== null) {\n      let program;\n    }\n  }\n}
this.runWebGLProgram(program, [{dataId, shape, dtype}]);
const data = this.readSync(res.dataId);
this.disposeIntermediateTensorInfo(res);
return data;
} else if (dtype !== 'string') {
  let start: number;
  if (shouldTimeProgram) {
    start = util.now();
  }

  let result: Float32Array;
  if (dtype === 'complex64') {
    const realValues =
      this.readSync(complexTensorInfos.real.dataId) as Float32Array;
    const imagValues =
      this.readSync(complexTensorInfos.imag.dataId) as Float32Array;
    result =
      backend_util.mergeRealAndImagArrays(realValues, imagValues);
  } else {
    result =
      this.getValuesFromTexture(dataId);
  }

  if (shouldTimeProgram) {
    this.downloadWaitMs += util.now() - start;
  }

  return this.convertAndCacheOnCPU(dataId);
}

async read(dataId: DataId): Promise<BackendValues> {
  if (this.pendingRead.has(dataId)) {
    const subscribers =
      this.pendingRead.get(dataId);
    return new Promise<TypedArray>(resolve => subscribers.push(resolve));
  }

  const texData = this.texData.get(dataId);
  const {values, shape, slice, dtype, complexTensorInfos, isPacked} =
    texData;

  // The presence of `slice` indicates this tensor is a shallow slice of an
  // different tensor, and is
  if (slice != null) {
    let program:
      if (isPacked) {
        program = new UnaryOpPackedProgram(shape,
          unary_op.CLONE);
      } else {
        program = new UnaryOpProgram(shape, unary_op.CLONE);
      }

    const res =
      this.runWebGLProgram(program, [{dataId, shape, dtype}], dtype);
    const data =
      this.read(res.dataId);
    this.disposeIntermediateTensorInfo(res);
    return data;
  }

  if (values != null) {
    return this.convertAndCacheOnCPU(dataId);
  }

  if (!env().getBool('WEBGL_DOWNLOAD_FLOAT_ENABLED') &&
    env().getNumber('WEBGL_VERSION') === 2) {
    throw new Error(`tensor.data() with WEBGL_DOWNLOAD_FLOAT_ENABLED=false and ` +
      `WEBGL_VERSION=2 not yet supported.`);
  }

  let buffer = null;
  let tmpDownloadTarget: TensorInfo;

  if (dtype !== 'complex64' &&
    env().get('WEBGL_BUFFER_SUPPORTED')) {
    // Possibly copy the texture into a buffer before inserting a
    // fence.
    tmpDownloadTarget = this.decode(dataId);
    const tmpData =
      this.texData.get(tmpDownloadTarget.dataId);
    buffer = this.gpgpu.createBufferFromTexture(
      tmpData.texture, ...tex_util.getDenseTexShape(shape));
  }

  this.pendingRead.set(dataId, []);

  if (dtype
    !== 'complex64') {
    // Create a fence and wait for it to resolve.
    await this.gpgpu.createAndWaitForFence();
  }

  // Download the values from the GPU.
  let vals:
    Float32Array;
  if (dtype === 'complex64') {
    const ps = await Promise.all(
      this.read(complexTensorInfos.real.dataId),
      this.read(complexTensorInfos.imag.dataId)
    );
    const realValues = ps[0];
    const imagValues = ps[1];
    vals =
      backend_util.mergeRealAndImagArrays(realValues as Float32Array,
        imagValues as Float32Array);
  } else if (buffer == null) {
    vals =
      this.getValuesFromTexture(dataId);
  } else {
    const size = util.sizeFromShape(shape);
    vals =
      this.gpgpu.downloadFloat32MatrixFromBuffer(buffer, size);
  }

  if (tmpDownloadTarget != null) {
    this.disposeIntermediateTensorInfo(tmpDownloadTarget);
  }

  const dTypeVals =
    this.convertAndCacheOnCPU(dataId, vals);

  const subscribers =
    this.pendingRead.get(dataId);

  this.pendingRead.delete(dataId);
  // Notify all pending reads.
  subscribers.forEach(resolve =>
    resolve(dTypeVals));
}

return dTypeVals;
if (env().getBool('WEBGL_RENDER_FLOAT32_ENABLED')) {
  throw Error(`The value ${num} cannot be represented with your current settings. Consider enabling float32 rendering: ` + `'tf.env().set('WEBGL_RENDER_FLOAT32_ENABLED', true);'`);
}

if (env().getBool('WEBGL_PACK') && &isPacked === true) {
  const outputShape = shouldUsePackedProgram ? webgl_util.getShapeAs3D(shape) : shape;
  const program = new EncodeFloatPackedProgram(outputShape as [number, number, number]);
}

let outerMostTime = false;
if (this.programTimersStack == null) {
  this.programTimersStack = newActiveTimers;
  outerMostTime = true;
} else {
  this.activeTimers.push(newActiveTimers);
}

new ActiveTimers: TimerNode[] = [];

if (this.programTimersStack) {
  outerMostTime = true;
} else {
  outerMostTime = false;
}

this.activeTimers = new ActiveTimers:

if (outerMostTime) {
  this.programTimersStack = null;
}

const res: WebGLTimingInfo = {
  uploadWaitMs: this.uploadWaitMs,
  downloadWaitMs: this.downloadWaitMs,
  kernelMs: null,
  wallMs: null // will be filled by the engine
};

const kernelMs = await Promise.all(flattenedActiveTimerQueries);
res['kernelMs'] = util.sum(kernelMs);

res['getExtraProfileInfo'] = () =>
  res['getExtraProfileInfo'] = () =>
    false;

res['kernelMs'] = {
  error: 'WebGL query timers are not supported in this environment.'
};

this.uploadWaitMs = 0;
this.downloadWaitMs = 0;
return res;
}

private startTimer(): WebGLQuery|CPUTimerQuery {
  if (env().getNumber('WEBGL_DISJOINT_QUERY_TIMER_EXTENSION_RELIABLE') > 0) {
    return this.gpgpu.beginQuery();
  }
  return {startMs: util.now(), endMs: null};
}

private endTimer(query: WebGLQuery|CPUTimerQuery): WebGLQuery|CPUTimerQuery {
  if (env().getNumber('WEBGL_DISJOINT_QUERY_TIMER_EXTENSION_RELIABLE') > 0) {
    this.gpgpu.endQuery();
  }
  (query as CPUTimerQuery).endMs = util.now();
  return query;
}

private async getQueryTime(query: WebGLQuery|CPUTimerQuery): Promise<number> {
  if (env().getNumber('WEBGL_DISJOINT_QUERY_TIMER_EXTENSION_RELIABLE') > 0) {
    return this.gpgpu.waitForQueryAndGetTime(query as WebGLQuery);
  }
  const timerQuery = query as CPUTimerQuery;
  return timerQuery.endMs - timerQuery.startMs;
}

private pendingDeletes = 0;

/**
 * Decrease the RefCount on the dataId and dispose the memory if the dataId
 * has 0 refCount. If there are
pending read on the data, the disposal would\n * added to the pending delete queue. Return true if the dataId is
removed\n * from backend or the backend does not contain the dataId, false if the\n * dataId is not removed.
Memory may or may not be released even when dataId\n * is removed, which also depends on dataRefCount, see \n`releaseGPU`\n * @param dataId\n * @param force Optional, remove the data regardless of refCount\n * @return true if the\n * dataId is removed
   * from backend or the backend does not contain the dataId, false if the
   * dataId is not removed.

   * @param dataId
   * @oaram force Optional, remove the data regardless of refCount
   */

disposeData(dataId: DataId, force = false): boolean {
    if (this.pendingDisposal.has(dataId)) {
      return false;
    }

    // No-op if already disposed.
    if (!this.texData.has(dataId)) {
      return true;
    }

    // if force flag is
    // set, change refCount to 0, this would ensure disposal
    // when added to the pendingDisposal queue. Memory may
    // or may not be released, which also depends on dataRefCount, see
    // `releaseGPU`.
    // @param dataId
    // @oaram force Optional, remove the data regardless of refCount
    // */

    this.releaseGPUData(dataId);
    const {complexTensorInfos} = this.texData.get(dataId);
    if (complexTensorInfos != null) {
      this.disposeData(complexTensorInfos.real.dataId, force);
      this.disposeData(complexTensorInfos.imag.dataId, force);
    }

    this.texData.delete(dataId);

    return true;
  }

  private releaseGPUData(dataId: DataId): void {
    const {texture, dtype, texShape, usage, isPacked, slice} =
        this.texData.get(dataId);
    const key = slice && slice.origDataId || dataId;
    const refCount =
        this.dataRefCount.get(key);

    if (refCount > 1) {
      this.dataRefCount.set(key, refCount - 1);
    } else {
      this.dataRefCount.delete(key);
      if (texture != null) {
        this.numBytesInGPU -=
            this.computeBytes(texShape, dtype);
        this.textureManager.releaseTexture(texture, texShape, usage,
            isPacked);
      }
    }

    const texData = this.texData.get(dataId);
    texData.texture = null;
    texData.texShape = null;
    texData.isPacked = false;
    texData.slice = null;

    return true;
  }

  getTexture(dataId: DataId): WebGLTexture {
    this.uploadToGPU(dataId);
    return this.texData.get(dataId).texture;
  }

  /**
   * Returns internal information for the specific data bucket. Used in unit
   * tests.\n   */
  getDataInfo(dataId: DataId): TextureData {
    return this.texData.get(dataId);
  }

  private getCPUBackend(): KernelBackend|null {
    if (!env().getBool('WEBGL_CPU_FORWARD')) {
      return null;
    }

    if (this.cpuBackend == null) {
      this.cpuBackend = engine().findBackend('cpu');
    }

    return this.cpuBackend;
  }

  // Tests
  // whether all the inputs to an op are small and on the CPU. WebGL\n  // kernels opt into running this check and forwarding when appropriate.
  // TODO(https://github.com/tensorflow/tfjs/issues/872): Develop a more\nT
  // sustainable strategy for optimizing
  // backend execution of ops.
  // * shouldExecuteOnCPU in inputs: TensorInfo[],\n    sizeThreshold =
    // CPU_HANDOFF_SIZE_THRESHOLD): boolean {\n    // const cpuBackend = this.getCPUBackend();\n    // if (!env().getBool('IS_TEST') && !this.warnedAboutCPUBackend &&
    // cpuBackend == null) {\n    // console.warn(\n    // 'Your application contains ops that are small enough to be ' +
    // 'executed on the CPU\n    // backend, however the GPU backend cannot ' +\n    // 'be found. Consider importing the CPU backend ' +\n    // '(@tensorflow/tfjs-backend-cpu) for better performance.');\n    // this.warnedAboutCPUBackend = true;
    // }
    // this.return cpuBackend = null &
    // return true;
    // inputs.every((\n    // this.return input => this.texData.get(input.dataId).texture ==
    // return true;
    // util.sizeFromShape(input.shape) < sizeThreshold)\n    // return true;
    // this.return getGPGPUContext(): GPGPUContext {\n    // return this.gpgpu\n    // return true;
    // where(condition: Tensor): Tensor2D {\n    // backend util.warn(\n    // 'tf.where() in\n    // WebGL locks the UI thread. ' +\n    // 'Call tf.whereAsync() instead');\n    // const condVals = condition.dataSync();\n    // return whereImpl(condition.shape, condVals);
    // this.return private packedUnaryOp(x: TensorInfo, op: string, dtye:
    // DataType) {\n    // const program = new UnaryOpPackedProgram(x.shape, op);
    // return info =
    // this.compileAndRun(program, [x], dtye);
    // return engine().makeTensorFromDataId(
    // this.return outInfo.dataId,\n    // outInfo.dataId, outInfo.dtype);\n    // return true;
    // TODO(msoulanille) remove this once the backend has been modularized\n    // a copy is needed here to break a circular dependency.\n    // Also remove the op from unary_op.abs<T extends}\n    // Tensor>(x: T): T {\n    // TODO: handle cases when x is complex.\n    // if (this.shouldExecuteOnCPU([x]) &&
    // x.dtype !== 'complex64') {\n    // const outValues =\n    // simpleAbsImplCPU(this.texData.get(x.dataId).values as\n    // typedArray);
    // return this.makeOutput(x.shape, x.dtype, outValues);\n    // return true;
    // (env().getBool('WEBGL_PACK_UNARY_OPERATIONS')) {\n    // return this.packedUnaryOp(x, unary_op.ABS,
uniformValues: texData.values as TypedArray
          return {
            shape: input.shape,
            texData: null,
            isUniform: true,
            uniformValues: texData.values as TypedArray
          };
        }

        // This ensures that if a packed program's inputs have not yet been
        // uploaded to the GPU, they get uploaded as packed right off the bat.
        if (program.packedInputs) {
          texData.isPacked = true;
          texData.shape = input.shape;
        } else if (!!texData.isPacked !== !!program.packedInputs) {
          input = texData.isPacked ? this.unpackTensor(input) :
          this.packTensor(input);
          dataToDispose.push(input);
          texData = this.texData.get(input.dataId);
        } else if (!!texData.isPacked !== !!program.packedInputs) {
          input = texData.isPacked ? this.unpackTensor(input) :
          this.packTensor(input);
          dataToDispose.push(input);
          texData = this.texData.get(input.dataId);
        }

        // This is a special case where a texture exists for a tensor
        // but the shapes are incompatible (due to packing constraints) because
        // the tensor did not have a chance to go through the packed reshape
        // shader. This only happens when we reshape the *same* tensor to
        // *distinct* inputs to an op, e.g. dotting a vector with itself. This
        // case will disappear once
        // packed uploading is the default;
        const savedInput = input;
        const targetShape = input.shape;

        input.shape = texData.shape;
        input = this.packedReshape(input as Tensor, targetShape);
        dataToDispose.push(input);
        texData = this.texData.get(input.dataId);

        savedInput.shape = targetShape;
      }

      this.uploadToGPU(input.dataId);
      return {shape: input.shape, texData, isUniform: false};
    });

    this.uploadToGPU(output.dataId);
    const outputData:
        TensorData = {shape: output.shape, texData: outData, isUniform: false};
    const key = gpgpu_math.makeShaderKey(program, inputsData, outputData);
    const binary = this.getAndSaveBinary(key, () => {
      return gpgpu_math.compileProgram(
          this.gpgpu, program, inputsData, outputData);
    });
    const shouldTimeProgram = this.activeTimers != null;
    let query = WebGLQuery|CPUTimerQuery;
    if (shouldTimeProgram) {
      query = this.startTimer();
    }

    gpgpu_math.runProgram(
        this.gpgpu,
        binary, inputsData, outputData, customSetup);

    dataToDispose.forEach(info =>
      this.disposeIntermediateTensorInfo(info));
    if (shouldTimeProgram) {
      query = this.endTimer(query);
      this.activeTimers.push(
          {name: program.constructor.name, query: this.getQueryTime(query)});
    }

    if (!env().getBool('WEBGL_LAZILY_UNPACK') && outData.isPacked &&
        preventEagerUnpackingOfOutput
        // This is a special case where a texture exists for a tensor
        console.error('WEBGL_LAZILY_UNPACK') && outData.isPacked &&
          preventEagerUnpackingOfOutput
        === false) {
      const unpacked = this.unpackTensor(output);
      this.disposeIntermediateTensorInfo(output);
      return unpacked;
    }
    return output;
  }

  compileAndRun(
      program: GPGPUProgram, inputs:
          TensorInfo[], outputDtype?: DataType,
      customSetup?: (gpgpu: GPGPUContext, webGLProgram:
          WebGLProgram) => void,
      preventEagerUnpackingOfOutput = false): TensorInfo {
    outputDtype = outputDtype || inputs[0].dtype;
    const outInfo = this.runWebGLProgram(
        program, inputs, outputDtype,
        customSetup,
        preventEagerUnpackingOfOutput);
    return outInfo;
  }

  private getAndSaveBinary(key: string, getBinary: () => GPGPUBinary):
      GPGPUBinary {
    if (!(key in this.binaryCache)) {
      this.binaryCache[key] = getBinary();
    }
    return this.binaryCache[key];
  }

  getTextureManager(): TextureManager {
    return this.textureManager;
  }

  private disposed = false;

  dispose() {
    if (this.disposed) {
      return;
    }
    // Avoid disposing the compiled webgl programs during unit testing
    // because it slows down test execution.
    if (!env().getBool('IS_TEST')) {
      this.disposeIntermediateTensorInfo(true);
      allKeys = Object.keys(this.binaryCache);
    }
    if (this.canvas != null &&
        (typeof (HTMLCanvasElement) !== 'undefined')) {
      this.canvas.remove();
    } else {
      this.canvas = null;
    }
  }

  floatPrecision(): 16|32 {
    if (this.floatPrecisionValue == null) {
      this.floatPrecisionValue = tidy(() => {
        if (!env().getBool('WEBGL_RENDER_FLOAT32_ENABLED')) {
          // Momentarily switching DEBUG flag to false
          env().setBool('IS_TEST', true);
        }
        return 16;
      });
    }
    return this.floatPrecisionValue;
  }

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/** Returns the smallest representable number. */
number epsilon(): { return this.floatPrecision() === 32 ? EPSILON_FLOAT32 : EPSILON_FLOAT16; }

uploadToGPU(dataId: DataId): void { const texData = this.texData.get(dataId);
  const [shape, dtype, values, texture, usage, isPacked] = texData;
  if (texture !== null) { // Array is already on GPU. No-op.
    return;
  }
  const shouldTimeProgram = this.activeTimers !== null;
  let start: number;
  if (shouldTimeProgram) { start = util.now(); }
  let texShape = texData.texShape;
  if (texShape === null) { texShape = WebGL.getTextureShapeFromLogicalShape(shape, isPacked); }
  const {shapeAs3D, height, width} = texShape[1];
  const texture = values instanceof Uint8Array ? WebGL.uploadDenseMatrixToTexture(this, dataId): WebGL.uploadDenseMatrixToTexture(this, dataId); // We want the output to remain packed regardless of the value of outputSideUtils.PIXELS;
  const tempTexture = this.acquireTexture(shape, TextureUsage.UPLOAD, dtype, isPacked);
  const outData = this.convertAndCacheOnCPU(dataId, float32Values);
  this.releaseGPUData(dataId);
  this.gpgpu.uploadDenseMatrixToTexture(tempTexture, width, height, outData.asTypedArray); // Once uploaded, don't store the values on cpu.
  this.texData.delete(dataId);
}

WEBGL_PACK const preventEagerUnpacking = true;

const encodedOutputTarget = this.runWebGLProgram(program, [tempBusyInputHandle.dataId], dtype, null, preventEagerUnpacking, true); // Have the original texture assume the identity of the encoded output.
const outputTexData = this.texData.get(encodedOutputTarget.dataId);
const {shape, usage, isPacked} = outputTexData;
this.texData.delete(encodedOutputTarget.dataId); // If we have a texture, store it here.

WEBGL_TEXTURE const numBytesInGPU = this.numBytesInGPU + this.computeBytes(shape, dtype); // WebGL texture
const this.texture = values instanceof Uint8Array ? WebGL.uploadDenseMatrixToTexture(this, dataId): WebGL.uploadDenseMatrixToTexture(this, dataId); // We want the output to remain packed regardless of the value of outputSideUtils.PIXELS;

WEBGL_TEXTURE const newTexture = this.acquireTexture(shape, usage, dtype, isPacked);
this.texData.delete(tempBusyInputHandle.dataId);

WEBGL_TEXTURE this.disposeIntermediateTensorInfo(tempBusyInputHandle); // We want the output to remain packed regardless of the value of outputSideUtils.PIXELS;

WEBGL_TEXTURE this.releaseGPUData(dataId);

WEBGL_TEXTURE if (float32Values !== null) { this.texData.values = float32ToTypedArray<any>({a: Float32Array, dtype: 'float32'}, dtype as any): {
  return texData.values as TypedArray;
}

WEBGL_TEXTURE private acquireTexture(shape: number, number, texture: TextureUsage, dtype: DataType): boolean;

WEBGL_TEXTURE this.textureManager.acquireTexture(shape, TextureUsage._PIXeLS, isPacked);

WEBGL_TEXTURE const mb = (this.numBytesInGPU / 1024 / 1024).toFixed(2);
console.warn(`High memory usage in GPU: ${mb} MB, most likely due to a memory leak`);

WEBGL_TEXTURE return this.textureManager.acquireTexture(shape, TextureUsage._PIXeLS, isPacked);

WEBGL_TEXTURE private computeBytes(shape: number, number, dtype: DataType): { return shape[0] * shape[1] * util.getBytesPerElement(dtype); }

WEBGL_TEXTURE /* extension NumericDataType:<a name="Float32Array"/> */

datatype(a, shape: number, number, dtype: DataType): { return shape[0] * shape[1] * util.getBytesPerElement(dtype); }

WEBGL_TEXTURE function float32ToTypedArray<T extends NumericDataType>({a: Float32Array, dtype: D}: tf.DataTypeMap[D]): {
  return a as tf.DataTypeMap[D];
}

WEBGL_TEXTURE else if (dtype === 'int32' || dtype === 'bool') { return (dtype === 'int32') ? new Int32Array(a.length) : new Uint8Array(a.length); }

WEBGL_TEXTURE return new Error('Unknown dtype $dtype$');
}

WEBGL_TEXTURE */ @license * Copyright 2019 Google LLC. All Rights Reserved.
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=============================================================================

*/

import {env} from '@tensorflow/tfjs-core';

import * as gpgpu_util from './gpgpu_util';
import * as webgl_util from './webgl_util';
export {MathBackendWebGL, WebGLMemoryInfo, WebGLTimingInfo} from './backend_webgl';
export {setWebGLContext} from './canvas_util';
export {GPGPUContext} from './gpgpu_context';
export {GPGPUProgram} from './gpgpu_math';

/**
 * Enforce use of half precision textures if available on the platform.
 * @doc {heading: 'Environment', namespace: 'webgl'}
 */
export function forceHalfFloat(): void {
  env().set('WEBGL_FORCE_F16_TEXTURES', true);
}

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 *
 *=============================================================================

*/

import {backend_util} from '@tensorflow/tfjs-core';

import {GPGPUProgram} from './gpgpu_math';
import {getChannels} from './packing_util';
import {getCoordsDataType} from './shader_compiler';

export const CHECK_NAN_SNIPPET = `
  if (isNaN.a) return a;
  if (isNaN.b) return b;
`;

export const SQUARED_DIFFERENCE = 'return (a - b) * (a - b);';

export const BinaryOpProgram implements GPGPUProgram {
  variableNames = ['A', 'B'];
  outputShape: number[];
  userCode: string;

  constructor(op: string, aShape: number[], bShape: number[]) {
    this.outputShape = backend_util.assertAndGetBroadcastShape(aShape, bShape);
    this.userCode = `float binaryOperation(float a, float b) {
      ${op}
    }

    void main() {
      float a = getAAtOutCoords();
      float b = getBAtOutCoords();
      setOutput(binaryOperation(a, b));
    }
  }
}

*/

import {backend_util} from '@tensorflow/tfjs-core';

import {GPGPUProgram} from './gpgpu_math';

import {getChannels} from './packing_util';
import {getCoordsDataType} from './shader_compiler';

export const CHECK_NAN_SNIPPET = `
  result.r = isNaN.r > 0. ? NAN : result.r;
  result.g = isNaN.g > 0. ? NAN : result.g;
  result.b = isNaN.b > 0. ? NAN : result.b;
  result.a = isNaN.a > 0. ? NAN : result.a;
`;

export const ELU_DER = `vec4 bGTEZero = vec4(greaterThanEqual(b, vec4(0.)));
return (bGTEZero * a) + ((vec4(1.0) - bGTEZero) * (a * (b + vec4(1.0))));
`;

export const NOT_EQUAL = `return vec4(notEqual(a, b));
`;

export class BinaryOpPackedProgram implements GPGPUProgram {
  variableNames = ['A', 'B'];
  outputShape: number[];
  userCode: string;
  supportsBroadcasting = true;
  packedInputs = true;
  packedOutput = true;

  constructor(
      op: string, aShape: number[], bShape: number[],
      checkOutOfBounds = false) {
    this.outputShape = backend_util.assertAndGetBroadcastShape(aShape, bShape);
    const rank = this.outputShape.length;
    let checkOutOfBoundsString = '';
    if (checkOutOfBounds) {
      if (rank === 0 || util.sizeFromShape(this.outputShape) === 1) {
        checkOutOfBoundsString = `result.y = 0.;
        result.z = 0.;
        result.w = 0.;
      } else {
        const dtype = getCoordsDataType(rank);
        checkOutOfBoundsString = `if (rank === 0) {
          if (checkOutOfBoundsString === 1) {
            result.y = (coords + 1) >= ${this.outputShape[0]} ? 0. : result.y;
            result.z = 0.;
            result.w = 0.;
          } else {
            const channels = getChannels('coords', rank);
            checkOutOfBoundsString += `result.y = (coords + 1) >= ${this.outputShape[0]} ? 0. : result.y;
```
checkOutOfBoundsString += `\n  bool nextRowOutOfBounds =
    (${channels[rank - 2]} + 1) >=
    ${this.outputShape[rank - 2]};
  bool nextColOutOfBounds =
    (${channels[rank - 1]} + 1) >=
    ${this.outputShape[rank - 1]};
  result.y = nextColOutOfBounds ? 0.:
    result.y;
  result.z =
    nextRowOutOfBounds ? 0.:
    result.z;
  result.w = nextColOutOfBounds || nextRowOutOfBounds ? 0.:
    result.w;
`;
    }
  }
    }

    this.userCode = `
      vec4 binaryOperation(vec4 a, vec4 b) {
        return (${op})
      }

      void main() {
        vec4 a = getAAtOutCoords();
        vec4 b = getBAtOutCoords();

        vec4 result = binaryOperation(a, b);
        ${checkOutOfBoundsString}

        setOutput(result);
      }
    `;
  }
}

*/

import {env, KernelConfig, KernelFunc, LeakyRelu, LeakyReluAttrs, LeakyReluInputs, TensorInfo, util} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import {BinaryOpProgram} from '../binaryop_gpu';
import {BinaryOpPackedProgram} from '../binaryop_packed_gpu';

export const LEAKYRELU = `return (a < 0.) ? b * a : a;`;
export const LEAKYRELU_PACKED = `
  vec4 aLessThanZero = vec4(lessThan(a, vec4(0.)));
  return (aLessThanZero * (b * a)) + ((vec4(1.0) - aLessThanZero) * a);
`;

export function leakyRelu(args: {
  inputs: LeakyReluInputs,
  backend: MathBackendWebGL,
  attrs: LeakyReluAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {alpha} = attrs;

  const $alpha = backend.makeTensorInfo([], 'float32', util.createScalarValue(alpha as {} as 'float32', 'float32'));

  const program = env().getBool('WEBGL_PACK_BINARY_OPERATIONS') ?
    new BinaryOpPackedProgram(LEAKYRELU_PACKED, x.shape, $alpha.shape) :
    new BinaryOpProgram(LEAKYRELU, x.shape, $alpha.shape);
  const result = backend.runWebGLProgram(program, [x, $alpha], x.dtype);

  backend.disposeIntermediateTensorInfo($alpha);

  return result;
}

export const leakyReluConfig: KernelConfig = {
  kernelName: LeakyRelu,
  backendName: 'webgl',
  kernelFunc: leakyRelu as {} as KernelFunc
};

*/

import {env, KernelConfig, KernelFunc, Prelu, PreluInputs, TensorInfo} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {BinaryOpProgram} from '../binaryop_gpu';
import {BinaryOpPackedProgram} from '../binaryop_packed_gpu';

export const PRELU = `return (a < 0.) ? b * a : a;`;
export const PRELU_PACKED = `
  vec4 aLessThanZero = vec4(lessThan(a, vec4(0.)));
  return (aLessThanZero * (b * a)) + ((vec4(1.0) - aLessThanZero) * a);
`;

export function prelu(args: {inputs: PreluInputs, backend: MathBackendWebGL}):
    TensorInfo {
  const {inputs, backend} = args;
  const {x, alpha} = inputs;

  const program = env().getBool('WEBGL_PACK_BINARY_OPERATIONS') ?
    new BinaryOpPackedProgram(PRELU_PACKED, x.shape, alpha.shape) :
    new BinaryOpProgram(PRELU, x.shape, alpha.shape);
  const result = backend.runWebGLProgram(program, [x, alpha], x.dtype);

  const kernelConfig = {
    kernelName: Prelu,
    backendName: 'webgl',
    kernelFunc: prelu as {} as KernelFunc
  };

  return result;
}

export const preluConfig: KernelConfig = {
  kernelName: Prelu,
  backendName: 'webgl',
  kernelFunc: prelu as {} as KernelFunc
};

*/

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=============================================================================

import {backend_util, BinaryInputs, DataType, env, KernelFunc, TypedArray, UnaryInputs, upcastType} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {BinaryOpProgram} from '../binaryop_gpu';
import {complex} from '../kernels/Complex';
import {LEAKYRELU, LEAKYRELU_PACKED} from '../kernels/LeakyRelu';
import {PRELU, PRELU_PACKED} from '../kernels/Prelu';
import * as unary_op from '../unaryop_gpu';
import {UnaryOpProgram} from '../unaryop_gpu';
import * as unary_packed_op from '../unaryop_packed_gpu';

import {SimpleBinaryKernelImplCPU, SimpleUnaryKernelImplCPU} from './shared';

export const CHECK_NAN_SNIPPET_UNARY = `if (isnan(x)) return x;`;

export const CHECK_NAN_SNIPPET_BINARY = `
  if (isnan(a)) return a;
  if (isnan(b)) return b;
`;

export const CHECK_NAN_SNIPPET_BINARY_PACKED = `
  result.r = isNaN.r > 0. ? NAN : result.r;
  result.g = isNaN.g > 0. ? NAN : result.g;
  result.b = isNaN.b > 0. ? NAN : result.b;
  result.a = isNaN.a > 0. ? NAN : result.a;
`;

type UnaryKernelFuncConfig = {
  opSnippet: string,
  packedOpSnippet?: string,
  cpuKernelImpl?: SimpleUnaryKernelImplCPU,
  dtype?: DataType
};

/**
 * Template that creates a `KernelFunc` for unary ops.
 * @param opSnippet Op snippet to create `UnaryOpProgram`.
 * @param packedOpSnippet Op snippet to create `UnaryOpPackedProgram`.
 * @param dtype Optional. If set, the result has
 *     this dtype. Otherwise, the
 *     result has the same dtype as the first input. This is mainly used in
 *     comparison kernels, such as Equal, Less, Greater, etc.
 *     @param checkOutOfBounds Whether to set checkOutOfBounds=true
 *     when creating
 *     BinaryKernelFuncConfig.
 *     @param supportsComplex Optional. If true, the
 *     result has the same dtype as the first input. This is mainly used in
 *     comparison kernels, such as Equal, Less, Greater, etc.
 *     @param env Boolean value indicating whether WebGL PACK
 *     UNARY_OPERATIONS is enabled or not.
 *     @param usePackedSnippet Optional. If true, use Packed
 *     Op snippet to create `BinaryOpPackedProgram`.
 */
export function unaryKernelFunc({opSnippet, packedOpSnippet, cpuKernelImpl, dtype}: UnaryKernelFuncConfig): KernelFunc {
  return ({inputs, backend}) => {
    const {x} = inputs as UnaryInputs;
    const webglBackend = backend as MathBackendWebGL;

    const $dtype = dtype || x.dtype;
    if (webglBackend.shouldExecuteOnCPU([x]) && cpuKernelImpl != null) {
      const xData = webglBackend.texData.get(x.dataId);
      const outValues = cpuKernelImpl(xData.values as TypedArray, $dtype);
      return webglBackend.makeTensorInfo(x.shape, $dtype, outValues);
    }

    const shouldUsePackedProgram =
      env().getBool('WEBGL_PACK_UNARY_OPERATIONS') && packedOpSnippet != null;

    let program: UnaryOpProgram | UnaryOpPackedProgram = new
      UnaryOpProgram([x], $dtype);
    if (shouldUsePackedProgram) {
      program = new
        UnaryOpPackedProgram([x], $dtype);
    }

    return webglBackend.runWebGLProgram(program, [x], $dtype);
  };
}

/**
 * Template that creates a `KernelFunc` for binary ops.
 * @param opSnippet Op snippet to create `BinaryOpProgram`.
 * @param packedOpSnippet Op snippet to create `BinaryOpPackedProgram`.
 * @param checkOutOfBoundsForPackedProgram Whether to set checkOutOfBounds=true
 *     when creating
 *     BinaryOpPackedProgram.
 */
export function binaryKernelFunc({opSnippet, packedOpSnippet, checkOutOfBounds = false, supportsComplex = false, cpuKernelImpl, dtype}: BinaryKernelFuncConfig): KernelFunc {
  return ({inputs, backend}) => {
    const {a, b} = inputs as BinaryInputs;
    const webglBackend = backend as MathBackendWebGL;

    if (supportsComplex && dtype === 'complex64') {
      const aData = webglBackend(texData.get(a.dataId));
      const bData = webglBackend(texData.get(b.dataId));
      const [real, imag] = [aData.complexTensorInfos.real, bData.complexTensorInfos.real];
      [aData.complexTensorInfos.imag, bData.complexTensorInfos.imag].map(complexParts =>
        const

[aPart, bPart] = complexParts;

const aHandle = {
dataId: aPart.dataId,
dtype: aPart.dtype,
shape: a.shape
};

const bHandle = {
dataId: bPart.dataId,
dtype: bPart.dtype,
shape: b.shape
};

const program = new BinaryOpProgram(opSnippet, a.shape, b.shape);

return webglBackend.runWebGLProgram(program, [aHandle, bHandle], upcastType(a.dtype, bPart.dtype));

const complexOutput = complex({inputs: [real, imag], backend: webglBackend});

webglBackend.disposeIntermediateTensorInfo(real);

webglBackend.disposeIntermediateTensorInfo(img);

// TODO(annxingyuan): Implement CPU forwarding for complex inputs.

const Sdtype = dtype || upcastType(a.dtype, b.dtype);

if (webglBackend.shouldExecuteOnCPU([a, b]) && cpuKernelImpl != null) {
  const aData = webglBackend.texData.get(a.dataId);
  const bData = webglBackend.texData.get(b.dataId);
  const [outValues, outShape] = cpuKernelImpl(a.shape, b.shape, aData.values as TypedArray, bData.values as TypedArray, Sdtype);
  const out = webglBackend.makeTensorInfo(outShape, Sdtype);
  const outData = webglBackend.texData.get(out.dataId);
  outData.values = outValues;
  return out;
}

const shouldUsePackedProgram = env().getBool('WEBGL_PACK_BINARY_OPERATIONS') && packedOpSnippet != null;

let program: BinaryOpProgram | BinaryOpPackedProgram;

if (shouldUsePackedProgram) {
  program = new BinaryOpPackedProgram(packedOpSnippet, a.shape, b.shape, checkOutOfBounds);
}

else {
  program = new BinaryOpProgram(opSnippet, a.shape, b.shape);
}

return webglBackend.runWebGLProgram(program, [a, b], Sdtype);

export function mapActivationToShaderProgram(activation: backend_util.Activation, packed = false): string {
  if (activation === 'linear') {
    if (packed) {
      return unary_packed_op.LINEAR;
    }
    return unary_op.LINEAR;
  } else if (activation === 'relu') {
    if (packed) {
      return unary_packed_op.RELU;
    }
    return unary_op.RELU;
  } else if (activation === 'elu') {
    if (packed) {
      return unary_packed_op.ELU;
    }
    return unary_op.ELU;
  } else if (activation === 'relu6') {
    if (packed) {
      return unary_packed_op.RELU6;
    }
    return unary_op.RELU6;
  } else if (activation === 'prelu') {
    if (packed) {
      return PRELU_PACKED;
    }
    return PRELU;
  } else if (activation === 'leakyrelu') {
    if (packed) {
      return LEAKYRELU_PACKED;
    }
    return LEAKYRELU;
  }
  throw new Error(`Activation ${activation} has not been implemented for the WebGL backend.`);
}
```cpp
const float sharedDimension = $sharedDimensionPacked.0;

vec4 dot2x2ARowBCol(ivec3 rc) {
  vec4 result = vec4(0);
  for (int i = 0; i < ${sharedDimensionPacked}; i++)
  {
    int batchA = ${batchASnippet};
    int batchB = ${batchBSnippet};
    vec4 a = getMatrixA(batchA, ${aSample});
    vec4 b = getMatrixB(batchB, ${bSample});
    result += a.x * b.x + a.y * b.y + a.z * b.z + a.w * b.w;
  }
  return result;
}
```

```cpp
void main() {
  float areal = getARealAtOutCoords();
  float aimag = getAImagAtOutCoords();
  float breal = getBRealAtOutCoords();
  float bimag = getBImagAtOutCoords();
  setOutput(binaryOpComplex(areal, aimag, breal, bimag));
}
```

```cpp
export const COMPLEX_MULTIPLY = {
  REAL: 'return areal * breal - aimag * bimag;',
  IMAG: 'return areal * bimag + aimag * breal;'
};
```

```cpp
export class BinaryOpComplexProgram implements GPGPUProgram {
  variableNames = ['AReal', 'AImag', 'BReal', 'BImag'];
  userCode: string;
  outputShape: number[];

  constructor(op: string, aShape: number[], bShape: number[]) {
    this.outputShape = backend_util.assertAndGetBroadcastShape(aShape, bShape);
    this.userCode = `
      float binaryOpComplex(
          float areal, float aimag, float breal, float bimag) {
        ${op}
      }

      void main() {
        float areal = getARealAtOutCoords();
        float aimag = getAImagAtOutCoords();
        float breal = getBRealAtOutCoords();
        float bimag = getBImagAtOutCoords();
        setOutput(binaryOpComplex(areal, aimag, breal, bimag));
      }
    `;
  }
}
```

```cpp
import {TensorInfo} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import {ReshapePackedProgram} from '../reshape_packed_gpu';
import {getBatchDim, getRowsCols} from '../webgl_util';

export function packedReshape(
    input: TensorInfo, afterShape: number[],
    backend: MathBackendWebGL): TensorInfo {
  const input3DShape =
      [getBatchDim(input.shape),
       ...getRowsCols(input.shape)] as [number, number, number];
  const input3D: TensorInfo = {
    dtype: input.dtype,
    shape: input3DShape,
    dataId: input.dataId
  };
  const afterShapeAs3D =
      [getBatchDim(afterShape),
       ...getRowsCols(afterShape)] as [number, number, number];
  const program = new ReshapePackedProgram(afterShapeAs3D, input3DShape);
  const
```
```javascript
preventEagerUnpackingOfOutput = true;
const output = backend.runWebGLProgram(
  program, [input3D],
  input.dtype, null /* customSetup */, /* preventEagerUnpackingOfOutput */);
return {
  datalid: output.datalid, shape: afterShape,
  dtype: output.dtype,
}/** *
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 */

import {KernelConfig, KernelFunc, Reshape, ReshapeAttrs, ReshapeInputs, TensorInfo, util} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '...' /.../backend_webgl';
import {packedReshape} from '.../kernel_utils/reshape';
import {isReshapeFree} from '.../webgl_util';

export function reshape(args: {
  inputs: ReshapeInputs,
  backend: MathBackendWebGL,
  attrs: ReshapeAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {shape} = attrs;
  const webglBackend = backend;

  const xSize = util.sizeFromShape(x.shape);
  const $shape = util.inferFromImplicitShape(shape, xSize);
  const $xSize = util.sizeFromShape($shape);

  util.assert(
    xSize === $xSize,
    () => `The new shape (${$shape}) has $xSize elements and the old shape (${x.shape}) has xSize elements. The new shape and old shape must have the same number of elements.`);

  const xTexData = webglBackend.texData.get(x.dataId);
  if (xTexData.isPacked && !isReshapeFree(x.shape, $shape) &&
      !isReshapeFree(xTexData.shape, $shape))
    return packedReshape(x, $shape, webglBackend);

  webglBackend.incRef(x.dataId);

  return {dataId: x.dataId, shape: $shape, dtype: x.dtype};
}

export const reshapeConfig: KernelConfig = {
  kernelName: Reshape,
  backendName: 'webgl',
  kernelFunc: reshape as {} as KernelFunc
};

import {backend_util, util} from '@tensorflow/tfjs-core';
import {GPGPUProgram} from '...' /.../gpgpu_math';

export class MeanProgram implements GPGPUProgram {
  variableNames = ['x'];
  outputShape: number[];
  userCode: string;

  constructor(reduceInfo: backend_util.ReduceInfo, divisor?: number) {
    const {windowSize, batchSize, inSize, outSize} = reduceInfo;
    this.outputShape = [batchSize, outSize];

    const windowSizeNearestVec4 = Math.floor(windowSize / 4) * 4;
    const windowSizeVec4Remainder = windowSize % 4;

    let updateSnippet = `sumValue += dot(values, ones);`;
    if (divisor != null) {
      const denominator = 1 / divisor;
      updateSnippet = `sumValue += dot(values * ${
        util.isInt(denominator) ? denominator.toPrecision(2) :
        denominator}, ones);`;
    }

    let checkOutOfBounds = ''; if (inSize % windowSize > 0) {
      checkOutOfBounds = `
        if (inIdx < 0 || inIdx >= ${inSize}) {
          return 0.0;
        }
      `;
    }

    this.userCode = `
      const vec4 ones = vec4(1.0, 1.0, 1.0, 1.0);

      float getValue(int batch, int inIdx) {
        ${checkOutOfBounds}
        return getX(batch, inIdx);
      }

      void main() {
        ivec2 coords = getOutputCoords();
        int batch = coords[0];
        int outIdx = coords[1];
        int inOffset = outIdx * $windowSize;
        float sumValue = 0.0;
        for (int i = 0; i < $windowSizeNearestVec4; i += 4) {
          int inIdx = inOffset + i;
          vec4 values = vec4($getValue(batch, inIdx),
            $getValue(batch, inIdx + 1),
            $getValue(batch, inIdx + 2),
            $getValue(batch, inIdx + 3))
        };

      }
    ```
```
vec4(getValue(batch, inIdx), 0.0, 0.0, 0.0);

} else if (${windowSizeVec4Remainder == 3}) {
    vec4 values = vec4(getValue(batch, inIdx), getValue(batch, inIdx + 1), getValue(batch, inIdx + 2), 0.0);
    ${updateSnippet}
  }
}

}

```

```
$\{vecType\} values = $\{vecType\}(\n    getValue(batch, inIdx),\n    getValue(batch, inIdx + 1),\n    initializationValue,\n    initializationValue\n) \n    if
    ($\{windowSizeVec\} remainder === 3) \n    $\{vecType\} values = $\{vecType\}(\n    getValue(batch, inIdx),\n    getValue(batch, inIdx + 1),\n    initializationValue\n) \n    else
    $\{updateSnippet\}
  } else if
  ($\{windowSizeVec4Remainder === 3\}) {
    $\{vecType\} values = $\{vecType\}(\n        getValue(batch, inIdx),
        getValue(batch, inIdx + 1),
        getValue(batch, inIdx + 2),
        initializationValue
    );
    $\{updateSnippet\}
  }
  setOutput($\{returnValue\});
}

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 */

import {backend_util, DataType, TensorInfo} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {MeanProgram} from '../mean_gpu';
import {ReduceProgram} from '../reduce_gpu';

// Returns an array of configuration objects that describe each stage of the
// reduction.
function getReductionStages(inShape: number[]):
    Array<{inSize: number, windowSize: number, outSize: number}> {
  const stages = [];
  while (stages.length === 0 || stages[stages.length - 1].outSize !== 1) {
    const outSize: number =
        stages.length ? stages[stages.length - 1].outSize : inShape[1];
    const windowSize =
        backend_util.computeOptimalWindowSize(outSize);
    stages.push({
      inSize: outSize,
      windowSize,
      outSize: Math.ceil(outSize / windowSize)
    });
  }
  return stages;
}

export function reduce(
    x: TensorInfo, dtype: DataType, reductionType: ReduceTypes,
    backend: MathBackendWebGL): TensorInfo {
  const reductionStages = getReductionStages(x.shape);
  let result = x;
  for (let i = 0; i < reductionStages.length; i++) {
    const {inSize, windowSize, outSize} = reductionStages[i];
    let program:
        ReduceProgram|MeanProgram;
    if (reductionType === 'mean') {
      program = i === 0 ?
        new MeanProgram(
            {windowSize, inSize, batchSize: x.shape[0], outSize},
            inSize) :
        new MeanProgram({windowSize, inSize, batchSize: x.shape[0], outSize});
    } else {
      program = new ReduceProgram(
          {windowSize, inSize, batchSize: x.shape[0], outSize},
          reductionType);
    }
    previousResult = result;
    result = backend.runWebGLProgram(program, [result], dtype);
    if (previousResult.dataId !== x.dataId) {
      backend.disposeIntermediateTensorInfo(previousResult);
    }
  }
  return result;
}

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 */

import {GPGPUProgram} from './gpgpu_math';
import {getCoordsDataType} from './shader_compiler';
export class TransposeProgram implements GPGPUProgram {
  variableNames = ['A'];
  outputShape: number[];
  userCode: string;
  rank: number;
  constructor(aShape: number[], newDim: number[]) {
    const outputShape: number[] = new Array(aShape.length);
    for (let i = 0; i < outputShape.length; i++) {
      outputShape[i] = aShape[newDim[i]];
    }
    this.outputShape = outputShape;
    this.rank = outputShape.length;
    this.dtype = getCoordsDataType(this.rank);
    const switched = getSwitchedCoords(newDim);
    this.userCode = 'void main() { \n    $\{dtype\} resRC = getOutputCoords();\n    setOutput(getA($\{switched\}));\n    } \n    \n    function getSwitchedCoords(newDim: number[]): string {
        for (let i = 0; i < newDim.length; i++) {
            if (rank > 6) {\n                throw Error('Transpose for rank $\{rank\} is not yet supported');\n            }\n            \n            return \n        }\n        \n        function getSwitchedCoords(newDim: number[]): string {
            \n            return \n        }\n    }

    return resRC.x, resRC.y,'}
const switchedCoords = new Array(rank);

for (let i = 0; i < newDim.length; i++) {
  switchedCoords[newDim[i]] = originalOrder[i];
}

return switchedCoords.join();

const originalOrder = outputShape.map((shape, i) => shape);
const outputShape = new Array(aShape.length);

for (let i = 0; i < outputShape.length; i++) {
  outputShape[i] = aShape[newDim[i]];
}

this.outputShape = outputShape;
this.rank = outputShape.length;

if (this.rank > 6) {
  throw Error(`Packed transpose for rank ${this.rank} is not yet supported.`);
}

dtype = getCoordsDataType(this.rank);

getc = `getChannel(getA(${switchedOrder.join()}), ${innerDims})`;

result[0] = getc;

if (${nextColumn}) {
  result[1] = getc;
}

--${outputOrder[this.rank - 1]};

if (++${outputOrder[this.rank - 2]} < ${outputShape[this.rank - 2]}) {
  result[2] = getc;
}

if (${nextColumn}) {
  result[3] = getc;
}

setOutput(result);

```
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import {KernelConfig, KernelFunc, Sum, SumAttrs, SumInputs} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';

import {mapActivationToShaderProgram} from '../kernel_utils/kernel_funcs_utils';
import {MatMulPackedProgram} from '../mulmat_packed_gpu';

import {multiply} from './Multiply';
import {reshape} from './Reshape';
import {sum} from './Sum';
import {transpose} from './Transpose';

// Empirically determined minimal shared dimension in matmul before we forward
// to a.mul(b).sum() in order to take advantage of GPU parallelism. See
export const MATMUL_SHARED_DIM_THRESHOLD = 1000;

type BatchMatMulConfig = {
  a: TensorInfo,
  b: TensorInfo,
  transposeA: boolean,
  transposeB: boolean,
  backend: MathBackendWebGL,
  bias?: TensorInfo,
  preluActivationWeights?: TensorInfo,
  leakyreluAlpha?: number,
  activation?: backend_util.Activation
};

export function batchMatMulImpl({
  a,
  b,
  transposeA,
  transposeB,
  backend,
  bias = null,
  preluActivationWeights = null,
  leakyreluAlpha = 0,
  activation = null
}: BatchMatMulConfig): TensorInfo {
  const aRank = a.shape.length;
  const bRank = b.shape.length;

  const innerShapeA = transposeA ? a.shape[aRank - 2] : a.shape[aRank - 1];
  const innerShapeB = transposeB ? b.shape[bRank - 1] : b.shape[bRank - 2];

  const outerShapeA = a.shape.slice(0, -2);
  const outerShapeB = b.shape.slice(0, -2);

  const batchDimA = util.sizeFromShape(outerShapeA);
  const batchDimB = util.sizeFromShape(outerShapeB);

  const batchDimsCompatible = batchDimA === batchDimB;

  const outShape = outShapeOutsideDimA.concat([outerShapeB, outerShapeB]);

  util.assert(outShape.length === 2, () => `Error in matMul: the input batch dimensions must either be the same or at least one input batch dimension must be 1. Got input batch dimensions (${outerShapeA}) and (${outerShapeB}).`);

  const outShapeOutsideDimA = batchDimA > batchDimB ? a.shape.slice(0, -2) : b.shape.slice(0, -2);

  const outShape = outShapeOutsideDimA.concat([outerShapeA, outerShapeB]);

  util.assert(outShape.length === 2, () => `Error in matMul: the input batch dimensions must either be the same or at least one input batch dimension must be 1. Got input batch dimensions (${outerShapeA}) and (${outerShapeB}).`);

  return batchMatMulConfig;
}
The rest of the implementation is designed to operate on rank-3 tensors:

```javascript
const a3dShape: [number, number, number] = transposeA ?
    [batchDimA, innerShapeA, outerShapeA] :
    [batchDimA, outerShapeA, innerShapeA];

const b3dShape: [number, number, number] =
    transposeB ?
    [batchDimB, outerShapeB, innerShapeB] :
    [batchDimB, innerShapeB, outerShapeB];
```

For the rest of the implementation, we will operate on rank-3 tensors. The matrices are vectors, so it is faster to call `mul().sum()` instead of calling `sum()` directly. This optimization is achieved by splitting the multiplication code into two parts:

- **Part 1:**
  - If one of the matrices is a vector (`outerShapeA` or `outerShapeB` is 1), we use `mul()` instead of `sum()`.

- **Part 2:**
  - If both matrices are not vectors, we use `sum()` directly.

### Part 1: Vector Matrices

When one of the matrices is a vector, we can use `mul().sum()` to optimize the computation. This is because `sum()` has a divide-and-conquer approach and is O(sqrt(N)) in complexity.

```javascript
if ((outerShapeA === 1 || outerShapeB === 1) &&
    Math.abs(sharedDim - MATMUL_SHARED_DIM_THRESHOLD) > 0) {
  // The rest of the implementation is designed to operate on rank-3 tensors
  const a3d = reshape({inputs: {x: a}, backend, attrs: {shape: a3dShape}});
  const b3d = reshape({inputs: {x: b}, backend, attrs: {shape: b3dShape}});

  const intermediates: TensorInfo[] = [a3d, b3d];

  const batchDim = Math.max(batchDimA, batchDimB);

  const hasBias = bias != null;
  const hasPreluActivationWeights = preluActivationWeights != null;
  const hasLeakyreluAlpha = activation === 'leakyrelu';
  const fusedActivation = activation != null ?
      mapActivationToShaderProgram(activation, true) :
      null;
  const containsFusedOps = hasBias || hasPreluActivationWeights ||
      hasLeakyreluAlpha || fusedActivation != null;

  let out: TensorInfo;

  if (outerShapeA === 1 || outerShapeB === 1) {
    // The rest of the implementation is designed to operate on rank-3 tensors
  } else {
    const dtype = upcastType(a.dtype, b.dtype);

    const program = new MatMulPackedProgram(
        aShape, bShape, [batchDim, outerShapeA, outerShapeB],
        transposeA, transposeB, hasBias, fusedActivation, hasPreluActivationWeights,
        hasLeakyreluAlpha);

    const inputs: TensorInfo[] = [a3d, b3d];
    if (bias != null) {
      inputs.push(bias);
    }
    if (hasPreluActivationWeights) {
      inputs.push(preluActivationWeights);
    }
    if (hasLeakyreluAlpha) {
      const $leakyreluAlpha = backend.makeTensorInfo(
          [], 'float32',
          util.createScalarValue(leakyreluAlpha as {} as 'float32', 'float32'));
      inputs.push($leakyreluAlpha);
    }

    out = backend.runWebGLProgram(program, inputs, dtype);
  }

  const outReshaped =
      reshape({inputs: {x: out}, backend, attrs: {shape: outShape}});

  intermediates.push(out);
  for (const i of intermediates) {
    backend.disposeIntermediateTensorInfo(i);
  }
  return outReshaped;
}
```

### Part 2: General Matrices

When neither of the matrices is a vector, we use `sum()` directly.

```javascript
export function fusedMatMul(args: {
  inputs: _FusedMatMulInputs,
  attrs: _FusedMatMulAttrs,
  backend: MathBackendWebGL,
}) {

  const {inputs, backend, attrs} = args;
  const {a, b, bias, preluActivationWeights} = inputs;

  const transposeA = a && a.shape[0] !== outerShapeA;
  const transposeB = b && b.shape[0] !== outerShapeB;

  const $leakyreluAlpha = backend.makeTensorInfo(
      [], 'float32', 'float32')
  if (hasLeakyreluAlpha) {
    const $leakyreluAlpha = backend.makeTensorInfo(
        [], 'float32',
        util.createScalarValue(leakyreluAlpha as {} as 'float32', 'float32'));
    inputs.push($leakyreluAlpha);
  }

  out = backend.runWebGLProgram(program, inputs, dtype);
  intermediates.push(out);
  intermediates.push($leakyreluAlpha);
  return out;
}
```
```javascript
KernelConfig = {
  kernelName: _FusedMatMul,
  backendName: 'webgl',
  kernelFunc: _fusedMatMul as {} as KernelFunc,
};

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 */

import {Acos, KernelConfig} from '@tensorflow/tfjs-core';

const ACOS = CHECK_NAN_SNIPPET + `
  if (abs(x) > 1.) {
    return NAN;
  }
  return acos(x);
`;

export const acos = unaryKernelFunc({opSnippet: ACOS});

export const acosConfig: KernelConfig = {
  kernelName: Acos,
  backendName: 'webgl',
  kernelFunc: acos,
};

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 */

import {AddNProgram} from './gpgpu_math';

export class AddNProgram implements GPGPUProgram {
  variableNames: string[];
  outputShape: number[] = [];
  userCode: string;
  constructor(outputShape: number[], shapes: number[][]) {
    this.outputShape = outputShape;
    this.variableNames = shapes.map((_, i) => `T${i}`);

    const snippets: string[] = [];
    this.variableNames.forEach(variable => {
      snippets.push(`float v${variable} = get${variable}AtOutCoords();`);
    });

    // Calculate the sum of all elements.
    const operation = this.variableNames
      .map(variable => `
        v${variable}`)
      .join(' + ');

    this.userCode = `
      void main() {
        ${snippets.join('\n        ')}

        float result = ${operation};
        setOutput(result);
      }
    `;
  }
}

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 */
```

---

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---

KernelConfig = {
  kernelName: _FusedMatMul,
  backendName: 'webgl',
  kernelFunc: _fusedMatMul as {} as KernelFunc,
};

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 */

import {Acos, KernelConfig} from '@tensorflow/tfjs-core';

const ACOS = CHECK_NAN_SNIPPET + `
  if (abs(x) > 1.) {
    return NAN;
  }
  return acos(x);
`;

export const acos = unaryKernelFunc({opSnippet: ACOS});

export const acosConfig: KernelConfig = {
  kernelName: Acos,
  backendName: 'webgl',
  kernelFunc: acos,
};

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 */

import {AddNProgram} from './gpgpu_math';

export class AddNProgram implements GPGPUProgram {
  variableNames: string[];
  outputShape: number[] = [];
  userCode: string;
  constructor(outputShape: number[], shapes: number[][]) {
    this.outputShape = outputShape;
    this.variableNames = shapes.map((_, i) => `T${i}`);

    const snippets: string[] = [];
    this.variableNames.forEach(variable => {
      snippets.push(`float v${variable} = get${variable}AtOutCoords();`);
    });

    // Calculate the sum of all elements.
    const operation = this.variableNames
      .map(variable => `
        v${variable}`)
      .join(' + ');

    this.userCode = `
      void main() {
        ${snippets.join('\n        ')}

        float result = ${operation};
        setOutput(result);
      }
    `;
  }
}
import {GPGPUProgram} from './gpgpu_math';

export class AddNPackedProgram implements GPGPUProgram {
  variableNames: string[];
  outputShape: number[] = [];
  userCode: string;
  packedInputs = true;
  output = true;
  constructor(outputShape: number[], shapes: number[][])
  { this.outputShape = outputShape;
    this.variableNames = shapes.map((_, i) => `T${i}`);
    const snippets: string[] = [];
    // Get target elements from every input tensor.
    this.variableNames.forEach(variable => null);  
    const vec4 v$variable = get$variableAtOutCoords();
    };
    // Calculate the sum of all elements.
    const operation = this.variableNames
                      .map(variable => null)
                      .join(' + ');

    this.userCode = ` 
    void main()
    { ${snippets.join('
    ')}

    vec4 result = ${operation};
    setOutput(result);
    }
`;
  }
}

import {AddN, AddNInputs, env, KernelConfig, KernelFunc, TensorInfo, upcastType} from '@tensorflow/tfjs-core';

import {AddNProgram} from '../addn_gpu';
import {AddNPackedProgram} from '../addn_packed_gpu';
import {MathBackendWebGL} from '../backend_webgl';
import {Identity} from './Identity';

export function addN(args: {inputs: AddNInputs, backend: MathBackendWebGL}):
    TensorInfo {
  const {inputs, backend} = args;
  const tensors = inputs;
  if (tensors.length === 1) {
    return Identity({inputs: {x: tensors[0]}, backend});
  }

  // Limit the number of uploaded textures for optimization.
  if (tensors.length > env().get('WEBGL_MAX_TEXTURES_IN_SHADER')) {
    const midIndex = Math.floor(tensors.length / 2);
    const leftSide = addN({inputs: tensors.slice(0, midIndex), backend});
    const rightSide = addN({inputs: tensors.slice(midIndex), backend});
    return addN({inputs: [leftSide, rightSide], backend});
  }

  const dtype = tensors.map(t => t.dtype).reduce((d1, d2) => upcastType(d1, d2));
  const shapes = tensors.map(t => t.shape);
  const usePackedOp = env().getBool('WEBGL_PACK');
  const program = usePackedOp ?
      new AddNPackedProgram(tensors[0].shape, shapes) :
      new AddNProgram(tensors[0].shape, shapes);
  return backend.runWebGLProgram(program, tensors, dtype);
}

export const addNConfig: KernelConfig = {
  kernelName: AddN,
  backendName: 'webgl',
  kernelFunc: addN as {} as KernelFunc
};

import {All, AllAttrs, AllInputs, backend_util, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {reduce} from '../kernel_utils/reduce';

import {reshape} from './Reshape';
import {transpose} from './Transpose';

export function all(
    args: {inputs: AllInputs, backend: MathBackendWebGL, attrs: AllAttrs}):
    TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {axis, keepdims} = attrs;

  const xRank = x.shape.length;

  const origAxes = util.parseAxisParam(axis, x.shape);
  const permutedAxes = backend_util.getInnerMostAxes(axes, xRank);

  const permutedX = backend_util.getInnerMostAxes(axes, xRank);
  let axes = origAxes;
  const permutatedAxes = backend_util.getAxesPermutation(axes, xRank);

  backend_util.assertAxesAreInnerMostDims('all',...
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'select min\nfirstPass: boolean \nconst {windowSize, batchSize, outSize} = reduceInfo;\nif (!firstPass) \n{\n  this.variableNames.push('bestIndicesA');\n  this.outputShape = [batchSize, outSize];\n  const compOp = (op === 'max') ? '>' : '<';\n  const indexSnippet = firstPass ? 'inOffset + i;' : 
    'round(getBestIndicesA(batch, inOffset + i));';\n  this.userCode = `\n    void main() {
      ivec2 coords = getOutputCoords();\n      int batch = coords[0];\n      int outIdx = coords[1];\n      int inOffset = outIdx * \n        ${windowSize};\n      int bestIndex = inOffset;\n      float bestValue = getA(batch, bestIndex);\n      \n      if (candidate ${compOp} bestValue) {
        bestValue = candidate;\n        bestIndex = inIdx;\n      }
      setOutput(float(bestIndex));
    }
  `;
}

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 */

import {util} from '@tensorflow/tfjs-core';
import {GPGPUProgram} from './gpgpu_math';
import {getChannels} from './packing_util';
import {getCoordsDataType} from './shader_compiler';

export class ArgMinMaxPackedProgram implements GPGPUProgram {
  variableNames = ['A'];
  outputShape: number[];
  userCode: string;
  packedInputs = true;
  packedOutput = true;

  constructor(
    shape: number[],
    windowSize: number, op: 'max'|'min',
    firstPass: boolean) {
    util.assert(
      shape.length > 2,
      () => `Packed arg${op.charAt(0).toUpperCase()}${op.slice(1)} supports only inputs with rank above 2.`);
    const inSize = shape[shape.length - 1];
    const outSize = Math.ceil(inSize / windowSize);
    this.outputShape = shape.slice(0, -1);
    if (outSize > 1) {
      this.outputShape.push(outSize);
    }
    if (!firstPass) {
      this.variableNames.push('bestIndicesA');
    }
    const outShape = this.outputShape;
    const rank = outShape.length;
    const dtype = getCoordsDataType(rank);
    const coords = getChannels('coords', rank);
    let sourceLocSetup;
    let sourceRank;
    if (outSize === 1) {
      sourceRank = rank + 1;
      const sourceLocDType = getCoordsDataType(sourceRank);
      sourceLocSetup = `
        ${sourceLocDType} sourceLocR = ${sourceLocDType}(${coords.join()}, 0);
        ++${coords[rank - 1]};
        ${sourceLocDType} sourceLocG = ${sourceLocDType}(${coords.join()}, 0);
        ++${coords[rank - 2]};
        ${sourceLocDType} sourceLocA = ${sourceLocDType}(${coords.join()}, 0);
        --${coords[rank - 1]};
        ${sourceLocDType} sourceLocB = ${sourceLocDType}(${coords.join()}, 0);
        --${coords[rank - 2]};`;
    } else {
      sourceRank = rank;
      sourceLocSetup = `
        ${dtype} sourceLocR = coords;
        ++${coords[rank - 1]};
        ${dtype} sourceLocG = coords;
        ++${coords[rank - 2]};
        ${dtype} sourceLocA = coords;
        --${coords[rank - 1]};
        ${dtype} sourceLocB = coords;
        --${coords[rank - 2]};`;
    }
    const channels = ['x', 'y', 'z', 'w', 'u', 'v'].slice(0, sourceRank);
    const inChannel = '.' + channels[sourceRank - 1];  // e.g. \".b\" for rank 3.
    const intChannels = channels.map(x => `'int ' + x');
    const srcRCoordS = new
      getChannels('sourceLocR', sourceRank - 1).concat(intIndex.r);
    const srcGCoordS = new
      getChannels('sourceLocG', sourceRank - 1).concat(intIndex.g);
    const srcBCoordS = new
      getChannels('sourceLocB', sourceRank - 1).concat(intIndex.b);
    const srcACoordS = new
      getChannels('sourceLocA', sourceRank - 1).concat(intIndex.a);
    const fetchCandidateIdx = firstPass ? '' : `inIdx = 
      round(vec4(getBestIndicesAChannel(${srcRCoordS.join()}).
        getBestIndicesAChannel(${srcGCcoordS.join()}).
        getBestIndicesAChannel(${srcBCoordS.join()}).
        getBestIndicesAChannel(${srcACoordS.join()}).
      )
      ;`;
    const fetchValue = `vec4(${getAChannel(${srcRCoordS.join()}).
        getNextCol ? getAChannel(${srcGCcoordS.join()}) : 0.,
        hasNextRow ? getAChannel(${srcBCoordS.join()}) : 0.,
        hasNextRow && hasNextCol ?
```
getAChannel(${srcACoords.join()}) : 0.)

    const getBestIndicesAChannelSnippet = firstPass ? '' : `
      float
      getBestIndicesAChannel(${intChannels.join()}) {
        return getChannel(getBestIndicesA(${channels.join()}),

      vec2(${channels.slice(-2).join()})
    }`;

    this.userCode = `
      float
      getAChannel(${intChannels.join()}) {
        return getChannel(getA(${channels.join()}),

      vec2(${channels.slice(-2).join()})
    }
      ${getBestIndicesAChannelSnippet}
      void main() {

      ${dtype} coords = getOutputCoords();
        bool hasNextCol = ${coords[rank - 1]} < ${outShape[rank - 1] - 1};

        bool hasNextRow = ${coords[rank - 2]} < ${outShape[rank - 2] - 1};

        ${sourceLocSetup}
        ivec4
        srcIdx = ivec4(sourceLocR${inChannel}, sourceLocG${inChannel},
          sourceLocB${inChannel},
          sourceLocA${inChannel}) * ${windowSize};
        ivec4 inIdx = srcIdx;
        vec4 bestIndex = vec4(inIdx);

        vec4 bestValue = ${fetchValue};

        for (int i = 0; i < ${windowSize}; i++) {
          inIdx = srcIdx;
          vec4 candidate = ${fetchValue};
          bvec4 nan = isnan(candidate);

          vec4 replace = vec4(
            vec4(${compOp}(candidate, bestValue)) * (vec4(1.0) - vec4(nan)));

          bestValue = vec4(replace.x  ? candidate.x : bestValue.x,
                           replace.y  ? candidate.y : bestValue.y,
                           replace.z  ? candidate.z : bestValue.z,
                           replace.w  ? candidate.w : bestValue.w);
          bestIndex = mix(bestIndex, vec4(inIdx), vec4(replace));
          srcIdx++;
        }
        setOutput(bestIndex);
      }
    `;
    }
  }
}

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 *
 *=============================================================================

import {backend_util, env, TensorInfo, util} from '@tensorflow/tfjs-core';

import {ArgMinMaxProgram} from '../argminmax_gpu';
import {ArgMinMaxPackedProgram} from '../argminmax_packed_gpu';
import {MathBackendWebGL} from '../backend_webgl';
import {reshape} from '../kernels/Reshape';

function argReduce(
    backend: MathBackendWebGL, x: TensorInfo, reduceType: 'max'|'min',
    bestIndicesA: TensorInfo = null): TensorInfo {
  let batchSize = x.shape[0];
  let inSize = x.shape[1];
  if (bestIndicesA != null)
  { batch_size = bestIndicesA.shape[0];
    let inSize = bestIndicesA.shape[1];
  }
  const windowSize =
      backend_util.computeOptimalWindowSize(inSize);
  const reduceInfo =
      {windowSize, inSize, batchSize,
        outSize: Math.ceil(inSize / windowSize)};
  const program =
      new ArgMinMaxProgram(reduceInfo,
        reduceType, bestIndicesA == null);
  const inputs = [x];
  if (bestIndicesA != null) { inputs.push(bestIndicesA); }
  const output = backend.runWebGLProgram(program, inputs, 'int32'); // No need to run another GPGPU program.
  if (output.shape[1] === 1) { return output; }
  const result = argReduce(backend, x, reduceType, output);
  backend.disposeIntermediateTensorInfo(output);
  return result;
}

function argReducePacked(
    backend: MathBackendWebGL, x: TensorInfo, reduceType: 'max'|'min',
    bestIndicesA: TensorInfo = null): TensorInfo {
  const inShape = bestIndicesA != null ? bestIndicesA.shape : x.shape;
  const inSize = inShape[0];
  const windowSize =
      backend_util.computeOptimalWindowSize(inShape);
  const program = new ArgMinMaxPackedProgram(inShape, windowSize, reduceType, bestIndicesA == null);
  const inputs = [x, bestIndicesA];
  const output = backend.runWebGLProgram(program, inputs, 'int32');
  if (output.shape.length !== x.shape.length) { return argReducePacked(backend, x, reduceType, output); }

  backend.disposeIntermediateTensorInfo(output);
  return result;
}

export function argMinMaxReduce(
    backend: MathBackendWebGL, x: TensorInfo, axis: number,
    reduceType: 'min'|'max'): number {
  const axes = [axis];
  backend_util.assertAxesAreInnerMostDims(
    'arg' + reduceType.charAt(0).toUpperCase() + reduceType.slice(1), axes, x.shape.length);
  if (axes.length <= 2) { const intermediateTensorInfos = [];
    const output = backend_util.computeOutAndReduceShapes(x.shape, axes);
    const inSize = util.sizeFromShape(output);
    const a2D = reshape([inputs: {x}, backend, attr: {shape: [-1, inSize]}]);

  }
intermediateTensorInfos.push(a2D);
  const reduced = argReduce(backend, a2D, reduceType);
intermediateTensorInfos.push(reduced);
  const reshaped = reshape((inputs: {x: reduced}, backend, attr: {shape: outShape}));
intermediateTensorInfos.forEach(t =>
  backend.disposeIntermediateTensorInfo(t));
return reshaped;
}

export const argReducePacked = (backend, x, reduceType) => {
  return argReducePacked(backend, x, reduceType);
  return
const argReduce = (backend, x, reduceType) => {
  return /* @license */ Copyright 2020 Google LLC. All Rights Reserved.
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  =-----------------------------------------------------------------------------=

  import {ArgMax, ArgMaxAttrs, ArgMaxInputs, backend_util, KernelConfig, KernelFunc, TensorInfo, util}
  from '@tensorflow/tfjs-core';
  import {MathBackendWebGL} from '../backend_webgl';
  import {argMinMaxReduce} from '../kernel_utils/arg_min_max';
  import {transpose} from './Transpose';
  export function argMin(
    args:
        {inputs: ArgMinInputs, backend: MathBackendWebGL, attrs: ArgMinAttrs}):
  TensorInfo {
    const {inputs, backend, attrs} = args;
    const {x} = inputs;
    const {axis} = attrs;

    let axes = util.parseAxisParam(axis, x.shape);
    const permutedAxes = backend_util.getAxesPermutation(axes, x.shape.length);
    const $x = x;
    const intermediateTensorInfos = [];
    if (permutedAxes != null) {
      $x = transpose({inputs: {x}, backend, attrs: {perm: permutedAxes}});
      intermediateTensorInfos.push($x);
      axes = backend_util.getInnerMostAxes(axes.length, $x.shape.length);
    }

    backend_util.assertAxesAreInnerMostDims('argMin', [axes[0]], $x.shape.length);
    const out = argMinMaxReduce(backend, $x, axes[0], 'min');
    intermediateTensorInfos.forEach(t =>
      backend.disposeIntermediateTensorInfo(t));
    return out;
  }
  export const argMinConfig: KernelConfig = {
    kernelName: 'argMin',
    backendName: 'webgl',
    kernelFunc: argMin as {} as KernelFunc
  };

  =-----------------------------------------------------------------------------=

  import {ArgMin, ArgMinAttrs, ArgMinInputs, backend_util, KernelConfig, KernelFunc, TensorInfo, util}
  from '@tensorflow/tfjs-core';
  import {MathBackendWebGL} from '../backend_webgl';
  import {argMinMaxReduce} from '../kernel_utils/arg_min_max';
  import {transpose} from './Transpose';
  export function argMax(
    args:
        {inputs: ArgMaxInputs, backend: MathBackendWebGL, attrs: ArgMaxAttrs}):
  TensorInfo {
    const {inputs, backend, attrs} = args;
    const {x} = inputs;
    const {axis} = attrs;
    let axes = util.parseAxisParam(axis, x.shape);
    const permutedAxes = backend_util.getAxesPermutation(axes, x.shape.length);
    const $x = x;
    const intermediateTensorInfos = [];
    if (permutedAxes != null) {
      $x = transpose({inputs: {x}, backend, attrs: {perm: permutedAxes}});
      intermediateTensorInfos.push($x);
      axes = backend_util.getInnerMostAxes(axes.length, $x.shape.length);
    }

    backend_util.assertAxesAreInnerMostDims('argMax', [axes[0]], $x.shape.length);
    const out = argMinMaxReduce(backend, $x, axes[0], 'max');
    intermediateTensorInfos.forEach(t =>
      backend.disposeIntermediateTensorInfo(t));
    return out;
  }
  export const argMaxConfig: KernelConfig = {
    kernelName: 'argMax',
    backendName: 'webgl',
    kernelFunc: argMax as {} as KernelFunc
  };

  =-----------------------------------------------------------------------------=

  Open Source Used in Cisco Meeting Server (formerly Acano Server) 3.6 5096
import {Asin, KernelConfig} from '@tensorflow/tfjs-core';

import {unaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';
import {CHECK_NAN_SNIPPET} from '../unaryop_gpu';

const ASIN = CHECK_NAN_SNIPPET + `if (abs(x) > 1.) {
    return NAN;
  }
  return asin(x);
`;

export const asin = unaryKernelFunc({opSnippet: ASIN});

export const asinConfig: KernelConfig = {
  kernelName: Asin,
  backendName: 'webgl',
  kernelFunc: asin,
};

import {Asinh, KernelConfig} from '@tensorflow/tfjs-core';

import {unaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';
import {CHECK_NAN_SNIPPET} from '../unaryop_gpu';

const ASINH = CHECK_NAN_SNIPPET + `return log(x + sqrt(x * x + 1.0));`

export const asinh = unaryKernelFunc({opSnippet: ASINH});

export const asinhConfig: KernelConfig = {
  kernelName: Asinh,
  backendName: 'webgl',
  kernelFunc: asinh,
};

import {Atan, KernelConfig} from '@tensorflow/tfjs-core';

import {unaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';
import {CHECK_NAN_SNIPPET} from '../unaryop_gpu';

const ATAN = CHECK_NAN_SNIPPET + `
  return atan(x);
`;

export const atan = unaryKernelFunc({opSnippet: ATAN});

export const atanConfig: KernelConfig = {
  kernelName: Atan,
  backendName: 'webgl',
  kernelFunc: atan,
};

import {Atan2} from '@tensorflow/tfjs-core';
import {KernelConfig} from '@tensorflow/tfjs-core';

import {binaryKernelFunc, CHECK_NAN_SNIPPET_BINARY, CHECK_NAN_SNIPPET_BINARY_PACKED} from '../kernel_utils/kernel_funcs_utils';

const ATAN2 = CHECK_NAN_SNIPPET_BINARY + `return atan(a, b);
`;
const ATAN2_PACKED = `vec4 result = atan(a, b);
  vec4 isNaN = min(vec4(isnan(a)) + vec4(isnan(b)), vec4(1.0));
  ` + CHECK_NAN_SNIPPET_BINARY_PACKED + `
  return result;
`;

export const atan2 = binaryKernelFunc({opSnippet: ATAN2, packedOpSnippet: ATAN2_PACKED});

export const atan2Config: KernelConfig = {
  kernelName: Atan2,
  backendName: 'webgl',
  kernelFunc: atan2,
};
import {Atanh, KernelConfig} from '@tensorflow/tfjs-core';
import {unaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';
import {CHECK_NAN_SNIPPET} from '../unaryop_gpu';

const ATANH = CHECK_NAN_SNIPPET + `if ((x < -1.0) || (x > 1.0)) return NAN;
return (log(1.0 + x) - log(1.0 - x)) / 2.0;`;

export const atanh = unaryKernelFunc({opSnippet: ATANH});

export const atanhConfig: KernelConfig = {
  kernelName: Atanh,
  backendName: 'webgl',
  kernelFunc: atanh,
};
minMaxValue = 0.0;
          float minMaxValueFound = 0.0;
          int minMaxPosition = 0;

          for (int wD

          // max/min x(?, ?, ?, ch) to get y(yD, yR, yC, ch).
          // ? = to be determined
          float
          strides - pads;
          int xDCorner = xCorner.x;
          int xRCorner = xCorner.y;
          int xCCorner =

          ivec3 xCorner = ivec3(coords.x, coords.z, coords.w) *

        void main() {
          ivec5 coords = getOutputCoords();

          strides =
            ivec3(${padFront}, ${padTop}, ${padLeft});
        const ivec3 pads =
          poolType === 'avg');

    const isAvgPool = poolType === 'avg';

    let initializationValue = '0.0';
    if
    padTop = convInfo.padTop;
    const padLeft = convInfo.padLeft;
    this.outputShape =

    const padFront = convInfo.padFront;
    const padLeft = convInfo.padLeft;
    const this.outputShape =

    const strides =
      ivec3($(strideHeight), $(strideWidth));

    const strides - pads;
          int xDCorner = xCorner.x;
          int xRCorner = xCorner.y;
          int xCCorner =
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import {AvgPool, AvgPoolAttrs, AvgPoolInputs, backend_util, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {Pool2DProgram} from '../pool_gpu';
import {Identity} from './Identity';

export function avgPool(args: {
  inputs: AvgPoolInputs,
  backend: MathBackendWebGL,
  attrs: AvgPoolAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {filterSize, strides, pad, dimRoundingMode} = attrs;

  util.assert(
      backend_util.eitherStridesOrDilationsAreOne(strides, 1), () => 'Error in avgPool: Either strides or dilations must be 1. Got strides ' +
          `strides ${strides} and dilations ${dilations}`);

  const convInfo = backend_util.computePool2DInfo(
      x.shape as [number, number, number, number], filterSize, strides,
      pad, dimRoundingMode);
  if (convInfo.filterWidth === 1 && convInfo.filterHeight === 1
      && util.arraysEqual(convInfo.inShape, convInfo.outShape)) {
    return identity({inputs: {x}, backend});
  }
  const avgPoolProgram = new Pool2DProgram(convInfo, 'avg', false);
  return backend.runWebGLProgram(avgPoolProgram, [x], 'float32');
}

export const avgPoolConfig: KernelConfig = {
  kernelName: AvgPool,
  backendName: 'webgl',
  kernelFunc: avgPool as {} as KernelFunc
};

import {AvgPool3D, AvgPool3DAttrs, AvgPool3DInputs, backend_util, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {Pool3DProgram} from '../pool_gpu';

export function avgPool3D(args: {
  inputs: AvgPool3DInputs,
  backend: MathBackendWebGL,
  attrs: AvgPool3DAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {filterSize, strides, pad, dimRoundingMode, dataFormat} = attrs;
  const dilations: [number, number, number] = [1, 1, 1];

  const convInfo = backend_util.computePool3DInfo(
      x.shape as [number, number, number, number, number], filterSize, strides,
      pad, dimRoundingMode, dataFormat);
  const avgPoolProgram = new Pool3DProgram(convInfo, 'avg', false);
  return backend.runWebGLProgram(avgPoolProgram, [x], 'float32');
}

export const avgPool3DConfig: KernelConfig = {
  kernelName: AvgPool3D,
  backendName: 'webgl',
  kernelFunc: avgPool3D as {} as KernelFunc
};

import {backend_util} from '@tensorflow/tfjs-core';
import {GPGPUProgram} from './gpgpu_math';

export class AvgPool2DBackpropProgram implements GPGPUProgram {
  variableNames = ""
```javascript
[`dy`];

  constructor(convInfo: backend_util.Conv2DInfo) {
    this.outputShape = convInfo.inShape;
    const filterHeight = convInfo.filterHeight;
    const filterWidth = convInfo.filterWidth;
    const strideHeight = convInfo.strideHeight;
    const strideWidth = convInfo.strideWidth;
    const dilationHeight = convInfo.dilationHeight;
    const dilationWidth = convInfo.dilationWidth;
    const effectiveFilterHeight = convInfo.effectiveFilterHeight;
    const effectiveFilterWidth = convInfo.effectiveFilterWidth;

    const padTop = effectiveFilterHeight - 1 -
      convInfo.padInfo.top;
    const padLeft = effectiveFilterWidth - 1 -
      convInfo.padInfo.left;
    const avgMultiplier = 1 / (filterHeight * filterWidth);

    this.userCode = `const ivec2 pads = ivec2(${padTop}, ${padLeft});

    const float avgMultiplier = float(${avgMultiplier});

    void main() {
      ivec4 coords = getOutputCoords();
      int b = coords[0];
      int d = coords[3];

      ivec2 dyRCCorner = coords.yz - pads;
      int dyRCorner = dyRCCorner.x;
      int dyCCorner = dyRCCorner.y;

      // Convolve dy(? , ?, d)
      with pos mask(:, :, d) to get dx(xR, xC, d).`;
  }

export class AvgPool3DBackpropProgram implements GPGPUProgram {
  variableNames = ['dy'];
  outputShape: number[];
  userCode: string;

  constructor(convInfo: backend_util.Conv3DInfo) {
    this.outputShape = convInfo.inShape;
    const filterDepth = convInfo.filterDepth;
    const filterHeight = convInfo.filterHeight;
    const filterWidth = convInfo.filterWidth;
    const strideDepth = convInfo.strideDepth;
    const strideHeight = convInfo.strideHeight;
    const strideWidth = convInfo.strideWidth;
    const dilationDepth = convInfo.dilationDepth;
    const dilationHeight = convInfo.dilationHeight;
    const dilationWidth = convInfo.dilationWidth;
    const effectiveFilterDepth = convInfo.effectiveFilterDepth;
    const effectiveFilterHeight = convInfo.effectiveFilterHeight;
    const effectiveFilterWidth = convInfo.effectiveFilterWidth;

    const padFront = effectiveFilterDepth - 1 -
      convInfo.padInfo.front;
    const padTop = effectiveFilterHeight - 1 -
      convInfo.padInfo.top;
    const padLeft = effectiveFilterWidth - 1 -
      convInfo.padInfo.left;
    const avgMultiplier = 1 / (filterDepth * filterHeight * filterWidth);

    this.userCode = `const ivec3 pads = ivec3(${padFront}, ${padTop}, ${padLeft});

    const float avgMultiplier = float(${avgMultiplier});

    void main() {
      ivec5 coords = getOutputCoords();
      int batch = coords.x;
      int ch = coords.u;

      ivec3 dyCorner = ivec3(coords.y, coords.z, coords.w) - pads;
      int dyDCorner = dyCorner.x;
      int dyRCorner = dyCorner.y;
      int dyCCorner = dyCorner.z;

      // Convolve dy(? , ?, ?,
      d)
      with pos mask(:, :, :, ch) to get
      dx(xD, xR, xC, ch).`;
  }

```
```
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=============================================================================

*/

import {AvgPool3DGrad, AvgPool3DGradAttrs, AvgPool3DGradInputs, backend_util, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';

import {AvgPool3DBackpropProgram} from '../avg_pool_backprop_gpu';

export function avgPool3DGrad(args: {
  inputs: AvgPool3DGradInputs,
  backend: MathBackendWebGL,
  attrs: AvgPool3DGradAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {dy, input} = inputs;
  const x = input;
  const {filterSize, strides, pad, dimRoundingMode} = attrs;
  const convInfo = backend_util.computePool3DInfo(x.shape as [number, number, number], filterSize, strides, dilations, pad, dimRoundingMode);
  const avgPoolBackpropProgram = new AvgPool3DBackpropProgram(convInfo);
  return backend.runWebGLProgram(avgPoolBackpropProgram, [dy], x.dtype);
}

export const avgPoolGrad3DConfig: KernelConfig = {
  kernelName: AvgPool3DGrad,
  backendName: 'webgl',
  kernelFunc: avgPool3DGrad as {} as KernelFunc
};

/*=============================================================================

*/

import {AvgPoolGrad, AvgPoolGradAttrs, AvgPoolGradInputs, backend_util, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';

import {AvgPool2DBackpropProgram} from '../avg_pool_backprop_gpu';

export function avgPoolGrad(args: {
  inputs: AvgPoolGradInputs,
  backend: MathBackendWebGL,
  attrs: AvgPoolGradAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {dy, input} = inputs;
  const x = input;
  const {filterSize, strides, pad} = attrs;
  const convInfo = backend_util.computePool2DInfo(x.shape as [number, number, number], filterSize, strides, 1 /* dilations */, pad);
  const avgPoolBackpropProgram = new AvgPool2DBackpropProgram(convInfo);
  return backend.runWebGLProgram(avgPoolBackpropProgram, [dy], x.dtype);
}

export const avgPoolGradConfig: KernelConfig = {
  kernelName: AvgPoolGrad,
  backendName: 'webgl',
  kernelFunc: avgPoolGrad as {} as KernelFunc
};

/*=============================================================================

*/

import {BatchMatMul, BatchMatMulAttrs, BatchMatMulInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';

export function batchMatMul(args: {
  inputs: BatchMatMulInputs,
  attrs: BatchMatMulAttrs,
  backend: MathBackendWebGL
}) {
  const {inputs, backend, attrs} = args;
  const {a, b} = inputs;
  const {transposeA, transposeB} = attrs;
  return batchMatMulImpl({a, b, transposeA, transposeB, backend});
}

export const batchMatMulConfig: KernelConfig = {
  kernelName: BatchMatMul,
  backendName: 'webgl',
  kernelFunc: batchMatMul as {} as KernelFunc
};

/*=============================================================================
backendName: 'webgl',
kernelFunc: batchMatMul as {} as KernelFunc,
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import {backend_util} from '@tensorflow/tfjs-core';
import {GPGPUProgram} from
'./gpgpu_math';

export class BatchNormProgram implements GPGPUProgram {
variableNames: string[];
outputShape: number[] = [];
userCode: string;
constructor(xShape: number[], meanShape: number[],
varianceShape: number[], offsetShape: number[],
varianceEpsilon: number) {
    this.variableNames = ['x', 'mean', 'variance'];
    backend_util.assertAndGetBroadcastShape(xShape, meanShape);
    backend_util.assertAndGetBroadcastShape(xShape, varianceShape);
    if (offsetShape != null) {
        backend_util.assertAndGetBroadcastShape(xShape, offsetShape);
        this.variableNames.push('offset');
        offsetSnippet = 'getOffsetAtOutCoords()';
    }
    if (scaleShape != null) {
        backend_util.assertAndGetBroadcastShape(xShape, scaleShape);
        this.variableNames.push('scale');
        scaleSnippet = 'getScaleAtOutCoords()';
    }
    this.outputShape = xShape;
    this.userCode = `
      void main() {
        float x = getXAtOutCoords();
        float mean = getMeanAtOutCoords();
        float variance = getVarianceAtOutCoords();
        float offset = ${offsetSnippet};
        float scale = ${scaleSnippet};

        float inv = scale * inversesqrt(variance + float(${varianceEpsilon}));

        setOutput((x - mean) * inv + offset);
      }
    `;
}
}

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import {backend_util} from '@tensorflow/tfjs-core';
import {GPGPUProgram} from
'./gpgpu_math';

export class BatchNormPackedProgram implements GPGPUProgram {
variableNames: string[];
outputShape: number[] = [];
userCode: string;
packedInputs = true;
packedOutput = true;
constructor(xShape: number[], meanShape: number[],
varianceShape: number[], offsetShape: number[]|
null, scaleShape: number[]|
null,
varianceEpsilon: number) {
    this.variableNames = ['x', 'mean', 'variance'];
    backend_util.assertAndGetBroadcastShape(xShape, meanShape);
    backend_util.assertAndGetBroadcastShape(xShape, varianceShape);
    if (offsetShape != null) {
        backend_util.assertAndGetBroadcastShape(xShape, offsetShape);
        this.variableNames.push('offset');
        offsetSnippet = 'getOffsetAtOutCoords()';
    }
    if (scaleShape != null) {
        backend_util.assertAndGetBroadcastShape(xShape, scaleShape);
        this.variableNames.push('scale');
        scaleSnippet = 'getScaleAtOutCoords()';
    }
    this.outputShape = xShape;
    this.userCode = `
      void main() {
        float x = getXAtOutCoords();
        float variance = getVarianceAtOutCoords();
        float offset = ${offsetSnippet};
        float scale = ${scaleSnippet};

        float x = vec4(x);
        float mean = getMeanAtOutCoords();
        float var = getVarianceAtOutCoords();

        float inv = scale * inversesqrt(variance + float(${varianceEpsilon}));

        setOutput((x - mean) * inv + offset);
      }
    `;
}

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yet supported');

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 * limitations under the License.
 */

import {GPGPUContext} from './gpgpu_context';
import {GPGPUProgram} from './gpgpu_math';
import {getChannels} from './packing_util';
import {getCoordDataType} from './shader_compiler';

export class SlicePackedProgram implements GPGPUProgram {
  variableNames = ['source'];
  packedInputs = true;
  packedOutput = true;
  outputShape: number[];
  userCode: string;
  rank: number;

  // Caching uniform location for speed.
  startLoc: WebGLUniformLocation;

  constructor(destSize: number[]) {
    this.outputShape = destSize;
    this.rank = destSize.length;

    const dtype = getCoordDataType(this.rank);
    const coords = getChannels('coords', this.rank);
    const sourceLoc = getChannels('sourceLoc', this.rank);

    const innerDims = this.rank === 1 ? 'sourceLoc' : `vec2(${sourceLoc.slice(-2).join()})`;
    const getChannel = `getChannel(getSource(${sourceLoc.join()}), ${innerDims})`;
    const upperRow = `
      result.x = ${getChannel};
      if (++${coords[this.rank - 1]} < ${destSize[this.rank - 1]}) {
        ++${sourceLoc[this.rank - 1]};
        result.y = ${getChannel};
        --${sourceLoc[this.rank - 1]};
      }
    `;
    const lowerRow = this.rank === 1 ? '' : `
      --${coords[this.rank - 2]};
      if (++${coords[this.rank - 2]} < ${destSize[this.rank - 2]}) {
        ++${sourceLoc[this.rank - 2]};
        result.z = ${getChannel};
        if (++${coords[this.rank - 1]} < ${destSize[this.rank - 1]}) {
          ++${sourceLoc[this.rank - 1]};
          result.w = ${getChannel};
        }
      }
    `;

    const sourceLocSetup = this.rank <= 4 ?
      `sourceLoc = coords + ${dtype}(${destSize.map((_, i) => `start[${i}]`).join()});` : 
      destSize.map((_, i) => `${sourceLoc[i]} = ${coords[i]} + start[${i}];`)
        .join('
');
    this.userCode = `
      uniform int start[${this.rank}];
      void main() {
        ${dtype} coords = getOutputCoords();
        ${dtype} sourceLoc;
        ${sourceLocSetup}
        vec4 result = vec4(0.);
        ${upperRow}
        ${lowerRow}
        setOutput(result);
      }
    `;
  }

  getCustomSetupFunc(start: number[]) {
    if (start.length !== this.rank) {
      throw Error('The rank ($this.rank) of the program must match the length of start (${start.length})');
    }
    return (gpgpu: GPGPUContext, webGLProgram: WebGLProgram) => {
      if (this.startLoc == null) {
        this.startLoc = gpgpu.getUniformLocationNoThrow(webGLProgram, 'start');
        if (this.startLoc == null) {
          // This means the compiler has optimized and realized it doesn't need a uniform.
        }
      }
      gpgpu.gl.uniform1iv(this.startLoc, start);
    };
  }
}

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 */

import {backend_util, BatchToSpaceND, BatchToSpaceNDAttrs, BatchToSpaceNDInputs, KernelConfig, 
  KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {reshape} from './Reshape';
import {slice} from './Slice';
import {transpose} from './Transpose';

export const batchToSpaceND = (args: {
  inputs: BatchToSpaceNDInputs,
  backend: MathBackendWebGL,
  attrs: BatchToSpaceNDAttrs
}): TensorInfo => {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {blockShape, crops} = attrs;

  util.assert(x.shape.length <= 4, () => 'batchToSpaceND for rank > 4 with a WebGL backend not implemented yet');
  const prod = x.shape.reduce((a, b) => a * b);

  const reshaped = backend.reshape(x, blockShape, prod)

const permuted = backend_util.getPermuted(reshaped.length, blockShape.length);
const reshapedPermuted =
  backend_util.getReshapedPermuted(x.shape, blockShape, prod);
const sliceBeginCoords =
  backend_util.getSliceBeginCoords(crops, blockShape.length);
const sliceSize =
  backend_util.getSliceSize(reshapedPermuted, crops, blockShape.length);
const toDispose =

  const reshapedIntermediate =
      reshape({inputs: {x}, backend, attrs: {shape: reshaped}});
  const transposedIntermediate = transpose(
      {inputs: {x: reshapedIntermediate}, backend, attrs: {perm: permuted}});
  const reshapedIntermediate2 = reshape({
    inputs: {x: transposedIntermediate},
    backend,
    attrs: {shape: reshapedPermuted}
  });
  const sliced = slice({
    inputs: {x: reshapedIntermediate2},
    backend,
    attrs: {begin: sliceBeginCoords, size: sliceSize}
  });

  toDispose.push(reshapedIntermediate);
  toDispose.push(transposedIntermediate);
  toDispose.push(reshapedIntermediate2);
  toDispose.push(sliced);

export const batchToSpaceNDConfig:
  KernelConfig = {
    kernelName: BatchToSpaceND,
    backendName: 'webgl',
    kernelFunc: batchToSpaceND as
  } as KernelFunc

export function bincount(args: {
  inputs: BincountInputs,
  backend:
MathBackendWebGL,
  attrs: BincountAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x, weights} = inputs;
  const {size} = attrs;

  const xVals = backend.readSync(x.dataId) as TypedArray;
  const weightsVals = backend.readSync(weights.dataId) as TypedArray;
  const xValInts = backend.smartInt(xVals);
  const weightsInts = backend.smartInt(weightsVals);

  return
  bincountImplCPU(xInt, weightsInt, weights.dtype, weights.shape, size);

export const bincountConfig: KernelConfig = {
    kernelName: Bincount,
    backendName: 'webgl',
    kernelFunc: bincount as
  } as KernelFunc

export function int(input: TensorInfo, backend: MathBackendWebGL): TensorInfo {
  const program = new UnaryOpProgram(input.shape, TO_INT);
  const output = backend.runWebGLProgram(program, [input], TO_INT);
  return
  output;

export const intConfig: KernelConfig = {
    kernelName: Int,
    backendName: 'webgl',
    kernelFunc: int as
  } as KernelFunc

=============================================================================

import {Bincount, BincountAttrs, BincountInputs, KernelConfig, KernelFunc, TensorInfo, TypedArray} from

import {MathBackendWebGL} from

import {bincountImplCPU}

export function bincount(args: {
  inputs: BincountInputs,
  backend:
MathBackendWebGL,
  attrs: BincountAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x, weights} = inputs;
  const {size} = attrs;

  const xVals = backend.readSync(x.dataId) as TypedArray;
  const weightsVals = backend.readSync(weights.dataId) as TypedArray;
  const xValInts = backend.smartInt(xVals);
  const weightsInts = backend.smartInt(weightsVals);

  return
  bincountImplCPU(xInt, weightsInt, weights.dtype, weights.shape, size);

export const bincountConfig: KernelConfig = {
    kernelName: Bincount,
    backendName: 'webgl',
    kernelFunc: bincount as
  } as KernelFunc

export function int(input: TensorInfo, backend: MathBackendWebGL): TensorInfo {
  const program = new UnaryOpProgram(input.shape, TO_INT);
  const output = backend.runWebGLProgram(program, [input], TO_INT);
  return
  output;

export const intConfig: KernelConfig = {
    kernelName: Int,
    backendName: 'webgl',
    kernelFunc: int as
  } as KernelFunc

=============================================================================

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 */

import {TensorInfo} from

import {MathBackendWebGL} from

import {UnaryOpProgram} from

const TO_INT = `return float(int(x));`;

export function int(input: TensorInfo, backend: MathBackendWebGL): TensorInfo {
  const program = new UnaryOpProgram(input.shape, TO_INT);
  const output = backend.runWebGLProgram(program, [input], TO_INT);
  return
  output;

export const intConfig: KernelConfig = {
    kernelName: Int,
    backendName: 'webgl',
    kernelFunc: int as
  } as KernelFunc

=============================================================================

Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6 5107
import {GPGPUContext} from './gpgpu_context';
import {GPGPUProgram} from './gpgpu_math';

export class ClipProgram implements GPGPUProgram {
  variableNames = ['A'];
  userCode: string;
  outputShape: number[];

  // Caching uniform locations for speed.
  minLoc: WebGLUniformLocation;
  maxLoc: WebGLUniformLocation;

  constructor(aShape: number[]) {
    this.outputShape = aShape;
    this.userCode = `uniform float minVal;
    uniform float maxVal;

    void main() {
      float value = getAAAtOutCoords();
      if (isNaN(value)) {
        setOutput(value);
        return;
      }

      setOutput(clamp(value, minVal, maxVal));
    }
  }

  getCustomSetupFunc(min: number, max: number) {
    return (gpgpu: GPGPUContext, webGLProgram: WebGLProgram) => {
      if (this.minLoc == null) {
        this.minLoc = gpgpu.getUniformLocationNoThrow(webGLProgram, 'minVal');
      }
      gpgpu.gl.uniform1f(this.minLoc, min);
    };
  }
}

import {GPGPUContext} from './gpgpu_context';
import {GPGPUProgram} from './gpgpu_math';

export class ClipPackedProgram implements GPGPUProgram {
  variableNames = ['A'];
  packedInputs = true;
  packedOutput = true;
  userCode: string;
  outputShape: number[];

  // Caching uniform locations for speed.
  minLoc: WebGLUniformLocation;
  maxLoc: WebGLUniformLocation;

  constructor(aShape: number[]) {
    this.outputShape = aShape;
    this.userCode = `uniform float minVal;
    uniform float maxVal;

    void main() {
      vec4 value = getAAtOutCoords();
      if (any(isNaN(value))) {
        setOutput(value);
        return;
      }

      setOutput(clamp(value, vec4(minVal), vec4(maxVal)));
    }
  }

  getCustomSetupFunc(min: number, max: number) {
    return (gpgpu: GPGPUContext, webGLProgram: WebGLProgram) => {
      if (this.minLoc == null) {
        this.minLoc = gpgpu.getUniformLocationNoThrow(webGLProgram, 'minVal');
      }
      gpgpu.gl.uniform1f(this.minLoc, min);
    };
  }
}

import {ClipByValue, ClipByValueAttrs, ClipByValueInputs, env, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import {ClipProgram} from '../clip_gpu';
import {ClipPackedProgram} from '../clip_packed_gpu';

export function clipByValue(args: {
  inputs: ClipByValueInputs,
  backend: MathBackendWebGL,
  attrs: ClipByValueAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;

  const {x} = inputs;
  const {clipValueMin, clipValueMax} = attrs;

  let program;
  if (env().getBool('WEBGL_PACK_CLIP')) {
    program = new ClipPackedProgram(x.shape);
  }
  else {
    program = new ClipProgram(x.shape);
  }

  const customSetup = program.getCustomSetupFunc(clipValueMin, clipValueMax);

  return backend.runWebGLProgram(program, 
    x, x.dtype, customSetup);
}

export const clipByValueConfig: KernelConfig = {
  kernelName: ClipByValue,
  backendName: 'webgl',
  kernelFunc: clipByValue as {} as KernelFunc
};

--------------------------------------------------------------------------

import {ClipByValue, ClipByValueAttrs, ClipByValueInputs, env, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import {ClipProgram} from '../clip_gpu';

export function clipByValue(args: {
  inputs: ClipByValueInputs,
  backend: MathBackendWebGL,
  attrs: ClipByValueAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;

  const {x} = inputs;
  const {clipValueMin, clipValueMax} = attrs;

  let program;
  if (env().getBool('WEBGL_PACK_CLIP')) {
    program = new ClipPackedProgram(x.shape);
  }
  else {
    program = new ClipProgram(x.shape);
  }

  const customSetup = program.getCustomSetupFunc(clipValueMin, clipValueMax);

  return backend.runWebGLProgram(program, [x], x.dtype, customSetup);
}

export const clipByValueConfig: KernelConfig = {
  kernelName: ClipByValue,
  backendName: 'webgl',
  kernelFunc: clipByValue as {} as KernelFunc
};

--------------------------------------------------------------------------

*\n\nimport {GPGPUContext} from './gpgpu_context';
import {GPGPUProgram} from './gpgpu_math';

export class ClipProgram implements GPGPUProgram {
  variableNames = ['A'];
  userCode: string;
  outputShape: number[];

  // Caching uniform locations for speed.
  minLoc: WebGLUniformLocation;
  maxLoc: WebGLUniformLocation;

  constructor(aShape: number[]) {
    this.outputShape = aShape;
    this.userCode = `uniform float minVal;
    uniform float maxVal;

    void main() {
      float value = getAAAtOutCoords();
      if (isNaN(value)) {
        setOutput(value);
        return;
      }

      setOutput(clamp(value, minVal, maxVal));
    }
  }

  getCustomSetupFunc(min: number, max: number) {
    return (gpgpu: GPGPUContext, webGLProgram: WebGLProgram) => {
      if (this.minLoc == null) {
        this.minLoc = gpgpu.getUniformLocationNoThrow(webGLProgram, 'minVal');
      }
      gpgpu.gl.uniform1f(this.minLoc, min);
    };
  }
}

import {GPGPUContext} from './gpgpu_context';
import {GPGPUProgram} from './gpgpu_math';

export class ClipPackedProgram implements GPGPUProgram {
  variableNames = ['A'];
  packedInputs = true;
  packedOutput = true;
  userCode: string;
  outputShape: number[];

  // Caching uniform locations for speed.
  minLoc: WebGLUniformLocation;
  maxLoc: WebGLUniformLocation;

  constructor(aShape: number[]) {
    this.outputShape = aShape;
    this.userCode = `uniform float minVal;
    uniform float maxVal;

    void main() {
      vec4 value = getAAtOutCoords();
      if (any(isNaN(value))) {
        setOutput(value);
        return;
      }

      setOutput(clamp(value, vec4(minVal), vec4(maxVal)));
    }
  }

  getCustomSetupFunc(min: number, max: number) {
    return (gpgpu: GPGPUContext, webGLProgram: WebGLProgram) => {
      if (this.minLoc == null) {
        this.minLoc = gpgpu.getUniformLocationNoThrow(webGLProgram, 'minVal');
      }
      gpgpu.gl.uniform1f(this.minLoc, min);
    };
  }
}

import {ClipByValue, ClipByValueAttrs, ClipByValueInputs, env, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import {ClipProgram} from '../clip_gpu';
import {ClipPackedProgram} from '../clip_packed_gpu';

export function clipByValue(args: {
  inputs: ClipByValueInputs,
  backend: MathBackendWebGL,
  attrs: ClipByValueAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;

  const {x} = inputs;
  const {clipValueMin, clipValueMax} = attrs;

  let program;
  if (env().getBool('WEBGL_PACK_CLIP')) {
    program = new ClipPackedProgram(x.shape);
  }
  else {
    program = new ClipProgram(x.shape);
  }

  const customSetup = program.getCustomSetupFunc(clipValueMin, clipValueMax);

  return backend.runWebGLProgram(program, [x], x.dtype, customSetup);
}

export const clipByValueConfig: KernelConfig = {
  kernelName: ClipByValue,
  backendName: 'webgl',
  kernelFunc: clipByValue as {} as KernelFunc
};

--------------------------------------------------------------------------

import {ClipByValue, ClipByValueAttrs, ClipByValueInputs, env, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import {ClipProgram} from '../clip_gpu';
import {ClipPackedProgram} from '../clip_packed_gpu';

export function clipByValue(args: {
  inputs: ClipByValueInputs,
  backend: MathBackendWebGL,
  attrs: ClipByValueAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;

  const {x} = inputs;
  const {clipValueMin, clipValueMax} = attrs;

  let program;
  if (env().getBool('WEBGL_PACK_CLIP')) {
    program = new ClipPackedProgram(x.shape);
  }
  else {
    program = new ClipProgram(x.shape);
  }

  const customSetup = program.getCustomSetupFunc(clipValueMin, clipValueMax);

  return backend.runWebGLProgram(program, [x], x.dtype, customSetup);
}

export const clipByValueConfig: KernelConfig = {
  kernelName: ClipByValue,
  backendName: 'webgl',
  kernelFunc: clipByValue as {} as KernelFunc
};

--------------------------------------------------------------------------

Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6 5108
import {GPGPUProgram} from './gpgpu_math';

```

import {GPGPUProgram} from './gpgpu_math';

export class ComplexAbsProgram implements GPGPUProgram {
  variableNames = ['real', 'imag'];
  userCode: string;
  outputShape: number[];
  constructor(shape: number[]) {
    this.outputShape = shape;
    this.userCode = `void main() {
      float re = abs(getRealAtOutCoords());
      float im = abs(getImagAtOutCoords());
      float mx = max(re, im);
      // sadly the length function in glsl is not underflow-safe
      // (at least not on Intel GPUs). So the safe solution
      // is to use abs(mx - getRealAtOutCoords()) + abs(mx - getImagAtOutCoords())
      // to ensure underflow-safety in all cases.
      setOutput(mx == 0.0 ? 0.0 : mx * length(vec2(1, min(re, im)/mx)))
    }
  }
}
```

import {ComplexAbs, ComplexAbsInputs, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';

```
import {ComplexAbs, ComplexAbsInputs, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {ComplexAbsProgram} from '../complex_abs_gpu';

// Returns a TensorInfo with the complex shape and the dataId of the underlying part.
// We need to do this because a reshaped complex tensor isn't reflected in its parts.
function makeComplexComponentTensorInfo(
    complexTensor: TensorInfo, complexPart: TensorInfo): TensorInfo {
  return {
    dataId: complexPart.dataId,
    dtype: complexPart.dtype,
    shape: complexTensor.shape
  };
}

export function complexAbs(
    args: {inputs: ComplexAbsInputs, backend: MathBackendWebGL}): TensorInfo {
  const {inputs, backend} = args;
  const {x} = inputs;

  const xData = backend.texData.get(x.dataId);

  const program = new ComplexAbsProgram(x.shape);
  const programInputs = [
    makeComplexComponentTensorInfo(x, xData.complexTensorInfos.real),
    makeComplexComponentTensorInfo(x, xData.complexTensorInfos.imag)
  ];

  return backend.runWebGLProgram(
      program, programInputs, programInputs[0].dtype);
}

export const complexAbsConfig: KernelConfig = {
  kernelName: ComplexAbs,
  backendName: 'webgl',
  kernelFunc: complexAbs as {} as KernelFunc
};
```
```javascript
const lastIndex = offsets.length; const lastShift = offsets[length - 1];
snippets.push('else ' + 'setOutput(getT0(yR, yC));
    for (let i = 1; i < offsets.length; i++) {
      const shift = offsets[i - 1];
      snippets.push(
          'else if (yC < ' + offsets[i] + ') ' +
          'setOutput(getT' + i + '(yR, yC-' + shift + '));
    }
    const lastIndex = offsets.length;
    const lastShift = offsets[offsets.length - 1];
    snippets.push(
        'else ' + 'setOutput(getT' + lastIndex + '(yR, yC-' + lastShift + '));
    }
    this.userCode = `
      void main() {
        int yR = coords.x;
        int yC = coords.y;
        ${snippets.join(' ')}
      }
    `;
  };
}

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 */

import {backend_util} from '@tensorflow/tfjs-core';
import {GPGPUProgram} from './gpgpu_math';
import {getChannels} from './packing_util';
import {getCoordsDataType} from './shader_compiler';
export class ConcatPackedProgram implements GPGPUProgram {
  variableNames: string[];
  packedInputs = true;
  packedOutput = true;
  outputShape: number[] = [];
  userCode: string;

  constructor(shapes: number[][], axis: number) {
    this.outputShape = backend_util.computeOutShape(shapes, axis);
    const shape = this.outputShape;
    const rank = shape.length;
    const dtype = getCoordsDataType(rank);
    const coords = getChannels('coords', rank);
    const channels = ['x', 'y', 'z', 'w', 'u', 'v'].slice(0, rank);
    this.variableNames = shapes.map((_, i) => `T${i}`);

    const offsets: number[] = new Array(shapes.length - 1);
    offsets[0] = shapes[0][axis];
    for (let i = 1; i < offsets.length; i++) {
      offsets[i] = offsets[i - 1] + shapes[i][axis];
    }

    const channel = channels[axis];
    const lastChannels = channels.slice(-2);
    const allChannels = channels.join();

    let getValueSnippet = `if (${channel} < ${offsets[0]}) {
      return getChannel(
        getT0(${allChannels}), vec2(${lastChannels.join()}));
    }`;
    for (let i = 1; i < offsets.length; i++) {
      const shift = offsets[i - 1];
      getValueSnippet += `
        if (${channel} < ${offsets[i]}  &&
            ${channel} >= ${offsets[i - 1]}) {
          return getChannel(
            getT${i}(${shiftedChannels(channels, channel, shift)}),
            vec2(${shiftedChannels(lastChannels, channel, shift)}));
        }`;
    }
    const lastIndex = offsets.length;
    const shift = offsets[offsets.length - 1];
    getValueSnippet += `
        return getChannel(
          getT${lastIndex}(${shiftedChannels(channels, channel, shift)}),
          vec2(${shiftedChannels(lastChannels, channel, shift)}));
    `;

    this.userCode = `
      float getValue(${channels.map(x => 'int ' + x)}) {
        ${getValueSnippet}
      }

      void main() {
        ${dtype} coords = getOutputCoords();
        vec4 result = vec4(getValue(${coords}), 0., 0., 0.);
        ${coords[rank - 1]} = ${coords[rank - 1]} + 1;
        if (${coords[rank - 1]} < ${shape[rank - 1]}) {
          result.g = getValue(${coords});
        }
        ${coords[rank - 2]} = ${coords[rank - 2]} + 1;
        if (${coords[rank - 2]} < ${shape[rank - 2]}) {
          result.a = getValue(${coords});
        }
        ${coords[rank - 1]} = ${coords[rank - 1]} - 1;
        if (${coords[rank - 1]} < ${shape[rank - 1]}) {
          result.b = getValue(${coords});
        }
        setOutput(result);
      }
    `;
  }
}

/**
 * Return an expression for coordinates into a vector where a given channel
 * will be offset by [shift].
 *
 * @param channels the channels to consider
 * @param channel the channel we want shifted
 * @param shift the amount to subtract from the channel.
 * @returns a string of the form 'x, y-[shift], z' where any one channel can
 * have the shift applied.
 */
function shiftedChannels(channels: string[], channel: string,
  shift: number) {
  const channelIdx = channels.indexOf(channel);
  const res = channels.map(c, idx) => {
    if (idx === channelIdx) {
      return `$c - $shift`;
    } else {
      return c;
    }
  });
  return res.join(';');
}
```

---

Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6
5110

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**============================================================================**

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=============================================================================

import {Imag, ImagInputs, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {identity} from './Identity';

export function imag(args: {inputs: ImagInputs, backend: MathBackendWebGL}): TensorInfo {
  const {inputs, backend} = args;
  const {input} = inputs;
  const inputData = backend.texData.get(input.dataId);

  return identity({inputs: {x: inputData.complexTensorInfos.imag}, backend});
}

export const imagConfig: KernelConfig = {
  kernelName: Imag,
  backendName: 'webgl',
  kernelFunc: imag as {} as KernelFunc
};

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 *
=============================================================================

import {backend_util, Concat, ConcatAttrs, ConcatInputs, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {concatImpl} from './Concat_impl';
import {identity} from './Identity';

export function concat(args: {inputs: ConcatInputs, attrs: ConcatAttrs, backend: MathBackendWebGL}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {axis} = attrs;

  const $axis = util.parseAxisParam(axis, inputs[0].shape)[0];
  const outShape = backend_util.computeOutShape(inputs.map(t => t.shape), $axis);

  if (util.sizeFromShape(outShape) === 0) {
    return backend.makeTensorInfo(outShape, inputs[0].dtype, []);
  }

  const $inputs = inputs.filter(t => util.sizeFromShape(t.shape) > 0);
  if ($inputs.length === 1) {
    return identity({inputs: {x: $inputs[0]}, backend});
  }

  const shapes = $inputs.map(t => t.shape);
  backend_util.assertParamsConsistent(shapes, $axis);

  return concatImpl($inputs, $axis, backend);
}

export const concatConfig: KernelConfig = {
  kernelName: Concat,
  backendName: 'webgl',
  kernelFunc: concat as {} as KernelFunc
};

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 *
=============================================================================

import {backend_util} from '@tensorflow/tfjs-core';
import {GPGPUProgram} from './gpgpu_math';

export class Conv2DProgram implements GPGPUProgram {
  variableNames = ['x', 'W'];
  outputShape: number[];
  userCode: string;
  constructor(convInfo: backend_util.Conv2DInfo, addBias = false, activation: string = null, hasPreluActivationWeights = false, hasLeakyreluAlpha = false) {
    this.outputShape = convInfo.outShape;
    this.userCode = convInfo.userCode;
    this.convInfo = convInfo;
    convInfo.addBias = addBias;
    convInfo.activation = activation;
    convInfo.hasPreluActivationWeights = hasPreluActivationWeights;
    convInfo.hasLeakyreluAlpha = hasLeakyreluAlpha;
  }

  outputShape: number[];
  userCode: string;
  constructor(convInfo: backend_util.Conv2DInfo, addBias = false, activation: string = null, hasPreluActivationWeights = false, hasLeakyreluAlpha = false) {
    this.outputShape = convInfo.outShape;
    this.userCode = convInfo.userCode;
    this.convInfo = convInfo;
    convInfo.addBias = addBias;
    convInfo.activation = activation;
    convInfo.hasPreluActivationWeights = hasPreluActivationWeights;
    convInfo.hasLeakyreluAlpha = hasLeakyreluAlpha;
  }

  outputShape: number[];
  userCode: string;
  constructor(convInfo: backend_util.Conv2DInfo, addBias = false, activation: string = null, hasPreluActivationWeights = false, hasLeakyreluAlpha = false) {
    this.outputShape = convInfo.outShape;
    this.userCode = convInfo.userCode;
    this.convInfo = convInfo;
    convInfo.addBias = addBias;
    convInfo.activation = activation;
    convInfo.hasPreluActivationWeights = hasPreluActivationWeights;
    convInfo.hasLeakyreluAlpha = hasLeakyreluAlpha;
  }

  outputShape: number[];
  userCode: string;
  constructor(convInfo: backend_util.Conv2DInfo, addBias = false, activation: string = null, hasPreluActivationWeights = false, hasLeakyreluAlpha = false) {
    this.outputShape = convInfo.outShape;
    this.userCode = convInfo.userCode;
    this.convInfo = convInfo;
    convInfo.addBias = addBias;
    convInfo.activation = activation;
    convInfo.hasPreluActivationWeights = hasPreluActivationWeights;
    convInfo.hasLeakyreluAlpha = hasLeakyreluAlpha;
  }

  outputShape: number[];
  userCode: string;
  constructor(convInfo: backend_util.Conv2DInfo, addBias = false, activation: string = null, hasPreluActivationWeights = false, hasLeakyreluAlpha = false) {
    this.outputShape = convInfo.outShape;
    this.userCode = convInfo.userCode;
    this.convInfo = convInfo;
    convInfo.addBias = addBias;
    convInfo.activation = activation;
void main() {
  ivec4 coords = getOutputCoords();
  int batch = coords[0];
  int d2 = coords[1];
  int d1 = 0;

  vec4 wValues = vec4(0.0);
  vec4 xValues = vec4(0.0);

  for (int wR = 0; wR < filterHeight; wR++) {
    int xR = xRCCorner.x + wR * strideHeight;
    ivec4 xCoord = ivec4(xR, xRCorner.y, coords[rowDim], coords[colDim]);

    vec4 w = getW(wR, xR, d1);
    vec4 x = getX(batch, xR, xC, d1);
    vec4 y = dot(x, w);

    if (y < 0) {
      y = 0;
    }

    wValues += y;
    xValues += y;
  }

  vec4 result = xValues;\n}

float dot(float x, float y) {
  return x * y;
}

vec4 getW(int wR, int xR, int d1) {
  return ...}

vec4 getX(int batch, int xR, int xC, int d1) {
  return ...}

float getLeakyreluAlphaAtOutCoords() {
  return ...}

float getLeakyreluAlpha() {
  return ...}

float getLeakyreluAlphaAtOutCoords();
variableNames = ['x', 'W'];
outputShape: number[];
userCode: string;
constructor(convInfo:
  backend_util.Conv3DInfo) {
  this.outputShape = convInfo.outShape;
  const padFront = convInfo.padInfo.front;
  const padTop = convInfo.padInfo.top;
  const padLeft = convInfo.padInfo.left;
  const strideDepth = convInfo.strideDepth;
  const strideHeight = convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;
  const dilationDepth = convInfo.dilationDepth;
  const dilationHeight = convInfo.dilationHeight;
  const dilationWidth = convInfo.dilationWidth;
  const filterDepth = convInfo.filterDepth;
  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const inputDepthNearestVec4 = Math.floor(convInfo.inChannels / 4) * 4;
  const inputDepthRemainder = convInfo.inChannels % 4;
  this.userCode = `const ivec3 strides = ivec3(${strideDepth}, ${strideHeight}, ${strideWidth});
  const vec3 paddings = vec3(${padFront}, ${padTop}, ${padLeft});

  void main() {
    vec4 in = input(batch = 0, x = x, y = y, z = z);
    vec2 in = input(batch = 0, x = x, y = y);
    vec3 in = input(batch = 0, x = x, y = y, z = z);
    vec4 in = input(batch = 0, x = x, y = y, z = z, w = w);
    vec2 in = input(batch = 0, x = x, y = y, w = w);
    vec3 in = input(batch = 0, x = x, y = y, z = z, w = w);
    vec4 in = input(batch = 0, x = x, y = y, z = z, w = w, d = d);

    float dotProd = 0.0;
    for (int w = 0; w < filterWidth; w++) {
      float dotProds = 0.0;
      for (int d = 0; d < inputDepthNearestVec4; d++) {
        vec4 wValues = vec4(input(d = d, x = x, y = y, z = z, w = w));
        vec2 wValues = vec2(input(d = d, x = x, y = y));
        vec3 wValues = vec3(input(d = d, x = x, y = y, z = z));
        vec4 wValues = vec4(input(d = d, x = x, y = y, z = z, w = w));
        vec2 wValues = vec2(input(d = d, x = x, y = y, w = w));
        vec3 wValues = vec3(input(d = d, x = x, y = y, z = z, w = w));
        vec4 wValues = vec4(input(d = d, x = x, y = y, z = z, w = w, d = d));
        vec2 wValues = vec2(input(d = d, x = x, y = y, w = w, d = d));
        vec3 wValues = vec3(input(d = d, x = x, y = y, z = z, w = w, d = d));
        vec4 wValues = vec4(input(d = d, x = x, y = y, z = z, w = w, d = d, d = d));
        ivec4 strides = ivec4(${strideDepth}, ${strideHeight}, ${strideWidth});
        float dotProds = dot(input(x = x, y = y, z = z, w = w));
        for (int w = 0; w < filterWidth; w++) {
          float dotProds = dot(input(x = x, y = y, z = z, w = w));
        }
        vec4 out = vec4(dotProds);
        setOutput(out);
      }
    }
    print(dotProds);
    return out;
  }
};
*/

import {backend_util} from '@tensorflow/tfjs-core';
import {getGlsdDifferences} from
  '/glsd_version';
import {GPGPUProgram} from '/gpgpu_math';
export class Im2ColPackedProgram implements GPGPUProgram {
  variableNames = ['A'];
  packedInputs = true;
  packedOutput = true;
}
```javascript
outputShape: number[];

userCode: string;

constructor(
  outputShape: number[],
  inputShape: number[],
  convInfo: backend_util.Conv2DInfo) {
  this.outputShape = outputShape;
  this.inChannels = convInfo.inChannels;
  this.strideWidth = convInfo.strideWidth;
  this.strideHeight = convInfo.strideHeight;
  this.padInfo = convInfo.padInfo;
  this.outputWidth = convInfo.outputWidth;
  this.dilationWidth = convInfo.dilationWidth;
  this.dilationHeight = convInfo.dilationHeight;
  this.dataFormat = convInfo.dataFormat;

  const {left, top} = convInfo.padInfo;
  this.padInfo = {left, top};

  if (this.inChannels <= 1) {
    console.error(`Conv2D: In channels is less than or equal to 1.`);
    return;
  }

  let unrolled = `;

  for (let row = 0; row <= 1; row++) {
    for (let col = 0; col <= 1; col++) {
      unrolled += `;
      blockIndex = rc.y + ${col} * $[row];
      pos = rc.x + $[row] * $[col];

      if (blockIndex < $[outputShape[1]] &&
          pos < $[outputShape[0]]) {
        offsetY = int(blockIndex / $[outputWidth]) * $[strideHeight] - $[top] + $[row] * $[strideWidth] - $[left].
        d0 = offsetY + $[dilationHeight] * (pos / $[itemsPerBlockRow]);

        if (d0 < $[inputShape[row]] && d1 < $[inputShape[col]]) {
          offsetX = int(mod(float(blockIndex), $[outputWidth]) * $[strideWidth] - $[left].);
          d1 = offsetX + $[dilationWidth] * int(mod(float(pos), $[inChannels]));

          ch = int(mod(float(pos), $[inChannels]));

          if ($[isChannelsLast]) {
            innerDims = vec2(d1, ch);
            result[rc.y * 2 + rc.x] = getChannel(getA(d0, int(innerDims.x), int(innerDims.y)), innerDims);
          } else {
            innerDims = vec2(d0, d1);
            result[rc.y * 2 + rc.x] = getChannel(getA(ch, int(innerDims.x), int(innerDims.y)), innerDims);
          }
        }
      }
    }
  }

  this.userCode = `;

  this.outputShape = outputShape;
  this.inChannels = inChannels;
  this.strideWidth = strideWidth;
  this.strideHeight = strideHeight;
  this.padInfo = padInfo;
  this.outputWidth = outputWidth;
  this.dilationWidth = dilationWidth;
  this.dilationHeight = dilationHeight;
  this.dataFormat = dataFormat;

  // AchannelsLast, con const rowDim = isChannelsLast ? 0 : 1;  
  const colDim = isChannelsLast ? 1 : 2;

  let unrolled = `;

  for (let row = 0; row <= 1; row++) {
    for (let col = 0; col <= 1; col++) {
      unrolled += `;
      blockIndex = rc.y + $[col];
      pos = rc.x + $[row];

      if (blockIndex < $[outputShape[1]] &&
          pos < $[outputShape[0]]) {
        offsetY = int(blockIndex / $[outputWidth]) * $[strideHeight] - $[top] + $[row] * $[strideWidth] - $[left].
        d0 = offsetY + $[dilationHeight] * (pos / $[itemsPerBlockRow]);

        if (d0 < $[inputShape[row]] && d1 < $[inputShape[col]]) {
          offsetX = int(mod(float(blockIndex), $[outputWidth]) * $[strideWidth] - $[left].);
          d1 = offsetX + $[dilationWidth] * int(mod(float(pos), $[inChannels]));

          ch = int(mod(float(pos), $[inChannels]));

          if ($[isChannelsLast]) {
            innerDims = vec2(d1, ch);
            result[rc.y * 2 + rc.x] = getChannel(getA(d0, int(innerDims.x), int(innerDims.y)), innerDims);
          } else {
            innerDims = vec2(d0, d1);
            result[rc.y * 2 + rc.x] = getChannel(getA(ch, int(innerDims.x), int(innerDims.y)), innerDims);
          }
        }
      }
    }
  }

  this.userCode = `
    void main() {
      ivec2 rc = getOutputCoords();
      vec4 result = vec4(0);
      int blockIndex, pos, offsetY, d0, offsetX, d1, ch;
      vec2 innerDims;
      //
      unrolled
      //
      result[rc.x * 2 + rc.y] = getChannel(getA(ch, int(innerDims.x), int(innerDims.y)), innerDims);
    }
  `;
}
```

```
const targetShape = isChannelsLast ? xShape[0] * xShape[1] * xShape[2] : xShape[0] * xShape[2] * xShape[3];

const xReshaped = reshape({
  inputs: [x],
  backend,
  attr: {shape: [1, targetShape, convInfo.inChannels]}
});

const result = batchMatMulImpl({
  a: xReshaped,
  b: filterReshaped,
  transposeA, transposeB,
  backend,
  bias, activation,
  preluActivationWeights,
  leakyreluAlpha
});

const out = reshape(
  {inputs: [result],
   backend, attr: {shape: convInfo.outShape}}
);

intermediates.push(xReshaped);
intermediates.push(filterReshaped);
intermediates.push(result);
}

else {

  // Following optimization is specific to packed |x| with odd row count
  // (For example, in channelLast mode, ‘row count’ refers to x.shape[2]):
  // we avoid expensive packed 2x2 reshape by padding row count to next
  // even number. When x.shape[2] is odd, the result of packed batchMatMul
  // is the same (has the same texture layout and and values in the texture) as
  // it is for even x.shape[2] + 1. We make the odd-rows tensor to look
  // like
  // even-rows tensor before the operation and, after the batchMatMul,
  // fix the even-rows result to have odd number of rows.

  const targetShape = isChannelsLast ?
    xShape[0] * xShape[1] * (xShape[2] + 1) :
    xShape[0] * xShape[2] * (xShape[3] + 1);

  const xReshaped: TensorInfo = {
    dataId: x.dataId,
    shape:
      [1, targetShape, convInfo.inChannels],
    dtype: x.dtype
  };

  // xTexData.shape gets referenced from
  // GPGPUBinary.inShapeInfos.
  // Decrementing row count, after batchMatMul >...->compileProgram leads to
  // invalid row count within the reference in GPGPUBinary.inShapeInfos.
  // Alternative fix would be to provide a
copy to GPGPUBinary.inShapeInfos
  // in compileProgram method, but that would affect compilation of all
  // programs - instead, provide a copy here, with even row count, before
  // calling batchMatMul >...->compileProgram and after that, the original
  // xTexData.shape is restored.
  // const originalXTexDataShape = xTexData.shape.slice();

  const filterReshaped = reshape({
    inputs: [x: filter],
    backend,
    attr: {shape: [1, convInfo.inChannels, convInfo.outChannels]}
  });

  intermediates.push(filterReshaped);

  const pointwiseConv = batchMatMulImpl({
    a: xReshaped,
    b: filterReshaped,
    backend,
    transposeA,
    transposeB,
    bias,
    activation,
    preluActivationWeights,
    leakyreluAlpha
  });

  pointwiseConvTexData = backend.texData.get(pointwiseConv.dataId);
  util.assert(
    pointwiseConvTexData.isPacked,
    () => 'batchMatMul result is expected to be packed');

  // Restore the input shape to original.
  xTexData.shape = originalXTexDataShape;

  // Set the output shape - there is no need for expensive reshape as data
  // layout is already correct.

  const pointwiseConvTexData.shape = convInfo.outShape;
  out = identity({inputs: [x: pointwiseConv],
                  backend});

  out.shape = convInfo.outShape;

  intermediates.push(pointwiseConv);

  for (const i of intermediates) {
    backend.disposeIntermediateTensorInfo(i);
  }

  return out;
}

function conv2dWithIm2Row({
  x,
  filter,
  convInfo,
  backend,
  bias = null,
  preluActivationWeights = null,
  leakyreluAlpha = 0,
  activation = null
}:

  const {filterWidth,
         filterHeight,
         inChannels,
         outHeight,
         outWidth,
         dataFormat
     } = convInfo;

  const isChannelsLast = dataFormat === 'channelsLast';

  const sharedDim = filterWidth * filterHeight * inChannels;

  const numCols = outHeight * outWidth;

  const x2ColShape = [sharedDim, numCols];
  const transposeA = true;
  const transposeB = false;

  const intermediates: TensorInfo[] = [
    util.composeTensorInfo({
      bias: null,
      preluActivationWeights: null,
      leakyreluAlpha: 0,
      activation: null
    },
    {backend, dispose: false,
     rank: 4,
     isIntermediate: true}
  ];

  const out = conv2dImpl({
    x: xSqueezed,
    filter:
      util.composeTensorInfo({
        bias: null,
        preluActivationWeights: null,
        leakyreluAlpha: 0,
        activation: null
      },
      {backend: backend, dispose: false,
       rank: 4,
       isIntermediate: true}
    ),
    convInfo:
      util.composeTensorInfo({
        bias: null,
        preluActivationWeights: null,
        leakyreluAlpha: 0,
        activation: null
      },
      {backend: backend, dispose: false,
       rank: 4,
       isIntermediate: true}
    },
    backend,
    attr: {shape: x.shape.slice(1)}
  });

  return out;
}
Im2ColPackedProgram(x2ColShape, xSqueezed.shape, convInfo);
const im2Col = backend.runWebGLProgram(im2ColProgram, [xSqueezed], 'float32');
const im2ColReshaped = reshape([{
inputs: [x: im2Col],
backend, 
attrs: {shape: [1, x2ColShape[0], x2ColShape[1]]}
}]);

intermediates.push(im2Col);
intermediates.push(im2ColReshaped);

const hasBias = bias !== null;
const hasLeakyreluAlpha = activation === 'leakyrelu';
const fusedActivation = activation ? mapActivationToShaderProgram(activation, true) : null;

const matmulProgram = new MatMulPackedProgram(
  im2ColReshaped.shape as [number, number, number, number],
  w2Row.shape as [number, number, number, number],
  [1, numCols, convInfo.outChannels], transposeA, transposeB,
  hasBias,
  fusedActivation, hasLeakyreluActivationWeights, hasLeakyreluAlpha);

const inputs: TensorInfo[] = [im2ColReshaped, w2Row];

if (bias) {
  inputs.push(bias);
}

if (hasLeakyreluActivationWeights) {
  inputs.push(preluActivationWeights);
}

if (hasLeakyreluAlpha) {
  const $leakyreluAlpha = backend.makeTensorInfo([], 'float32',
    util.createScalarValue(leakyreluAlpha as {} as 'float32', 'float32'));
  inputs.push($leakyreluAlpha);
  intermediates.push($leakyreluAlpha);
}

const product = backend.runWebGLProgram(matmulProgram, inputs, 'float32');

const outShape = isChannelsLast ?
  [1, outHeight, outWidth, convInfo.outChannels] :
  [1, convInfo.outChannels, outHeight, outWidth];

const out = reshape({
  inputs: [x: product],
  backend, 
  attrs: {shape: outShape}
});

intermediates.push(product);
for (const i of intermediates) {
  backend.disposeIntermediateTensorInfo(i);
}

return out;

}
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---

```javascript
import {backend_util} from '@tensorflow/tfjs-core';
import {GPGPUProgram} from './gpgpu_math';

export class Conv2DDerFilterProgram implements GPGPUProgram {
  variableNames = ['x', 'dy'];
  outputShape: number[];
  userCode: string;
  constructor(convInfo: backend_util.Conv2DInfo) {
    this.outputShape = convInfo.filterShape;
    const strideHeight = convInfo.strideHeight;
    const strideWidth = convInfo.strideWidth;
    const padTop = convInfo.padInfo.top;
    const padLeft = convInfo.padInfo.left;
    const isChannelsLast = convInfo.dataFormat === 'channelsLast';
    this.userCode = 'void main() { 
      vec4 coords = getOutputCoords();
      int wR = coords.x;
      int wC = coords.y;
      int d1 = coords.z;
      int d2 = coords.w;
      // Convolve x(:, :, d1) with dy(:, :, d2) to get dw(wR, wC, d1, d2).
      // ? = to be determined.
      // : = across all values in that axis.
      float dotProd = 0.0;
      for (int b = 0; b < convInfo.batchSize; b++) {
        for (int yR = 0; yR < convInfo.outHeight; yR++) {
          int xR = wR + yR * strideHeight - padTop;
          if (xR < 0 || xR >= convInfo.inHeight) {
            continue;
          }
          int d1 = coords[wR + yR * strideHeight - padTop];
        }
        setOutput(dotProd);
      }
    }
  }
}

export class Conv2DDerInputProgram implements GPGPUProgram {
  variableNames = ['dy', 'W'];
  outputShape: number[];
  userCode: string;
  constructor(convInfo: backend_util.Conv2DInfo) {
    this.outputShape = convInfo.inShape;
    const filterHeight = convInfo.filterHeight;
    const filterWidth = convInfo.filterWidth;
    const strideHeight = convInfo.strideHeight;
    const strideWidth = convInfo.strideWidth;
    const isChannelsLast = convInfo.dataFormat === 'channelsLast';
    const padTop = filterHeight - 1 - convInfo.padInfo.top;
    const padLeft = filterWidth - 1 - convInfo.padInfo.left;
    const rowDim = isChannelsLast ? 1 : 2;
    const colDim = isChannelsLast ? 2 : 3;
    const channelDim = isChannelsLast ? 3 : 1;
    this.userCode = 'void main() {
      const ivec2 pads = ivec2(padTop, padLeft);
      void main() {
      for (int yC = 0; yC < convInfo.outWidth; yC++) {
        float xValue = getX(b, xR, yC, d1);
        dotProd += (xValue * dyValue);
      }
    }
  }
}

export class Conv3DDerFilterProgram implements GPGPUProgram {
  variableNames = ['x', 'dy'];
  outputShape: number[];
  userCode: string;
  constructor(convInfo: backend_util.Conv3DInfo) {
    this.outputShape = convInfo.inShape;
    const filterHeight = convInfo.filterHeight;
    const filterWidth = convInfo.filterWidth;
    const strideHeight = convInfo.strideHeight;
    const strideWidth = convInfo.strideWidth;
    const strideDepth = convInfo.strideDepth;
    const isChannelsLast = convInfo.dataFormat === 'channelsLast';
    this.userCode = 'void main() {
      vec4 coords = getOutputCoords();
      int wC = coords.x;
      int wR = coords.y;
      int d1 = coords.z;
      int d2 = coords.w;
      // Convolve x(:, :, d1) with dy(:, :, d2) to compute dx(xR, xC, d1, d2).
      // ? = to be determined.
      // : = across all values in that axis.
      float dotProd = 0.0;
      for (int wR = 0; wR < convInfo.outWidth; wR++) {
        for (int yR = 0; yR < convInfo.outHeight; yR++) {
          float xValue = getW(wR, yR, d1, d2);
          dotProd += (xValue * dyValue);
        }
        setOutput(dotProd);
      }
    }
  }
}
```

---

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b++) {
          for (int yF = 0; yF < ${convInfo.outDepth}; yF++) {
            int xF = wF + yF * ${strideDepth} -
            ${padFront};

            if (xF < 0 || xF >= ${convInfo.inDepth}) {
              continue;
            }

            for (int yR = 0; yR < ${convInfo.outHeight}; yR++) {
              int xR = wR + yR * ${strideHeight} - ${padTop};

              if (xR < 0 || xR >= ${convInfo.inHeight}) {
                continue;
              }

              for (int yC = 0; yC < ${convInfo.outWidth}; yC++) {
                int xC = wC + yC * ${strideWidth} - ${padLeft};

                if (xC < 0 || xC >= ${convInfo.inWidth}) {
                  continue;
                }

                float dyValue = getDy(b, yF, yR, yC, d2);
                float xValue = getX(b, xF, xR, xC, d1);

                dotProd += (xValue * dyValue);

              }
            }
          }
        }
        setOutput(dotProd);
      }
    `;
  }
}

export class Conv3DDerInputProgram implements GPGPUProgram {
  variableNames = ['dy', 'W'];
  outputShape: number[];
  userCode: string;
  constructor(convInfo: backend_util.Conv3DInfo) {
    this.outputShape = convInfo.inShape;
    const filterDepth = convInfo.filterDepth;
    const filterHeight = convInfo.filterHeight;
    const filterWidth = convInfo.filterWidth;
    const strideDepth = convInfo.strideDepth;
    const strideHeight = convInfo.strideHeight;
    const strideWidth = convInfo.strideWidth;
    const padFront = filterDepth - 1 - convInfo.padInfo.front;
    const padTop = filterHeight - 1 - convInfo.padInfo.top;
    const padLeft = filterWidth - 1 - convInfo.padInfo.left;

    this.userCode = `const ivec3 pads = ivec3(${padFront}, ${padTop},
    ${padLeft});

    void main() {
      ivec5 coords = getOutputCoords();
      int batch = coords.x;
      int d1 = coords.u;
      ivec3 dyCorner = ivec3(coords.y, coords.z, coords.w) - pads;
      int dyFCorner = dyCorner.x;
      int dyRCorner = dyCorner.y;
      int dyCCorner = dyCorner.z;

      float dotProd = 0.0;

      for (int wF = 0; wF < ${filterDepth}; wF++) {
        float dyF = float(dyFCorner + wF) / ${strideDepth}.0;

        if (dyF < 0.0 || dyF >= ${convInfo.outDepth}.0 ||
            fract(dyF) > 0.0) {
          continue;
        }

        int idyF = int(dyF);
        int wFPerm = ${filterDepth} - 1 - wF;

        for (int wR = 0; wR < ${filterHeight}; wR++) {
          float dyR = float(dyRCorner + wR) / ${strideHeight}.0;

          if (dyR < 0.0 || dyR >= ${convInfo.outHeight}.0 ||
              fract(dyR) > 0.0) {
            continue;
          }

          int idyR = int(dyR);
          int wRPerm = ${filterHeight} - 1 - wR;

          for (int wC = 0; wC < ${filterWidth}; wC++) {
            float dyC = float(dyCCorner + wC) / ${strideWidth}.0;

            if (dyC < 0.0 || dyC >= ${convInfo.outWidth}.0 ||
                fract(dyC) > 0.0) {
              continue;
            }

            int idyC = int(dyC);
            int wCPerm = ${filterWidth} - 1 - wC;

            for (int d2 = 0; d2 < ${convInfo.outChannels}; d2++) {
              float xValue = getDy(batch, idyF, idyR, idyC, d2);

              dotProd += xValue * wValue;
            }
          }
        }
      }
      setOutput(dotProd);
    }
  }
}

export const conv2DBackpropFilterConfig: KernelConfig = {
  kernelName: Conv2DBackpropFilter,
  kernelFunc: conv2DBackpropFilter
}
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```javascript
import {backend_util, Conv2DBackpropInput, Conv2DBackpropInputAttrs, Conv2DBackpropInputInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {Conv2DDerInputProgram} from '../conv_backprop_gpu';

export function conv2DBackpropInput(args: {
  inputs: Conv2DBackpropInputInputs,
  attrs: Conv2DBackpropInputAttrs,
  backend: MathBackendWebGL
}) {
  const {inputs, backend, attrs} = args;
  const {dy, filter} = inputs;
  const {inputShape, strides, pad, dataFormat, dimRoundingMode} = attrs;

  const $dataFormat = backend_util.convertConv2DDataFormat(dataFormat);
  const convInfo = backend_util.computeConv2DInfo(
    inputShape, filter.shape as [number, number, number, number], strides,
    1 /* dilations */, pad,
    dimRoundingMode, false, $dataFormat);

  const program = new Conv2DDerInputProgram(convInfo);
  return backend.runWebGLProgram(program, [dy, filter], 'float32');
}

export const conv2DBackpropInputConfig:
  KernelConfig = {
    kernelName: Conv2DBackpropInput,
    backendName: 'webgl',
    kernelFunc: conv2DBackpropInput as {} as KernelFunc,
  };

import {backend_util, Conv3D, Conv3DAttrs, Conv3DInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {Conv3DProgram} from '../conv_gpu';

export function conv3D(
    args: {
        inputs: Conv3DInputs, 
        attrs: Conv3DAttrs, 
        backend: MathBackendWebGL
    }) {
    const {inputs, backend, attrs} = args;
    const {x, filter} = inputs;
    const {strides, pad, dilations} = attrs;

    const convInfo = backend_util.computeConv3DInfo(
        x.shape as [number, number, number, number, number],
        filter.shape as [number, number, number, number, number], strides,
        1 /* dilations */, pad);

    const program = new Conv3DProgram(convInfo);
    return backend.runWebGLProgram(program, [x, filter], 'float32');
}

export const conv3DConfig:
  KernelConfig = {
    kernelName: Conv3D,
    backendName: 'webgl',
    kernelFunc: conv3D as {} as KernelFunc,
  };

import {backend_util, Conv3DBackpropFilterV2, Conv3DBackpropFilterV2Attrs, Conv3DBackpropFilterV2Inputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';

export function conv3DBackpropFilterV2(args: {
  inputs: Conv3DBackpropFilterV2Inputs,
  attrs: Conv3DBackpropFilterV2Attrs,
  backend: MathBackendWebGL
}) {
```

```
```javascript
const {inputs, backend, attrs} = args;
const {x, dy} = inputs;
const {strides, pad, filterShape} = attrs;

const convInfo = backend_util.computeConv3DInfo(x.shape as [number, number, number, number, number], filterShape, strides, 1 /* dilations */, pad);
const program = new Conv3DDerFilterProgram(convInfo);
return backend.runWebGLProgram(program, [x, dy], 'float32');

export const conv3DBackpropFilterV2Config: KernelConfig = {
  kernelName: Conv3DBackpropFilterV2,
  backendName: 'webgl',
  kernelFunc: conv3DBackpropFilterV2 as {} as KernelFunc
};

export function conv3DBackpropFilterV2(args: {
  inputs: Conv3DBackpropFilterV2Inputs,
  attrs: Conv3DBackpropFilterV2Attrs,
  backend: MathBackendWebGL
}) {
  const {inputs, backend, attrs} = args;
  const {dy, filter} = inputs;
  const {pad, strides, inputShape} = attrs;

  const convInfo = backend_util.computeConv3DInfo(inputShape, filter.shape as [number, number, number, number, number], strides, 1 /* dilations */, pad);
  const program = new Conv3DDerFilterProgram(convInfo);
  return backend.runWebGLProgram(program, [dy, filter], 'float32');
}
```

```javascript
export const conv3DBackpropInputConfig: KernelConfig = {
  kernelName: Conv3DBackpropInputV2,
  backendName: 'webgl',
  kernelFunc: conv3DBackpropInput as {} as KernelFunc,
};

export function conv3DBackpropInput(args: {
  inputs: Conv3DBackpropInputV2Inputs,
  attrs: Conv3DBackpropInputV2Attrs,
  backend: MathBackendWebGL
}) {
  const {inputs, backend, attrs} = args;
  const {dy, filter} = inputs;
  const {pad, strides, inputShape} = attrs;

  const convInfo = backend_util.computeConv3DInfo(inputShape, filter.shape as [number, number, number, number, number], strides, 1 /* dilations */, pad);
  const program = new Conv3DDerInputProgram(convInfo);
  return backend.runWebGLProgram(program, [dy, filter], 'float32');
}
```

```javascript
export const cos = unaryKernelFunc({opSnippet: COS});

export const cosConfig: KernelConfig = {
  kernelName: Cos,
  backendName: 'webgl',
  kernelFunc: cos,
};

export const cosh = unaryKernelFunc({opSnippet: COSH});

export const coshConfig: KernelConfig = {
  kernelName: Cosh,
  backendName: 'webgl',
  kernelFunc: cosh,
};
```

---

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=============================================================================
*/

import {GPGPUProgram} from './gpgpu_math';

export class CropAndResizeProgram implements GPGPUProgram {
  variableNames = ['Image', 'Boxes', 'BoxInd'];
  outputShape: number[] = [ ];
  userCode: string;
  constructor(imageShape: [number, number, number, number], boxShape: [number, number],
  cropSize: [number, number], method: 'bilinear'|'nearest', extrapolationValue: number) {
    const [batch, imageHeight, imageWidth, depth] = imageShape;
    const [numBoxes, ] = boxShape;
    const [cropHeight, cropWidth] = cropSize;
    this.outputShape = [numBoxes, cropHeight, cropWidth, depth];
    const methodId = method !== 'bilinear' ? 1 : 0;
    const inputHeightFloat = imageHeight > 1 ? ' ' : `$\{imageHeight - 1\}.0`;
    const [heightRatio, heightScale] = cropHeight > 1 ? [ ' ', ' ' ] :
        [ `1 * (y2-y1) * height_ratio`, `y1 * [inputHeightFloat]` ];
    const [widthRatio, widthScale] = cropWidth > 1 ? [ ' ', ' ' ] :
        [ `1 * (x2-x1) * width_ratio`, 'x1 * [inputWidthScale] + float(x)*(width_scale)` ];
    if (methodId == 1) {
      // Compute the four integer indices.
      ivec2 sourceFloorCR = ivec2(sourceFracIndexCR);
      ivec2 sourceCeilCR = ivec2(ceil(sourceFracIndexCR));
      float topLeft = getImage(b, sourceFloorCR.y, sourceFloorCR.x, d);
      float bottomLeft = getImage(b, sourceCeilCR.y, sourceFloorCR.x, d);
      float topRight = getImage(b, sourceFloorCR.y, sourceCeilCR.x, d);
      float bottomRight = getImage(b, sourceCeilCR.y, sourceCeilCR.x, d);
      vec2 fracCR = sourceFracIndexCR - vec2(sourceFloorCR);
      float top = topLeft + (topRight - topLeft) * fracCR.x;
      float bottom = bottomLeft + (bottomRight - bottomLeft) * fracCR.x;
      float newValue = top + (bottom - top) * fracCR.y;
    } else {
      // Compute the coordinators of nearest neighbor point.
      ivec2 sourceNearestCR = ivec2(ceil(sourceFracIndexCR));
      float topLeft = getImage(b, sourceFloorCR.y, sourceFloorCR.x, d);
      float bottomRight = getImage(b, sourceCeilCR.y, sourceCeilCR.x, d);
      vec2 fracCR = sourceFracIndexCR - vec2(sourceFloorCR);
      float top = (topLeft + (topRight - topLeft)) * fracCR.x;
      float bottom = (bottomLeft + (bottomRight - bottomLeft)) * fracCR.x;
      float newValue = top + (bottom - top) * fracCR.y;
    }
    setOutput(newValue);
  }
}

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=============================================================================

// tslint:disable-next-line:max-line-length

https://github.com/tensorflow/tensorflow/blob/master/tensorflow/core/kernels/crop_and_resize_op_gpu.cc

```javascript
this.userCode = `const float height_ratio = float(${heightRatio});
const float width_ratio = float(${widthRatio});
void main() {
  ivec4 coords = getOutputCoords();
  int b = coords[0];
  int y = coords[1];
  int x = coords[2];
  int d = coords[3];
  // get box vals
  float y1 = getBoxes(b,0);
  float x1 = getBoxes(b,1);
  float y2 = getBoxes(b,2);
  float x2 = getBoxes(b,3);
  // get image in batch index
  int bln = round(getBoxInd(b));
  if(bln < 0 || bln >= ${batch}) {
    return;
  }
  float height_scale = ${heightScale};
  float width_scale = ${widthScale};
  float in_y = ${inY};
  if( in_y < 0.0 || in_y > ${inputHeightFloat} ) {
    setOutput(float(${extrapolationValue}));
    return;
  }
  float in_x = ${inX};
  if( in_x < 0.0 || in_x > ${inputWidthFloat} ) {
    setOutput(float(${extrapolationValue}));
    return;
  }
  vec2 sourceFracIndexCR = vec2(in_x,in_y);
  if($methodId == 1) { // Compute the four integer indices.
    ivec2 sourceFloorCR = ivec2(sourceFloorCR);
    ivec2 sourceCeilCR = ivec2(sourceCeilCR);
    float topLeft = getImage(b, sourceFloorCR.y, sourceFloorCR.x, d);
    float bottomRight = getImage(b, sourceCeilCR.y, sourceCeilCR.x, d);
    vec2 fracCR = sourceFracIndexCR - vec2(sourceFloorCR);
    float top = (topLeft + (topRight - topLeft)) * fracCR.x;
    float bottom = (bottomLeft + (bottomRight - bottomLeft)) * fracCR.x;
    float newValue = top + (bottom - top) * fracCR.y;
  } else {
    // Compute the coordinators of nearest neighbor point.
    ivec2 sourceNearestCR = ivec2(ceil(sourceFracIndexCR));
    float topLeft = getImage(b, sourceFloorCR.y, sourceFloorCR.x, d);
    float bottomRight = getImage(b, sourceCeilCR.y, sourceCeilCR.x, d);
    vec2 fracCR = sourceFracIndexCR - vec2(sourceFloorCR);
    float top = (topLeft + (topRight - topLeft)) * fracCR.x;
    float bottom = (bottomLeft + (bottomRight - bottomLeft)) * fracCR.x;
    float newValue = top + (bottom - top) * fracCR.y;
  }
  setOutput(newValue);
  return;
}
```
```
import {CropAndResize, CropAndResizeAttrs, CropAndResizeInputs, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core'; import {MathBackendWebGL} from '../backend_webgl'; import {CropAndResizeProgram} from '../crop_and_resize_gpu'; export const cropAndResize = (args: {
  inputs: CropAndResizeInputs,
  backend: MathBackendWebGL,
  attrs: CropAndResizeAttrs
}): TensorInfo => {
  const {inputs, backend, attrs} = args;
  const {image, boxes, boxInd} = inputs;
  const {cropSize, method, extrapolationValue} = attrs;
  const program = new CropAndResizeProgram(
    image.shape as [number, number, number, number],
    boxes.shape as [number, number, number, number],
    cropSize, method, extrapolationValue);
  return backend.runWebGLProgram(program, [image, boxes, boxInd], 'float32');
};

export const cropAndResizeConfig: KernelConfig = {
  kernelName: CropAndResize,
  backendName: 'webgl',
  kernelFunc: cropAndResize as {} as KernelFunc
};

import {GPGPUContext} from './gpgpu_context'; import {GPGPUProgram} from './gpgpu_math';
import {getCoordsDataType} from './shader_compiler';

export class CumSumProgram implements GPGPUProgram {
  variableNames = ['x'];
  outputShape: number[];
  userCode: string;

  index: WebGLUniformLocation;

  constructor(shape: number[], exclusive: boolean, reverse: boolean) {
    this.outputShape = shape;
    const rank = shape.length;
    const val = exclusive ? '0.0' : `getX(${getCoords(rank, 'coords')})`;
    const length = shape[length - 1];
    let condition = '';
    let idxString = '';
    if (exclusive) {
      condition = reverse ? `end != ${length - 1}` :
        `end != 0`; idxString = reverse ? 'end + 1' : 'end - 1';
    } else {
      condition = reverse ? `end + pow2 < ${length}` :
        `end >= pow2`; idxString = (reverse ? 'end + pow2' : 'end - pow2');
    }
    this.userCode = `uniform float index;
      void main() {
        ${getCoordsDataType(rank)} coords = getOutputCoords();
        int end = ${getFinalCoord(rank, 'coords')};
        float val = ${val};
        int pow2 = int(pow(2.0, index));
        if (${condition}) {
          int idx = ${idxString};
          ${getFinalCoord(rank, 'coords')} = idx;
          val += getX(${getCoords(rank, 'coords')});
        }
        setOutput(val);
      }
    `;
  }

  getCustomSetupFunc(index: number) {
    return (gpgpu: GPGPUContext, webGLProgram: WebGLProgram) => {
      if (this.index == null) {
        this.index = gpgpu.getUniformLocation(webGLProgram, 'index');
      }
      function getCoords(rank, number, name, string): string {
        if (rank === 1) {
          return `$({name})`;
        } else if (rank === 2) {
          return `$({name}.x, ${name}.y)`;
        } else if (rank === 3) {
          return `$({name}.x, ${name}.y, ${name}.z)`;
        } else if (rank === 4) {
          return `$({name}.x, ${name}.y, ${name}.z, ${name}.w)`;
        } else 
          throw Error('Cumulative sum for rank $rank is not yet supported');

      function getFinalCoord(rank, number, name, string): string {
        if (rank === 1) {
          return `$({name})`;
        } else if (rank === 2) {
          return `$({name}.x, ${name}.y)`;
        } else if (rank === 3) {
          return `$({name}.x, ${name}.y, ${name}.z)`;
        } else if (rank === 4) {
          return `$({name}.x, ${name}.y, ${name}.z, ${name}.w)`;
        } else 
          throw Error('Cumulative sum for rank $rank is not yet supported');
      }
      return (gpgpu: GPGPUContext, webGLProgram: WebGLProgram) => {
        if (this.index == null) {
          this.index = gpgpu.getUniformLocation(webGLProgram, 'index');
        }
      };
    };
  }

function getFinalCoord(rank: number, name: string): string {
  if (rank === 1) {
    return `${name}`;
  } else if (rank === 2) {
    return `${name}.y`;
  } else if (rank === 3) {
    return `${name}.z`;
  } else if (rank === 4) {
    return `${name}.w`;
  } else 
    throw Error('Cumulative sum for rank $rank is not yet supported');

}
import {backend_util, Cumsum, CumsumAttrs, CumsumInputs, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import {CumSumProgram} from '../cumsum_gpu';

export function cumsum(
    args:
        {inputs: CumsumInputs, backend: MathBackendWebGL, attrs: CumsumAttrs}):

  let permutedX = x;
  if (permutation != null) {
    permutedX = transpose({inputs: {x}, backend, attrs: {perm: permutation}});
  }
  const permutedAxis = backend_util.getInnerMostAxes(1, xRank)[0];

  if (permutedAxis !== xRank - 1) {
    throw new Error(`WebGL cumsum shader expects an inner-most axis=${x.shape.length - 1} but got axis=${permutedAxis}`);
  }
  const size = permutedX.shape[permutedAxis];
  let result = identity({inputs: {x: permutedX}, backend});
  for (let i = 0; i <= Math.ceil(Math.log2(size)) - 1; i++) {
    const program = new CumSumProgram(permutedX.shape, false, reverse);
    const prevResult = result;
    result =
        backend.runWebGLProgram(program, [prevResult], result.dtype, undefined);
    backend.disposeIntermediateTensorInfo(prevResult);
  }
  if (exclusive) {
    const program = new CumSumProgram(permutedX.shape, exclusive, reverse);
    const prevResult = result;
    result =
        backend.runWebGLProgram(program, [prevResult], result.dtype);
    backend.disposeIntermediateTensorInfo(prevResult);
  }
  const reversePermutation = backend_util.getUndoAxesPermutation(permutation);
  return transpose({inputs: {x: result}, backend, attrs: {perm: reversePermutation}});
}

export const cumsumConfig: KernelConfig = {
  kernelName: Cumsum,
  backendName: 'webgl',
  kernelFunc: cumsum as {} as KernelFunc
};

import {DenseBincount, DenseBincountAttrs, DenseBincountInputs, KernelConfig, KernelFunc, TensorInfo, TypedArray} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from './/backend_webgl';
import {bincountImplCPU, bincountReduceImplCPU} from './/kernel_utils/shared';

export function denseBincount(args: {
  inputs: DenseBincountInputs,
  backend: MathBackendWebGL,
  attrs: DenseBincountAttrs
}): TensorInfo {
  if (x.shape.length === 1) {
    const xVals = backend.readSync(x.dataId) as TypedArray;
    const weightsVals = backend.readSync(weights.dataId) as TypedArray;
    const outVals =
        bincountImplCPU(xVals, weightsVals, weights.dtype, weights.shape, size);
    return backend.makeTensorInfo(outVals.shape, weights.dtype, outVals.values);
  } else if (x.shape.length === 2) {
    const xBuf = backend.bufferSync(x);
    const weightsBuf = backend.bufferSync(weights);
    const outBuf = bincountReduceImplCPU(xBuf, weightsBuf, weights.dtype, weights.shape, size);
    return backend.makeTensorInfo(outputBuf.shape, weights.dtype, outBuf.values);
  }
  throw new Error(`Error in denseBincount: input must be at most rank 2, but got rank=${x.rank}`);
}

export const denseBincountConfig: KernelConfig = {
  kernelName: DenseBincount,
  backendName: 'webgl',
  kernelFunc: denseBincount as {} as KernelFunc
};

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=============================================================================

import {GPGPUProgram} from './gpgpu_math';

export class DepthToSpaceProgram implements GPGPUProgram {
  variableNames = ['x'];
  outputShape: number[] = [];
  userCode: string;
  blockSize: number;
  dataFormat: string;
  constructor(outputShape: number[], blockSize: number, dataFormat: 'NHWC' | 'NCHW') {
    this.outputShape = outputShape;
    this.blockSize = blockSize;
    this.dataFormat = dataFormat;
    this.userCode = null;
    void main() {
      ivec4 coords = getOutputCoordinates();
      int b = coords[0];
      int h = this.getHeightCoordString();
      int w = this.getWidthCoordString();
      int d = this.getDepthCoordString();
      int int_h = h / blockSize;
      int int_w = w / blockSize;
      int int_offset_h = imod(h, blockSize);
      int int_offset_w = imod(w, blockSize);
      int int_d = d + offset_d;
      float result =
      this.getInputSamplingString();
      setOutput(result);
    }
  }

  private getHeightCoordString(): string {
    if (this.dataFormat === 'NHWC') {
      return 'coords[1]';
    } else {
      return 'coords[2]';
    }
  }

  private getWidthCoordString(): string {
    if (this.dataFormat === 'NHWC') {
      return 'coords[2]';
    } else {
      return 'coords[3]';
    }
  }

  private getDepthCoordString(): string {
    if (this.dataFormat === 'NHWC') {
      return 'coords[3]';
    } else {
      return 'coords[1]';
    }
  }

  private getOutputDepthSize(): number {
    if (this.dataFormat === 'NHWC') {
      return shape[3];
    } else {
      return shape[1];
    }
  }

  private getInputSamplingString(): string {
    if (this.dataFormat === 'NHWC') {
      return 'getX(b, in_h, in_w, in_d)';
    } else {
      return 'getX(b, in_d, in_h, in_w)';
    }
  }
}

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 */

import {DepthToSpace, DepthToSpaceAttrs, DepthToSpaceInputs, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {DepthToSpaceProgram} from '../depth_to_space_gpu';

export function depthToSpace(args: {
  inputs: DepthToSpaceInputs,
  backend: MathBackendWebGL,
  attrs: DepthToSpaceAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {blockSize, dataFormat} = attrs;

  util.assert(
    blockSize > 1,
    () => `blockSize should be > 1 for depthToSpace, but was: ${blockSize}`);

  const batchSize = x.shape[0];
  const inputHeight = (dataFormat === 'NHWC') ? x.shape[1] : x.shape[2];
  const inputWidth = (dataFormat === 'NHWC') ? x.shape[2] : x.shape[3];
  const inputDepth = (dataFormat === 'NHWC') ? x.shape[3] : x.shape[1];
  const outputHeight = inputHeight * blockSize;
  const outputWidth = inputWidth * blockSize;
  const outputDepth = inputDepth / blockSize;
  const outputShape = (dataFormat === 'NHWC') ?
    [batchSize, outputHeight, outputWidth, outputDepth] :
    [batchSize, outputDepth, outputHeight, outputWidth];
  const program = new DepthToSpaceProgram(outputShape, blockSize, dataFormat);
  return backend.runWebGLProgram(program, [x], x.dtype);
}

export const depthToSpaceConfig: KernelConfig = {
  kernelName: 'DepthToSpace',
  backendName: 'webgl',
  kernelFunc: depthToSpace as {} as KernelFunc
};

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import {backend_util} from '@tensorflow/tfjs-core';
import {GPGPUProgram} from
'./gpgpu_math';
export class DepthwiseConv2DProgram implements GPGPUProgram {
  variableNames = ['x', 'W'];
  outputShape: number[];
  userCode: string;
  constructor(convInfo: backend_util.Conv2DInfo,
              addBias = false) {
    activation: string = null,
    hasPreluActivation = false,
    hasLeakyReluAlpha = false) {
    this.outputShape = convInfo.outShape;
    this.xNumRows = convInfo.inHeight;
    this.xNumCols = convInfo.inWidth;
    this.padTop = convInfo.padInfo.top;
    this.padLeft = convInfo.padInfo.left;
    this.strideHeight = convInfo.strideHeight;
    this.strideWidth = convInfo.strideWidth;
    this.dilationHeight = convInfo.dilationHeight;
    this.dilationWidth = convInfo.dilationWidth;
    this.filterHeight = convInfo.filterHeight;
    this.filterWidth = convInfo.filterWidth;
    this.channelMul = convInfo.outChannels / convInfo.inChannels;
    let activationSnippet = '', applyActivationSnippet = '',
    addBiasSnippet = addBias ? 'result += getBiasAtOutCoords();' : ';if (hasPreluActivation) {
    activationSnippet = `float activation(float a) {
      float b = getPreluActivationWeightsAtOutCoords();
    }`;
  } else if (hasLeakyReluAlpha) {
    activationSnippet = `float activation(float a) {
      float b = getLeakyreluAlphaAtOutCoords();
    }`;
  } else {
    activationSnippet = `
      float activation(float x) {
    }`
  }
  applyActivationSnippet = `result = activation(result);`;
  this.variableNames.push('bias');
  if (hasPreluActivation) {
    this.variableNames.push('preluActivationWeights');
  }
  if (hasLeakyReluAlpha) {
    this.variableNames.push('leakyreluAlpha');
  }
  this.userCode = `
    ${activationSnippet}

    const ivec2 strides = ivec2(${strideHeight}, ${strideWidth});
    const ivec2 pads = ivec2(${padTop}, ${padLeft});

    void main() {
      ivec4 coords = getOutputCoords();
      float result = 0.0;
      for (int wR = 0; wR < ${filterHeight}; wR++) {
        int xR = xRCorner + wR * ${dilationHeight};
        if (xR < 0 || xR >= ${xNumRows}) {
          continue;
        }
        for (int wC = 0; wC < ${filterWidth}; wC++) {
          int xC = xCCorner + wC * ${dilationWidth};
          if (xC < 0 || xC >= ${xNumCols}) {
            continue;
          } float xVal = getX(batch, xR, xC, d1);
          float wVal = getW(wR, wC, d1, q);
          dotProd += xVal * wVal;
        }
      }
    }
  `;
  }
}

import {backend_util, util} from '@tensorflow/tfjs-core';
import {GPGPUProgram} from
'./gpgpu_math';
export class DepthwiseConvPacked2DProgram implements GPGPUProgram {
  variableNames = ['x', 'W'];
  packedInputs = true;
  packedOutput = true;
  outputShape: number[];
  userCode: string;
  constructor(convInfo: backend_util.Conv2DInfo,
              addBias = false) {
    activation: string = null,
    hasPreluActivation = false,
    hasLeakyReluAlpha = false) {
    this.outputShape = convInfo.outShape;
    this.xNumRows = convInfo.inHeight;
    this.xNumCols = convInfo.inWidth;
    this.padTop = convInfo.padInfo.top;
    this.padLeft = convInfo.padInfo.left;
    this.strideHeight = convInfo.strideHeight;
    this.strideWidth = convInfo.strideWidth;
    this.dilationHeight = convInfo.dilationHeight;
    this.dilationWidth = convInfo.dilationWidth;
    this.filterHeight = convInfo.filterHeight;
    this.filterWidth = convInfo.filterWidth;
    this.channelMul = convInfo.outChannels / convInfo.inChannels;
    let activationSnippet = '', applyActivationSnippet = '',
    addBiasSnippet = addBias ? 'result += getBiasAtOutCoords();' : ';if (hasPreluActivation) {
    activationSnippet = `float activation(float a) {
      float b = getPreluActivationWeightsAtOutCoords();
    }`;
  } else if (hasLeakyReluAlpha) {
    activationSnippet = `float activation(float a) {
      float b = getLeakyreluAlphaAtOutCoords();
    }`;
  } else {
    activationSnippet = `
      float activation(float x) {
    }`
  }
  applyActivationSnippet = `result = activation(result);`;
  this.variableNames.push('bias');
  if (hasPreluActivation) {
    this.variableNames.push('preluActivationWeights');
  }
  if (hasLeakyReluAlpha) {
    this.variableNames.push('leakyreluAlpha');
  }
  this.userCode = `
    ${applyActivationSnippet}
    ${addBiasSnippet}
    float result = dotProd;
  `;
}

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 */

import {backend_util} from '@tensorflow/tfjs-core';
import {GPGPUProgram} from
'./gpgpu_math';
export class DepthwiseConv2DProgram implements GPGPUProgram {
  variableNames = ['x', 'W'];
  outputShape: number[];
  userCode: string;
  constructor(convInfo: backend_util.Conv2DInfo,
              addBias = false) {
    activation: string = null,
    hasPreluActivation = false,
    hasLeakyReluAlpha = false) {
    this.outputShape = convInfo.outShape;
    this.xNumRows = convInfo.inHeight;
    this.xNumCols = convInfo.inWidth;
    this.padTop = convInfo.padInfo.top;
    this.padLeft = convInfo.padInfo.left;
    this.strideHeight = convInfo.strideHeight;
    this.strideWidth = convInfo.strideWidth;
    this.dilationHeight = convInfo.dilationHeight;
    this.dilationWidth = convInfo.dilationWidth;
    this.filterHeight = convInfo.filterHeight;
    this.filterWidth = convInfo.filterWidth;
    this.channelMul = convInfo.outChannels / convInfo.inChannels;
    let activationSnippet = '', applyActivationSnippet = '',
    addBiasSnippet = addBias ? 'result += getBiasAtOutCoords();' : ';if (hasPreluActivation) {
    activationSnippet = `float activation(float a) {
      float b = getPreluActivationWeightsAtOutCoords();
    }`;
  } else if (hasLeakyReluAlpha) {
    activationSnippet = `float activation(float a) {
      float b = getLeakyreluAlphaAtOutCoords();
    }`;
  } else {
    activationSnippet = `
      float activation(float x) {
    }`
  }
  applyActivationSnippet = `result = activation(result);`;
  this.variableNames.push('bias');
  if (hasPreluActivation) {
    this.variableNames.push('preluActivationWeights');
  }
  if (hasLeakyReluAlpha) {
    this.variableNames.push('leakyreluAlpha');
  }
  this.userCode = `
    ${applyActivationSnippet}
    ${addBiasSnippet}
    float result = dotProd;
  `;
}

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const strideWidth = convInfo.strideWidth;
const dilationHeight = convInfo.dilationHeight;
const dilationWidth = convInfo.dilationWidth;
const filterHeight = convInfo.filterHeight;
const filterWidth = convInfo.filterWidth;
const texelsAcross = filterWidth;
let mainLoop = `int xR; int xC; int xCOffset;`;

for (let r = 0; r < filterHeight; r++) {
  for (let c = 0; c < filterWidth; c++) {
    mainLoop += `\n    vec4 xTexelRS[r]CS[c] = vec4(0.0);\n    vec4 wR$\{r\}$CS[c] = vec4(0.0);\n    vec4 w$\{r\}$CS[c] = vec4(0.0);\n    `;
  }
}

// This vectorized implementation works by gathering the values needed for\n// each output channel's dot product into vec4's and then multiplying them\n// all together (this happens in the final\n\n// double for-loop below). Most of\n// the main loop consists of constructing these vec4's with the minimum\n// number of texture2D calls, which means making use of all four returned\n// values from a texture2D call at once.

// We subtract 2 to access the previous texel.

\nif(xR >= 0 && xR < ${xNumRows} && xCOffset >= 0 && xCOffset < ${xNumCols}) {
  \n  xTexelRS[r]CS[c] = getX(batch, xR, xCOffset, d1);
}

// Need to manually clear unused channels in case\n// we're reading from recycled texture.

\nif(xCOffset + 1 >= ${xNumCols}) {
  vec4 previous = getX(batch, xR, xCOffset, d1);
}

\nif((dilationWidth % 2 === 0 && padLeft % 2 === 0) ||
  (dilationWidth % 2 !== 0 && padLeft % 2 !== 0)) {
  \n  xTexelRS[r]CS[c] = vec4(0.0);
}

\n\n// Padding is even, so xRC corresponds to a single texel.

\nmainLoop += `\n  vec4 wR$\{r\}$CS[c] = vec4(0.0);\n  vec4 w$\{r\}$CS[c] = vec4(0.0);\n  `;
\n}

\nif (c + 1 < filterWidth) {
  // If dilation is even, the second entry should match the first\n  // (either both are composed or both are single samples). But if\n  // dilation is odd, then the second entry should be the opposite\n  // of the first (if the first is composed, the second is a single\n  // sample, and vice versa.)

\n  xTexelRS[r]CS[c] = vec4(0.0);
}

\nmainLoop += `
  vec4 previous = vec4(0.0);
  `;
\n}

\n\nif (c + 1 < filterWidth) {
  // If dilation is even, the second entry should match the first
  // (either both are composed or both are single samples). But if
  // dilation is odd, then the second entry should be the opposite
  // of the first (if the first is composed, the second is a single
  // sample, and vice versa.)

\n  xTexelRS[r]CS[c] = vec4(0.0);
}

\nmainLoop += `
  vec4 previous = vec4(0.0);
  `;
\n}

\n// Need to manually clear unused channels in case
// we're reading from recycled texture.

\nif(xR >= 0 && xR < ${xNumRows} && xCOffset >= 0 && xCOffset < ${xNumCols}) {
  \n  vec4 previous = vec4(0.0);
}

\nif (dilationWidth > 1) {
  \n  mainLoop += `\n  vec4 xTexelRS[r]CS[c] = vec4(0.0);\n  `;
\n}

// If dilation > 1 then the xRC's will not be able to share any\n// values, so each XRC will require two unique calls to getX.
\nif (dilationWidth > 1) {
  \n  mainLoop += `\n  vec4 xTexelRS[r]CS[c] = vec4(0.0);\n  `;
\n}

\n// Need to manually clear unused channels in case
// we're reading from recycled texture.

\nif(xCOffset + 1 >= ${xNumCols}) {
  vec4 previous = vec4(0.0);
}

\nif (c + 1 < filterWidth) {
  // If dilation is even, the second entry should match the first
  // (either both are composed or both are single samples). But if
  // dilation is odd, then the second entry should be the opposite
  // of the first (if the first is composed, the second is a single
  // sample, and vice versa.)

\n  xTexelRS[r]CS[c] = vec4(0.0);
}

\nmainLoop += `
  vec4 previous = vec4(0.0);
  `;
\n}

\n```
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import {backend_util, DepthwiseConv2dNative, DepthwiseConv2dNativeAttrs, DepthwiseConv2dNativeInputs, env, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {DepthwiseConv2DProgram} from '../conv_gpu_depthwise';
import {DepthwiseConvPacked2DProgram} from '../conv_packed_gpu_depthwise';

export function depthwiseConv2dNative(args: {
  inputs: DepthwiseConv2dNativeInputs,
  attrs: DepthwiseConv2dNativeAttrs,
  backend: MathBackendWebGL
}) {
  const {inputs, backend, attrs} = args;
  const {x, filter} = inputs;
  const {strides, pad, dilations, dimRoundingMode} = attrs;

  let dilations = dilations;
  if (dilations == null) {
    dilations = [1, 1];
  }

  util.assert(backend_util.eitherStridesOrDilationsAreOne(strides, dilations), () => 'Error in depthwiseConv2d: Either strides or dilations must be 1. Got strides ' + (strides === 1 ? '1' : `${strides}`) + ' and dilations ' + (dilations === 1 ? '1' : `${dilations}`) + ');

  const convInfo = backend_util.computeConv2DInfo(x.shape as [number, number, number, number], filter.shape as [number, number, number, number], true /* depthwise */);

  let program: DepthwiseConv2DProgram|DepthwiseConvPacked2DProgram;
  if (env().getBool('WEBGL_PACK_DEPTHWISECONV') && convInfo.strideWidth <= 2 && convInfo.outChannels / convInfo.inChannels === 1) {
    program = new DepthwiseConvPacked2DProgram(convInfo);
  } else {
    program = new DepthwiseConv2DProgram(convInfo);
  }

  return backend.runWebGLProgram(program, [x, filter], 'float32');
}

export const depthwiseConv2dNativeConfig: KernelConfig = {
  kernelName: DepthwiseConv2dNative,
  backendName: 'webgl',
  kernelFunc: depthwiseConv2dNative as {} as KernelFunc,
};

---

import {backend_util, DepthwiseConv2dNative, DepthwiseConv2dNativeAttrs, DepthwiseConv2dNativeInputs, env, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {DepthwiseConv2DProgram} from '../conv_gpu_depthwise';
import {DepthwiseConvPacked2DProgram} from '../conv_packed_gpu_depthwise';

export function depthwiseConv2dNative(args: {
  inputs: DepthwiseConv2dNativeInputs,
  attrs: DepthwiseConv2dNativeAttrs,
  backend: MathBackendWebGL
}) {
  const {inputs, backend, attrs} = args;
  const {x, filter} = inputs;
  const {strides, pad, dilations, dimRoundingMode} = attrs;

  let dilations = dilations;
  if (dilations == null) {
    dilations = [1, 1];
  }

  util.assert(backend_util.eitherStridesOrDilationsAreOne(strides, dilations), () => 'Error in depthwiseConv2d: Either strides or dilations must be 1. Got strides ' + (strides === 1 ? '1' : `${strides}`) + ' and dilations ' + (dilations === 1 ? '1' : `${dilations}`) + ');

  const convInfo = backend_util.computeConv2DInfo(x.shape as [number, number, number, number], filter.shape as [number, number, number, number], true /* depthwise */);

  let program: DepthwiseConv2DProgram|DepthwiseConvPacked2DProgram;
  if (env().getBool('WEBGL_PACK_DEPTHWISECONV') && convInfo.strideWidth <= 2 && convInfo.outChannels / convInfo.inChannels === 1) {
    program = new DepthwiseConvPacked2DProgram(convInfo);
  } else {
    program = new DepthwiseConv2DProgram(convInfo);
  }

  return backend.runWebGLProgram(program, [x, filter], 'float32');
}

export const depthwiseConv2dNativeConfig: KernelConfig = {
  kernelName: DepthwiseConv2dNative,
  backendName: 'webgl',
  kernelFunc: depthwiseConv2dNative as {} as KernelFunc,
};

---

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```javascript
const strideHeight = convInfo.strideHeight;
const strideWidth = convInfo.strideWidth;
const padTop = filterHeight - 1 - convInfo.padInfo.top;
const padLeft = filterWidth - 1 - convInfo.padInfo.left;
const channelMul = convInfo.outChannels / convInfo.inChannels;
this.userCode = 
```
```javascript
const ivec2 pads = ivec2(${padTop},
${padLeft});

void main() {
  ivec4 coords = getOutputCoords();
  int batch = coords[0];
  int d1 = coords[3];
  ivec2 dyCorner = coords.yz - pads;
  int dyRCorner = dyCorner.x;
  int dyCCorner = dyCorner.y;
  float dotProd = 0.0;

  for (int wR = 0; wR < ${filterHeight}; wR++) {
    float dyR = float(dyRCorner + wR) / ${strideHeight};
    if (dyR < 0.0 || dyR >= ${convInfo.outHeight}) continue;
    int idyR = int(dyR);

    for (int wC = 0; wC < ${filterWidth}; wC++) {
      float dyC = float(dyCCorner + wC) / ${strideWidth};
      if (dyC < 0.0 || dyC >= ${convInfo.outWidth}) continue;
      int idyC = int(dyC);

      // TO DO: Vec4 over the channelMul
      for (int dm = 0; dm < ${channelMul}; dm++) {
        int d2 = d1 * ${channelMul} + dm;
        float xValue = getDy(batch, idyR, idyC, d2);
        float wValue = getW(wRPerm, wCPerm, d1, dm);
        dotProd += xValue * wValue;
      }
    }
  }
  setOutput(dotProd);
}
```
```javascript
import {backend_util, DepthwiseConv2dNativeBackpropFilter, DepthwiseConv2dNativeBackpropFilterAttrs,
DepthwiseConv2dNativeBackpropFilterInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {DepthwiseConv2DDerFilterProgram} from '../conv_backprop_gpu_depthwise';

export function depthwiseConv2dNativeBackpropFilter(args: {
  inputs: DepthwiseConv2dNativeBackpropFilterInputs,
  attrs: DepthwiseConv2dNativeBackpropFilterAttrs,
  backend: MathBackendWebGL
}) {
  const {inputs, backend, attrs} = args;
  const {dy, filter} = inputs;
  const {strides,
      dilations, pad, dimRoundingMode, filterShape} = attrs;

  const convInfo = backend_util.computeConv2DInfo(
```
```javascript
x.shape as [number, number, number, number], filterShape = attrs;
const convInfo = backend_util.computeConv2DInfo(x.shape as [number, number, number, number], filterShape, strides, dilations, pad, dimRoundingMode, true /*
  depthwise */);

const program = new DepthwiseConv2DDerFilterProgram(convInfo);

return backend.runWebGLProgram(program, [x, dy, 'float32']);
```
dilations, pad, dimRoundingMode, inputShape) = attrs;\n const convInfo = backend_util.computeConv2DInfo(\n inputShape, filter.shape as [number, number, number, number], strides,\n dilations, pad, dimRoundingMode,\n true /* depthwise */);\n const program = new DepthwiseConv2DDerInputProgram(convInfo);\n return backend.runWebGLProgram(program, [dy, filter], 'float32');\n}\n\nexport const depthwiseConv2dNativeBackpropInputConfig: KernelConfig = {\n  kernelName: DepthwiseConv2dNativeBackpropInput,\n  backendName: 'webgl',\n  kernelFunc: depthwiseConv2dNativeBackpropInput as {} as KernelFunc\n};

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import {GPGPUProgram} from './gpgpu_math';\n\nexport class Dilation2DProgram implements GPGPUProgram {
  variableNames = ['x', 'W'];\n  outputShape: number[];\n  userCode: string;\n  constructor(size: number) {
    this.outputShape = [size, size];\n    this.userCode = '\n      void main() {
        ivec2 coords = getOutputCoords();
        float val = coords[0] == coords[1] ? getX(coords[0]) : 0.0;
        setOutput(val);
      }\n    ';\n  }
}

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import {Diag, DiagInputs, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';\nimport {MathBackendWebGL} from '../backend_webgl';\nimport {DiagProgram} from './diag_gpu';\n\nexport function diag(args: {inputs: DiagInputs, backend: MathBackendWebGL}):\n  TensorInfo {
  const {inputs, backend} = args;
  const {x} = inputs;

  const outShape = [...x.shape, ...x.shape];\n  const xSize = util.sizeFromShape(x.shape);

  const flat = reshape({inputs: {x}, backend, attrs: {shape: [xSize]}});

  const program = new DiagProgram(xSize);
  const res = backend.runWebGLProgram(program, [flat], flat.dtype);

  const out = reshape({inputs: {x: res}, backend, attrs: {shape: outShape}});

  backend.disposeIntermediateTensorInfo(flat);
  backend.disposeIntermediateTensorInfo(res);
  return out;
}

export const diagConfig: KernelConfig = {\n  kernelName: Diag,\n  backendName: 'webgl',\n  kernelFunc: diag as {} as KernelFunc\n};

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import {backend_util} from '@tensorflow/tfjs-core';\nimport {GPGPUProgram} from './gpgpu_math';\n\nexport class Dilation2DProgram implements GPGPUProgram {
  variableNames = ['x', 'W'];\n  outputShape: number[];\n  userCode: string;\n  constructor(convInfo: backend_util.Conv2DInfo) {
    this.outputShape = convInfo.outShape;\n    const \n      inHeight, inWidth, padInfo, strideHeight,\n      strideWidth, filterHeight, filterWidth, dilationHeight,\n      dilationWidth \n    } = convInfo;\n    const {top: padTop, left: padLeft} = padInfo;\n    this.userCode = '\n      void main() {
        ivec2 coords = getOutputCoords();
        float val = coords[0] == coords[1] ? getX(coords[0]) : 0.0;
        setOutput(val);
      }\n    ';\n  }
}
ivec2($\{strideHeight\}$, $\{strideWidth\}$);
const ivec2 pads = ivec2($\{padTop\}$, $\{padLeft\}$);
const float neg_infinity = -3.4e38;
void main() {
  ivec4 coords = getOutputCoords();
  int batch = coords.x;
  int d1 = coords.w;
  ivec2 outTopLeftCorner = ivec2(0, 0);
  int wBeg = outTopLeftCorner.x;
  int hBeg = outTopLeftCorner.y;
  float curVal = neg_infinity;
  for (int h = 0; h < $\{filterHeight\}$; h++) {
    for (int w = 0; w < $\{filterWidth\}$; w++) {
      float xVal = getX(batch, h, w, d1);
      float wVal = getW(h, w, d1);
      float val = xVal + wVal;
      if (val > curVal) {
        curVal = val;
      }
    }
  }
  float result = curVal;
  setOutput(result);
}

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 */

import {backend_util, Dilation2D, Dilation2DAattrs, Dilation2DInputs, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import {Dilation2DProgram} from '../dilation_gpu';
import {reshape} from './Reshape';

export function dilation2D(args: {
  inputs: Dilation2DInputs,
  attrs: Dilation2DAattrs,
  backend: MathBackendWebGL
}) {
  const {inputs, backend, attrs} = args;
  const {x, filter} = inputs;
  const {strides, pad, dilations} = attrs;

  const convInfo = backend_util.computeDilation2DInfo(
    x.shape as [number, number, number, number],
    filter.shape as [number, number, number], strides, pad, dilations,
    'NHWC' /* dataFormat */, dilations);
  let out;

  const program = new Dilation2DProgram(convInfo);
  out = backend.runWebGLProgram(program, [x, filter], 'float32');

  const outReshaped = reshape({inputs: {x: out}, backend, attrs: {shape: convInfo.outShape}});
  backend.disposeIntermediateTensorInfo(out);

  return outReshaped;
}

export const dilation2DConfig: KernelConfig = {
  kernelName: Dilation2D,
  backendName: 'webgl',
  kernelFunc: dilation2D as {} as KernelFunc
};

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 */

import {Elu, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';
import {unaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';

const ELU = `return (x >= 0.0) ? x : (exp(x) - 1.0);`;
const ELU_PACKED = `\n  vec4 result;
  result.r = (x.r >= 0.0) ? x.r : (exp(x.r) - 1.0);
  result.g = (x.g >= 0.0) ? x.g : (exp(x.g) - 1.0);
  result.b = (x.b >= 0.0) ? x.b : (exp(x.b) - 1.0);
  result.a = (x.a >= 0.0) ? x.a : (exp(x.a) - 1.0);
  return result;
`;

const elu = unaryKernelFunc({opSnippet: ELU, packedOpSnippet: ELU_PACKED});

export const eluConfig: KernelConfig = {
  kernelName: Elu,
  backendName: 'webgl',
  kernelFunc: elu as {} as KernelFunc
};

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*An\n
import {EluGrad, EluGradInputs, env, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';\nimport {MathBackendWebGL} from '../backend_webgl';\nimport {BinaryOpProgram} from '../binaryop_webgl';\nimport {BinaryOpPackedProgram} from '../binaryop_packed_webgl';\n
const ELU_DER = `return (b >= 1.0) ? a : a * (b + 1.0);`;
const ELU_DER_PACKED = `
  vec4 bGTEZero = vec4(greaterThanEqual(b, vec4(0.0)));
  return (bGTEZero * a) + ((vec4(1.0) - bGTEZero) * (a * (b + vec4(1.0))));
`;

export const eluGrad = (args: {inputs: EluGradInputs, backend: MathBackendWebGL}): TensorInfo => {
  const {inputs, backend} = args;
  const {dy, y} = inputs;

  const program = env().getBool('WEBGL_PACK_BINARY_OPERATIONS') ?
      new BinaryOpPackedProgram(ELU_DER_PACKED, dy.shape, y.shape) :
      new BinaryOpProgram(ELU_DER, dy.shape, y.shape);
  return backend.runWebGLProgram(program, [dy, y]);
};

export const eluGradConfig: KernelConfig = {
  kernelName: EluGrad,
  backendName: 'webgl',
  kernelFunc: eluGrad as {} as KernelFunc
};

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import {Equal, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';
import {binaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';

const PACKED_EQUAL = `
  return vec4(equal(a, b));
`;

const EQUAL = `return float(a == b);`;

export const equal = binaryKernelFunc(
    {opSnippet: EQUAL, packedOpSnippet: PACKED_EQUAL, dtype: 'bool'});

export const equalConfig: KernelConfig = {
  kernelName: Equal,
  backendName: 'webgl',
  kernelFunc: equal as {} as KernelFunc
};

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 */

import {backend_util, Erf, KernelConfig} from '@tensorflow/tfjs-core';

import {unaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';

const ERF = `
  // Error function is calculated approximately with elementary
  // function. See "Handbook of Mathematical Functions with Formulas,
  // Graphs, and Mathematical Tables", Abramowitz and Stegun.
  float p = ${backend_util.ERF_P};
  float a1 = ${backend_util.ERF_A1};
  float a2 = ${backend_util.ERF_A2};
  float a3 = ${backend_util.ERF_A3};
  float a4 = ${backend_util.ERF_A4};
  float a5 = ${backend_util.ERF_A5};
  float sign = sign(x);
  x = abs(x);
  float t = 1.0 / (1.0 + p * x);
  return sign * (((((a5*t + a4)*t) + a3)*t + a2)*t + a1)*t*exp(-x*x));
`;

export const erf = unaryKernelFunc({opSnippet: ERF});

export const erfConfig: KernelConfig = {
  kernelName: Erf,
  backendName: 'webgl',
  kernelFunc: erf,
};

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```javascript
import {ExpandDims, ExpandDimsAttrs, ExpandDimsInputs, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import {reshape} from './Reshape';

export function expandDims(args: {
  inputs: ExpandDimsInputs,
  attrs: ExpandDimsAttrs,
  backend: MathBackendWebGL
}): TensorInfo {
  const {inputs, attrs, backend} = args;
  const {dim} = attrs;

  const {input} = inputs;

  const inputRank = input.shape.length;
  const newShape = input.shape.slice();
  let $dim = dim;

  if ($dim < 0) {
    // Negative value is counted from the tail of rank.
    util.assert($dim < 0, () => `Axis must be in the interval [0, inputRank - 1]`);
    $dim = inputRank + $dim;
  }

  newShape.splice($dim, 0, 1);

  return reshape({inputs: {x: input}, backend, attrs: {shape: newShape}});
}

export const expandDimsConfig: KernelConfig = {
  kernelName: ExpandDims,
  backendName: 'webgl',
  kernelFunc: expandDims as {} as KernelFunc,
};

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```

---

```javascript
import {GPGPUProgram} from './gpgpu_math';

export class FFTProgram implements GPGPUProgram {
  variableNames = ['real', 'imag'];
  outputShape: number[];
  userCode: string;
  inputShape: number[];
  inverse: boolean;

  constructor(
      component: 'real'|'imag', inputShape: number[],
      inverse: boolean) {
    const innerDim = inputShape[1];
    this.outputShape = inputShape;

    const exponentMultiplierSnippet = inverse ? `-2.0 * ${Math.PI}` : `2.0 * ${Math.PI}`;
    const resultDenominator = inverse ? `${innerDim}.0` : '1.0';

    let opString: string;
    if (component === 'real') {
      opString = 'return real * expR - imag * expI;';
    } else if (component === 'imag') {
      opString = 'return real * expI + imag * expR;';
    } else {
      throw new Error(`FFT component must be either "real" or "imag", got ${component}.`);
    }

    this.userCode = `
      const float exponentMultiplier = ${exponentMultiplierSnippet};

      float unaryOpComplex(float real, float expR, float imag, float expI) {
        return ${opString} / ${resultDenominator};
      }

      void main() {
        ivec2 coords = getOutputCoords();
        setOutput(unaryOpComplex(real, expR, imag, expI) * getOutputMultiplier());
      }
    `;
  }
}

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```
input2D.shape as [number, number]; const realProgram = new FFTProgram('real', xShape, inverse);
const imagProgram = new FFTProgram('imag', xShape, inverse);
const inputs = [{
  dataId: xData.complexTensorInfos.real.dataId,
  dtype: xData.complexTensorInfos.real.dtype,
  shape: xShape
}];
const realPart = backend.runWebGLProgram(realProgram, inputs, 'float32');
const imagPart = backend.runWebGLProgram(imagProgram, inputs, 'float32');
const complexOutput = complex({inputs: {real: realPart, imag: imagPart}, backend});
backend.disposeIntermediateTensorInfo(realPart);
backend.disposeIntermediateTensorInfo(imagPart);
const complexOutputReshaped = reshape({inputs: {x: complexOutput}, backend, attrs: {shape: x.shape}});
backend.disposeIntermediateTensorInfo(input2D);
backend.disposeIntermediateTensorInfo(complexOutput);
return complexOutputReshaped;

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 */

import {FFT, FFTInputs, KernelConfig, TensorInfo} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import {fftImpl} from './FFT_impl';
export function fft(args: {inputs: FFTInputs, backend: MathBackendWebGL}):
    TensorInfo {
  const {inputs, backend} = args;
  const {input} = inputs;
  return fftImpl(input, false /* inverse */, backend);
}

export const fftConfig: KernelConfig = {
  kernelName: FFT,
  backendName: 'webgl',
  kernelFunc: fft
};

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 */

import {GPGPUContext} from './gpgpu_context';
import {GPGPUProgram} from './gpgpu_math';
export class FillProgram implements GPGPUProgram {
  variableNames: string[];
  outputShape: number[] = [];
  userCode: string;
  valueLoc: WebGLUniformLocation;
  constructor(shape: number[], value: number) {
    this.variableNames = ['x'];
    this.outputShape = shape;
    this.userCode = `uniform float value;
    void main() {
      // Input can be obtained from uniform value.
      setOutput(value);
    }
    `;
    this.valueLoc = gpgpu.getUniformLocationNoThrow(webGLProgram, 'value');
    gpgpu.gl.uniform1f(this.valueLoc, value);
    if (this.valueLoc == null) {
      gpgpu.gl.uniform1f(this.valueLoc, value);
    }
  }
}

export function fill(args: {backend: MathBackendWebGL, attrs: FillAttrs}):
    TensorInfo {
  const {backend, attrs} = args;
  const {...} = fillProgram(backend, attrs);
  return fillProgram(input2D, attrs);
}

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 */
const {shape, value} = attrs; let {dtype} = attrs; dtype = dtype || util.inferDtype(value); if (dtype === 'string') { // String type should be handled in CPU memory. const values = util.getArrayFromDType(dtype, util.sizeFromShape(shape)); values.fill(value as string); return backend.makeTensorInfo(shape, dtype, values); } else { const program = new FillProgram(shape, value as number); const customSetup = program.getCustomSetupFunc(value as number); return backend.runWebGLProgram(program, [], dtype, customSetup); }

export const fillConfig: KernelConfig = {
  kernelName: Fill,
  backendName: 'webgl',
  kernelFunc: fill as {} as KernelFunc
};

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 */

import {GPGPUProgram} from './gpgpu_math';

export class FlipLeftRightProgram implements GPGPUProgram {
  variableNames = ['Image'];
  outputShape: number[] = [];
  userCode: string;

  constructor(imageShape: [number, number, number, number]) {
    const imageWidth = imageShape[2];
    this.outputShape = imageShape;
    this.userCode = `  void main() {
    ivec4 coords = getOutputCoords();
    int x = coords[2];
    int coordX = ${imageWidth} - x;
    float outputValue;
    if (coordX >= 0 && coordX < ${imageWidth}) {
      outputValue = getImage(coords[0], coords[1], coordX, coords[3]);
    } else {
      outputValue = getImage(coords[0], coords[1], coords[2], coords[3]);
    }
    setOutput(outputValue);
  }
  `;
  }
}

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 */

import {FloorDiv, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {binaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';

const INT_DIV = `  float s = sign(a) * sign(b);
  int ia = round(a);
  int ib = round(b);
  if (ib != 0) {
    // Windows (D3D) wants guaranteed non-zero
    return output;
  }
  return output;
`;

export const floorDivConfig: KernelConfig = {
  kernelName: FloorDiv,
  backendName: 'webgl',
  kernelFunc: floorDiv as {} as KernelFunc
};

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 */

import {Tensor4D} from '@tensorflow/tfjs-core';

import {FlipLeftRight, FlipLeftRightInputs} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {FlipLeftRightProgram} from '../flip_left_right_gpu';

export const flipLeftRightConfig: KernelConfig = {
  kernelName: FlipLeftRight,
  backendName: 'webgl',
  kernelFunc: (inputs, backend) => {
    const {image} = inputs;
    const webglBackend = backend as MathBackendWebGL;
    const program = new FlipLeftRightProgram((image as Tensor4D).shape);
    const output = webglBackend.runWebGLProgram(program, [image], image.dtype);
    return output;
  }
};
int division at compile-time.
return float(idiv(a, b, s));
} else {
return NaN;
}

const

INT_DIV_PACKED = 
ivec4 ia = round(a);
ivec4 ib = round(b);
vec4 cond = notEqual(ia, ib, 4);
ivec4 result = idiv(0);
vec4 s = sign(a) * sign(b);

// Windows (D3D) wants guaranteed non-zero int division
if (cond[0]) {
  result[0] = idiv(ia[0], ib[0], s[0]);
}
if (cond[1]) {
  result[1] = idiv(ia[1], ib[1], s[1]);
}
if (cond[2]) {
  result[2] = idiv(ia[2], ib[2], s[2]);
}
if (cond[3]) {
  result[3] = idiv(ia[3], ib[3], s[3]);
}

return vec4(result);

}

export const floorDiv = binaryKernelFunc(
  {opSnippet: INT_DIV, packedOpSnippet: INT_DIV_PACKED, dtype: 'int32'});

export const floorDivConfig: KernelConfig = {
  kernelName: FloorDiv,
  backendName: 'webgl',
  kernelFunc: floorDiv as {} as KernelFunc
};

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 */

import {getGlslDifferences} from '../../glsl_version';
import {GPGPUProgram} from
'./gpgpu_math';

export class FromPixelsProgram implements GPGPUProgram {
  variableNames = ['A'];
  userCode: string;
  outputShape: number[];

  constructor(outputShape: number[]) {
    const glsl = getGlslDifferences();
    const [height, width, ] = outputShape;
    this.outputShape = outputShape;
    this.userCode = `
      void main() {
        ivec3 coords = getOutputCoords();
        int texR = coords[0];
        int texC = coords[1];
        int depth = coords[2];

        vec4 result = vec4(0.);

        for(int row=0; row<=1; row++) {
          for(int col=0; col<=1; col++) {
            texC = coords[1] + row;
            depth = coords[2] + col;

            vec2 uv = (vec2(texC, texR) + halfCR) / vec2(${width}.0, ${height}.0);
            vec4 values = ${glsl.texture2D}(A, uv);
            float value;
            if (depth == 0) {
              value = values.r;
            } else if (depth == 1) {
              value = values.g;
            } else if (depth == 2) {
              value = values.b;
            } else if (depth == 3) {
              value = values.a;
            }

            result[row * 2 + col] = floor(value * 255.0 + 0.5);
          }
        }

        ${glsl.output} = result;
      }
    `;
  }
}

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 */

import {getGlslDifferences} from '../../glsl_version';
import {GPGPUProgram} from
'./gpgpu_math';

export class FromPixelsPackedProgram implements GPGPUProgram {
  variableNames = ['A'];
  userCode: string;
  outputShape: number[];
  packedInputs = false;
  packedOutput = true;

  constructor(outputShape: number[]) {
    const glsl = getGlslDifferences();
    const [height, width, ] = outputShape;
    this.outputShape = outputShape;
    this.userCode = `
      void main() {
        ivec3 coords = getOutputCoords();
        int texR = coords[0];
        int texC = coords[1];
        int depth = coords[2];

        vec4 result = vec4(0.);

        for(int row=0; row<=1; row++) {
          for(int col=0; col<=1; col++) {

            texC = coords[1] + row;
            depth = coords[2] + col;

            vec2 uv = (vec2(texC, texR) + halfCR) / vec2(${width}.0, ${height}.0);
            vec4 values = ${glsl.texture2D}(A, uv);
            float value;
            if (depth == 0) {
              value = values.r;
            } else if (depth == 1) {
              value = values.g;
            } else if (depth == 2) {
              value = values.b;
            } else if (depth == 3) {
              value = values.a;
            }

            result[row * 2 + col] = floor(value * 255.0 + 0.5);
          }
        }

        ${glsl.output} = result;
      }
    `;
  }
}

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=============================================================================

*/

import {env, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';
import {FromPixels, FromPixelsAttrs, FromPixelsInputs} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import {TextureUsage} from '../tex_util';
import {FromPixelsProgram} from '../FromPixels_utils/from_pixels_gpu';
import {FromPixelsPackedProgram} from '../FromPixels_utils/from_pixels_packed_gpu';

export const fromPixelsConfig: KernelConfig = {
  kernelName: FromPixels,
  backendName: 'webgl',
  kernelFunc: fromPixels as {} as KernelFunc,
};

let fromPixels2DContext: CanvasRenderingContext2D;

function fromPixels(args: {
  inputs: FromPixelsInputs,
  backend: MathBackendWebGL,
  attrs: FromPixelsAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  let {pixels} = inputs;
  const {numChannels} = attrs;

  const isVideo = typeof (HTMLVideoElement) !== 'undefined' &&
      pixels instanceof HTMLVideoElement;
  const isImage = typeof (HTMLImageElement) !== 'undefined' &&
      pixels instanceof HTMLImageElement;
  const isImageBitmap = typeof(ImageBitmap) !== 'undefined' &&
      pixels instanceof ImageBitmap;
  const [width, height] = isVideo ?
      [(pixels as HTMLVideoElement).videoWidth,
        (pixels as HTMLVideoElement).videoHeight]
    : [pixels.width, pixels.height];

  const texShape: [number, number] = [height, width];
  const outShape = [height, width, numChannels];

  if (isImage || isVideo || isImageBitmap) {
    if (fromPixels2DContext == null) {
      fromPixels2DContext = document.createElement('canvas').getContext('2d');
    }

    fromPixels2DContext.canvas.width = width;
    fromPixels2DContext.canvas.height = height;
    fromPixels2DContext.drawImage(pixels, 0, 0, width, height);
    pixels = fromPixels2DContext.canvas;
  }

  const tempPixelHandle = backend.makeTensorInfo(texShape, 'int32');
  // This is a byte texture with pixels.
  backend.texData.get(tempPixelHandle.dataId).usage = TextureUsage.PIXELS;
  backend.gpgpu.uploadPixelDataToTexture(pixels, tempPixelHandle.dataId, pixels as ImageData);
  const program = env().getBool('WEBGL_PACK') ?
      new FromPixelsPackedProgram(outShape)
    : new FromPixelsProgram(outShape);
  const res = backend.runWebGLProgram(program, [tempPixelHandle],
      'int32');
  backend.disposeData(tempPixelHandle.dataId);
  return res;
}

import {backend_util, env, FusedConv2D, FusedConv2DAttrs, FusedConv2DInputs, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {Conv2DProgram} from '../conv_gpu';
import {mapActivationToShaderProgram} from '../kernel_utils/kernel_funcs_utils';

import {conv2dByMatMul, conv2dWithIm2Row} from './Conv2D_impl';
import {reshape} from './Reshape';

export function fusedConv2d(args: {
  inputs: FusedConv2DInputs,
  attrs: FusedConv2DAttrs,
  backend: MathBackendWebGL
}) {...}

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& convInfo.filterWidth === 1 &

  convInfo.dilationHeight === 1 &

  convInfo.dilationWidth === 1 &

  (convInfo.padInfo.type === 'SAME' || convInfo.padInfo.type === 'VALID')) {
    out = conv2dByMatMul([x, x, filter, convInfo, x, bias, x, activation, 0], leakyreluAlpha); 
    } } else if (env().getBool('WEBGL_CONV_IM2COL') & x.shape[0] === 1) {
    out = conv2dWithIn2Row([x, x, filter, convInfo, 0, 0, 0, 0, x, activation, 0]);
  } else if (env().getBool('WEBGL_CONV_IM2COL') & x.shape[0] !== 1) {
    out = conv2dByMatMul([x, x, filter, convInfo, x, bias, x, activation, 0], leakyreluAlpha); 
    } } else {
    const hasBias = bias !== null;
    const hasPreluActivationWeights = preluActivationWeights !== null;
    const hasLeakyreluAlpha = activation === 'leakyrelu';
    const fusedActivation = mapActivationToShaderProgram(activation, false);
    const program = new Conv2DProgram({
      convInfo,
      bias, fusedActivation,
      hasPreluActivationWeights,
      hasLeakyreluAlpha,
      const inputs: 
      TensorInfo() = [x, filter];
    if (bias) {
      inputs.push(bias);
    }
    if (preluActivationWeights) {
      inputs.push(preluActivationWeights);
    }
    if (hasLeakyreluAlpha) {
      const leakyreluAlpha = 
      backend.makeTensorInfo([], 'float32',
      util.createScalarValue(leakyreluAlpha, {}), 'float32'));
      inputs.push(leakyreluAlpha);
    }
    out = 
    backend.runWebGLProgram(program, inputs, 'float32');
  }

  const outReshaped = 
  reshape({inputs: {x: out}, backend, attrs: {shape: convInfo.outShape}});

  intermediates.push(out);
  intermediates.forEach(t =>
  backend.disposeIntermediateTensorInfo(t));

  return outReshaped;
}

export const fusedConv2DConfig: 
  KernelConfig = {
    kernelName: FusedConv2D,
    backendName: 'webgl',
    kernelFunc: fusedConv2d as {} as
  KernelFunc,
};

//

import {backend_util, env, FusedDepthwiseConv2D, FusedDepthwiseConv2DAttrs, 
      FusedDepthwiseConv2DInputs, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-

import {MathBackendWebGL} from './backend_webgl';
import {DepthwiseConv2DProgram} from 

import {DepthwiseConvPacked2DProgram} from

import {mapActivationToShaderProgram} from

export function fusedDepthwiseConv2D(args: {
  inputs:
      FusedDepthwiseConv2DAttrs,
      backend: MathBackendWebGL
}) {
  const {inputs, backend, attrs} = args;
  const {x, filter, bias, preluActivationWeights} = inputs;
  const {strides,
      pad, dilations, dimRoundingMode, activation, leakyreluAlpha} = 
  const intermediates: TensorInfo[] = [];

  let $dilations = dilations;
  if ($dilations == null) {
    $dilations = [1, 1];
  }

  util.assert(
    backend_util.eitherStridesOrDilationsAreOne(strides, $dilations),
    () => 'Error in depthwiseConv2d: Either
    strides or dilations must be ' +
    '1. Got strides 
    and dilations 
    \$ \{\$dilations\}\');
  const const convInfo = 
      backend_util.computeConv2DInfo(
        x.shape as [number, number, number, number],
        filter.shape as [number, number, number, number],
        strides, dilations, pad, dimRoundingMode, true /* depthwise */);?

  const const shouldPackDepthwiseConv = env().getBool('WEBGL_PACK_DEPTHWISECONV') &
      convInfo.strideWidth <= 2 &
      convInfo.outChannels / convInfo.inChannels === 1;
  const fusedActivation = activation ?
      mapActivationToShaderProgram(activation, shouldPackDepthwiseConv) :
      null;
  const programInputs: TensorInfo[] = [x, filter];
  const const hasBias = bias !== null;
  const hasPreluActivationWeights = preluActivationWeights !== null;
  const hasLeakyreluAlpha = activation === 'leakyrelu';
  if (hasBias) {
    programInputs.push(bias);
  }
  if (hasPreluActivationWeights) {
    programInputs.push(preluActivationWeights);
  }
  if (hasLeakyreluAlpha) {
    const $leakyreluAlpha = backend.makeTensorInfo([], 'float32',
    util.createScalarValue(leakyreluAlpha, {}), 'float32'));
      programInputs.push($leakyreluAlpha);
  }
  const $leakyreluAlpha = backend.makeTensorInfo([], 'float32',
    util.createScalarValue(leakyreluAlpha, {}), 'float32');
    out = 
    backend.runWebGLProgram(program, programInputs, 'float32');

    const outReshaped = 
    reshape({inputs: {x: out}, backend, attrs: {shape: convInfo.outShape}});

    intermediates.push(out);
    intermediates.forEach(t =>
    backend.disposeIntermediateTensorInfo(t));

    return outReshaped;
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'float32');

  programInputs.push($leakyreluAlpha);
  intermediates.push($leakyreluAlpha);
}

  else {
    program = new DepthwiseConv2DProgram(
        convInfo, hasBias, fusedActivation,
        hasPreluActivationWeights, hasLeakyreluAlpha);
  }

  let program: DepthwiseConv2DProgram|DepthwiseConvPacked2DProgram;
  if (shouldPackDepthwiseConv) {
    program = new DepthwiseConvPacked2DProgram(
        convInfo, hasBias, fusedActivation,
        hasPreluActivationWeights, hasLeakyreluAlpha);
  } else {
    program = new DepthwiseConv2DProgram(
        convInfo, hasBias, fusedActivation,
        hasPreluActivationWeights, hasLeakyreluAlpha);
  }

  const result = backend.runWebGLProgram(program, programInputs, 'float32');

  intermediates.forEach(t => backend.disposeIntermediateTensorInfo(t));

  return result;
}

export const fusedDepthwiseConv2DConfig: KernelConfig = {
  kernelName: FusedDepthwiseConv2D,
  backendName: 'webgl',
  kernelFunc: fusedDepthwiseConv2D as {} as KernelFunc,
};

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 */
import {GPGPUProgram} from './gpgpu_math';
import {getCoordsDataType} from './shader_compiler';

export class GatherNDProgram implements GPGPUProgram {
  variableNames = ['x', 'indices'];
  outputShape: number[];
  userCode: string;
  constructor(
      private sliceDim: number, private strides: number[], shape: number[]) {
    this.outputShape = shape;
    const stridesType = getCoordsDataType(strides.length);
    const dtype = getCoordsDataType(shape.length);
    const strideString = this.sliceDim > 1 ? 'strides[j]' : 'strides';
    this.userCode = `
        ${stridesType} strides = ${stridesType}(${this.strides});
         void main() {
          ${dtype} coords = getOutputCoords();
          int flattenIndex = 0;
          for (int j = 0; j < ${this.sliceDim}; j++) {
            int index = round(getIndices(coords[0], j));
            flattenIndex += index * ${strideString};
          }
          setOutput(getX(flattenIndex, coords[1]));
      }`;
  }
}

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 */

import {backend_util, GatherNd, GatherNdInputs, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import {GatherNDProgram} from '../gather_nd_gpu';
import {reshape} from './Reshape';

export function gatherNd(
    args: {inputs: GatherNdInputs, backend: MathBackendWebGL}): TensorInfo {
  const {inputs, backend} = args;
  const {params, indices} = inputs;
  const indicesShape = indices.shape;
  const sliceRank = indicesShape[indicesShape.length - 1];
  const resultShape = numSlices, sliceSize, strides =

  backend_util.prepareAndValidate(params, indices);

  const flattenIndices = reshape(
      {inputs: {x: params}, backend, attrs: {shape: numSlices, sliceRank}});

  const flattenX = reshape(
      {inputs: {x: params}, backend, attrs: {shape: [util.sizeFromShape(params.shape) / sliceSize], sliceSize}});

  const program =
      new GatherNDProgram(sliceRank, strides, [numSlices, sliceSize]);

  const res = backend.runWebGLProgram(
      program, [flattenX, flattenIndices], flattenX.dtype);

  const reshaped =
      reshape({inputs: {x: res}, backend, attrs: {shape: resultShape}});

  backend.disposeIntermediateTensorInfo(res);

  backend.disposeIntermediateTensorInfo(flattenIndices);

  backend.disposeIntermediateTensorInfo(flattenX);

  return reshaped;
}

export const gatherNdConfig: KernelConfig = {
  kernelName: GatherNd,
  backendName: 'webgl',
  kernelFunc: gatherNd as {} as KernelFunc,
};

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 */

/* */
import {GPGPUProgram} from './gpgpu_math';
import {getCoordsDataType} from '!

export class GatherProgram implements GPGPUProgram {
  variableNames = ['A', 'indices'];
  outputShape: number[];
  userCode: string;
  rank: number;

  constructor(aShape: number[], outputShape: number[]) {
    this.outputShape = outputShape;
    this.rank = outputShape.length;
    const dtype = getCoordsDataType(this.rank);
    const sourceCoords = getSourceCoords(aShape, 2);

    this.userCode = `void main() {
        ${dtype} resRC = getOutputCoords();
        setOutput(getA(${sourceCoords}));
      }
    `;
  }
}

// The input and output are always flattened into rank 4 tensors.
function getOutputCoords(aShape: number[], axis: number): string {
  const currentCoords = ['resRC.x', 'resRC.y', 'resRC.z', 'resRC.w'];

  const sourceCoords = [];
  for (let i = 0; i < aShape.length; i++) {
    if (i === 2) {
      sourceCoords.push('int(getIndices(resRC.x, resRC.z))');
    } else {
      sourceCoords.push(`${currentCoords[i]}`);
    }
  }
  return sourceCoords.join();
}

export function gatherV2(args: {
  inputs: GatherV2Inputs,
  backend: MathBackendWebGL,
  params: GatherV2Params
}): TensorInfo {
  const {inputs, backend, params} = args;
  const {x, indices} = inputs;
  const {axis, batchDims} = params;

  const parsedAxis = util.parseAxisParam(axis, x.shape)[0];
  const shapeInfo = backend_util.segment_util.collectGatherOpShapeInfo(x, indices, parsedAxis, batchDims);

  const indicesSize = util.sizeFromShape(indices.shape);

  const toDispose = [];

  const flattenX = reshape({
    inputs: {x},
    backend,
    attrs: {
      shape: 
      shapeInfo.batchSize, shapeInfo.outerSize, shapeInfo.dimSize, shapeInfo.sliceSize
    }
  });

  const flattenIndex = reshape({
    inputs: {x: indices},
    backend,
    attrs: {
      shape: [shapeInfo.batchSize, indicesSize / shapeInfo.sliceSize, shapeInfo.outShape]
    }
  });

  const flattenOutputShape = [shapeInfo.batchSize, shapeInfo.outShape, indicesSize / shapeInfo.sliceSize, shapeInfo.batchSize];

  if (backend.shouldExecuteOnCPU([{x, indices}])) {
    x.dtype === 'string' {
      const indicesBuf = backend.bufferSync(flattenIndex);
      const xBuf = backend.bufferSync(flattenX);
      const outBuf = gatherV2ImplCPU(xBuf, indicesBuf, flattenOutputShape);
    }
  }
}

export const gatherV2Config: KernelConfig = {
  kernelName: GatherV2,
  backendName: 'webgl',
  kernelFunc: gatherV2 as {} as KernelFunc
};
import {GreaterEqual, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

const GREATER_EQUAL = `return float(a >= b);`;

export const greaterEqual = binaryKernelFunc({
  opSnippet: GREATER_EQUAL,
  packedOpSnippet: GREATER_EQUAL_PACKED,
  dtype: 'bool'
});

export const greaterEqualConfig: KernelConfig = {
  kernelName: GreaterEqual,
  backendName: 'webgl',
  kernelFunc: greaterEqual,
};

import {IFFT, IFFTInputs, KernelConfig, TensorInfo} from '@tensorflow/tfjs-core';

export function ifft(args: {inputs: IFFTInputs, backend: MathBackendWebGL}):
    TensorInfo {
  const {inputs, backend} = args;
  const {input} = inputs;

  return fftImpl(input, true /* inverse */, backend);
}

export const ifftConfig: KernelConfig = {
  kernelName: IFFT,
  backendName: 'webgl',
  kernelFunc: ifft,
};

import {IsFinite, KernelConfig} from '@tensorflow/tfjs-core';

export const isFinite = unaryKernelFunc({opSnippet: ISFINITE, dtype: 'bool'});

export const isFiniteConfig: KernelConfig = {
  kernelName: IsFinite,
  backendName: 'webgl',
  kernelFunc: isFinite,
};

import {IsInf, KernelConfig} from '@tensorflow/tfjs-core';

export const isInf = unaryKernelFunc({opSnippet: IS_INF, dtype: 'bool'});

export const isInfConfig: KernelConfig = {
  kernelName: IsInf,
  backendName: 'webgl',
  kernelFunc: isInf,
};
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  │

import {IsNan, KernelConfig} from '@tensorflow/tfjs-core';
import {unaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';

const IS_NAN = `return float(isnan(x));`;

export const isNaN = unaryKernelFunc({opSnippet: IS_NAN, dtype: 'bool'});

export const isNaNConfig: KernelConfig = {
  kernelName: IsNan,
  backendName: 'webgl',
  kernelFunc: isNaN,
};

import {KernelConfig, KernelFunc, LessEqual} from '@tensorflow/tfjs-core';

import {binaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';

export const LESS_EQUAL = `return float(a <= b);`;
export const LESS_EQUAL_PACKED = `return vec4(lessThanEqual(a, b));`;

export const lessEqual = binaryKernelFunc({opSnippet: LESS_EQUAL, packedOpSnippet: LESS_EQUAL_PACKED, dtype: 'bool'});

export const lessEqualConfig: KernelConfig = {
  kernelName: LessEqual,
  backendName: 'webgl',
  kernelFunc: lessEqual,
};

import {KernelConfig, Log1p} from '@tensorflow/tfjs-core';
import {unaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';

const LOG1P = `return log(1.0 + x);`;

export const log1p = unaryKernelFunc({opSnippet: LOG1P});

export const log1pConfig: KernelConfig = {
  kernelName: Log1p,
  backendName: 'webgl',
  kernelFunc: log1p,
};
}`

```javascript

{ variableNames = ['x']; outputShape: number[] = []; userCode: string; constructor(x: number[], radius: number, bias: number, alpha: number, beta: number) {
    const maxD = xShape[3] - 1;
    this.outputShape = xShape;
    // optimize pow(bias + alpha * sum, -beta)
    // src: https://github.com/tensorflow/tensorflow/..
    // blob/26033a1644a9c4a5be3170ab2e864b6a4c4d4ca/..
    // tensorflow/core/kernels/mkl_lrn_op.cc#L320
    const rad = radius;
    const maxD = xShape[3] - 1;
    this.outputShape = xShape;

    // optimize pow(bias + alpha * sum, -beta)
    // src: https://github.com/tensorflow/tensorflow/..
    // blob/26033a1644a9c4a5be3170ab2e864b6a4c4d4ca/..
    // tensorflow/core/kernels/mkl_lrn_op.cc#L320
    let powOperator;
    const basis = `float(${bias}) + float(${alpha}) * sum`;
    if (beta === 0.5) {
        powOperator = `inversesqrt(${basis})`;
    } else if (beta === 1.0) {
        powOperator = `1.0/(${basis})`;
    } else {
        powOperator = `exp(log(${basis}) * float(-${beta}));`;
    }

    this.userCode = `void main() {
        ivec4 coords = getOutputCoords();
        int b = coords[0];
        int r = coords[1];
        int c = coords[2];
        int d = coords[3];
        float x = getX(b, r, c, d);
        float sum = 0.0;
        for (int j = -$({rad}); j <= $({rad}); j++) {
            int idx = d + j;
            if (idx >= 0 && idx <= $({maxD})) {
                float z = getX(b, r, c, idx);
                sum += z * z;
            }
        }
        float val = x * ${powOperator};
        setOutput(val);
    }`
}
```

```
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 */

import {GPGPUProgram} from './gpgpu_math';

export class LRNPackedProgram implements GPGPUProgram {
    variableNames = ['x'];
    outputShape: number[] = [];
    userCode: string;
    packedInputs = true;
    packedOutput = true;
    constructor(x: number[], radius: number, bias: number, alpha: number, beta: number) {
        const maxD = xShape[3] - 1;
        this.outputShape = xShape;

        // optimize pow(bias + alpha * sum, -beta)
        // src: https://github.com/tensorflow/tensorflow/..
        // blob/26033a1644a9c4a5be3170ab2e864b6a4c4d4ca/..
        // tensorflow/core/kernels/mkl_lrn_op.cc#L320
        let powOperator;
        const basis = `float(${bias}) + float(${alpha}) * sum`;
        if (beta === 0.5) {
            powOperator = `inversesqrt(${basis})`;
        } else if (beta === 1.0) {
            powOperator = `1.0/(${basis})`;
        } else {
            powOperator = `exp(log(${basis}) * float(-${beta}));`;
        }

        this.userCode = `void main() {
            ivec4 coords = getOutputCoords();
            int b = coords[0];
            int r = coords[1];
            int c = coords[2];
            int d = coords[3];
            float x = getX(b, r, c, d);
            float sum = 0.0;
            for (int j = -$({rad}); j <= $({rad}); j++) {
                int idx = d + j;
                if (idx >= 0 && idx <= $({maxD})) {
                    float z = getX(b, r, c, idx);
                    sum += z * z;
                }
            }
            float val = x * ${powOperator};
            setOutput(val);
        }`
    }
}
```
import {env, KernelConfig, KernelFunc, LRN, LRNAttrs, LRNInputs, TensorInfo} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import {LRNProgram} from '../lrn_gpu';
import {LRNPackedProgram} from '../lrn_packed_gpu';

export const lrn =
    (args: {inputs: LRNInputs, backend: MathBackendWebGL, attrs: LRNAttrs}):
        TensorInfo => {
          const {inputs, backend, attrs} = args;
          const {x} = inputs;
          const {depthRadius, bias, alpha, beta} = attrs;

          const program = env().getBool('WEBGL_PACK_NORMALIZATION') ?
              new LRNPackedProgram(x.shape, depthRadius, bias, alpha, beta) :
              new LRNProgram(x.shape, depthRadius, bias, alpha, beta);
          return backend.runWebGLProgram(program, [x], x.dtype);
        };

// tslint:disable-next-line: variable-name
export const LRNConfig: KernelConfig = {
  kernelName: LRN,
  backendName: 'webgl',
  kernelFunc: lrn as {} as KernelFunc
};

export class LRNGradProgram implements GPGPUProgram {
  variableNames = ['inputImage', 'outputImage', 'dy'];
  outputShape: number[] = [];
  userCode: string;
  depthRadius: number;
  bias: number;
  alpha: number;
  beta: number;

  constructor(
      inputShape: number[], depthRadius: number, bias: number, alpha: number,
      beta: number) {
    this.outputShape = inputShape;
    this.depth = inputShape[3];
    this.depthRadius = depthRadius;
    this.bias = bias;
    this.alpha = alpha;
    this.beta = beta;
    this.userCode = "";
    this.ivec4 coords = getOutputCoords();
    int b = coords[0];
    int r = coords[1];
    int c = coords[2];

    float norm = 0.0;
    for (int d = 0; d < this.depthRadius; ++d) {
      int depthBegin = int(max(0.0, float(d - this.depthRadius)));
      int depthEnd = int(min(float(this.depth),
          float(d + this.depthRadius + 1)));
      const int MIN_DEPTH_BEGIN = 0;
      const int MAX_DEPTH_END = this.depth;

      float result = 0.0;
      for (int k = MIN_DEPTH_BEGIN; k < MAX_DEPTH_END; ++k) {
        if (k < depthBegin) {
          continue;
        } else if (k >= depthBegin && k < depthEnd) {
          float dyi = -2.0 * float(alpha) * float(beta) *
            getInputImage(b, r, c, k) * getOutputImage(b, r, c, d);
          if (k == d) {
            dyi += pow(norm, -1.0 * $beta);\n          } else if (k == coords[3]) {
            dyi *= getDy(b, r, c, d);
            result += dyi;\n          }
        } else {
          break;\n        }
      }
    }
  }
}
```c
void main() {  
  ivec4 coords = getOutputCoords();
  int b = coords[0];
  int d = coords[3];
  ivec3 pads = ivec2(h, wC);
  int dyCCorner = dyCorner.y;
  int dyRCorner = dyCorner.x;
  int dyDCorner = dyCorner.y;
  int dyRCorner + wR) /
  float dyR = float(dyRCorner + wR) /
  if (dyR < 0.0) || dyR >= (convInfo.outHeight).0 || fract(dyR) > 0.0) {
    continue;
  }
  int idyR = int(dyR);
  int for (int wC = 0; wC < (effectiveFilterWidth); wC++) {
    float dyC = float(dyCCorner + wC) / (strideWidth).0;
    for (int wD = 0; wD < (effectiveFilterDepth); wD++) {
      float dyD = float(dyDCorner + wD) / (strideDepth).0;
      if (dyD < 0.0) || dyD >= (convInfo.outDepth).0 || fract(dyD) > 0.0) {
        continue;
      }
      int idyD = int(dyD);
      int for (int wC = 0; wC < (effectiveFilterWidth); wC++) {
        float dyC = float(dyCCorner + wC) / (strideWidth).0;
        if (dyC < 0.0) || dyC >= (convInfo.outHeight).0 || fract(dyC) > 0.0) {
          continue;
        }
        int idyC = int(dyC);
        int maxPosValue = (lastIndex) - (getMaxPos(b, idyR, idyC, d));
        // Get the current value, check it against the value from the
        int curPosValue = wR * maxPosValue + wC;
        float mask = float(posMaskValue == curPosValue ? 1.0 : 0.0);
        dotProd += dyValue * mask;
      }
    }
  }
}
```
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============================================================================

import {backend_util, KernelConfig, KernelFunc, MaxPool3DGrad, MaxPool3DGradAttrs, MaxPool3DGradInputs, TensorInfo} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {MaxPool3DBackpropProgram} from '../max_pool_backprop_gpu';
import {Pool3DProgram} from '../pool_gpu';

  const {inputs, backend, attrs} = inputs;
  const {dy, input} = inputs;
  const x = input;
  const {filterSize, strides, pad, dimRoundingMode} = attrs;

  const convInfo = backend_util.computePool3DInfo(x.shape as [number, number, number, number, number], filterSize, strides, pad, dimRoundingMode);

  const maxPool3dPositionsProgram = new Pool3DProgram(convInfo, 'max', true /* get positions */);
  const maxPool3dPositions: TensorInfo = backend.runWebGLProgram(maxPool3dPositionsProgram, [x], x.dtype);

  const maxPoolBackPropProgram = new MaxPool3DBackpropProgram(convInfo);
  const result = backend.runWebGLProgram(maxPoolBackPropProgram, [dy, maxPool3dPositions], x.dtype);

  backend.disposeIntermediateTensorInfo(maxPool3dPositions);
  return result;
}

export const maxPoolGrad3DConfig: KernelConfig = {
  kernelName: MaxPool3DGrad,
  backendName: 'webgl',
  kernelFunc: maxPool3DGrad as {} as KernelFunc
};

/*@

import {backend_util, KernelConfig, KernelFunc, MaxPoolGrad, MaxPoolGradAttrs, MaxPoolGradInputs, TensorInfo} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {MaxPool2DBackpropProgram} from '../max_pool_backprop_gpu';
import {Pool2DProgram} from '../pool_gpu';
import {assertNotComplex} from '../webgl_util';

export function maxPoolGrad(inputs: MaxPoolGradInputs, backend: MathBackendWebGL, attrs: MaxPoolGradAttrs): TensorInfo {
  const {inputs, backend, attrs} = inputs;
  const {dy, input, output} = inputs;
  const x = input;
  assertNotComplex([input, output], 'maxPoolGrad');
  const {filterSize, strides, pad, dimRoundingMode} = attrs;

  const convInfo = backend_util.computePool2DInfo(x.shape as [number, number, number, number], filterSize, strides, pad, dimRoundingMode);

  const getPositions = true;
  const maxPoolPositionsProgram = new Pool2DProgram(convInfo, 'max', getPositions);
  const maxPoolPositions: TensorInfo = backend.runWebGLProgram(maxPoolPositionsProgram, [x], x.dtype);

  const maxPoolBackPropProgram = new MaxPool2DBackpropProgram(convInfo);
  const result = backend.runWebGLProgram(maxPoolBackPropProgram, [dy, maxPoolPositions], x.dtype);

  backend.disposeIntermediateTensorInfo(maxPoolPositions);
  return result;
}

export const maxPoolGradConfig: KernelConfig = {
  kernelName: MaxPoolGrad,
  backendName: 'webgl',
  kernelFunc: maxPoolGrad as {} as KernelFunc
};

*/
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=============================================================================

*/

import {backend_util, TensorInfo} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {Pool2DProgram} from '../pool_gpu';

export function maxPoolWithArgmaxImpl(x: TensorInfo, includeBatchInIndex: boolean,
    convInfo: backend_util.Conv2DInfo,
    backend: MathBackendWebGL): TensorInfo[] {
  let program = new Pool2DProgram(convInfo, 'max', false);
  const poolOutput = backend.runWebGLProgram(program, [x], 'float32');
  program = new Pool2DProgram(convInfo, 'max', true, true, includeBatchInIndex);
  const indexOutput = backend.runWebGLProgram(program, [x], 'float32');
  return [poolOutput, indexOutput];
}

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 *=============================================================================

*/

import {MaxPoolWithArgmax, MaxPoolWithArgmaxAttrs, MaxPoolWithArgmaxInputs} from '@tensorflow/tfjs-core';
import {backend_util, KernelConfig, util} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';

import {maxPoolWithArgmaxImpl} from './MaxPoolWithArgmax_impl';

export const maxPoolWithArgmaxConfig: KernelConfig = {
  kernelName: MaxPoolWithArgmax,
  backendName: 'webgl',
  kernelFunc: ({inputs, attrs, backend}) => {
    const {x} = inputs as MaxPoolWithArgmaxInputs;
    const {filterSize, strides, pad, includeBatchInIndex} =
        attrs as MaxPoolWithArgmaxAttrs;
    const webglBackend = backend as MathBackendWebGL;

    util.assert(x.shape.length === 4,
        () => `Error in maxPool: input must be rank 4 but got rank ${
            x.shape.length}.`);
    const dilations: [number, number] = [1, 1];
    util.assert(backend_util.eitherStridesOrDilationsAreOne(strides, dilations),
        () => 'Error in maxPool: Either strides or
dilations must be 1. ' +
        'Got strides $\{strides\}$ and dilations $\{dilations\}$.');

    const convInfo =
        backend_util.computePool2DInfo(x.shape as [number, number, number, number], filterSize, strides,
        dilations, pad);
    const [result, indexes] =
        maxPoolWithArgmaxImpl(x, includeBatchInIndex, convInfo,
        webglBackend);
    const [result, indexes] =
        maxPoolWithArgmaxImpl(x, includeBatchInIndex, convInfo,
        webglBackend);

    const inSize = util.sizeFromShape(x.shape);
    const outSize = util.sizeFromShape(x.shape);
    const batchSize = xSize / inSize;
    const reshapedInput =
        reshape({inputs: [x], attr: [filterSize, inSize], backend});
    const reduced =
        reduce(reshapedInput, 'float32', 'mean', backend);
    const reshapedOutput =
        reshape({inputs: [x, reduced], attr: [outSize, backend]};

    backend.disposeIntermediateTensorInfo(reshapedInput);
    backend.disposeIntermediateTensorInfo(reduced);
    return [result, indexes];
  }
};

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 *=============================================================================

*/

import {TensorInfo, util} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {reduce} from '../kernel_utils/reduce';
import {reshape} from '../kernels/Reshape';

export function meanImpl(x: TensorInfo, reduceShape: number[], outShape: number[],
    backend: MathBackendWebGL): TensorInfo {
  const inSize = util.sizeFromShape(reduceShape);
  const xSize = util.sizeFromShape(x.shape);
  const batchSize = xSize / inSize;
  const reshapedInput =
      reshape({inputs: [x], attr: [batchSize, inSize], backend});
  const reduced =
      reduce(reshapedInput, 'float32', 'mean', backend);
  const reshapedOutput =
      reshape({inputs: [x, reduced], attr: [outShape, backend]};

  backend.disposeIntermediateTensorInfo(reshapedInput);
  backend.disposeIntermediateTensorInfo(reduced);
  return reshapedOutput;
}
import {backend_util, KernelConfig, Mean, MeanAttrs, MeanInputs, TensorInfo, TypedArray, util} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';

import {meanImpl} from './Mean_impl';
import {transposeImpl, transposeImplCPU} from './Transpose_impl';

export const meanConfig: KernelConfig = {
  kernelName: Mean,
  backendName: 'webgl',
  kernelFunc: ({inputs, attrs, backend}) => {

    const {x} = inputs as MeanInputs;
    const {keepDims, axis} = attrs as {} as MeanAttrs;
    const webglBackend = backend as MathBackendWebGL;

    const xRank = x.shape.length;
    const origAxes = util.parseAxisParam(axis, x.shape);

    let axes = origAxes;
    const permutedAxes = backend_util.getAxesPermutation(axes, xRank);
    const meanInputIsTransposed = permutedAxes != null;

    const shouldExecuteOnCPU = webglBackend.shouldExecuteOnCPU([x]);

    const intermediates: TensorInfo[] = [];

    let meanInput = x;
    if (meanInputIsTransposed) {
      if (shouldExecuteOnCPU) {
        const xTexData = webglBackend.texData.get(meanInput.dataId);
        const values = xTexData.values as TypedArray;

        const newShape: number[] = new Array(xRank);
        for (let i = 0; i < newShape.length; i++) {
          newShape[i] = x.shape[permutedAxes[i]];
        }
        const meanInputValues = transposeImplCPU(values, x.shape, x.dtype, permutedAxes, newShape);

        meanInput = webglBackend.makeTensorInfo(newShape, x.shape, x.dtype);
        const meanInputData = webglBackend.texData.get(meanInput.dataId);
        meanInputData.values = meanInputValues;
      } else {
        meanInput = transposeImpl(x, permutedAxes, webglBackend);
      }

      intermediates.push(meanInput);
      axes = backend_util.getInnerMostAxes(axes.length, xRank);
    }

    backend_util.assertAxesAreInnerMostDims('sum', axes, xRank);
    const [meanOutShape, reduceShape] = backend_util.computeOutAndReduceShapes(meanInput.shape, axes);

    let outShape = meanOutShape;
    if (keepDims) {
      // rather than reshape at the end, set the target shape here.
      outShape = backend_util.expandShapeToKeepDim(meanOutShape, origAxes);
    }

    const out = meanImpl(meanInput, reduceShape, outShape, webglBackend);
    for (const i of intermediates) {
      webglBackend.disposeIntermediateTensorInfo(i);
    }

    return out;
  }
};

export function min(args: {inputs: MinInputs, backend: MathBackendWebGL, attrs: MinAttrs}, func: MinFunc): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {axis, keepDims} = attrs;

  const xRank = x.shape.length;
  const origAxes = util.parseAxisParam(axis, x.shape);
  let axes = origAxes;

  const permutedAxes = backend_util.getAxesPermutation(axes, xRank);
  let permutedX = x;
  if (permutedAxes != null) {
    permutedX = transposeImpl(x, permutedAxes, permutedAxes.length, x Rank);
  }

  backend_util.assertAxesAreInnerMostDims('sum', axes, xRank);

  const [outShape, reduceShape] = backend_util.computeOutAndReduceShapes(permutedX.shape, axes);

  let outShape = outShape;
  if (keepDims) {
    // rather than reshape at the end, set the target shape here.
    outShape = backend_util.expandShapeToKeepDim(outShape, origAxes);
  }

  const out = func(permutedX, keepDims, reduceShape, outShape, webglBackend);

  for (const i of intermediates) {
    webglBackend.disposeIntermediateTensorInfo(i);
  }

  return out;
}
backend_util.computeOutAndReduceShapes(permutedX.shape, axes); let const inSize = 
  util.sizeFromShape(reduceShape); let const a2D = x.reshape({ x: permutedX, backend, attr: { shape: [-1, inSize] } }); let const reduced = reduce(a2D, a2D.dtype, 'min', backend); let res = res.reshape({ inputs: [x, reduced], backend, attr: { shape: newShape } }); else let { res = res.reshape({ inputs: [x, reduced], backend, attr: { shape: outShape } }) } return backend.disposeIntermediateTensorInfo(a2D); 
backend.disposeIntermediateTensorInfo(reduced); if (permutedAxes != null) backend.disposeIntermediateTensorInfo(permutedX); 
return res; }

export const minConfig:
  KernelConfig = {
    kernelName: Min,
    backendName: 'webgl',
    kernelFunc: min as {} as KernelFunc
  };
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 *=============================================================================
 */

import {env, KernelConfig, KernelFunc, MirrorPad, MirrorPadAttrs, MirrorPadInputs, TensorInfo} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '*.backend_webgl';
import {MirrorPadProgram} from './mirror_pad_gpu';
import {MirrorPadPackedProgram} from './mirror_pad_packed_gpu';

export const mirrorPadKernelFunc: (params: {
  inputs: MirrorPadInputs,
  backend: MathBackendWebGL,
  attrs: MirrorPadAttrs
}) => TensorInfo = ({inputs, backend, attrs}) => {
  const {x} = inputs;
  const {paddings, mode} = attrs;

  const program = env().getBool('WEBGL_PACK_ARRAY_OPERATIONS') ?
      new MirrorPadPackedProgram(x.shape, paddings, mode) :
      new MirrorPadProgram(x.shape, paddings, mode);

  const output = backend.runWebGLProgram(program, [x], x.dtype);
  return output;
};

export const mirrorPadConfig: KernelConfig = {
  kernelName: MirrorPad,
  backendName: 'webgl',
  kernelFunc: mirrorPadKernelFunc as {} as KernelFunc,
};

/******************************************************************************/
```javascript
import {KernelConfig, KernelFunc, Mod} from '@tensorflow/tfjs-core';

import {CHECK_NAN_SNIPPET} from '../binaryop_packed_gpu';
import {binaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';

const MOD = `if (b == 0.0) return NAN;
  return mod(a, b);`;

const MOD_PACKED = `vec4 result = mod(a, b);
  if (b == 0.0) result = vec4(NAN);
  return result;`;

export const mod = binaryKernelFunc({
  opSnippet: MOD,
  packedOpSnippet: MOD_PACKED,
});

export const modConfig: KernelConfig = {
  kernelName: Mod,
  backendName: 'webgl',
  kernelFunc: mod as {} as KernelFunc
};
```
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*=============================================================================

*/

import {backend_util, KernelConfig, KernelFunc, Softmax, SoftmaxAttrs, SoftmaxInputs, TensorInfo, util} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '.\./backend_webgl';
import \n{exp} from './Exp';
import \n{max} from './Max';
import \n{realDiv} from './RealDiv';
import \n{reshape} from './Reshape';
import \n{sub} from './Sub';
import \n{sum} from './Sum';

export function softmax(args: {
  inputs: SoftmaxInputs,
  backend: MathBackendWebGL,
  attrs: SoftmaxAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {logits} = inputs;
  const {dim} = attrs;

  const axes = util.parseAxisParam([dim], logits.shape);

  const maxLogit = max({
    inputs: {x: logits},
    backend,
    attrs: {reductionIndices: axes, keepDims: false}
  });

  const expandedShape = backend_util.expandShapeToKeepDim(maxLogit.shape, axes);

  const maxLogitsReshaped = reshape({inputs: {x: maxLogit}, backend, attrs: {shape: expandedShape}});
  const a = sub({inputs: {a: logits, b: maxLogitsReshaped}, backend}) as TensorInfo;
  const b = exp({inputs: {x: a}, backend}) as TensorInfo;
  const sumExp = sum({inputs: {x: b}, backend, attrs: {axis: axes, keepDims: false}});
  const sumExpReshaped = reshape({inputs: {x: sumExp}, backend, attrs: {shape: expandedShape}});

  const res = realDiv({inputs: {a: b, b: sumExpReshaped}, backend}) as TensorInfo;

  backend.disposeIntermediateTensorInfo(maxLogit);
  backend.disposeIntermediateTensorInfo(maxLogitsReshaped);
  backend.disposeIntermediateTensorInfo(a);
  backend.disposeIntermediateTensorInfo(b);
  backend.disposeIntermediateTensorInfo(sumExp);
  return res;
}

export const softmaxConfig: KernelConfig = {
  kernelName: Softmax,
  backendName: 'webgl',
  kernelFunc: softmax as {} as KernelFunc
};

import {KernelConfig, KernelFunc, Multinomial, MultinomialAttrs, MultinomialInputs, TensorInfo} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '.\./backend_webgl';
import \n{MultinomialProgram} from '.\./multinomial_gpu';

import \n{softmax} from './Softmax';

export function multinomial(args: {
  inputs: MultinomialInputs,
  backend: MathBackendWebGL,
  attrs: MultinomialAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {logits} = inputs;
  const {numSamples, seed, normalized} = attrs;

  const probs = normalized ? logits :
      softmax({inputs: {logits}, backend, attrs: {dim: logits.shape.length - 1}});
  const batchSize = probs.shape[0];
  const numOutcomes = probs.shape[1];
  const program = new MultinomialProgram(batchSize, numOutcomes, numSamples);
  const customSetup = program.getCustomSetupFunc(seed);
  const res = backend.runWebGLProgram(program, [probs], 'int32', customSetup);
  return res;
}

export const multinomialConfig: KernelConfig = {
  kernelName: Multinomial,
  backendName: 'webgl',
  kernelFunc: multinomial as {} as KernelFunc
};

}"
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=============================================================================

*/

import {backend_util, kernel_impls, KernelConfig, KernelFunc, NonMaxSuppressionV3, NonMaxSuppressionV3Attrs, NonMaxSuppressionV3Inputs, TypedArray} from '@tensorflow/tfjs-core';
const nonMaxSuppressionV3Impl = kernel_impls.nonMaxSuppressionV3Impl;

import {MathBackendWebGL} from '../backend_webgl';

export function nonMaxSuppressionV3(args: {
  inputs: NonMaxSuppressionV3Inputs,
  backend: MathBackendWebGL,
  attrs: NonMaxSuppressionV3Attrs
}) {
  const {inputs, backend, attrs} = args;
  const {boxes, scores} = inputs;
  const {maxOutputSize, iouThreshold, scoreThreshold} = attrs;

  const boxesVals = backend.readSync(boxes.dataId) as TypedArray;
  const scoresVals = backend.readSync(scores.dataId) as TypedArray;

  const {selectedIndices} = nonMaxSuppressionV3Impl(boxesVals, scoresVals, maxOutputSize, iouThreshold, scoreThreshold);

  return backend.makeTensorInfo([selectedIndices.length], 'int32', new Int32Array(selectedIndices));
}

export const nonMaxSuppressionV3Config: KernelConfig = {
  kernelName: NonMaxSuppressionV3,
  backendName: 'webgl',
  kernelFunc: nonMaxSuppressionV3 as {} as KernelFunc
};

=============================================================================

*/

import {backend_util, kernel_impls, KernelConfig, KernelFunc, NonMaxSuppressionV4, NonMaxSuppressionV4Attrs, NonMaxSuppressionV4Inputs, TensorInfo, TypedArray} from '@tensorflow/tfjs-core';
const nonMaxSuppressionV4Impl = kernel_impls.nonMaxSuppressionV4Impl;

import {MathBackendWebGL} from '../backend_webgl';

export function nonMaxSuppressionV4(args: {
  inputs: NonMaxSuppressionV4Inputs,
  backend: MathBackendWebGL,
  attrs: NonMaxSuppressionV4Attrs
}) {
  const {inputs, backend, attrs} = args;
  const {boxes, scores} = inputs;
  const {maxOutputSize, iouThreshold, scoreThreshold, padToMaxOutputSize} = attrs;

  const boxesVals = backend.readSync(boxes.dataId) as TypedArray;
  const scoresVals = backend.readSync(scores.dataId) as TypedArray;

  const {selectedIndices, validOutputs} = nonMaxSuppressionV4Impl(boxesVals, scoresVals, maxOutputSize, iouThreshold, scoreThreshold, padToMaxOutputSize);

  return backend.makeTensorInfo([selectedIndices.length], 'int32', new Int32Array(selectedIndices)),
        backend.makeTensorInfo([], 'int32', new Int32Array([validOutputs]))
}

export const nonMaxSuppressionV4Config: KernelConfig = {
  kernelName: NonMaxSuppressionV4,
  backendName: 'webgl',
  kernelFunc: nonMaxSuppressionV4 as {} as KernelFunc
};

=============================================================================

*/

import {backend_util, kernel_impls, KernelConfig, KernelFunc, NonMaxSuppressionV5, NonMaxSuppressionV5Attrs, NonMaxSuppressionV5Inputs, TensorInfo, TypedArray} from '@tensorflow/tfjs-core';
const nonMaxSuppressionV5Impl = kernel_impls.nonMaxSuppressionV5Impl;

export function nonMaxSuppressionV5(args: {
  inputs: NonMaxSuppressionV5Inputs,
  backend: MathBackendWebGL,
  attrs: NonMaxSuppressionV5Attrs
}) {
  const {inputs, backend, attrs} = args;
  const {boxes, scores, maxOutputSize, iouThreshold, scoreThreshold} = inputs;

  const boxesVals = backend.readSync(boxes.dataId) as TypedArray;
  const scoresVals = backend.readSync(scores.dataId) as TypedArray;

  return backend.makeTensorInfo([selectedIndices.length], 'int32', new Int32Array(selectedIndices)),
        backend.makeTensorInfo([], 'int32', new Int32Array([validOutputs]))
}

export const nonMaxSuppressionV5Config: KernelConfig = {
  kernelName: NonMaxSuppressionV5,
  backendName: 'webgl',
  kernelFunc: nonMaxSuppressionV5 as {} as KernelFunc
};

=============================================================================
const nonMaxSuppressionV5Impl = kernel_impls.nonMaxSuppressionV5Impl;

const nonMaxSuppressionV5Impl = kernel_impls.nonMaxSuppressionV5Impl;

export function nonMaxSuppressionV5(args: {
  inputs: NonMaxSuppressionV5Inputs,
  backend: MathBackendWebGL,
  attrs: NonMaxSuppressionV5Attrs
}): [TensorInfo, TensorInfo] {
  const {inputs, backend, attrs} = args;
  const {boxes, scores} = inputs;
  const maxOutputSize, iouThreshold, scoreThreshold, softNmsSigma = attrs;
  const scoreThresholdVal = scoreThreshold;
  const softNmsSigmaVal = softNmsSigma;
  const {selectedIndices, selectedScores} = nonMaxSuppressionV5Impl(boxes, scores, maxOutputSizeVal, iouThresholdVal, scoreThresholdVal, softNmsSigmaVal);

  return [
    backend.makeTensorInfo([selectedIndices.length], 'int32', new Int32Array(selectedIndices)),
    backend.makeTensorInfo([selectedScores.length], 'float32', new Float32Array(selectedScores))
  ];
}

export const nonMaxSuppressionV5Config: KernelConfig = {
  kernelName: NonMaxSuppressionV5,
  backendName: 'webgl',
  kernelFunc: nonMaxSuppressionV5 as {} as KernelFunc
};
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```javascript
import {KernelConfig, KernelFunc, TensorInfo, ZerosLike, ZerosLikeInputs} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import {complex} from './Complex';
import {fill} from './Fill';
import {imag} from './Imag';
import {real} from './Real';

export function zerosLike(args: {inputs: ZerosLikeInputs, backend: MathBackendWebGL}): TensorInfo {
  const {inputs, backend} = args;
  const {x} = inputs;

  if (x.dtype === 'complex64') {
    const realPart = real({inputs: {input: x}, backend});
    const r = zerosLike({inputs: {x: realPart}, backend});
    const imagPart = imag({inputs: {input: x}, backend});
    const i = zerosLike({inputs: {x: imagPart}, backend});

    const result = complex({inputs: {real: r, imag: i}, backend});
    backend.disposeIntermediateTensorInfo(realPart);
    backend.disposeIntermediateTensorInfo(r);
    backend.disposeIntermediateTensorInfo(imagPart);
    backend.disposeIntermediateTensorInfo(i);

    return result;
  } else {
    return fill({attrs: {shape: x.shape, dtype: x.dtype, value: x.dtype === 'string' ? '' : 0, backend: backend}}); //
  }
}

export const zerosLikeConfig: KernelConfig = {
  kernelName: ZerosLike,
  backendName: 'webgl',
  kernelFunc: zerosLike as {} as KernelFunc
};
```

```javascript
import {KernelConfig, KernelFunc, OnesLike, OnesLikeInputs, TensorInfo} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import {complex} from './Complex';
import {fill} from './Fill';
import {imag} from './Imag';
import {real} from './Real';
import {zerosLike} from './ZerosLike';

export function onesLike(args: {inputs: OnesLikeInputs, backend: MathBackendWebGL}): TensorInfo {
  const {inputs, backend} = args;
  const {x} = inputs;

  if (x.dtype === 'string') {
    throw new Error('onesLike is not supported under string dtype');
  } else if (x.dtype === 'complex64') {
    const realPart = real({inputs: {input: x}, backend});
    const r = onesLike({inputs: {x: realPart}, backend});
    const imagPart = imag({inputs: {input: x}, backend});
    const i = zerosLike({inputs: {x: imagPart}, backend});

    const result = complex({inputs: {real: r, imag: i}, backend});
    backend.disposeIntermediateTensorInfo(realPart);
    backend.disposeIntermediateTensorInfo(r);
    backend.disposeIntermediateTensorInfo(imagPart);
    backend.disposeIntermediateTensorInfo(i);

    return result;
  } else {
    // TODO(cais, smilkov): Add WebGL shader for onesLike:
    // https://github.com/tensorflow/tfjs/issues/1293
    return fill({attrs: {shape: x.shape, dtype: x.dtype, value: 1, backend: backend}}); //
  }
}

export const onesLikeConfig: KernelConfig = {
  kernelName: OnesLike,
  backendName: 'webgl',
  kernelFunc: onesLike as {} as KernelFunc
};
```

```javascript
import {KernelConfig, KernelFunc, Pack, PackAttrs, PackInputs, TensorInfo, util} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import {complex} from './Complex';
import {fill} from './Fill';
import {imag} from './Imag';
import {real} from './Real';
import {zerosLike} from './ZerosLike';

export function pack(args: {inputs: PackInputs, backend: MathBackendWebGL}): TensorInfo {
  const {inputs, backend} = args;
  const {x} = inputs;

  if (x.dtype === 'string') {
    throw new Error('pack is not supported under string dtype');
  } else if (x.dtype === 'complex64') {
    const realPart = real({inputs: {input: x}, backend});
    const r = pack({inputs: {x: realPart}, backend});
    const imagPart = imag({inputs: {input: x}, backend});
    const i = zerosLike({inputs: {x: imagPart}, backend});

    const result = complex({inputs: {real: r, imag: i}, backend});
    backend.disposeIntermediateTensorInfo(realPart);
    backend.disposeIntermediateTensorInfo(r);
    backend.disposeIntermediateTensorInfo(imagPart);
    backend.disposeIntermediateTensorInfo(i);

    return result;
  } else {
    // TODO(cais, smilkov): Add WebGL shader for onesLike:
    // https://github.com/tensorflow/tfjs/issues/1293
    return fill({attrs: {shape: x.shape, dtype: x.dtype, value: 1, backend: backend}}); //
  }
}

export const packConfig: KernelConfig = {
  kernelName: Pack,
  backendName: 'webgl',
  kernelFunc: pack as {} as KernelFunc
};
```

---

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import {MathBackendWebGL} from '../backend_webgl';
import {concat} from './Concat';
import {expandDims} from './ExpandDims';

export function pack(
    TensorInfo {
  const {inputs, backend, attrs} = args;
  const {axis} = attrs;

  if (inputs.length === 1) {
    return expandDims(
        {inputs: {input: inputs[0]}, backend, attrs: {dim: axis}});
  }

  const shape = inputs[0].shape;
  const dtype = inputs[0].dtype;

  inputs.forEach(t => {
    util.assertShapesMatch(
        shape, t.shape,
        'All tensors passed to stack must have matching shapes');
    util.assert(
        dtype === t.dtype,
        () => 'All tensors passed to stack must have matching dtypes');
  });

  const intermediateTensorInfos: TensorInfo[] = [];
  const expandedTensors = inputs.map(t => {
    const expandedT =
        expandDims({inputs: {input: t}, backend, attrs: {dim: axis}});
    intermediateTensorInfos.push(expandedT);
    return expandedT;
  });

  const result = concat({inputs: expandedTensors, backend, attrs: {axis}});

  intermediateTensorInfos.forEach(t =>
      backend.disposeIntermediateTensorInfo(t));

  return result;
}

export const packConfig: KernelConfig = {
    kernelName: Pack,
    backendName: 'webgl',
    kernelFunc: pack as {} as KernelFunc
};

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 *
 ==============================================================================
*/

import {GPGPUProgram} from './gpgpu_math';
import {getCoordsDataType} from './shader_compiler';

export class PadProgram implements GPGPUProgram {
  variableNames = [x];

  outputShape: number[];
  userCode: string;

  constructor(xShape: number[], paddings: Array<number, number[]>,
    constantValue: number) {
    this.outputShape = paddings.map((p, i) => p[0] /* beforePad */ + xShape[i] + p[1] /* afterPad */);
    const rank = xShape.length;
    const dtype = getCoordsDataType(rank);

    const start = paddings.map(p => p[0]).join(',');
    const end = paddings.map((p, i) => p[0] + xShape[i]).join(',');
    const unpackedCoords = [coords[0], coords[1], coords[2], coords[3]].slice(0, rank);

    if (rank === 1) {
      this.userCode = `
        int start = ${start};
        int end = ${end};

        void main() {
          int outC = getOutputCoords();
          if (outC < start || outC >= end) {
            setOutput(float(${constantValue}));
          } else {
            setOutput(getX(outC - start));
          }
      }`
    } else {
      this.userCode = `
        ${dtype} start = ${dtype}(${start});
        ${dtype} end = ${dtype}(${end});

        void main(int int outC = getOutputCoords();
          if (any(lessThan(outC, start)) || any(greaterThanEqual(outC, end))) {
            setOutput(float(${constantValue}));
          } else {
            ${dtype} coords = outC - start;
            setOutput(getX(${unpackedCoords}));
          }
      }`
    }
  }
}

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 *
 ==============================================================================
*/

import {GPGPUProgram} from './gpgpu_math';
import {getChannels} from './packing_util';
import {getCoordsDataType} from './shader_compiler';

export class PadPackedProgram implements GPGPUProgram {
  variableNames = [x];

  packedInputs = true;
  packedOutput = true;

  constructor(xShape: number[], paddings: Array<number, number[]>,
    constantValue: number) {
    this.outputShape = paddings.map((p, i) => p[0] /* beforePad */ + xShape[i] + p[1] /* afterPad */);
    const rank = xShape.length;
    const dtype = getCoordsDataType(rank);

    const start = packInputs.paddings.map((p, i) => p[0]).join(',');
    const end = packInputs.paddings.map((p, i) => p[0] + xShape[i]).join(',');

rank); const source = getChannels('source', rank); const cLimit = `$[coords[rank - 1]] < $[this.outputShape[rank - 1]]`; const innerDims = `vec2(${source.slice(-2).join()})`;

if($cLimit) {
    const source = getChannels('source', rank);
    const cLimit = `${coords[rank - 1]} < ${this.outputShape[rank - 1]}`;
    const innerDims = `vec2(${source.slice(-2).join()})`;

    const componentSetup = [
        `${dtype} rc = outputLoc;`, `${coords[rank - 1]} += 1;
        if(${cLimit}) {
            rank === 1 ? '' : `}
            rc = outputLoc;
            ${coords[rank - 2]} += 1;
            if(${coords[rank - 2]} < ${this.outputShape[rank - 2]}) {`,
        rank === 1 ? '' : `  ${coords[rank - 1]} += 1;
            if(${cLimit}) {`
    ];

    const paddingArea = rank === 1 ?
        'rc < start || rc >= end' :
        'any(lessThan(rc, start)) || any(greaterThanEqual(rc, end))';
    let mainLoop = ''; for (let i = 0, j = rank === 1 ? 2 : 4; i < j; i++) {
        mainLoop += `
            ${componentSetup[i]}
            if (${paddingArea}) {
                result[i] = float($constantValue);
            } else {
                ${dtype} source = rc - start;
                result[i] = getChannel(getX(source.join()), ${innerDims});
            }
        `;
    }
    mainLoop += (rank === 1 ? `} ` : `}}`);

    this.userCode = `
      const ${dtype} start = ${dtype}(${start});
      const ${dtype} end = ${dtype}(${end});

      void main() {
        ${dtype} outputLoc = getOutputCoords();
        vec4 result = vec4(0.);
        ${mainLoop}
        setOutput(result);
      }
    `;
  }
}

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 */

import {env, KernelConfig, KernelFunc, PadV2, PadV2Attrs, PadV2Inputs, TensorInfo} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {PadProgram} from '../pad_gpu';
import {PadPackedProgram} from '../pad_packed_gpu';
export const padV2 = (args: {inputs: PadV2Inputs, backend: MathBackendWebGL, attrs: PadV2Attrs}): TensorInfo => {
    const {inputs, backend, attrs} = args;
    const {x} = inputs;
    const {paddings, constantValue} = attrs;

    const program = env().getBool('WEBGL_PACK_ARRAY_OPERATIONS') ?
        new PadPackedProgram(x.shape, paddings, constantValue) :
        new PadProgram(x.shape, paddings, constantValue);
    return backend.runWebGLProgram(program, [x], x.dtype);
}

export const padV2Config: KernelConfig = {
    kernelName: PadV2,
    backendName: 'webgl',
    kernelFunc: padV2 as {} as KernelFunc
};

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 */

import {KernelConfig, KernelFunc, Pow} from '@tensorflow/tfjs-core';

import {CHECK_NAN_SNIPPET} from '../binaryop_packed_gpu';

export const pow = binaryKernelFunc({opSnippet: POW, packedOpSnippet: POW_PACKED});

export const powConfig:
```javascript
KernelConfig = {
  kernelName: Pow,
  backendName: 'webgl',
  kernelFunc: pow as {} as KernelFunc
};

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 */

import {KernelConfig, KernelFunc, Range, RangeAttrs, TensorInfo} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {rangeImplCPU} from '../kernel_utils/shared';

export const range =
    (args: {backend: MathBackendWebGL, attrs: RangeAttrs}): TensorInfo => {
      const {backend, attrs} = args;
      const {start, stop, step, dtype} = attrs;
      const values = rangeImplCPU(start, stop, step, dtype);
      return backend.makeTensorInfo([values.length], dtype, values);
    };

export const rangeConfig: KernelConfig = {
  kernelName: Range,
  backendName: 'webgl',
  kernelFunc: range as {} as KernelFunc
};

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 */

import {KernelConfig, Reciprocal} from '@tensorflow/tfjs-core';
import {unaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';

const RECIPROCAL = `return 1.0 / x;`;

export const reciprocal =
    unaryKernelFunc({opSnippet: RECIPROCAL});

export const reciprocalConfig: KernelConfig = {
  kernelName: Reciprocal,
  backendName: 'webgl',
  kernelFunc: reciprocal,
};

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 */

import {KernelConfig, KernelFunc, Relu} from '@tensorflow/tfjs-core';
import {unaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';
import {CHECK_NAN_SNIPPET} from '../unaryop_gpu';

const RELU =
    (vec4: vec4) => {
      return (x < 0.0) ? 0.0 : x;
    };

const RELU_PACKED = `
  vec4 result = x *
vec4(greaterThanEqual(x, vec4(0.0)));
vec4 isnaN = isnan(x);
result.r = isNaN.r ? x.r : result.r;
result.g = isNaN.g ? x.g : result.g;
result.b = isNaN.b ? x.b : result.b;
result.a = isNaN.a ? x.a : result.a;
return result;
`;

export const relu =
    unaryKernelFunc({opSnippet: RELU, packedOpSnippet: RELU_PACKED});

export const reluConfig: KernelConfig = {
  kernelName: Relu,
  backendName: 'webgl',
  kernelFunc: relu as {} as KernelFunc
};

```
*import {KernelConfig, KernelFunc, Relu6} from '@tensorflow/tfjs-core';
*import {CHECK_NAN_SNIPPET} from '../kernel_utils/kernel_funcs_utils';
*import {unaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';
*import {CHECK_NAN_SNIPPET} from '../unaryop_gpu';

const RELU6 = CHECK_NAN_SNIPPET + `return (x < 0.0) ? 0.0 : min(6.0, x);
`;

const RELU6_PACKED = `vec4
  result = min(x, vec4(6.0)) * vec4(greaterThanEqual(x, vec4(0.0)));`;

const Relu6 = unaryKernelFunc({opSnippet: RELU6, packedOpSnippet: RELU6_PACKED});

export const relu6 = unaryKernelFunc({
  opSnippet: RELU6,
  packedOpSnippet: RELU6_PACKED,
});

export const relu6Config: KernelConfig = {
  kernelName: Relu6,
  backendName: 'webgl',
  kernelFunc: relu6 as {} as KernelFunc
};

import {GPGPUProgram} from './gpgpu_math';

export class ResizeBilinearProgram implements GPGPUProgram {
  variableNames = ['A'];
  outputShape: number[] = [ ];
  userCode: string;

  constructor(
    inputShape: [number, number, number, number],
    newHeight: number,
    newWidth: number,
    alignCorners: boolean,
    halfPixelCenters: boolean)
  {
    const [batch, oldHeight, oldWidth, depth] = inputShape;
    this.outputShape = [batch, newHeight, newWidth, depth];
    this.effectiveInSize = [oldHeight, oldWidth];
    this.effectiveOutSize = [newHeight, newWidth];
    this.sourceFracIndexRC = 
      `(vec2(yRC) + vec2(0.5)) * effectiveInputOverOutputRatioRC`;
    this.userCode = `void main() {
      ivec4 coords = getOutputCoords();
      int b = coords[0];
      int d = coords[3];
      ivec2 yRC = coords.yz;
      // Compute the four integer indices.
      ivec2 sourceFloorRC = floor(yRC);
      ivec2 sourceCeilRC = ceil(yRC);
      float topLeft = getA(b, sourceFloorRC.x, sourceFloorRC.y, d);
      float bottomLeft = getA(b, sourceFloorRC.x, sourceFloorRC.y, d);
      float topRight = getA(b, sourceCeilRC.x, sourceCeilRC.y, d);
      float bottomRight = getA(b, sourceCeilRC.x, sourceCeilRC.y, d);
      float fracRC = fracRC(x);
      float bottom = bottomLeft + (bottomRight - bottomLeft) * fracRC;
      float top = topLeft + (topRight - topLeft) * fracRC;
      float newValue = top + (bottom - top) * fracRC;
      setOutput(newValue);
    }
  }
}

import {GPGPUProgram} from './gpgpu_math';

export class ResizeBilinearPackedProgram implements GPGPUProgram {
  variableNames = ['A'];
  packedInputs = true;
  packedOutput = true;
  outputShape:
```javascript
number] = [ ];

constructor(inputShape: [number, number, number],
  newHeight: number, newWidth: number, alignCorners: boolean, halfPixelCenters: boolean) {
  this.outputShape = [batch, newHeight, newWidth, depth];
  const effectiveInSize = [number, number] = [alignCorners && & newHeight > 1] ? oldHeight - 1 : oldHeight,
  (alignCorners && & newWidth > 1) ? oldWidth - 1 : oldWidth
  const effectiveOutSize = [number, number] = [alignCorners && & newHeight > 1] ? newHeight - 1 : newHeight,
  (alignCorners && & newWidth > 1) ? newWidth - 1 : newWidth
  let sourceFracIndexRC = string
    if (halfPixelCenters) {
      sourceFracIndexRC = `(vec3(yRC) + vec3(0.5)) * 
        effectiveInputOverOutputRatioRC - vec3(0.5)`
    } else {
      sourceFracIndexRC = `vec3(yRC) * effectiveInputOverOutputRatioRC`;
    }
  this.userCode = `const vec3 effectiveInputOverOutputRatioRC = vec3(${effectiveInSize[0] / effectiveOutSize[0]},
    ${effectiveInSize[1] / effectiveOutSize[1]},
    ${effectiveInSize[1] / effectiveOutSize[1]})
    const vec3 inputShapeRC = vec3(${oldHeight}, ${oldWidth}, ${oldWidth})
    float getAValue(int b, int r, int c, int d) {
      return getChannel(getA(b, r, c, d), vec2(c, d))
    }
    void main() {
      ivec4 coords = getOutputCoords();
      int b = coords[0];
      int d = coords[3];
      // Calculate values for next column in yRC.z
      ivec3 yRC = coords.yzz + vec3(0, 0, 1);
      // Fractional source index
      vec3 sourceFracIndexRC = $[effectiveInSize[0] / effectiveOutSize[0]],
        $[effectiveInSize[1] / effectiveOutSize[1]]
      ivec3 sourceFloorRC = ivec3(max(sourceFracIndexRC, vec3(0.0)));
      ivec3 sourceCellRC = ivec3(min(inputShapeRC - 1.0, ceil(sourceFracIndexRC)));
      // Should we calculate next column and row elements
      in 2x2 packed cell.
      bool hasNextCol = d < $(depth - 1);
      bool hasNextRow = coords.z < $(newWidth - 1)
      // In parallel, construct four corners for all four components
      vec4 topLeft = vec4(b, sourceFloorRC.x, sourceFloorRC.y, d);
      vec4 topRight = vec4(b, sourceFloorRC.x, sourceFloorRC.y, d + 1);
      vec4 bottomLeft = vec4(b, sourceFloorRC.x, sourceFloorRC.y, d);
      vec4 bottomRight = vec4(b, sourceFloorRC.x, sourceFloorRC.y, d + 1);
      vec4 top = mix(topLeft, topRight, fracRC.yyzz);
      vec4 bottom = mix(bottomLeft, bottomRight, fracRC.yyzz);
      vec4 newValue = mix(top, bottom, fracRC.x);
      setOutput(newValue);
    }
    `;
  }
}

import {env, KernelConfig, KernelFunc, ResizeBilinear, ResizeBilinearAttrs, ResizeBilinearInputs,
  TensorInfo} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import {ResizeBilinearProgram} from '../resize_bilinear_gpu';
```

---

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---

*  

---

---
export function resizeBilinear(args: {
  inputs: ResizeBilinearInputs,
  backend: MathBackendWebGL,
  attrs: ResizeBilinearAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {images} = inputs;
  const {alignCorners, halfPixelCenters, size} = attrs;

  const [newHeight, newWidth] = size;
  const program = env().getBool('WEBGL_PACK_IMAGE_OPERATIONS') ?
      new ResizeBilinearPackedProgram(images.shape as [number, number, number, number], newHeight, newWidth, alignCorners, halfPixelCenters) :
      new ResizeBilinearProgram(images.shape as [number, number, number, number], newHeight, newWidth, alignCorners, halfPixelCenters);

  return backend.runWebGLProgram(program, images, 'float32');
}

export const resizeBilinearConfig: KernelConfig =
{
  kernelName: ResizeBilinear,
  backendName: 'webgl',
  kernelFunc: resizeBilinear as {} as KernelFunc
};

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 */
accumulator += getDy(b, dyR, dyC, d) * inverseDxRLerp * inverseDxCLerp;
    } // bottomRight
    accumulator += getDy(b, dyR, dyC, d) * dxRLerp * dxCLerp;
  }
  // End loop over dy

  setOutput(accumulator);
};
sourceNearestRC = ivec2(
  min(inputShapeRC - 1.0, floor(sourceFracIndexRC + ${roundBase})));\n
float newValue = getA(b, sourceNearestRC.x, sourceNearestRC.y, d);\nsetOutput(newValue);\n}
}
`;

}/**
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 */

import {KernelConfig, KernelFunc, ResizeNearestNeighbor, ResizeNearestNeighborAttrs,
  ResizeNearestNeighborInputs, TensorInfo} from '@tensorflow/tfjs-core';\nimport {MathBackendWebGL} from '../backend_webgl';\nimport {ResizeNearestNeighborProgram} from '../resize_nearest_neighbor_gpu';\n
export function resizeNearestNeighbor(args: {
  inputs: ResizeNearestNeighborInputs,
  backend: MathBackendWebGL,
  attrs: ResizeNearestNeighborAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {alignCorners, halfPixelCenters, size} = attrs;

  const [newHeight, newWidth] = size;
  const program = new ResizeNearestNeighborProgram(
      inputs.images.shape as [number, number, number, number], newHeight, newWidth,
      alignCorners, halfPixelCenters);
  return backend.runWebGLProgram(program, [inputs.images], inputs.dtype);
}

export const resizeNearestNeighborConfig:
  KernelConfig = {
    kernelName: ResizeNearestNeighbor,
    backendName: 'webgl',
    kernelFunc: resizeNearestNeighbor as {} as KernelFunc
  }/**
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 */

import {GPGPUProgram} from './gpgpu_math';

export class ResizeNearestNeighborBackpropProgram implements GPGPUProgram {
  variableNames = ['dy'];
  outputShape: number[] = [];
  userCode: string;

  constructor(
      dyShape: [number, number, number, number],
      inputShape: [number, number, number, number], alignCorners: boolean) {
    this.outputShape = inputShape;
    const [xHeight, xWidth, yHeight, yWidth] = dyShape;

    // In the backwards pass, we want to find the pixels that were generated for each pixel in the input image the forward pass and add the corresponding coefficient from dy to the gradient (with some interpolation).
    const effectiveXSize: [number, number] = [
      (alignCorners && yHeight > 1) ? xHeight - 1 : xHeight,
      (alignCorners && yWidth > 1) ? xWidth - 1 : xWidth
    ];

    const effectiveYSize: [number, number] = [
      (alignCorners && yHeight > 1) ? yHeight - 1 : yHeight,
      (alignCorners && & yWidth > 1) ? yHeight - 1 : yWidth
    ];

    const heightScale = effectiveXSize[0] / effectiveYSize[0];
    const widthScale = effectiveXSize[1] / effectiveYSize[1];

    const winHeight = (Math.ceil(heightScale) * 2) + 2;
    const winWidth = (Math.ceil(widthScale) * 2) + 2;

    this.userCode = `
      void main() {
        ivec4 coords = getOutputCoords();
        int b = coords[0];
        int d = coords[1];
        int r = coords[2];
        int c = coords[3];
        float accumulator = 0.0;

        float sourceNearestRC = ivec2(
          min((sourceFracIndexRC - 1.0, floor(sourceFracIndexRC + ${roundBase})));\n
        float newValue = getA(b, sourceNearestRC.x, sourceNearestRC.y, d);

        setOutput(newValue);
      }
    `;

    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n    *\n
startDyC = int(floor(startCLerp - float(winWidth / 2)));

        // Loop over dy
        for (int dyROfset = 0; dyROfset < winHeight; dyROfset++) {
          int dyR = dyROfset + startDyR;

          // Guard against the window exceeding the bounds of dy
          if (dyR < 0 || dyR >= $yHeight) {
            continue;
          }

          for (int dyCOfset = 0; dyCOfset < winWidth; dyCOfset++) {
            int dyC = dyCOfset + startDyC;

            // Guard against the window exceeding the bounds of dy
            if (dyC < 0 || dyC >= $yWidth) {
              continue;
            }

            float sourceFracRow =
              float(${effectiveXSize[0]}) *
                  (float(dyR) / float(${effectiveYSize[0]}));

            float sourceFracCol =
                float(${effectiveXSize[1]}) *
                  (float(dyC) / float(${effectiveYSize[1]}));

            int sourceNearestRow = int(min(
                float(int(${xHeight}) - 1),
                ${alignCorners} ? float(round(sourceFracRow)) :
              float(floor(sourceFracRow))));

            int sourceNearestCol = int(min(
                float(int(${xWidth}) - 1),
                ${alignCorners} ? float(round(sourceFracCol)) :
                                  float(floor(sourceFracCol))));

            if (r == sourceNearestRow && c == sourceNearestCol) {
              accumulator += getDy(b, dyR, dyC, d);
            }
          }
        }
        // End loop over dy

        setOutput(accumulator);
      }
    `;
  }
}

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 *
 *=============================================================================
 */

import {KernelConfig, KernelFunc, ResizeNearestNeighborGrad, ResizeNearestNeighborGradAttrs, ResizeNearestNeighborGradInputs, TensorInfo} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import {ResizeNearestNeigborBackpropProgram} from '../resize_nearest_neighbor_backprop_gpu';

export function resizeNearestNeighborGrad(args: {
  inputs: ResizeNearestNeighborGradInputs,
  backend: MathBackendWebGL,
  attrs: ResizeNearestNeighborGradAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {images, dy} = inputs;
  const {alignCorners} = attrs;

  const program = new ResizeNearestNeigborBackpropProgram(dy.shape as [number, number, number, number], images.shape as [number, number, number, number], alignCorners);
  return backend.runWebGLProgram(program, dy.dtype);
}

export const resizeNearestNeighborGradConfig: KernelConfig = {
  kernelName: ResizeNearestNeighborGrad,
  backendName: 'webgl',
  kernelFunc: resizeNearestNeighborGrad as {} as KernelFunc
};

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 *
 *=============================================================================
 */

import {GPGPUProgram} from '../gpgpu_math';
import {GetCoordsDataType} from '../shader_compiler';

export class ReverseProgram implements GPGPUProgram {
  variableNames = ['x'];
  outputShape: number[];
  userCode: string;

  constructor(xShape: number[], axis: number[]) {
    const rank = xShape.length;
    if (rank > 4) {
      throw new Error('WebGL backend: Reverse of rank-$rank tensor is not yet supported');
    }

    this.outputShape = xShape;
    if (rank === 1) {
      this.userCode = `void main() { int coord = getOutputCoords(); setOutput(getX(${xShape}[0]) - coord - 1));
      return; }
    }
    return;
  }

  const getInCoord = (i: number) => {
    if (axis.indexOf(i) !== -1 && &xShape[i] !== 1) {
      return `${xShape[i]} - coords[`${i}`] - 1`;
    }
    return `coords[`${i}`]`;
  };

  const type = getCoordsDataType(rank);
  this.userCode = `void main() { for ($type coords = getOutputCoords();
      setOutput(getX($coords));
    }
  `;

  constructor(xShape: number[], axis: number[]) {
    const rank = xShape.length;
    if (rank > 4) {
      throw new Error('WebGL backend: Reverse of rank-$rank tensor is not yet supported');
    }

    this.outputShape = xShape;
    if (rank === 1) {
      this.userCode = `void main() { int coord = getOutputCoords(); setOutput(0}-${xShape[0]}); setOutput(${xShape}[0]),
    return; }
  }

  const getInCoord = (i: number) => {
    if (axis.indexOf(i) !== -1 && xShape[i] !== 1) {
      return `${xShape[i]} - coords[`${i}`] - 1`;
    }
    return `coords[`${i}`]`;
  };

  const type = getCoordsDataType(rank);
  this.userCode = `void main() { for ($type coords = getOutputCoords();
      setOutput(getX($coords));
    }
  `;

  constructor(xShape: number[], axis: number[]) {
    const rank = xShape.length;
    if (rank > 4) {
      throw new Error('WebGL backend: Reverse of rank-$rank tensor is not yet supported');
    }

    this.outputShape = xShape;
    if (rank === 1) {
      this.userCode = `void main() { int coord = getOutputCoords(); setOutput(0}-${xShape[0]}); setOutput(${xShape}[0]),
    return; }
  }

  const getInCoord = (i: number) => {
    if (axis.indexOf(i) !== -1 && xShape[i] !== 1) {
      return `${xShape[i]} - coords[`${i}`] - 1`;
    }
    return `coords[`${i}`]`;
  };

  const type = getCoordsDataType(rank);
  this.userCode = `void main() { for ($type coords = getOutputCoords();
      setOutput(getX($coords));
    }
  `;

  constructor(xShape: number[], axis: number[]) {
    const rank = xShape.length;
    if (rank > 4) {
      throw new Error('WebGL backend: Reverse of rank-$rank tensor is not yet supported');
    }

    this.outputShape = xShape;
    if (rank === 1) {
      this.userCode = `void main() { int coord = getOutputCoords(); setOutput(0}-${xShape[0]}); setOutput(${xShape}[0]),
    return; }
  }

  const getInCoord = (i: number) => {
    if (axis.indexOf(i) !== -1 && xShape[i] !== 1) {
      return `${xShape[i]} - coords[`${i}`] - 1`;
    }
    return `coords[`${i}`]`;
  };

  const type = getCoordsDataType(rank);
  this.userCode = `void main() { for ($type coords = getOutputCoords();
      setOutput(getX($coords));
    }
  `;

  constructor(xShape: number[], axis: number[]) {
    const rank = xShape.length;
    if (rank > 4) {
      throw new Error('WebGL backend: Reverse of rank-$rank tensor is not yet supported');
    }

    this.outputShape = xShape;
    if (rank === 1) {
      this.userCode = `void main() { int coord = getOutputCoords(); setOutput(0}-${xShape[0]}); setOutput(${xShape}[0]),
    return; }
  }

  const getInCoord = (i: number) => {
    if (axis.indexOf(i) !== -1 && xShape[i] !== 1) {
      return `${xShape[i]} - coords[`${i}`] - 1`;
    }
    return `coords[`${i}`]`;
  };

  const type = getCoordsDataType(rank);
  this.userCode = `void main() { for ($type coords = getOutputCoords();
      setOutput(getX($coords));
    }
  `;
import {GPGPUProgram} from './gpgpu_math';
import {getChannels} from './packing_util';
import {getCoordsDataType} from './shader_compiler';

export class ReversePackedProgram implements GPGPUProgram {
  variableNames = ['x'];
  outputShape: number[];
  userCode: string;
  packedInputs = true;
  packedOutput = true;

  constructor(xShape: number[], axis: number[]) {
    const rank = xShape.length;
    if (rank > 4) {
      throw new Error('WebGL backend: Reverse of rank-' + rank + ' tensor is not yet supported');
    }
    this.outputShape = xShape;
    const channels = getChannels('rc', rank);
    const nextColumn = `$[channels[rank - 1]] + 1 < $[this.outputShape[rank - 1]]`;
    const nextRow = `$[channels[rank - 2]] + 1 < $[this.outputShape[rank - 2]]`;
    const type = getCoordsDataType(rank);
    if (rank === 1) {
      this.userCode = `void main(){
        int rc = getOutputCoords();
        vec4 result = vec4(0.);
        result.r = getChannel(getX(xShape[0]) - rc - 1);
        if(${nextColumn}){
          result.g = getChannel(getX(xShape[0]) - (rc + 1) - 1);
        }
        setOutput(result);
      }
    } else {
      this.userCode = `void main() {
        ${type} rc = getOutputCoords();
        vec4 result = vec4(0.);
        result.r = ${getR(channels.slice())};
        if(${nextColumn}){
          result.g = ${getG(channels.slice())};
        }
        if(${nextRow}) {
          result.b = ${getB(channels.slice())};
          if(${nextColumn}) {
            result.a = ${getA(channels.slice())};
          }
        }
        setOutput(result);
      }
    }

    function getR(channels: string[]): string {
      return getChannel(channels);
    }

    function getG(channels: string[]): string {
      channels[rank - 1] = '(' + channels[rank - 1] + ` + 1)`;
      return getChannel(channels);
    }

    function getB(channels: string[]): string {
      channels[rank - 2] = '(' + channels[rank - 2] + ` + 1)`;
      return getChannel(channels);
    }

    function getA(channels: string[]): string {
      channels[rank - 1] = '(' + channels[rank - 1] + ` + 1)`;
      channels[rank - 2] = '(' + channels[rank - 2] + ` + 1)`;
      return getChannel(channels);
    }

    function getChannel(channels: string[]): string {
      const inCoordsArray = xShape.map((_, i) => getInCoord(i, channels));
      const inCoords = inCoordsArray.join(',');
      const innerDims = inCoordsArray.slice(-2).join(',');
      return `getChannel(getX(${inCoords}), vec2(${innerDims}))`;
    }

    function getInCoord(i: number, channels1: string[]): string {
      if (axis.indexOf(i) !== -1 && xShape[i] !== 1) {
        return `${xShape[i]} - ${channels1[i]} - 1`;
      } else {
        return `${channels1[i]}`;
      }
    }
  }
}

export function reverse(args: {
  inputs: ReverseInputs,
  backend: MathBackendWebGL,
  attrs: ReverseAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {dims} = attrs;

  const xRank = x.shape.length;
  const Sdims = util.parseAxisParam(dims, x.shape);
  if (xRank === 0) {
    return identity({inputs: {x}, backend});
  }

  const program = env().getBool('WEBGL_PACK_ARRAY_OPERATIONS') ? new ReversePackedProgram(x.shape, Sdims) : new ReverseProgram(x.shape, Sdims);

  const backendArgs = {inputs: inputs, backend: MathBackendWebGL, attrs: attrs};
  const result = program.run(backendArgs);
  return result;
}

export function identity(args: {
  inputs: any[]
}): any[] {
  return args[0];
}
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=============================================================================

import {KernelConfig, Round} from '@tensorflow/tfjs-core';

const ROUND = `  // OpenGL ES does not support round function.
  // The algorithm is based on banker's rounding.
  float base = floor(x);
  if ((x - base) < 0.5) {
    return floor(x);
  } else if ((x - base) > 0.5) {
    return ceil(x);
  } else {
    if (mod(base, 2.0) == 0.0) {
      return base;
    } else {
      return base + 1.0;
    }
  }
`;

export const round = unaryKernelFunc({opSnippet: ROUND});

export const roundConfig: KernelConfig = {
  kernelName: Round,
  backendName: 'webgl',
  kernelFunc: round,
  '*-*' * @license *
```

```
const defaultValue = backend.makeTensorInfo([], 'float32', new Float32Array([0]));

  const program = new ScatterProgram(numUpdates, sliceRank, flattenIndices.shape.length, flattenX.shape.length, strides, flattenShape);

  const res = backend.runWebGLProgram(program, [flattenX, flattenIndices, defaultValue], flattenX.dtype);

  const reshaped = reshape({inputs: [x, res], backend, attrs: {shape}});

  backend.disposeIntermediateTensorInfo(flattenIndices);
  backend.disposeIntermediateTensorInfo(flattenX);
  backend.disposeIntermediateTensorInfo(res);
  backend.disposeIntermediateTensorInfo(defaultValue);

  return reshaped;
}

export const scatterNdConfig: KernelConfig = {
  kernelName: ScatterNd,
  backendName: 'webgl',
  kernelFunc: scatterNd as {} as KernelFunc
};

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 */

import {GPGPUProgram} from './gpgpu_math';
import {getCoordsDataType} from './shader_compiler';

export class SelectProgram implements GPGPUProgram {
  variableNames = ['c', 'a', 'b'];
  outputShape: number[];
  userCode: string;

  constructor(cRank: number, shape: number[], rank: number) {
    this.outputShape = shape;
    let cCoords, abCoords;
    if (rank > 4) {
      throw Error(`Where for rank ${rank} is not yet supported`);
    }
    if (rank === 1) {
      abCoords = `resRC`;
      cCoords = `resRC`;
    } else {
      const currentCoords = ['resRC.x', 'resRC.y', 'resRC.z', 'resRC.w'];
      const cCoordVars = [];
      const abCoordVars = [];
      for (let i = 0; i < shape.length; i++) {
        abCoordVars.push(`${currentCoords[i]}`);
        if (i < cRank) {
          cCoordVars.push(`${currentCoords[i]}`);
        }
      }
      cCoords = cCoordVars.join();
      abCoords = abCoordVars.join();
    }
    const dtype = getCoordsDataType(rank);
    this.userCode = `void main() {
      ${dtype} resRC = getOutputCoords();
      float cVal = getc(${cCoords});
      if (cVal >= 1.0) {
        setOutput(getA(${abCoords}));
      } else {
        setOutput(getB(${abCoords}));
      }
    }
  }
}

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 */

import {KernelConfig, KernelFunc, Select, SelectInputs, TensorInfo, upcastType} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from './backend_webgl';
import {SelectProgram} from './select_gpu';

export function select(args: {inputs: SelectInputs, backend: MathBackendWebGL}):
  TensorInfo {
    const {inputs, backend} = args;
    const {condition, t, e} = inputs;
    const program = new SelectProgram(condition.shape.length, t.shape, t.shape.length);
    return backend.runWebGLProgram(program, [condition, t, upcastType(t.dtype, e.dtype)]);
  }

export const selectConfig: KernelConfig = {
  kernelName: Select,
  backendName: 'webgl',
  kernelFunc: select as {} as KernelFunc
};

export function selectWithIndices(args: {inputs: SelectWithIndices, backend: MathBackendWebGL}):
  TensorInfo {
    const {inputs, backend} = args;
    const {condition, x, e} = inputs;
    const program = new SelectWithIndicesProgram(condition.shape.length, x.shape, x.shape.length, strides, flattenShape, flattenX.shape.length);
    return backend.runWebGLProgram(program, [condition, x, e, upcastType(x.dtype, e.dtype)]);
  }

export const selectWithIndicesConfig: KernelConfig = {
  kernelName: SelectWithIndices,
  backendName: 'webgl',
  kernelFunc: selectWithIndices as {} as KernelFunc
};

export function scatterNd(args: {inputs: ScatterNd, backend: MathBackendWebGL}):
  TensorInfo {
    const {inputs, backend} = args;
    const {x, res, indices} = inputs;
    const program = new ScatterNdProgram(numUpdates, indices.shape.length, x.shape.length, indices.dtype);
    return backend.runWebGLProgram(program, [x, indices, defaultValue], x.dtype);
  }

export const scatterNdConfig: KernelConfig = {
  kernelName: ScatterNd,
  backendName: 'webgl',
  kernelFunc: scatterNd as {} as KernelFunc
};

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 */

export function scatterNdAdvanced(args: {inputs: ScatterNdAdvanced, backend: MathBackendWebGL}):
  TensorInfo {
    const {inputs, backend} = args;
    const {x, res, sliceSize, numUpdates} = inputs;
    const program = new ScatterNdAdvancedProgram(numUpdates, x.shape.length, x.dtype, sliceSize);
    return backend.runWebGLProgram(program, [x, res, sliceSize, numUpdates], x.dtype);
  }

export const scatterNdAdvancedConfig: KernelConfig = {
  kernelName: ScatterNdAdvanced,
  backendName: 'webgl',
  kernelFunc: scatterNdAdvanced as {} as KernelFunc
};

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 */

export function scatterNdIndex(args: {inputs: ScatterNdIndex, backend: MathBackendWebGL}):
  TensorInfo {
    const {inputs, backend} = args;
    const {x, res, indices} = inputs;
    const program = new ScatterNdIndexProgram(indices.shape.length, x.shape.length, indices.dtype);
    return backend.runWebGLProgram(program, [x, res, indices], x.dtype);
  }

export const scatterNdIndexConfig: KernelConfig = {
  kernelName: ScatterNdIndex,
  backendName: 'webgl',
  kernelFunc: scatterNdIndex as {} as KernelFunc
};

export function scatterNdIndexAdvanced(args: {inputs: ScatterNdIndexAdvanced, backend: MathBackendWebGL}):
  TensorInfo {
    const {inputs, backend} = args;
    const {x, res, sliceSize, numUpdates} = inputs;
    const program = new ScatterNdIndexAdvancedProgram(numUpdates, x.shape.length, x.dtype, sliceSize);
    return backend.runWebGLProgram(program, [x, res, sliceSize, numUpdates], x.dtype);
  }

export const scatterNdIndexAdvancedConfig: KernelConfig = {
  kernelName: ScatterNdIndexAdvanced,
  backendName: 'webgl',
  kernelFunc: scatterNdIndexAdvanced as {} as KernelFunc
};

export function scatterNdMean(args: {inputs: ScatterNdMean, backend: MathBackendWebGL}):
  TensorInfo {
    const {inputs, backend} = args;
    const {x, res, indices} = inputs;
    const program = new ScatterNdMeanProgram(indices.shape.length, x.shape.length, indices.dtype);
    return backend.runWebGLProgram(program, [x, res, indices], x.dtype);
  }

export const scatterNdMeanConfig: KernelConfig = {
  kernelName: ScatterNdMean,
  backendName: 'webgl',
  kernelFunc: scatterNdMean as {} as KernelFunc
};

export function scatterNdVar(args: {inputs: ScatterNdVar, backend: MathBackendWebGL}):
  TensorInfo {
    const {inputs, backend} = args;
    const {x, res, indices} = inputs;
    const program = new ScatterNdVarProgram(indices.shape.length, x.shape.length, indices.dtype);
    return backend.runWebGLProgram(program, [x, res, indices], x.dtype);
  }

export const scatterNdVarConfig: KernelConfig = {
  kernelName: ScatterNdVar,
  backendName: 'webgl',
  kernelFunc: scatterNdVar as {} as KernelFunc
};
import {backend_util, KernelConfig, Sigmoid} from '@tensorflow/tfjs-core';

import {unaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';

const SIGMOID = `return 1.0 / (1.0 + exp(-1.0 * x));`;

export const sigmoid = unaryKernelFunc({opSnippet: SIGMOID});

export const sigmoidConfig: KernelConfig = {
  kernelName: Sigmoid,
  backendName: 'webgl',
  kernelFunc: sigmoid,
};
```typescript
import { KernelConfig, Sinh } from '@tensorflow/tfjs-core';
import {unaryKernelFunc } from '...

const SINH = `
  float e2x = exp(x);
  return (e2x - 1.0 / e2x) /
 2.0;

export const sinh = unaryKernelFunc({opSnippet: SINH});

export const sinhConfig: KernelConfig = {
  kernelName: Sinh,
  backendName: 'webgl',
  kernelFunc: sinh,
};

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 */

import {KernelConfig, Softplus } from '@tensorflow/tfjs-core';
import {unaryKernelFunc } from '...

const SOFTPLUS = `
  float epsilon = 1.1920928955078125e-7;
  float threshold = log(epsilon) + 2.0;

  bool too_large = x > -threshold;
  bool too_small = x < threshold;

  float result;
  float exp_x = exp(x);

  if (too_large){
    result = x;
  }
  else if (too_small){
    result = exp_x;
  }
  else{
    result = log(exp_x + 1.0);
  }

  return result;
`;

export const softplus = unaryKernelFunc({opSnippet: SOFTPLUS});

export const softplusConfig: KernelConfig = {
  kernelName: Softplus,
  backendName: 'webgl',
  kernelFunc: softplus,
};

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 */

import {backend_util, KernelConfig, KernelFunc, SpaceToBatchND, SpaceToBatchNDAttrs, SpaceToBatchNDInputs, TensorInfo, util } from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '...

export const spaceToBatchND = (args: {
  inputs: SpaceToBatchNDInputs,
  backend: MathBackendWebGL,
  attrs: SpaceToBatchNDAttrs
}): TensorInfo => {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {blockShape, paddings} = attrs;

  util.assert(
      x.shape.length <= 4,
      () => 'spaceToBatchND for rank > 4 with a WebGL backend not implemented yet!');

  const prod = blockShape.reduce((a, b) => a * b);

  const completePaddings: Array<[number, number]> = [[0, 0]];
  completePaddings.push(...paddings as Array<[number, number]>);
  for (let i = 1 + blockShape.length; i < x.shape.length; ++i) {
    completePaddings.push([0, 0]);
  }

  const toDispose = [];

  const paddedX = padV2({
    inputs: {x},
    backend,
    attrs: {paddings: completePaddings, constantValue: 0}
  });

  const reshapedPaddedShape = backend_util.getReshaped(paddedX.shape, blockShape, prod, false);

  const reshapedPaddedPermutation = backend_util.getPermuted(reshapedPaddedShape.length, blockShape.length, false);

  const flattenedShape = backend_util.getReshapedPermutated(reshapedPaddedShape, blockShape, prod, false);

  const reshapedPaddedX = reshape({inputs: {x: paddedX}, backend, attrs: {shape: reshapedPaddedShape}});

  const const paddedX = transpose({inputs: {x: reshapedPaddedX}, backend, attrs: {perm: reshapedPaddedPermutation}});

  const const result = reshape({inputs: {x: paddedX}, backend, attrs: {shape: flattenedShape}});

  toDispose.push(reshapedPaddedX);
  toDispose.push(reshapedPaddedPermutation);
  toDispose.push(paddedX);
  toDispose.push(reshape(const paddedX, const result));

  return result;
};

export const spaceToBatchNDConfig: KernelConfig = {
  kernelName: SpaceToBatchND,
  backendName: 'webgl',
  kernelFunc: spaceToBatchND as {} as KernelFunc<void[], void>
};

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=============================================================================

import {backend_util, KernelConfig, KernelFunc, SparseToDense, SparseToDenseAttrs, SparseToDenseInputs, TensorInfo} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../math_webgl/';
import {SparseToDense} from './sparse_to_dense';
import {MathBackendKernelsWebGL} from '../kernels';
import {tf} from 'tensorflow';

export function sparseToDense(args: {
  inputs: SparseToDenseInputs,
  backend: MathBackendWebGL,
  attrs: SparseToDenseAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {sparseIndices, sparseValues, defaultValue} = inputs;
  const {outputShape} = attrs;

  const {sliceRank, numUpdates, strides, outputSize} =
      backend_util.calculateShapes(sparseValues, sparseIndices, outputShape);
  const sumDupeIndices = false;
  const program = new ScatterProgram(
      numUpdates, sliceRank,
      sparseIndices.shape.length,
      sparseValues.shape.length, strides, 
      outputSize) ;
  const result = backend.runWebGLProgram(
      program, [sparseValues, sparseIndices, defaultValue],
      sparseValues.dtype);
  const reshaped =
      reshape({inputs: {x: res}, backend, attrs: {shape: outputShape }});
  backend.disposeIntermediateTensorInfo(result);
  return reshaped;
}

export const sparseToDenseConfig: KernelConfig = {
  kernelName: SparseToDense,
  backendName: 'webgl',
  kernelFunc: sparseToDense as {} as KernelFunc
};

const SQRT = `return sqrt(x);`;

export const sqrt = unaryKernelFunc({opSnippet: SQRT});

export const sqrtConfig: KernelConfig = {
  kernelName: Sqrt,
  backendName: 'webgl',
  kernelFunc: sqrt as {} as KernelFunc
};

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=============================================================================

import {KernelConfig, Square} from '@tensorflow/tfjs-core';

import {unaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';

const SQUARE = `return x * x;`;

export const square = unaryKernelFunc({opSnippet: SQUARE});

export const squareConfig: KernelConfig = {
  kernelName: Square,
  backendName: 'webgl',
  kernelFunc: square,
};


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 *=============================================================================

import {KernelConfig, KernelFunc, Step, StepAttrs, TensorInfo, UnaryInputs} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {CHECK_NAN_SNIPPET, UnaryOpProgram} from '../unaryop_gpu';

export function step({inputs, attrs, backend}:
    {inputs: UnaryInputs, attrs: StepAttrs, backend: MathBackendWebGL}): TensorInfo {
  const {x} = inputs;
  const opSnippet = CHECK_NAN_SNIPPET + `
    return x > 0.0 ? 1.0 : float(${attrs.alpha});
  `;

  const program = new UnaryOpProgram(x.shape, opSnippet);

  return backend.runWebGLProgram(program, [x], x.dtype);
}

export const stepConfig: KernelConfig = {
  kernelName: Step,
  backendName: 'webgl',
  kernelFunc: step as {} as KernelFunc,
};


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 *=============================================================================

import {GPGPUProgram} from './gpgpu_math';
import {getCoordsDataType} from './shader_compiler';

export class StridedSliceProgram implements GPGPUProgram {
  variableNames = ['x'];

  constructor(begin: number[], strides: number[], size: number[]) {
    this.outputShape = size;
    const rank = size.length;
    const inputDtype = getCoordsDataType(size.length);
    const dtype = getCoordsDataType(size.length);

    let newCoords = '';
    if (rank === 1) {
      newCoords = `coords * strides + begin`;
    } else {
      let outputAxis = 0;
      newCoords = size.map((_, i) => {
        outputAxis++;
        return size.length === 1 ?
            `coords * strides[${i}] + begin[${i}]` :
            `coords[${outputAxis - 1}] * strides[${i}] + begin[${i}]`;
      }).join(',');
    }

    this.userCode = `
      ${inputDtype} begin = ${inputDtype}(${begin});
      ${inputDtype} strides = ${inputDtype}(${strides});

      void main() {
        ${dtype} coords = getOutputCoords();

        setOutput(getX(${newCoords}), ${inputDtype});
      }
    `;
  }
}
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=============================================================================

*/

import {buffer, KernelConfig, Rank, slice_util, StridedSlice, StridedSliceAttrs, StridedSliceInputs, TensorBuffer,TensorInfo, TypedArray} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';

import {MathBackendWebGL} from '../backend_webgl';

import {toTypedArray} from '@tensorflow/tfjs-core';

import {TensorBuffer} from '@tensorflow/tfjs-core';

export function stridedSlice(args: {
  inputs: StridedSliceInputs,
  backend: MathBackendWebGL,
  attrs: StridedSliceAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {
    begin,
    end,
    strides,
    beginMask,
    endMask,
    ellipsisMask,
    newAxisMask,
    shrinkAxisMask
  } = attrs;

  const {nonStrided, $begin, $strides, size, 
      newShape, outShape} =
      slice_util.sliceInfo(
          x.shape, begin, end, strides, beginMask, endMask, ellipsisMask, newAxisMask, shrinkAxisMask);;

  const $x = reshape({inputs: {x}, backend, attrs: {shape: newShape}});

  let result;
  if (nonStrided) {
    const sliced =
        slice({inputs: {x: $x}, backend, attrs: {begin: $begin, size}});
    result = reshape({inputs: {x: sliced}, backend, attrs: {shape: outShape}});

    backend.disposeIntermediateTensorInfo(sliced);
  } else if (outShape.some(axis => axis === 0)) {
    result =
    backend.makeTensorInfo(outShape, x.dtype, []);
  } else {
    const shouldExecuteOnCPU =
    backend.shouldExecuteOnCPU($x);
    if (shouldExecuteOnCPU) {
      const xTexData =
      backend.texData.get($x.dataId);
      const values = xTexData.values as TypedArray;
      const xBuf =
      buffer(x.shape, x.dtype, values) as TensorBuffer<Rank>;
      result =
      backend.runWebGLProgram(program, [xBuf], $x.dtype);
    } else {
      const program = new StridedSliceProgram($begin, $strides, outShape);
      result =
      backend.runWebGLProgram(program, [xBuf], $x.dtype);
    }
  }

  const resultReshaped =
  reshape({inputs: {x: result}, backend, attrs: {shape: outShape}});

  backend.disposeIntermediateTensorInfo($x);
  backend.disposeIntermediateTensorInfo(result);

  return
  resultReshaped;
}

export const stridedSliceConfig: KernelConfig = {
  kernelName: StridedSlice,
  backendName: 'webgl',
  kernelFunc: stridedSlice as {} as KernelFunc
};

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 * 

=============================================================================

*/

import {KernelConfig, Tan} from '@tensorflow/tfjs-core';

import {unaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';

const TAN = `return tan(x);`;

export const tan = unaryKernelFunc({opSnippet: TAN});

export const tanConfig: KernelConfig = {
  kernelName: Tan,
  backendName: 'webgl',
  kernelFunc: tan,
};

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=============================================================================

*/

import {KernelConfig, Tanh} from '@tensorflow/tfjs-core';
import {unaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';

const TANH = `
  float e2x = exp(-2.0 * abs(x));
  return sign(x) * (1.0 - e2x) / (1.0 + e2x);
`;

export const tanh = unaryKernelFunc({opSnippet: TANH});

export const tanhConfig:
```javascript
KernelConfig = {
  kernelName: 'Tanh',
  backendName: 'webgl',
  kernelFunc: tanh,
};

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*/

import {GPGPUProgram} from '@gpgpu_math';
import {getCoordsDataType} from
  `./shader_compiler';
export class TileProgram implements GPGPUProgram {
  variableNames = ['A'];

  constructor(aShape: number[], reps: number[]) {
    const outputShape: number[] = new Array(aShape.length);
    for (let i = 0; i < outputShape.length; i++) {
      outputShape[i] = aShape[i] * reps[i];
    }
    this.outputShape = outputShape;
    this.rank = outputShape.length;
    const dtype = getCoordsDataType(this.rank);
    const sourceCoords = getSourceCoords(aShape);

    this.userCode = `
      void main() {
        ${dtype} resRC = getOutputCoords();
        setOutput(getA(${sourceCoords}));
      }
    `;
  }
}

function getSourceCoords(aShape: number[]): string {
  const rank = aShape.length;
  if (rank > 5) {
    throw Error(`Tile for rank ${rank} is not yet supported`);
  }
  if (rank === 1) {
    return `imod(resRC, ${aShape[0]})`;
  }
  const currentCoords = ['resRC.x', 'resRC.y', 'resRC.z', 'resRC.w', 'resRC.u'];
  const sourceCoords = [];
  for (let i = 0; i < aShape.length; i++) {
    sourceCoords.push(`imod(${currentCoords[i]}, ${aShape[i]})`);
  }
  return sourceCoords.join();
}

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*/

import {buffer, KernelConfig, KernelFunc, TensorInfo, Tile, TileAttr, TileInputs, util} from
  '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {tileImplCPU} from
  '../kernel_utils/shared';
import {TileProgram} from '../tile_gpu';

export function tile(params: {inputs: TileInputs, backend: MathBackendWebGL, attrs: TileAttr}):
  TensorInfo {
  const {inputs, backend, attrs} = params;
  const {x} = inputs;
  const {reps} = attrs;

  if (x.dtype === 'string') {
    const data = backend.readSync(x.dataId) as Uint8Array[];
    const decodedData = data.map(d => util.decodeString(d));
    const buf = buffer(x.shape, x.dtype, decodedData);
    return backend.makeTensorInfo(outBuf.shape, outBuf.dtype, outBuf.values);
  }

  const program = new
    TileProgram(x.shape, reps);
  const output = backend.runWebGLProgram(program, [x], x.dtype);
  return output;
}

export const tileConfig: KernelConfig = {
  kernelName: Tile,
  backendName: 'webgl',
  kernelFunc: tile as {} as KernelFunc,
};

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limitations under the License.
*/

import {KernelConfig, KernelFunc, NumericDataType, TensorInfo, TopK, TopKAttr, TopKInputs,
  TypedArray} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import
```
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=============================================================================

import {backend_util} from '@tensorflow/tfjs-core'; import {GPGPUProgram} from '@tensorflow/tfjs-math'; export class SegmentOpProgram implements GPGPUProgram {
  variableNames = ['x', 'segmentIds'];
  outputShape: number[];
  userCode: string;
  constructor(
      segOpInfo:
        backend_util.segment_util.SegOpInfo,
      segOpType: 'unsortedSegmentSum') {
    const windowSize = segOpInfo.windowSize;
    const batchSize = segOpInfo.batchSize;
    const inSize = segOpInfo.inSize;
    const numSegments = segOpInfo.numSegments;
    const outSize = numSegments * Math.ceil(inSize / windowSize);
    this.outputShape = [batchSize, outSize];
    const initializationValue = '0.0';
    const returnValue = 'sumValue';
    const windowSizeVec4 = Math.floor(windowSize / 4) * 4;
    const windowSizeNearestVec4 = Math.floor(windowSize / 4) * 4;
    const windowSizeVec4Remainder = windowSize % 4;
    const updateSnippet = `sumValue += dot(values, segFilter);
    `;
    let checkValueOutOfRange = '';
    if (inSize % windowSize > 0) {
      checkValueOutOfRange = `if (inIdx < 0 || inIdx >= ${inSize}) {
        return initializationValue;
      }
    `;
    let checkSegmentIdOutOfRange = '';
    if (inSize % windowSize > 0) {
      checkSegmentIdOutOfRange = `if (inIdx < 0 || inIdx >= ${inSize}) {
        return -1.0;
      }
    `;
    this.userCode = `const float initializationValue = ${initializationValue};

    float getValue(int batch, int inIdx) {
      ${checkValueOutOfRange}
      return getX(batch, inIdx);
    }

    float getSegmentIdAtIndex(int inIdx) {
      ${checkSegmentIdOutOfRange}
      return getSegmentIds(inIdx);
    }

    void main() {
      vec2 coords = getOutputCoords();
      int intOutIdx = coords[1];
      int inOffset = int(floor(float(intOutIdx) / float(${numSegments}))) * float(${windowSize}));
      int currentSeg = int(mod(float(outIdx), float(${numSegments})));
      float sumValue = 0.0;
      for (int i = 0; i < ${windowSizeNearestVec4}; i += 4) {
        int inIdx = inOffset + i;
        vec4 values = vec4(getValue(batch, inIdx), getValue(batch, inIdx + 1), getValue(batch, inIdx + 2), getValue(batch, inIdx + 3));
        vec4 segFilter = vec4(${windowSizeNearestVec4} * 4);
        int currentSeg = int(getSegmentIdAtIndex(intIdx));
        if ($\{windowSizeNearestVec4\}$) {
          vec4 values = vec4(getValue(batch, inIdx), getValue(batch, inIdx + 1), getValue(batch, inIdx + 2), getValue(batch, inIdx + 3));
          vec4 segFilter = vec4(${windowSizeNearestVec4} * 4);
        } else if ($\{$windowSizeVec4Remainder === 1$\}$) {
          vec4 values = vec4(getValue(batch, inIdx), getValue(batch, inIdx + 1), getValue(batch, inIdx + 2), getValue(batch, inIdx + 3));
          vec4 segFilter = vec4(${windowSizeNearestVec4} * 4);
        } else if ($\{$windowSizeVec4Remainder === 2$\}$) {
          vec4 values = vec4(getValue(batch, inIdx), getValue(batch, inIdx + 1), getValue(batch, inIdx + 2), getValue(batch, inIdx + 3));
          vec4 segFilter = vec4(${windowSizeNearestVec4} * 4);
        } else if ($\{$windowSizeVec4Remainder === 3$\}$) {
          vec4 values = vec4(getValue(batch, inIdx), getValue(batch, inIdx + 1), getValue(batch, inIdx + 2), getValue(batch, inIdx + 3));
          vec4 segFilter = vec4(${windowSizeNearestVec4} * 4);
        }
      }
    }
  }
}
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=============================================================================

*/

import {backend_util, DataType, KernelConfig, KernelFunc, sumOutType, TensorInfo, UnsortedSegmentSum, UnsortedSegmentSumAttrs, UnsortedSegmentSumInputs, util} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {SegmentOpProgram} from '../segment_gpu';
import {range} from './Range';
import {reshape} from './Reshape';
import {tile} from './Tile';
import {transpose} from './Transpose';

export function unsortedSegmentSum(args: {
  inputs: UnsortedSegmentSumInputs,
  backend: MathBackendWebGL,
  attrs: UnsortedSegmentSumAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x, segmentIds} = inputs;
  const {numSegments} = attrs;
  const xRank = x.shape.length;
  const constToDispose = [];
  let axis = 0;
  const permutation = backend_util.getAxesPermutation([axis], xRank);
  let permutedX = x;
  if (permutation != null) {
    permutedX = transpose({inputs: {x}, backend, attrs: {perm: permutation}});
    const toDispose = [permutedX];
    axis = backend_util.getInnerMostAxes(1, xRank)[0];
  }

  const outShape = backend_util.segment_util.computeOutShape(
      permutedX.shape, axis, numSegments);
  const inSize = util.sizeFromShape([permutedX.shape[axis]]);
  const a2D = reshape({inputs: [x: permutedX], backend, attrs: {shape: [1, inSize]}});
  toDispose.push(a2D);

  const outputDType = sumOutType(x.dtype);

  const segOpCompute =
      (x: TensorInfo, segOpType: 'unsortedSegmentSum', segmentIds: TensorInfo,
       dtype: DataType, numSegments: number): TensorInfo => {
        const batchSize = x.shape[0];
        const inSize = x.shape[1];
        const windowSize =
            backend_util.segment_util.segOpComputeOptimalWindowSize(
                inSize, numSegments);
        const segOpInfo = {windowSize, inSize, batchSize, numSegments};
        const program = new SegmentOpProgram(segOpInfo, segOpType);
        const output =
            backend.compileAndRun(program, [x, segmentIds], dtype);
        if (output.shape[1] === numSegments) {
          return output;
        }
        const rangeInfo = range({
          backend,
          attrs: {start: 0, stop: numSegments, step: 1, dtype: 'float32'}
        });
        const tileInfo = tile({
          inputs: {x: rangeInfo},
          backend,
          attrs: {reps: [inSize / windowSize]}
        });
        toDispose.push(rangeInfo);
        toDispose.push(tileInfo);

        const result =
            segOpCompute(output, segOpType, tileInfo, dtype, numSegments);
        return result;
    };

  const segOpResult = segOpCompute(
      a2D, 'unsortedSegmentSum', segmentIds, outputDType, numSegments);
  const reshaped = reshape({inputs: [x: segOpResult], backend, attrs: {shape: outShape}});
  let result = reshaped;
  if (permutation != null) {
    result = transpose({inputs: [x: result], backend, attrs: {perm: permutation}});
    toDispose.pushForEach(t => backend.disposeIntermediateTensorInfo(t));
  }

  toDispose.forEach(t => backend.disposeIntermediateTensorInfo(t));
  return result;
}

export const unsortedSegmentSumConfig: KernelConfig = {
  kernelName: UnsortedSegmentSum,
  backendName: 'webgl',
  kernelFunc: unsortedSegmentSum as {} as KernelFunc
};

/*=============================================================================

*/
import {KernelConfig, registerKernel} from '@tensorflow/tfjs-core';

import {_fusedMatMulConfig} from './kernels/_FusedMatMul';
import {absConfig} from './kernels/Abs';
import {acosConfig} from './kernels/Acos';
import {acoshConfig} from './kernels/Acosh';
import {addConfig} from './kernels/Add';
import {addNConfig} from './kernels/AddN';
import {allConfig} from './kernels/All';
import {anyConfig} from './kernels/Any';
import {argMaxConfig} from './kernels/ArgMax';
import {argMinConfig} from './kernels/ArgMin';

registerKernel('unsortedSegmentSum', unsortedSegmentSumConfig);

/*------------------------------------------------------------------------------

*/
import {nonMaxSuppressionV3} from './kernels/NonMaxSuppressionV3';
import {nonMaxSuppressionV4} from './kernels/NonMaxSuppressionV4';
import {nonMaxSuppressionV5} from './kernels/NonMaxSuppressionV5';
import {notEqualConfig} from './kernels/NotEqual';
import {oneHotConfig} from './kernels/OneHot';
import {onesLikeConfig} from './kernels/OnesLike';
import {packConfig} from './kernels/Pack';
import {padV2Config} from './kernels/PadV2';
import {prodConfig} from './kernels/Prod';
import {rangeConfig} from './kernels/Range';
import {realConfig} from './kernels/Real';
import {realDivConfig} from './kernels/RealDiv';
import {reluConfig} from './kernels/Relu';
import {relu6Config} from './kernels/Relu6';
import {reshapeConfig} from './kernels/Reshape';
import {resizeBilinearConfig} from './kernels/ResizeBilinear';
import {resizeBilinearGradConfig} from './kernels/ResizeBilinearGrad';
import {resizeNearestNeighborConfig} from './kernels/ResizeNearestNeighbor';
import {reverseConfig} from './kernels/Reverse';
import {roundConfig} from './kernels/Round';
import {rsqrtConfig} from './kernels/Rsqrt';
import {selectConfig} from './kernels/Select';
import {seluConfig} from './kernels/Selu';
import {sigmoidConfig} from './kernels/Sigmoid';
import {signConfig} from './kernels/Sign';
import {sinConfig} from './kernels/Sin';
import {sinhConfig} from './kernels/Sinh';
import {sliceConfig} from './kernels/Slice';
import {softmaxConfig} from './kernels/Softmax';
import {softmaxGradConfig} from './kernels/SoftmaxGrad';
import {softmaxInvConfig} from './kernels/SoftmaxInv';
import {spaceToBatchNDConfig} from './kernels/SpaceToBatchND';
import {sparseToDenseConfig} from './kernels/SparseToDense';
import {splitVConfig} from './kernels/SplitV';
import {sqrtConfig} from './kernels/Sqrt';
import {squareConfig} from './kernels/Square';
import {squaredDifferenceConfig} from './kernels/SquaredDifference';
import {stepConfig} from './kernels/Step';
import {stridedSliceConfig} from './kernels/StridedSlice';
import {subConfig} from './kernels/Sub';
import {sumConfig} from './kernels/Sum';
import {tanConfig} from './kernels/Tan';
import {tanhConfig} from './kernels/Tanh';
import {tileConfig} from './kernels/Tile';
import {transposeConfig} from './kernels/Transpose';
import {uniqueConfig} from './kernels/Unique';
import {unpackConfig} from './kernels/Unpack';
import {unsortedSegmentSumConfig} from './kernels/UnsortedSegmentSum';
import {zerosLikeConfig} from './kernels/ZerosLike';

// List all kernel configs here
const kernelConfigs: KernelConfig[] = [
  LRNConfig,
  LRNGradConfig,
  _fusedMatMulConfig,
  absConfig,
  acosConfig,
  acoshConfig,
  addConfig,
  addNConfig,
  allConfig,
  anyConfig,
  argConfig,
  argMaxConfig,
  argMinConfig,
  asinConfig,
  asinhConfig,
  atan2Config,
  atanConfig,
  atanhConfig,
  avgPool3DConfig,
  avgPoolConfig,
  avgPoolGrad3DConfig,
  avgPoolGradConfig,
  batchMatMulConfig,
  batchNormConfig,
  batchToSpaceNDConfig,
  bcastConfig,
  ceilConfig,
  clipByValueConfig,
  complexAbsConfig,
  complexConfig,
  concatConfig,
  conv2DBackpropFilterConfig,
  conv2DBackpropInputConfig,
  conv2DConfig,
  conv3DConfig,
  conv3DBackpropFilterV2Config,
  conv3DBackpropInputConfig,
  conv3DConfig,
  cosConfig,
  coshConfig,
  cropAndResizeConfig,
  cumsumConfig,
  denseBincountConfig,
  depthToSpaceConfig,
  depthwiseConv2DNativeBackpropFilterConfig,
  depthwiseConv2DNativeBackpropInputConfig,
  depthwiseConv2DNativeConfig,
  diagConfig,
  dilation2DConfig,
  eluConfig,
  eluGradConfig,
  equalConfig,
  erfConfig,
  expConfig,
  expandDimsConfig,
  expm1Config,
  fftConfig,
  fillConfig,
  flipLeftRightConfig,
  floorConfig,
  floorDivConfig,
  fromPixelsConfig,
  fusedConv2DConfig,
  fusedDepthwiseConv2DConfig,
  gatherNdConfig,
  gatherV2Config,
  greaterConfig,
  greaterEqualConfig,
  identityConfig,
  ifftConfig,
  imagConfig,
  isFiniteConfig,
  isInfiniteConfig,
  isNaNConfig,
  isLessConfig,
  isLessEqualConfig,
  isInSpaceConfig,
  isLog1pConfig,
  isLogConfig,
  logicalAndConfig,
  logicalNotConfig,
  logicalOrConfig,
  maxConfig,
  maxPool3DConfig,
  maxPoolConfig,
  maxPoolGrad3DConfig,
  maxPoolGradConfig,
  maxPoolWithArgmaxConfig,
  maximumConfig,
  meanConfig,
  minConfig,
  minimumConfig,
  mirrorPadConfig,
  modConfig,
multinomialConfig,
multiplyConfig,
negConfig,
nonMaxSuppressionV3Config,
nonMaxSuppressionV4Config,
nonMaxSuppressionV5Config,
notEqualConfig,
oneHotConfig,
onesLikeConfig,
packConfig,
padV2Config,
powConfig,
predictConfig,
prodConfig,
rangeConfig,
realConfig,
realDivConfig,
reciprocalConfig,
reluConfig,
relu6Config,
reluConfig,
reshapeConfig,
OpDef allows UninitializedInput */

* Export declare interface IArgDef { 
  /**
   * Properties of an ArgDef.
   * 
   * @param name
   * @param description
   * @param type
   * @param isRef
   * @param numberAttr
   * @param typeAttr
   * @param typeListAttr
   */

  name?: (string|null);
  description?: (string|null);
  type?: (DataType|null);
  numberAttr?: (string|null);
  typeAttr?: (string|null);
  typeListAttr?: (string|null);
  isRef?: (boolean|null);
}

export namespace OpDef {

/** Properties of an ArgDef. */
  export declare interface IArgDef {
    /** ArgDef name */
    name?: (string|null);
    /** ArgDef description */
    description?: (string|null);
    /** ArgDef type */
    type?: (DataType|null);
    /** ArgDef numberAttr */
    numberAttr?: (string|null);
    /** ArgDef typeAttr */
    typeAttr?: (string|null);
    /** ArgDef typeListAttr */
    typeListAttr?: (string|null);
    /** ArgDef isRef */
    isRef?: (boolean|null);
  }

  /** Properties of an AttrDef. */
  export declare interface IAttrDef {
    /** AttrDef name */
    name?: (string|null);
    /** AttrDef type */
    type?: (string|null);
    /** AttrDef defaultValue */
    defaultValue?: (IAttrValue|null);
    /** AttrDef description */
    description?: (string|null);
    /** AttrDef hasMinimum */
    hasMinimum?: (boolean|null);
    /** AttrDef minimum */
    minimum?: (number|string|null);
    /** AttrDef allowedValues */
    allowedValues?: (IAttrValue|null);
  }

  /** Properties of an OpDeprecation. */
  export declare interface IOpDeprecation {
    /** OpDeprecation version */
    version?: (number|null);
    /** OpDeprecation explanation */
    explanation?: (string|null);
  }
}

/** Properties of an OpList. */
export declare interface IOpList { 
  /** OpList op */
  op?: (IOpDef[]|null);
}

/** Properties of a MetaGraphDef. */
export declare interface IMetaGraphDef { 
  /** MetaGraphDef metaInfoDef */
  metaInfoDef?: (MetaGraphDef.IMetaInfoDef|null);
  /** MetaGraphDef graphDef */
  graphDef?: (IMetaGraphDef|

/** Properties of a MetaInfoDef. */
export declare interface IMetaInfoDef { 
  /** MetaInfoDef metaGraphVersion */
  metaGraphVersion?: (string|null);
  /** MetaInfoDef strippedOpList */
  strippedOpList?: (IOpList|null);
  /** MetaInfoDef anyInfo */
  anyInfo?: (IAny|null);
  /** MetaInfoDef tags */
  tags?: (string[]|null);
  /** MetaInfoDef tensorflowVersion */
  tensorflowVersion?: (string|null);
  /** MetaInfoDef tensorflowGitVersion */
  tensorflowGitVersion?: (string|null);
}

/** Properties of a SavedModel. */
export declare interface ISavedModel { 
  /** SavedModel savedModelSchemaVersion */
  savedModelSchemaVersion?: (string|null);
  /** SavedModel metaGraphs */
  metaGraphs?: (IMetaGraphDef[]|null);
  /** SavedModel assetFileDefs */
  assetFileDefs?: (IAssetFileDef[]|null);
}

/** Properties of a FunctionDefLibrary. */
export declare interface IFunctionDefLibrary { 
  /** FunctionDefLibrary function */
  function?: (IFunctionDef[]|null);
  /** FunctionDefLibrary grad */
  grad?: (IGradientDef[]|null);
}

/** Properties of a FunctionDef. */
export declare interface IFunctionDef { 
  /** FunctionDef signature */
  signature?: (IOpDef|null);
  /** FunctionDef attr */
  attr?: (IAttrValue[]|null);
  /** FunctionDef nodeDef */
  nodeDef?: (INodeDef[]|null);
  /** FunctionDef ret */
  ret?: (IAttrValue[]|null);
}

/** Properties of a GradientDef. */
export declare interface IGradientDef { 
  /** GradientDef functionName */
  functionName?: (string|null);
  /** GradientDef grad */
  grad?: (string|null);
}

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 * \import {OpExecutor, OpMapper} from '#types';

 * const CUSTOM_OPS: {[key: string]: OpMapper} = {
 *   ' register* Op for graph model executor.
 * This allow you to register TensorFlow custom op or
 * override existing op.
 * Here is an example of registering a new MatMul Op.
 * const customMatmul = (node) => 
 *   tf.matMul(node)[:, node.inputs[0], node.inputs[1], node.atrrs['transpose_a'], node.atrrs['transpose_b']);
 * @param name
 * The inputs and attr of the node
 * is based on the TensorFlow op.
 * registry.
 * @param name
 * The TensorFlow Op name.
 * @param opFunc An op function which is called with the current graph node
 * during execution and needs to
return a tensor or a list of tensors. The node * has the following attributes:
- * attr: A map from attribute name to its value
- * inputs: A list of input tensors
  - *name* @doc (heading: 'Models', subheading: 'Op Registry')
  export function registerOp(name: string, opFunc: OpExecutor) {
    const opMapper: OpMapper = {
      tfOpName: name,
      category: 'custom',
      inputs: [],
      attr: [],
      customExecutor: opFunc
    };
    CUSTOM_OPS[name] = opMapper;
  }
  @param name The Tensorflow Op name;
  @param *name* @doc (heading: 'Models', subheading: 'Op Registry')
  export function getRegisteredOp(name: string): OpMapper {
    return CUSTOM_OPS[name];
  }
  @param name The Tensorflow Op name;
  @param *name* @doc (heading: 'Models', subheading: 'Op Registry')
  export function deregisterOp(name: string) {
    delete CUSTOM_OPS[name];
  }

import {clone, Tensor, util} from '@tensorflow/tfjs-core';
import {NamedTensorsMap} from '../../data/types';
import {ExecutionContext} from '../../executor/execution_context';
import {ResourceManager} from '../../executor/resource_manager';
import {Node, ValueType} from '../types';

export function getParamValue(
    paramName: string, node: Node, tensorMap: NamedTensorsMap,
    context: ExecutionContext, resourceManager?: ResourceManager): ValueType {
  const inputParam = node.inputParams[paramName];
  if (inputParam && inputParam.inputIndexStart !== undefined) {
    const start = inputParam.inputIndexStart;
    const end = inputParam.inputIndexEnd === 0 ? undefined :
        (inputParam.inputIndexEnd === undefined ? start + 1 :
        inputParam.inputIndexEnd);
    if (inputParam.type === 'tensor') {
      return getTensor(
        node.inputNames[inputParam.inputIndexStart],
        tensorMap, context, resourceManager);
    }
    if (inputParam.type === 'tensors') {
      const inputs = node.inputNames.slice(start, end);
      return inputs.map(
        name => getTensor(name, tensorMap, context, resourceManager));
    }
    const tensor = getTensor(
        node.inputNames投产(start)[0],
        tensorMap, context, resourceManager);
    const data = tensor.dataSync();
    return inputParam.type === 'number' ?
        data[0] :
        util.toNestedArray(tensor.shape, data);
  }
  const attrParam = node.attrParams[paramName];
  return attrParam && attrParam.value;
}

export function getTensor(
    name: string, tensorsMap: NamedTensorsMap, context: ExecutionContext,
    resourceManager?: ResourceManager): Tensor {
  const [nodeName, index] = parseNodeName(name);

  if (resourceManager != null) {
    const tensor = resourceManager.getHashTableHandleByName(nodeName);
    if (tensor != null) {
      return tensor;
    }
  }

  const contextId = context.currentContextIds.find(contextId => {
    return tensorsMap[nodeNameWithContextId(contextId)] !== undefined;
  });

  return tensorsMap[nodeNameWithContextId(contextId)][index];
}

export function getAttrParam(name: string, node: Node,
    context: ExecutionContext) {
  return node.attrParams[name];
}

export function getTensorContextId(name: string, context: ExecutionContext) {
  return contextId[name];
}

export function getTensorFromNodeNameAndIndex(name: string, index: number) {
  return tensorsMap[nameWithIndex(name, index)];
}

export function getTensorFromNodeName(name: string) {
  return tensorsMap[name];
}

return Tensor

[nodeName, index] = parseNodeName(inputName);\n\nreturn [\n  getNodeNameWithContextId(nodeName, context && context.currentContextId),\n  index  ];\n}\n\nfunction getFunctionWithContextId(name, contextId?: string): string {\n  return !contextId ? `_${name}-${contextId}` : name;\n}\n\nexport function parseNodeName(name: string): [string, number] {\n  const parts = name.split('::');\n  if (parts.length === 1) \n    return [name, 0];\n  \n  const node = parts[0];\n  return [node, Number(parts[parts.length - 1])];\n}\n\nexport function split(tensor: number[], size: number) {\n  const res = [];\n  for (let i = 0; i < arr.length; i += size) {\n    res.push(arr.slice(i, i + size));\n  }\n  return res;\n}\n\nexport function getPadding(node: Node, tensorMap: NamedTensorsMap, context: ExecutionContext): ValueType {\n  let pad = getParamValue('pad', node, tensorMap, context);\n  if (pad === 'explicit') {\n    // This is 1d array, we need to convert it to 2d array\n    pad = getParamValue('explicitPaddings', node, tensorMap, context);\n  }\n  return pad;\n}\n\nexport function split(arr: number[], size: number) {\n  const res = [];\n  for (let i = 0; i < arr.length; i += size) {\n    res.push(arr.slice(i, i + size));\n  }\n  return res;\n}\n\nexport function getPadding(node: Node, tensorMap: NamedTensorsMap, context: ExecutionContext): ValueType {\n  let pad = getParamValue('pad', node, tensorMap, context);\n  if (pad === 'explicit') {\n    // This is 1d array, we need to convert it to 2d array\n    pad = getParamValue('explicitPaddings', node, tensorMap, context);\n  }\n  return pad;\n}\n\nexport function split(arr: number[], size: number) {\n  const res = [];\n  for (let i = 0; i < arr.length; i += size) {\n    res.push(arr.slice(i, i + size));\n  }\n  return res;\n}\n\nexport function getPadding(node: Node, tensorMap: NamedTensorsMap, context: ExecutionContext): ValueType {\n  let pad = getParamValue('pad', node, tensorMap, context);\n  if (pad === 'explicit') {\n    // This is 1d array, we need to convert it to 2d array\n    pad = getParamValue('explicitPaddings', node, tensorMap, context);\n  }\n  return pad;\n}\n\nexport function split(arr: number[], size: number) {\n  const res = [];\n  for (let i = 0; i < arr.length; i += size) {\n    res.push(arr.slice(i, i + size));\n  }\n  return res;\n}\n\nexport function getPadding(node: Node, tensorMap: NamedTensorsMap, context: ExecutionContext): ValueType {\n  let pad = getParamValue('pad', node, tensorMap, context);\n  if (pad === 'explicit') {\n    // This is 1d array, we need to convert it to 2d array\n    pad = getParamValue('explicitPaddings', node, tensorMap, context);\n  }\n  return pad;\n}\n\nexport function split(arr: number[], size: number) {\n  const res = [];\n  for (let i = 0; i < arr.length; i += size) {\n    res.push(arr.slice(i, i + size));\n  }\n  return res;\n}\n\nexport function getPadding(node: Node, tensorMap: NamedTensorsMap, context: ExecutionContext): ValueType {\n  let pad = getParamValue('pad', node, tensorMap, context);\n  if (pad === 'explicit') {\n    // This is 1d array, we need to convert it to 2d array\n    pad = getParamValue('explicitPaddings', node, tensorMap, context);\n  }\n  return pad;\n}\n\nexport function split(arr: number[], size: number) {\n  const res = [];\n  for (let i = 0; i < arr.length; i += size) {\n    res.push(arr.slice(i, i + size));\n  }\n  return res;\n}\n\nexport function getPadding(node: Node, tensorMap: NamedTensorsMap, context: ExecutionContext): ValueType {\n  let pad = getParamValue('pad', node, tensorMap, context);\n  if (pad === 'explicit') {\n    // This is 1d array, we need to convert it to 2d array\n    pad = getParamValue('explicitPaddings', node, tensorMap, context);\n  }\n  return pad;\n}\n\nexport function split(arr: number[], size: number) {\n  const res = [];\n  for (let i = 0; i < arr.length; i += size) {\n    res.push(arr.slice(i, i + size));\n  }\n  return res;\n}\n\nexport function getPadding(node: Node, tensorMap: NamedTensorsMap, context: ExecutionContext): ValueType {\n  let pad = getParamValue('pad', node, tensorMap, context);\n  if (pad === 'explicit') {\n    // This is 1d array, we need to convert it to 2d array\n    pad = getParamValue('explicitPaddings', node, tensorMap, context);\n  }\n  return pad;\n}
null

{ "tfName": "strides", "name": "strides", "type": "number[]" },
{ "tfName": "padding", "name": "pad", "type": "string" },
{ "tfName": "useCudnnGpu", "name": "useCudnnGpu", "type": "bool" },
{ "tfName": "data_format", "name": "dataFormat", "type": "string" },
{ "defaultValue": "NHWC" },
{ "tfName": "explicit_paddings", "name": "explicitPaddings", "type": "number[]" },
{ "tfName": "dilations", "name": "dilations", "type": "number[]" },
{ "defaultValue": "[1, 1, 1, 1]" },
{ "tfName": "fused_ops", "name": "fusedOps", "type": "string" },
{ "defaultValue": "["%s"]" },
{ "tfName": "leakyreluAlpha", "name": "leakyreluAlpha", "type": "number" },
{ "defaultValue": 0.0001 },
{ "tfName": "leakyrelu_alpha", "name": "leakyrelu_alpha", "type": "number" },
{ "defaultValue": 0.0001 },
{ "tfName": "useCudnnOnGpu", "name": "useCudnnOnGpu", "type": "bool" },
{ "defaultValue": true },
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{ "defaultValue": "[1, 1, 1, 1]" },
{ "tfName": "fused_ops", "name": "fusedOps", "type": "string" },
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{ "tfName": "leakyrelu_alpha", "name": "leakyrelu_alpha", "type": "number" },
{ "defaultValue": 0.0001 },
{ "tfName": "useCudnnOnGpu", "name": "useCudnnOnGpu", "type": "bool" },
{ "defaultValue": true },
{ "tfName": "explicit_paddings", "name": "explicitPaddings", "type": "number[]" },
{ "tfName": "dilations", "name": "dilations", "type": "number[]" },
{ "defaultValue": "[1, 1, 1, 1]" },
{ "tfName": "fused_ops", "name": "fusedOps", "type": "string" },
{ "defaultValue": "["%s"]" },
{ "tfName": "leakyreluAlpha", "name": "leakyreluAlpha", "type": "number" },
{ "defaultValue": 0.0001 },
{ "tfName": "leakyrelu_alpha", "name": "leakyrelu_alpha", "type": "number" },
{ "defaultValue": 0.0001 },
{ "tfName": "useCudnnOnGpu", "name": "useCudnnOnGpu", "type": "bool" },
{ "defaultValue": true }
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export const json: OpMapper[] = [
  {
    'tfOpName': 'NonMaxSuppressionV2',
    'category': 'dynamic',
    'inputs': [
      {'start': 0, 'name': 'boxes', 'type': 'tensor'},
      {'start': 1, 'name': 'scores', 'type': 'tensor'},
      {'start': 2, 'name': 'iouThreshold', 'type': 'number'},
      {'start': 3, 'name': 'maxOutputSize', 'type': 'number'}
    ],
    'attrs': [
      {'tfName': 'T', 'name': 'dtype', 'type': 'dtype', 'notSupported': true},
      {'tfName': 'T_threshold', 'name': 'threshold', 'type': 'dtype', 'notSupported': true}
    ]
  },
  {
    'tfOpName': 'NonMaxSuppressionV3',
    'category': 'dynamic',
    'inputs': [
      {'start': 0, 'name': 'boxes', 'type': 'tensor'},
      {'start': 1, 'name': 'scores', 'type': 'tensor'},
      {'start': 2, 'name': 'maxOutputSize', 'type': 'number'},
      {'start': 3, 'name': 'iouThreshold', 'type': 'number'},
      {'start': 4, 'name': 'scoreThreshold', 'type': 'number'}
    ],
    'attrs': [
      {'tfName': 'T', 'name': 'dtype', 'type': 'dtype', 'notSupported': true}
    ]
  },
  {
    'tfOpName': 'NonMaxSuppressionV4',
    'category': 'dynamic',
    'inputs': [
      {'start': 0, 'name': 'boxes', 'type': 'tensor'},
      {'start': 1, 'name': 'scores', 'type': 'tensor'},
      {'start': 2, 'name': 'maxOutputSize', 'type': 'number'},
      {'start': 3, 'name': 'iouThreshold', 'type': 'number'},
      {'start': 4, 'name': 'scoreThreshold', 'type': 'number'},
      {'start': 5, 'name': 'softNmsSigma', 'type': 'number'}
    ],
    'attrs': [
      {'tfName': 'T', 'name': 'dtype', 'type': 'dtype', 'notSupported': true}
    ]
  },
  {
    'tfOpName': 'Where',
    'category': 'dynamic',
    'inputs': [
      {'start': 0, 'name': 'condition', 'type': 'tensor'}
    ],
    'attrs': [
      {'tfName': 'T', 'name': 'dtype', 'type': 'dtype', 'notSupported': true}
    ]
  },
  {
    'tfOpName': 'ListDiff',
    'category': 'dynamic',
    'inputs': [
      {'start': 0, 'name': 'x', 'type': 'tensor'},
      {'start': 1, 'name': 'y', 'type': 'tensor'}
    ],
    'attrs': [
      {'tfName': 'T', 'name': 'dtype', 'type': 'dtype', 'notSupported': true}
    ]
  }
];

import {OpMapper} from '../types';

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 */

export const json: OpMapper[] = [
  {
    'tfOpName': 'TopKV2',
    'category': 'evaluation',
    'inputs': [
      {'start': 0, 'name': 'x', 'type': 'tensor'},
      {'start': 1, 'name': 'k', 'type': 'number'}
    ],
    'attrs': [{
      'tfName': 'sorted', 'name': 'sorted', 'type': 'bool'
    }]
  },
  {
    'tfOpName': 'Unique',
    'category': 'evaluation',
    'inputs': [
      {'start': 0, 'name': 'x', 'type': 'tensor'}
    ]
  },
  {
    'tfOpName': 'UniqueV2',
    'category': 'evaluation',
    'inputs': [
      {'start': 0, 'name': 'x', 'type': 'tensor'},
      {'start': 1, 'name': 'y', 'type': 'tensor'}
    ],
    'attrs': [
      {'tfName': 'T', 'name': 'dtype', 'type': 'dtype', 'notSupported': true}
    ]
  }
];

import {OpMapper} from '../types';

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 */

export const json: OpMapper[] = [
  {
    'tfOpName': 'PlaceholderWithDefault',
    'category': 'graph',
    'inputs': [
      {}]
  },
  {
    'tfOpName': 'UniqueV2',
    'category': 'graph',
    'inputs': [
      {}]
  }
];

import {OpMapper} from '../types';

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 */

export const json: OpMapper[] = [null];

import {OpMapper} from '../types';

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 */

export const json: OpMapper[] = [null];
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```javascript
[nodeName, ] = getNodeNameAndIndex(name);
node.inputs.push(nodes[nodeName]);
node.children.push(nodes[nodeName].children);

// if signature has not outputs set, add any node that
does not have outputs. if (Object.keys(outputNodeNameToKey).length === 0) {
allNodes.forEach(key => {
  const node = nodes[key];
  if (node.children.length === 0) {
    // if signature has not outputs set, add any node that
    // does not have outputs. if (Object.keys(outputNodeNameToKey).length === 0) {
    allNodes.forEach(key => {
      const node = nodes[key];
      if (node !== null) {
        node.signatureKey = outputNodeNameToKey[name];
        outputs.push(node);
      }
    });
  }
});

// if signature has not outputs set, add any node that
does not have outputs. if (Object.keys(outputNodeNameToKey).length === 0) {
allNodes.forEach(key => {
  const node = nodes[key];
  if (node !== null) {
    node.signatureKey = outputNodeNameToKey[name];
    outputs.push(node);
  }
});
```

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```typescript
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 *
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 */

// tslint:disable

import { atob, Buffer } from 'node:buffer';

function decodeBase64(s: string): string {
  if (typeof atob !== 'undefined') {
    return global.atob(text);
  } else if (typeof Buffer !== 'undefined') {
    return new Buffer(text, 'base64').toString();
  } else {
    throw new Error('Unable to decode base64 in this environment.');
  }
}

export function parseStringParam(s: string, keepCase: boolean): string {
  const value = Array.isArray(s) ? String.fromCharCode.apply(null, s) : decodeBase64(s);
  return keepCase ? value : value.toLowerCase();
}

export function getStringParam(attrs: {[key: string]: tensorflow.IAttrValue}, name: string, def: string, keepCase: boolean): string {
  const param = attrs[name];
  if (param != null) {
    return parseStringParam(param.s, keepCase);
  }
  return def;
}

export function getBoolParam(attrs: {[key: string]: tensorflow.IAttrValue}, name: string, def: boolean): boolean {
  const param = attrs[name];
  return param ? param.b : def;
}

export function getNumberParam(attrs: {[key: string]: tensorflow.IAttrValue}, name: string, def: number): number {
  const param = attrs[name] || {};
  const value = (param['i'] != null ? param['i'] : (param['f'] != null ? param['f'] : def));
  return (typeof value === 'number') ? value : parseInt(value, 10);
}

export function parseDtypeParam(value: string|tensorflow.DataType): tensorflow.DataType {
  if (typeof (value) === 'string') {
    value = tensorflow.DataType[value as any];
  }
  switch (value) {
    case tensorflow.DataType.DT_FLOAT:
      return 'float32';
    case tensorflow.DataType.DT_INT32:
    case tensorflow.DataType.DT_INT64:
    case tensorflow.DataType.DT_UINT8:
      return 'int32';
    case tensorflow.DataType.DT_BOOL:
      return 'bool';
    case tensorflow.DataType.DT_DOUBLE:
      return 'float32';
    case tensorflow.DataType.DT_STRING:
      return 'string';
    default:
      // Unknown dtype error will happen at runtime (instead of parse time),
      // since these nodes might not be used by the actual subgraph execution.
      return undefined;
  }
}

export function getFuncParam(attrs: {[key: string]: tensorflow.IAttrValue}, name: string, def: string): string {
  const param = attrs[name];
  if (param && param.func) {
    return param.func.name;
  }
  return def;
}

export function getDtypeParam(attrs: {[key: string]: tensorflow.IAttrValue}, name: string, def: tensorflow.DataType): tensorflow.DataType {
  const param = attrs[name];
  if (param && param.type) {
    return parseDtypeParam(param.type);
  }
  return def;
}

export function getDtypeArrayParam(attrs: {[key: string]: tensorflow.IAttrValue}, name: string, def: tensorflow.DataType[]): tensorflow.DataType[] {
  const param = attrs[name];
  if (param && param.list && param.list.type) {
    return param.list.type.map(v => parseDtypeParam(v));
  }
  return def;
}

export function parseTensorShapeParam(shape: tensorflow.ITensorShape): number[]|
undefined {
  if (shape.unknownRank) {
    return undefined;
  }
  if (shape.dim != null) {
    return shape.dim.map(dim =>
        (typeof dim.size === 'number') ? dim.size : parseInt(dim.size, 10));
  }
  return [];
}

export function getTensorShapeParam(attrs: {[key: string]: tensorflow.IAttrValue}, name: string, def?: number[]): number[]|
undefined {
  const param = attrs[name];
  if (param && param.shape) {
    return parseTensorShapeParam(param.shape);
  }
  return def;
}

export function getNumericArrayParam(attrs: {[key: string]: tensorflow.IAttrValue}, name: string, def: number[]): number[] {
  const param = attrs[name];
  if (param) {
    return ((param.list.f && param.list.f.length ? param.list.f :
        param.list.i) ||
            []).map(v => (typeof v === 'number') ? v : parseInt(v, 10));
  }
  return def;
}

export function getStringArrayParam(attrs: {[key: string]: tensorflow.IAttrValue}, name: string, def: string[] = []): string[] {
  const param = attrs[name];
  if (param && param.list && param.list.s) {
    return param.list.s.map((v) => {
      return parseStringParam(v, false);
    });
  }
  return def;
}

export function getTensorShapeArrayParam(attrs: {[key: string]: tensorflow.IAttrValue}, name: string, def: number[][]) = []: number[][] {
  const param = attrs[name];
  if (param && param.list && param.list.shape) {
    return param.list.shape.map((v) => {
      return parseTensorShapeParam(v);
    });
  }
  return def;
}

export function getBoolArrayParam(attrs: {[key: string]: tensorflow.IAttrValue}, name: string, def: boolean[]): boolean[] {
  const param = attrs[name];
  if (param && param.list && param.list.b) {
    return param.list.b.map(v => {
      return parseStringParam(v, false);
    });
  }
  return def;
}

// tslint:enable
```

---

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=============================================================================

*/

import {DataType, Tensor} from '@tensorflow/tfjs-core';

import {NamedTensorsMap} from
'../data/types';
import {ExecutionContext} from '../executor/execution_context';
import {getTensor} from
'../executors/utils';
import {getBoolArrayParam, getBoolParam, getDtypeArrayParam, getDtypeParam,
getNumberParam, getNumericArrayParam, getStringArrayParam, getStringParam, getTensorShapeArrayParam,
getTensorShapeParam} from '../operation_mapper';

/**
 * Helper class for lookup inputs and params for nodes in the model graph.
 */
export class NodeValueImpl implements GraphNode {
  public readonly inputs: Tensor[] = [];
  public readonly attrs: {[key: string]: ValueType} = {};
  constructor(
      private node: Node, private tensorMap: NamedTensorsMap,
      private context: ExecutionContext) {
    this.inputs = node.inputNames.map(name => this.getInput(name));
    if (node.rawAttrs != null) {
      this.attrs = Object.keys(node.rawAttrs)
                       .reduce((attrs: {[key: string]: ValueType}, key) => {
                         attrs[key] = this.getAttr(key);
                         return attrs;
                       }, {});
    }
  }

  /**
   * Return the value of the attribute or input param.
   * @param name String: name of attribute or input param.
   */
  private getInput(name: string): Tensor {
    return getTensor(name,
        this.tensorMap, this.context);
  }

  /**
   * Return the value of the attribute or input param.
   * @param name String: name of attribute or input param.
   */
  private getAttr(name: string, defaultValue?: ValueType): ValueType {
    const value = this.node.rawAttrs[name];
    if (value.tensor != null) {
      return getTensor(name,
          this.tensorMap, this.context);
    }
    if (value.i != null || value.f != null) {
      return getNumberParam(this.node.rawAttr, name, defaultValue as number);
    }
    if (value.b != null) {
      return getBoolParam(this.node.rawAttr, name, defaultValue as boolean);
    }
    if (value.shape != null) {
      return getTensorShapeParam(this.node.rawAttr, name, defaultValue as number);
    }
    if (value.string != null) {
      return getStringParam(this.node.rawAttr, name, defaultValue as string);
    }
    if (value.shape != null) {
      return getDtypeParam(this.node.rawAttr, name, defaultValue as dataType);
    }
    if (value.list != null) {
      return getDtypeArrayParam(this.node.rawAttr, name, defaultValue as dataType[]);
    }
    if (value.shape != null) {
      return getNumberArrayParam(this.node.rawAttr, name, defaultValue as number);
    }
    if (value.list != null) {
      return getNumberArrayParam(this.node.rawAttr, name, defaultValue as number[]);
    }
    if (value.shape != null) {
      return getStringArrayParam(this.node.rawAttr, name, defaultValue as string[]);
    }
    if (value.shape != null) {
      return getTensorShapeArrayParam(this.node.rawAttr, name, defaultValue as number[]);
    }
    if (value.list != null) {
      return getDtypeArrayParam(this.node.rawAttr, name, defaultValue as dataType[]);
    }
    if (value.list != null) {
      return getDtypeArrayParam(this.node.rawAttr, name, defaultValue as dataType[]);
    }
  }
}

/**
 * This file exports ops used by the converters executors. By default it
 * re-exports all ops. In a custom
 * build this is aliased to a file that will
 * only exports ops for a given model.json.
 */
export * from './ops';

/**
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 */

/**
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 */

/*\n * This file exports ops used by the converters executors. By default it \n * re-exports all ops. In a custom
 * build this is aliased to a file that will\n * only exports ops for a given model.json.\n *\n */

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import {Tensor} from '@tensorflow/tfjs-core';
import * as tfOps from '@tensorflow/tfjs-core/dist/ops/ops_for_converter';
import {NamedTensorsMap} from './data/types';
import {ExecutionContext} from './executor/execution_context';
import {InternalOpExecutor, Node} from '../types';

import {getParamValue, getTensor} from './utils';

export const executeOp: InternalOpExecutor =
    (node: Node, tensorMap: NamedTensorsMap,
     context: ExecutionContext): Tensor[] => {
      switch (node.op) {
        case 'Abs':
        case 'ComplexAbs':
          return [tfOps.abs(getParamValue('x', node, tensorMap, context) as Tensor)];
        case 'Acos':
          return [tfOps.acos(getParamValue('x', node, tensorMap, context) as Tensor)];
        case 'Acosh':
          return [tfOps.acosh(getParamValue('x', node, tensorMap, context) as Tensor)];
        case 'Asin':
          return [tfOps.asin(getParamValue('x', node, tensorMap, context) as Tensor)];
        case 'Asinh':
          return [tfOps.asinh(getParamValue('x', node, tensorMap, context) as Tensor)];
        case 'Atan':
          return [tfOps.atan(getParamValue('x', node, tensorMap, context) as Tensor)];
        case 'Atan2':
          return [tfOps.atan2(getParamValue('x', node, tensorMap, context) as Tensor,
              getParamValue('y', node, tensorMap, context) as Tensor)];
        case 'BiasAdd':
        case 'AddV2':
        case 'Add': {
          return [tfOps.add(getParamValue('a', node, tensorMap, context) as Tensor,
      getParamValue('b', node, tensorMap, context) as Tensor)];
        }
        case 'AddN': {
          return [tfOps.addN(getParamValue('tensors', node, tensorMap, context) as Tensor[])];
        }
        case 'FloorMod':
        case 'Mod': {
          return [tfOps.mod(getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context) as Tensor)];
        }
        case 'Sub': {
          return [tfOps.sub(getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context) as Tensor)];
        }
        case 'RealDiv':
        case 'Div': {
          return [tfOps.div(getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context) as Tensor)];
        }
        case 'DivNoNan': {
          return [tfOps.divNoNan(getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context) as Tensor)];
        }
        case 'FloorDiv': {
          return [tfOps.floorDiv(getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context) as Tensor)];
        }
        case 'Minimum': {
          return [tfOps.minimum(getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context) as Tensor)];
        }
        case 'Maximum': {
          return [tfOps.maximum(getParamValue('a', node, tensorMap, context) as Tensor,
                getParamValue('b', node, tensorMap, context) as Tensor)];
        }
        case 'Pow': {
          return [tfOps.pow(getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context) as Tensor)];
        }
        case 'SquaredDifference': {
          return [tfOps.squaredDifference(getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context) as Tensor)];
        }
      default:
        throw TypeError(`Node type ${node.op} is not implemented`);
      }
    }

export const CATEGORY = 'arithmetic';
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*

export const CATEGORY = 'basic_math';
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* Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language
import {Tensor, util} from '@tensorflow/tfjs-core';

/**
* This differs from util.assertShapesMatch in that it allows values of
* negative one, an undefined size of a dimension, in a shape match
* anything, in *
* Used by TensorList and TensorArray to verify if elementShape matches, support
* negative value as the dim shape.
* @param shapeA
* @param shapeB
* @param errorMessagePrefix
*/
export function assertShapesMatchAllowUndefinedSize(shapeA: number|number[], shapeB: number|number[], errorMessagePrefix = ''): boolean {
  if (typeof shapeA === 'number' || typeof shapeB === 'number') {
    return true;
  }
  util.assert(
      shapeA.length === shapeB.length,
      () => errorMessagePrefix + ` Shapes ${shapeA} and ${shapeB} must match`);
  for (let i = 0; i < shapeA.length; ++i) {
    const dim0 = shapeA[i];
    const dim1 = shapeB[i];
    util.assert(
        dim0 < 0 || dim1 < 0 || dim0 === dim1,
        () => errorMessagePrefix + ` Shapes ${shapeA} and ${shapeB} must match`);
  }
}

export function fullDefinedShape(elementShape: number|number[]): boolean {
  if (typeof elementShape === 'number' || elementShape.some(dim => dim < 0)) {
    return false;
  }
  return true;
}

/**
 * Generate the output element shape from the list elementShape, list tensors
 * and input param.
 */
export function inferElementShape(listElementShape: number|number[], tensors: Tensor[], elementShape: number|number[]): number[] {
  const partialShape = mergeElementShape(listElementShape, elementShape);
  const notFullDefinedShape = !fullDefinedShape(partialShape);
  if (notFullDefinedShape && tensors.length === 0) {
    throw new Error(`Tried to calculate elements of an empty list with non-fully-defined elementShape: ${partialShape}`);
  }
  if (notFullDefinedShape) {
    tensors.forEach(tensor => {
      partialShape = mergeElementShape(tensor.shape, partialShape);
    });
  }
  if (!fullDefinedShape(partialShape)) {
    throw new Error(`Non-fully-defined elementShape: ${partialShape}`);
  }
  return partialShape as number[];
}

export function mergeElementShape(elementShapeA: number|number[], elementShapeB: number|number[]): number|number[] {
  if (typeof elementShapeA === 'number') {
    return elementShapeB;
  }
  if (typeof elementShapeB === 'number') {
    return elementShapeA;
  }

  if (elementShapeA.length !== elementShapeB.length) {
    throw new Error(`Incompatible ranks during merge: ${elementShapeA} vs. ${elementShapeB}`);
  }

  const result: number[] = 
  for (let i = 0; i < elementShapeA.length; ++i) {
    const dim0 = elementShapeA[i];
    const dim1 = elementShapeB[i];
    if (dim0 >= 0 && dim1 >= 0 && dim0 !== dim1) {
      throw new Error(`Incompatible shape during merge: ${elementShapeA} vs. ${elementShapeB}`);
    }
    result[i] = dim0 >= 0 ? dim0 : dim1;
  }
  return result;
}

export interface TensorWithState {
  tensor?: Tensor;
  written?: boolean;
  read?: boolean;
  cleared?: boolean;
}

export class TensorArray {
  private tensors: TensorWithState[] = 
  private closed_ = false;
  readonly idTensor: Tensor;
  constructor(name: string, dtype: DataType, private maxSize: number, readonly elementShape: number[], readonly identicalElementShapes: boolean, readonly dynamicSize: boolean, readonly clearAfterRead: boolean) {
    this.idTensor = scalar(0);
    keep(this.idTensor);
  }

  get id() {
    return this.idTensor.id;
  }

  get closed() {
    return this.closed;
  }

  /**
   * Dispose
(\$\{tensors[0].shape\})\n| return concat(tensors, 0);\n}  

/**
 * Scatter the values of a Tensor in specific indices of a TensorArray.
 * @param indices number[] values in [0, max_value]. If the `*` TensorArray is not dynamic, max_value=size().
 * @param dtype Tensor input tensor.\n */\n scatter(indices: number[], tensor: Tensor) \n if (tensors.dtype !== this.dtype) \n throw new Error(`TensorArray dtype is \$\{this.dtype\} but tensor has dtype \$\{tensor.dtype\}`);\n \n if (indices.length !== this.shape[0]) \n throw new Error(`Expected len(indices) == tensor.shape[0], but saw: \$\{indices.length\} vs. \$\{tensor.shape[0]\}`);\n const maxIndex = Math.max(...indices);\n if (!this.dynamicSize && maxIndex >= this.maxSize) \n throw new Error(`Max index must be < array size (\$\{maxIndex\} vs. \$\{this.maxSize\})\`);\n this.writeMany(indices, unstack(tensor, 0));\n
/**
 * Split the values of a Tensor into the TensorArray.
 * @param length number[] with the lengths to use when splitting value along the first dimension.\n * @param dtype tensor Tensor, the tensor to split.\n */\n split(length: number[], tensor: Tensor) \n
if (length.length !== this.maxSize) \n throw new Error(`TensorArray's size is not equal to the size of lengths (\$\{this.maxSize\} vs. \$\{length.length\}), and the TensorArray is not marked as dynamically resizeable);\n
const elementPerRow = totalLength === 0 ? 0 : tensor.size / totalLength;\n const tensors: Tensor[] = [];\n
for (let i = 0; i < length.length; ++i) {\n
\nconst previousLength = (i === 0) ? 0 : cumulativeLengths[i - 1];\nconst indices = [0, previousLength, 0];\nconst sizes = [1, length[i], elementPerRow];\n\n\n\ntensors[i] = reshape(slice(tensor, indices, sizes), this.elementShape);\n}\n\n\n\n
---

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@tensorflow/tfjs-core';

import {assertShapesMatchAllowUndefinedSize, inferElementShape, mergeElementShape} from './tensor_utils';

/**
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 * software distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
TensorList containing a copy of the underlying tensor container:

```javascript
/*
 * copy(): TensorList { return new TensorList([...this.tensors], this.elementShape, this.elementDtype); }
 */

/*
 * clearAndClose(keepIds?: Set<number>) { this.tensors.forEach(tensor => {
    if (keepIds === null || keepIds.has(tensor.id)) { tensor.dispose(); }
  });
  this.tensors.length = 0; this.idTensor.dispose(); }
 */

/*
 * The size of the tensors in the tensor list:
 */

size() { return this.tensors.length; }

// Return a tensor that stacks a list of rank-R tf.Tensors into one rank-(R+1) tensor.
stack(elementShape: number[], elementDtype: DataType, numElements = -1): Tensor {
  if (elementDtype !== this.elementDtype)
    throw new Error(`Invalid data types; op elements ${elementDtype}, but list elements ${this.elementDtype}`);
  if (numElements !== -1 && this.tensors.length !== numElements)
    throw new Error(`Operation expected a list with ${numElements} elements but got a list with ${this.tensors.length} elements.`);
  const outputElementShape = inferElementShape(this.elementShape, this.tensors, elementShape);
  return tidy(() => {
    const reshapedTensors = this.tensors.map(tensor => reshape(tensor, outputElementShape));
    return stack(reshapedTensors, 0);
  });
}
```

```javascript
/*
 * Pop a tensor from the end of the list.
 */
popBack(elementShape: number[], elementDtype: DataType): Tensor {
  if (elementDtype !== this.elementDtype)
    throw new Error(`Invalid data types; op elements ${elementDtype}, but list elements ${this.elementDtype}`);
  if (this.size() === 0)
    throw new Error('Trying to pop from an empty list.);
  const outputElementShape = inferElementShape(this.elementShape, this.tensors, elementShape);
  const tensor = this.tensors.pop();
  assertShapesMatchAllowUndefinedSize(tensor.shape, elementShape, 'TensorList shape mismatch: ');
  return reshape(tensor, outputElementShape);
}
```

```javascript
/*
 * Push a tensor to the end of the list.
 */
pushBack(tensor: Tensor) {
  if (tensor.dtype !== this.elementDtype)
    throw new Error(`Invalid data types; op elements ${tensor.dtype}, but list elements ${this.elementDtype}`);
  assertShapesMatchAllowUndefinedSize(tensor.shape, this.elementShape, 'TensorList shape mismatch: ');
  if (this.maxNumElements === this.size())
    throw new Error('Trying to push element into a full list.);
  keep(tensor);
  this.tensors.push(tensor);
  resize(size: number) {
    if (size < 0)
      throw new Error('TensorListResize expects size to be non-negative. Got: ${size}';)
    if (this.maxNumElements !== -1 && size > this.maxNumElements)
      throw new Error('TensorListResize input size ${size} is greater maxNumElements ${this.maxNumElements}');
    this.tensors.length = size;
  }
  return reshape(this.tensors[elementIndex], outputElementShape);
}
```

```javascript
/*
 * The size of the tensors in the tensor list:
 */
size() { return this.tensors.length; }

// Return a tensor that stacks a list of rank-R tf.Tensors into one rank-(R+1) tensor.
stack(elementShape: number[], elementDtype: DataType, numElements = -1): Tensor {
  if (elementDtype !== this.elementDtype)
    throw new Error(`Invalid data types; op elements ${elementDtype}, but list elements ${this.elementDtype}`);
  if (numElements !== -1 && this.tensors.length !== numElements)
    throw new Error(`Operation expected a list with ${numElements} elements but got a list with ${this.tensors.length} elements.`);
  const outputElementShape = inferElementShape(this.elementShape, this.tensors, elementShape);
  return tidy(() => {
    const reshapedTensors = this.tensors.map(tensor => reshape(tensor, outputElementShape));
    return stack(reshapedTensors, 0);
  });
}
```

```javascript
/*
 * Pop a tensor from the end of the list.
 */
popBack(elementShape: number[], elementDtype: DataType): Tensor {
  if (elementDtype !== this.elementDtype)
    throw new Error(`Invalid data types; op elements ${elementDtype}, but list elements ${this.elementDtype}`);
  if (this.size() === 0)
    throw new Error('Trying to pop from an empty list.);
  const outputElementShape = inferElementShape(this.elementShape, this.tensors, elementShape);
  const tensor = this.tensors.pop();
  assertShapesMatchAllowUndefinedSize(tensor.shape, elementShape, 'TensorList shape mismatch: ');
  return reshape(tensor, outputElementShape);
}
```

```javascript
/*
 * Push a tensor to the end of the list.
 */
pushBack(tensor: Tensor) {
  if (tensor.dtype !== this.elementDtype)
    throw new Error(`Invalid data types; op elements ${tensor.dtype}, but list elements ${this.elementDtype}`);
  assertShapesMatchAllowUndefinedSize(tensor.shape, this.elementShape, 'TensorList shape mismatch: ');
  if (this.maxNumElements === this.size())
    throw new Error('Trying to push element into a full list.);
  keep(tensor);
  this.tensors.push(tensor);
  resize(size: number) {
    if (size < 0)
      throw new Error('TensorListResize expects size to be non-negative. Got: ${size}';)
    if (this.maxNumElements !== -1 && size > this.maxNumElements)
      throw new Error('TensorListResize input size ${size} is greater maxNumElements ${this.maxNumElements}');
    this.tensors.length = size;
  }
  return reshape(this.tensors[elementIndex], outputElementShape);
}
```

```javascript
/*
 * The size of the tensors in the tensor list:
 */
size() { return this.tensors.length; }

// Return a tensor that stacks a list of rank-R tf.Tensors into one rank-(R+1) tensor.
stack(elementShape: number[], elementDtype: DataType, numElements = -1): Tensor {
  if (elementDtype !== this.elementDtype)
    throw new Error(`Invalid data types; op elements ${elementDtype}, but list elements ${this.elementDtype}`);
  if (numElements !== -1 && this.tensors.length !== numElements)
    throw new Error(`Operation expected a list with ${numElements} elements but got a list with ${this.tensors.length} elements.`);
  const outputElementShape = inferElementShape(this.elementShape, this.tensors, elementShape);
  return tidy(() => {
    const reshapedTensors = this.tensors.map(tensor => reshape(tensor, outputElementShape));
    return stack(reshapedTensors, 0);
  });
}
```

```javascript
/*
 * Pop a tensor from the end of the list.
 */
popBack(elementShape: number[], elementDtype: DataType): Tensor {
  if (elementDtype !== this.elementDtype)
    throw new Error(`Invalid data types; op elements ${elementDtype}, but list elements ${this.elementDtype}`);
  if (this.size() === 0)
    throw new Error('Trying to pop from an empty list.);
  const outputElementShape = inferElementShape(this.elementShape, this.tensors, elementShape);
  const tensor = this.tensors.pop();
  assertShapesMatchAllowUndefinedSize(tensor.shape, elementShape, 'TensorList shape mismatch: ');
  return reshape(tensor, outputElementShape);
}
```

```javascript
/*
 * Push a tensor to the end of the list.
 */
pushBack(tensor: Tensor) {
  if (tensor.dtype !== this.elementDtype)
    throw new Error(`Invalid data types; op elements ${tensor.dtype}, but list elements ${this.elementDtype}`);
  assertShapesMatchAllowUndefinedSize(tensor.shape, this.elementShape, 'TensorList shape mismatch: ');
  if (this.maxNumElements === this.size())
    throw new Error('Trying to push element into a full list.);
  keep(tensor);
  this.tensors.push(tensor);
  resize(size: number) {
    if (size < 0)
      throw new Error('TensorListResize expects size to be non-negative. Got: ${size}';)
    if (this.maxNumElements !== -1 && size > this.maxNumElements)
      throw new Error('TensorListResize input size ${size} is greater maxNumElements ${this.maxNumElements}');
    this.tensors.length = size;
  }
  return reshape(this.tensors[elementIndex], outputElementShape);
}
```
>` assertShapesMatchAllowUndefinedSize(tensors, elementShape, tensor.shape, 'TensorList shape mismatch: ')
    const tensorList = new TensorList(tensors, elementShape, tensor.dtype, numElements);
    return new TensorList([tensor], elementShape, elementDtype, numElements);
}

/**
 * Split the values of a Tensor into a TensorList.
 * @param length the lengths to use when splitting value along
 *    its first dimension.
 * @param tensor the tensor to split.
 * @param elementShape the shape of the future elements of the
 *    TensorList.
 */
export function split(tensor: Tensor, length: number[], elementShape: number[]):
  const tensorList = new TensorList([tensor], elementShape, elementDtype);
  return new TensorList(split(tensor, length, elementShape));
}

/**
 * Scatter a Tensor to a TensorList at specific indices.
 * @param indices indices to scatter the tensor to.
 * @param tensor the tensor to scatter.
 * @param elementShape the shape of the future elements of the
 *    TensorList.
 * @param numElements the number of elements to reserve for
 *    the values in the TensorList.
 */
export function scatter(indices: number[], tensor: Tensor,
    elementShape: number[], numElements?: number):
  const tensorList = new TensorList([tensor], elementShape, elementDtype);
  return new TensorList(scatter(indices, tensor, elementShape, numElements));

/**
 * Stack a TensorList into a Tensor.
 * @param tensorList the TensorList to stack.
 * @param elementShape the shape of the future elements of the
 *    Tensor.
 */
export function stack(tensorList: TensorList, elementShape: number[]):
  return new TensorList(stack(tensorList, elementShape));

/**
 * Split a Tensor into a TensorList.
 * @param tensor the tensor to split.
 * @param elementShape the shape of the future elements of the
 *    TensorList.
 */
export function split(tensor: Tensor, elementShape: number[]):
  return new TensorList([tensor], elementShape);

/**
 * Scatter a Tensor to a TensorList at specific indices.
 * @param indices indices to scatter the tensor to.
 * @param tensor the tensor to scatter.
 * @param elementShape the shape of the future elements of the
 *    TensorList.
 * @param numElements the number of elements to reserve for
 *    the values in the TensorList.
 */
export function scatter(indices: number[], tensor: Tensor,
    elementShape: number[], numElements?: number):
  const tensorList = new TensorList([tensor], elementShape, elementDtype);
  return new TensorList(scatter(indices, tensor, elementShape, numElements));

/**
 * Stack a TensorList into a Tensor.
 * @param tensorList the TensorList to stack.
 * @param elementShape the shape of the future elements of the
 *    Tensor.
 */
export function stack(tensorList: TensorList, elementShape: number[]):
  return new TensorList(stack(tensorList, elementShape));

/**
 * Split a Tensor into a TensorList.
 * @param tensor the tensor to split.
 * @param elementShape the shape of the future elements of the
 *    TensorList.
 */
export function split(tensor: Tensor, elementShape: number[]):
  return new TensorList([tensor], elementShape);

/**
 * Scatter a Tensor to a TensorList at specific indices.
 * @param indices indices to scatter the tensor to.
 * @param tensor the tensor to scatter.
 * @param elementShape the shape of the future elements of the
 *    TensorList.
 * @param numElements the number of elements to reserve for
 *    the values in the TensorList.
 */
export function scatter(indices: number[], tensor: Tensor,
    elementShape: number[], numElements?: number):
  const tensorList = new TensorList([tensor], elementShape, elementDtype);
  return new TensorList(scatter(indices, tensor, elementShape, numElements));

/**
 * Stack a TensorList into a Tensor.
 * @param tensorList the TensorList to stack.
 * @param elementShape the shape of the future elements of the
 *    Tensor.
 */
export function stack(tensorList: TensorList, elementShape: number[]):
  return new TensorList(stack(tensorList, elementShape));

/**
 * Split a Tensor into a TensorList.
 * @param tensor the tensor to split.
 * @param elementShape the shape of the future elements of the
 *    TensorList.
 */
export function split(tensor: Tensor, elementShape: number[]):
  return new TensorList([tensor], elementShape);
const outputElementShape = un
mergeElementShape(shapeWithoutFirstDim, elementShape);

const elementPerRow = totalLength === 0 ? 0 :
tensor.size / totalLength;

const tensors: Tensor[] = tidy(() => {
  const tensors = [];
  tensor = reshape(tensor, [1, totalLength, elementPerRow]);

  for (let i = 0; i < length.length; ++i) {
    const indices = [0, previousLength, 0];
    const sizes = [1, length[i], elementPerRow];
    tensors[i] = reshape(
      slice(tensor, indices, sizes), outputElementShape as number[]);
  }
  tensor.dispose();
  return tensors;
});

const list = new TensorList([], elementShape, tensor.dtype,
length.length);

for (let i = 0; i < tensors.length; i++) {
  list.setItem(i, tensors[i]);
}
return list;

/**
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 * distributed under the License is distributed on an "AS IS"
 * BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 *=============================================================================
*/

import {DataType, scalar, Tensor} from '@tensorflow/tfjs-core';

import {NamedTensorsMap} from './data/types';
import {ExecutionContext} from './executor/execution_context';
import {TensorArray} from './executor/tensor_array';
import {fromTensor, reserve, scatter, split} from './executor/tensor_list';
import {InternalOpAsyncExecutor, Node} from '../types';

import {cloneTensor, getParamValue, getTensor} from './utils';

export const executeOp: InternalOpAsyncExecutor = async(
    node: Node, tensorMap:
NamedTensorsMap,
    context: ExecutionContext): Promise<Tensor[]> => {
  switch (node.op) {
    case 'If':
    case 'StatelessIf': {
      const thenFunc =
          getParamValue('thenBranch', node, tensorMap, context) as string;
      const elseFunc =
          getParamValue('elseBranch', node, tensorMap, context) as string;
      const cond = getParamValue('cond', node, tensorMap, context) as Tensor;
      const args = getParamValue('args', node,
tensorMap, context) as Tensor[];

      const condValue = await cond.data();
      if (condValue[0]) {
        return context.functionMap[thenFunc].executeFunctionAsync(
            args, context.tensorArrayMap,
context.tensorListMap);
      } else {
        return context.functionMap[elseFunc].executeFunctionAsync(
argin, context.tensorArrayMap,
context.tensorListMap);
      }
    }
    case 'While':
    case 'StatelessWhile': {
      const bodyFunc =
          getParamValue('body', node, tensorMap, context) as string;
      const condFunc =
          getParamValue('cond', node, tensorMap, context) as string;
      const args = getParamValue('args', node,
tensorMap, context) as Tensor[];

      let result: Tensor[] = args;

      while (condValue[0]) {
        // Calculate the condition of the loop
        const condValue = await cond.data();
        if (condValue[0]) {
          // Dispose the intermediate tensors for condition function
          result = await context.functionMap[condFunc].executeFunctionAsync(
result, context.tensorArrayMap,
context.tensorListMap);
        } else {
          const argIds = args.map(tensor => tensor.id);
          let condValue = await condResult[0].data();
        // Dispose the intermediate tensors for condition function
        condResult.forEach(tensor => {
          if (!tensor.kept && argIds.indexOf(tensor.id) === -1) {
            tensor.dispose();
          }
        });
        let result: Tensor[] = args;
        while (condValue[0]) {
          // Record the previous result for intermediate tensor
          const origResult = result;
        // Execution the body of the loop
          result = await context.functionMap[bodyFunc].executeFunctionAsync(
result, context.tensorArrayMap,
context.tensorListMap);
        }
      } // Recalculate the condition of the loop using the latest results.
      const condResult = await context.functionMap[condFunc].executeFunctionAsync(
result, context.tensorArrayMap,
context.tensorListMap);
    }
  }
  return resultIds;
});

const condValue = await condResult[0].data();
  // Dispose the intermediate tensors for condition function
  condResult.forEach(tensor => {
    if (!tensor.kept && argIds.indexOf(tensor.id) === -1) {
      tensor.dispose();
    }
  });
  return resultIds;
});

// Dispose the intermediate tensors for condition function
for (let i = 0; i < length.length; ++i) {
  const indices = [0, previousLength, 0];
  const sizes = [1, length[i], elementPerRow];
  tensors[i] = reshape(
    slice(tensor, indices, sizes), outputElementShape as number[]);
}
resultIds.indexOf(tensor.id) === -1) {
  tensor.dispose();
})

return result;
}

case 'LoopCond': {
  const pred = getParamValue('pred', node, tensorMap, context) as Tensor;
  return [cloneTensor(pred)];
}

case 'Switch': {
  const pred = getParamValue('pred', node, tensorMap, context) as Tensor;
  let data = getParamValue('data', node, tensorMap, context) as Tensor;
  if (!data.keep) {
    data = cloneTensor(data);
  }
  // Outputs nodes: 0 == false, 1 == true
  return (await pred.data())[0] !== undefined ? data.data : undefined;
}

case 'Merge': {
  const inputName = node.inputNames.find(name => getTensor(name, tensorMap, context) !== undefined);
  if (inputName) {
    const data = getTensor(inputName, tensorMap, context);
    return [cloneTensor(data)];
  }
}

return undefined;
}

case 'Enter': {
  const frameId = getParamValue('frameName', node, tensorMap, context) as string;
  const data = getParamValue('tensor', node, tensorMap, context) as Tensor;
  context.enterFrame(frameId);
  return [cloneTensor(data)];
}

case 'Exit': {
  const data = getParamValue('tensor', node, tensorMap, context) as Tensor;
  context.exitFrame();
  return [cloneTensor(data)];
}

case 'NextIteration': {
  const data = getParamValue('tensor', node, tensorMap, context) as Tensor;
  context.nextIteration();
  return [cloneTensor(data)];
}

case 'TensorArrayV3': {
  const size = getParamValue('size', node, tensorMap, context) as number;
  const dtype = getParamValue('dtype', node, tensorMap, context) as DataType;
  const elementShape = getParamValue('elementShape', node, tensorMap, context) as number[];
  const dynamicSize = getParamValue('dynamicSize', node, tensorMap, context) as boolean;
  const clearAfterRead = getParamValue('clearAfterRead', node, tensorMap, context) as boolean;
  const identicalElementShapes = getParamValue('identicalElementShapes', node, tensorMap, context) as boolean;
  const name = getParamValue('name', node, tensorMap, context) as string;
  const tensorArray = new TensorArray(name, dtype, size, elementShape, identicalElementShapes, dynamicSize, clearAfterRead);
  context.addTensorArray(tensorArray);
  return [tensorArray.idTensor, scalar(1.0)];
}

case 'TensorArrayWriteV3': {
  const id = getParamValue('tensorArrayId', node, tensorMap, context) as Tensor;
  const index = getParamValue('index', node, tensorMap, context) as number;
  const writeTensor = getParamValue('tensor', node, tensorMap, context) as Tensor;
  const writeTensorArray = context.getTensorArray(id.id);
  writeTensorArray.write(index, writeTensor);
  return [writeTensorArray.idTensor];
}

case 'TensorArrayReadV3': {
  const readId = getParamValue('tensorArrayId', node, tensorMap, context) as Tensor;
  const readIndex = getParamValue('index', node, tensorMap, context) as number;
  const readTensorArray = context.getTensorArray(readId.id);
  return [readTensorArray.read(readIndex)];
}

case 'TensorArrayGatherV3': {
  const gatherId = getParamValue('tensorArrayId', node, tensorMap, context) as Tensor;
  const gatherIndices = getParamValue('indices', node, tensorMap, context) as number[];
  const gatherDtype = getParamValue('dtype', node, tensorMap, context) as DataType;
  const gatherTensorArray = context.getTensorArray(gatherId.id);
  return [gatherTensorArray.gather(gatherIndices, gatherDtype)];
}

case 'TensorArrayScatterV3': {
  const scatterId = getParamValue('tensorArrayId', node, tensorMap, context) as Tensor;
  const scatterIndices = getParamValue('indices', node, tensorMap, context) as number[];
  const scatterDtype = getParamValue('dtype', node, tensorMap, context) as DataType;
  const scatterTensorArray = context.getTensorArray(scatterId.id);
  return [scatterTensorArray.idTensor];
}

case 'TensorArrayConcatV3': {
  const concatId = getParamValue('tensorArrayId', node, tensorMap, context) as Tensor;
  const concatTensorArray = context.getTensorArray(concatId.id);
  const concatDtype = getParamValue('dtype', node, tensorMap, context) as DataType;
  return [concatTensorArray.concat(concatDtype)];
}

case 'TensorArraySplitV3': {
  const splitId = getParamValue('tensorArrayId', node, tensorMap, context) as Tensor;
  const splitTensor = getParamValue('tensor', node, tensorMap, context) as Tensor;
  const lengths = getParamValue('lengths', node, tensorMap, context) as number[];
  const splitTensorArray = context.getTensorArray(splitId.id);
  return [splitTensorArray.split(lengths, splitTensor)];
}
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```javascript
[splitTensorArray.idTensor];

    case 'TensorArraySizeV3': {
      const sizeId =
        getParamValue('tensorArrayId', node, tensorMap, context) as Tensor;
      const sizeTensorArray =
        context.getTensorArray(sizeId.id);
      return [scalar(sizeTensorArray.size(), 'int32')];
    }

    case 'TensorArrayCloseV3': {
      const closeId =
        getParamValue('tensorArrayId', node, tensorMap, context) as Tensor;
      const closeTensorArray =
        context.getTensorArray(closeId.id);
      closeTensorArray.clearAndClose();
      return [closeTensorArray.idTensor];
    }

    case 'TensorListSetItem': {
      const idTensor =
        getParamValue('tensorListId', node, tensorMap, context) as Tensor;
      const writeTensor =
        getParamValue('tensor', node, tensorMap, context) as Tensor;
      const tensorList =
        context.getTensorList(idTensor.id);
      tensorList.setItem(index, writeTensor);
      return [idTensor];
    }

    case 'TensorListGetItem': {
      const idTensor =
        getParamValue('tensorListId', node, tensorMap, context) as Tensor;
      const readIndex =
        getParamValue('index', node, tensorMap, context) as number;
      const elementShape =
        getParamValue('elementShape', node, tensorMap, context) as number;
      const elementDType =
        getParamValue('elementDType', node, tensorMap, context) as DataType;
      const tensorList =
        context.getTensorList(idTensor.id);
      return [tensorList.getItem(readIndex, elementShape, elementDType)];
    }

    case 'TensorListScatterV2':
    case 'TensorListScatter': {
      const scatterIndices =
        getParamValue('indices', node, tensorMap, context) as number;
      const scatterTensor =
        getParamValue('tensor', node, tensorMap, context) as Tensor;
      const elementShape =
        getParamValue('elementShape', node, tensorMap, context) as number;
      const numElements =
        getParamValue('numElements', node, tensorMap, context) as number;
      const tensorList =
        scatter(scatterTensor, scatterIndices, elementShape, numElements);
      context.addTensorList(tensorList);
      return [tensorList.idTensor];
    }

    case 'TensorListReserve':
    case 'EmptyTensorList': {
      const elementShape =
        getParamValue('elementShape', node, tensorMap, context) as number;
      const elementDtype =
        getParamValue('elementDType', node, tensorMap, context) as DataType;
      let numElementsParam;
      if (node.op === 'TensorListReserve') {
        numElementsParam = 'numElements';
      } else {
        numElementsParam = 'maxNumElements';
      }
      const numElements =
        getParamValue(numElementsParam, node, tensorMap, context) as number;
      const tensorList =
        reserve(elementShape, elementDtype, numElements);
      context.addTensorList(tensorList);
      return [tensorList.idTensor];
    }

    case 'TensorListGather': {
      const gatherId =
        getParamValue('tensorListId', node, tensorMap, context) as Tensor;
      const gatherIndices =
        getParamValue('indices', node, tensorMap, context) as number;
      const gatherTensor =
        getParamValue('tensor', node, tensorMap, context) as Tensor;
      const elementShape =
        getParamValue('elementShape', node, tensorMap, context) as number;
      const elementDtype =
        getParamValue('elementDType', node, tensorMap, context) as DataType;
      const numElements =
        getParamValue('numElements', node, tensorMap, context) as number;
      const tensorList =
        gather(gatherId, gatherIndices, gatherTensor, elementShape, numElements);
      context.addTensorList(tensorList);
      return [tensorList.idTensor];
    }

    case 'TensorListStack': {
      const idTensor =
        getParamValue('tensorListId', node, tensorMap, context) as Tensor;
      const elementShape =
        getParamValue('elementShape', node, tensorMap, context) as number;
      const elementDtype =
        getParamValue('elementDType', node, tensorMap, context) as DataType;
      const numElements =
        getParamValue('numElements', node, tensorMap, context) as number;
      const tensorList =
        stack(elementShape, elementDtype, numElements);
      context.addTensorList(tensorList);
      return [tensorList.idTensor];
    }

    case 'TensorListFromTensor': {
      const tensor =
        getParamValue('tensor', node, tensorMap, context) as Tensor;
      const elementShape =
        getParamValue('elementShape', node, tensorMap, context) as number;
      const elementDtype =
        getParamValue('elementDType', node, tensorMap, context) as DataType;
      const tensorList =
        fromTensor(tensor, elementShape, elementDtype);
      context.addTensorList(tensorList);
      return [tensorList.idTensor];
    }

    case 'TensorListConcat': {
      const concatId =
        getParamValue('tensorListId', node, tensorMap, context) as Tensor;
      const tensorList =
        context.getTensorList(concatId.id);
      const concatDtype =
        getParamValue('dtype', node, tensorMap, context) as DataType;
      const numElements =
        getParamValue('numElements', node, tensorMap, context) as number;
      const tensorList =
        concat(tensorList, concatDtype, numElements);
      context.addTensorList(tensorList);
      return [tensorList.idTensor];
    }
```

as number[];

return [tensorList.concat(concatDtype, elementShape)];

} case 'TensorListPushBack': {

const idTensor =
  getParamValue('tensorListId', node, tensorMap, context) as Tensor;

const writeTensor =
  getParamValue('tensor', node, tensorMap, context) as Tensor;

const tensorList =
  context.getTensorList(idTensor.id);

return [tensorList.pushBack(writeTensor)];

} case 'TensorListPopBack': {

const idTensor =
  getParamValue('tensorListId', node, tensorMap, context) as Tensor;

const elementShape =
  getParamValue('elementShape', node, tensorMap, context) as number[];

const elementDType =
  getParamValue('elementDType', node, tensorMap, context) as DataType;

const tensorList = context.getTensorList(idTensor.id);

return [tensorList.popBack(elementShape, elementDType)];

} case 'TensorListSplit': {

const splitTensor =
  getParamValue('tensor', node, tensorMap, context) as Tensor;

const elementShape =
  getParamValue('elementShape', node, tensorMap, context) as number[];

const lengths =
  getParamValue('lengths', node, tensorMap, context) as number[];

const tensorList = split(splitTensor, lengths, elementShape);

context.addTensorList(tensorList);

return [tensorList.idTensor];

}

default:

throw TypeError(`Node type ${node.op} is not implemented`);

};

export const CATEGORY =
  'control';

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 */

import {Rank, Tensor, Tensor3D, Tensor4D, Tensor5D} from '@tensorflow/tfjs-core';
// tslint:disable-next-line: no-imports-from-dist
import * as tfOps from '@tensorflow/tfjs-core/dist/ops/ops_for_converter';

import {NamedTensorsMap} from '../../data/types';
import {ExecutionContext} from '../../executor/execution_context';
import {InternalOpExecutor, Node} from '../types';

import {getPadding, getParamValue} from './utils';

function fusedConvAndDepthWiseParams(
    node: Node, tensorMap: NamedTensorsMap, context: ExecutionContext) {

    const [extraOp, activationFunc] =
        getParamValue('fusedOps', node, tensorMap, context) as string[];

    const isBiasAdd = extraOp === 'biasadd';
    const isPrelu = activationFunc === 'prelu';
    const isBatchNorm = extraOp === 'fusedbatchnorm';

    const numArgs =
        (getParamValue('numArgs', node, tensorMap, context) as number);

    if (isBiasAdd) {
        if (isPrelu && numArgs !== 2) {
            throw new Error(
                'FusedConv2d and DepthwiseConv2d with BiasAdd ' +
                'and Prelu must have two extra arguments: bias and alpha.');
        }
        if (!isPrelu && numArgs !== 1) {
            throw new Error(
                'FusedConv2d and DepthwiseConv2d with BiasAdd must have ' +
                'one extra argument: bias.');
        }
    }
    if (isBatchNorm) {
        throw new Error(
            'FusedConv2d and DepthwiseConv2d with FusedBatchNorm is not supported.');
    }

    const stride = getParamValue('strides', node, tensorMap, context) as number[];
    const pad = getPadding(node, tensorMap, context);
    const dataFormat =
        (getParamValue('dataFormat', node, tensorMap, context) as string)
            .toUpperCase();
    const dilations =
        getParamValue('dilations', node, tensorMap, context) as number[];
    const leakyreluAlpha =
        getParamValue('leakyreluAlpha', node, tensorMap, context) as number;

    return {
        stride,
        pad,
        dataFormat,
        dilations,
        leakyreluAlpha
    };

} export const executeOp: InternalOpExecutor =
    (node: Node, tensorMap: NamedTensorsMap, context: ExecutionContext): Tensor[] => {

switch (node.op) {

case 'Conv1D': {

const stride =
    getParamValue('stride', node, tensorMap, context) as number;

const pad = getPadding(node, tensorMap, context);

const numArgs =
    (getParamValue('numArgs', node, tensorMap, context) as number);

if (isBiasAdd) {
    if (isPrelu && numArgs !== 2) {
        throw new Error('FusedConv2d and DepthwiseConv2d with BiasAdd and Prelu ' +
            'must have two extra arguments: bias and alpha.');
    }
}

if (isBiasAdd) {
    if (isPrelu && numArgs !== 1) {
        throw new Error('FusedConv2d and DepthwiseConv2d ' +
            'with BiasAdd must have one extra argument: bias.');
    }
}

if (isBatchNorm) {
    throw new Error('FusedConv2d and DepthwiseConv2d with FusedBatchNorm ' +
        'is not supported.');
}

const stride = getParamValue('strides', node, tensorMap, context) as number[];

const pad = getPadding(node, tensorMap, context);

const numDilations =
    getParamValue('dilations', node, tensorMap, context) as number[];

const leakyreluAlpha =
    getParamValue('leakyreluAlpha', node, tensorMap, context) as number;

const leakyreluArg =
    getParamValue('leakyreluArg', node, tensorMap, context) as number;

const biasArg =
    getParamValue('biasArg', node, tensorMap, context) as number;

const preluArg =
    getParamValue('preluArg', node, tensorMap, context) as number;

const activationFunc =
    getParamValue('activationFunc', node, tensorMap, context) as string;

const executeOp: InternalOpExecutor =
    (node: Node, tensorMap: NamedTensorsMap, context: ExecutionContext): Tensor[] => {

    switch (node.op) {

    case 'Conv1D': {

        const stride =
            getParamValue('stride', node, tensorMap, context) as number;

        const pad = getPadding(node, tensorMap, context);

        const numDilations =
            getParamValue('dilations', node, tensorMap, context) as number[];

        const leakyreluAlpha =
            getParamValue('leakyreluAlpha', node, tensorMap, context) as number;

        const leakyreluArg =
            getParamValue('leakyreluArg', node, tensorMap, context) as number;

        const biasArg =
            getParamValue('biasArg', node, tensorMap, context) as number;

        const preluArg =
            getParamValue('preluArg', node, tensorMap, context) as number;

        const activationFunc =
            getParamValue('activationFunc', node, tensorMap, context) as string;

        const executeOp: InternalOpExecutor =
            (node: Node, tensorMap: NamedTensorsMap, context: ExecutionContext): Tensor[] => {

        return [tfOps.conv1d(node, tensorMap, context) as number[]];

    }

    default:

        throw new Error('Node type ' +
            node.op + ' is not implemented');

    }

    return [tfOps.conv1d(node, tensorMap, context) as number[]];

}
Tensor3D,

getParamValue('filter', node, tensorMap, context) as Tensor3D,
stride, pad as 'valid' | 'same', dataFormat as 'NWC' | 'NCW',
dilation) as number, case 'Conv2D': {
  const stride =
getParamValue('strides', node, tensorMap, context) as number[],
  const pad = getPadding(node, tensorMap, context),
  const dataFormat =
getParamValue('dataFormat', node, tensorMap, context) as string
  .toUpperCase();
}

getParamValue('dilations', node, tensorMap, context) as number[],
return [tfOps.avgPool(
  const pad = getPadding(node, tensorMap, context) as number[],
  const dataFormat =
getParamValue('dataFormat', node, tensorMap, context) as string
  .toUpperCase();
)

const pad = getPadding(node, tensorMap, context) as number[],
return [tfOps.conv2d(
  const pad = getPadding(node, tensorMap, context) as number[],
  const dataFormat =
getParamValue('dataFormat', node, tensorMap, context) as string
  .toUpperCase();
)

const pad = getPadding(node, tensorMap, context) as number[],
return [tfOps.conv3d(
  const pad = getPadding(node, tensorMap, context) as number[],
  const dataFormat =
getParamValue('dataFormat', node, tensorMap, context) as string
  .toUpperCase();
)

const pad = getPadding(node, tensorMap, context) as number[],
return [tfOps.conv2dTranspose(
  const pad = getPadding(node, tensorMap, context) as number[],
  const dataFormat =
getParamValue('dataFormat', node, tensorMap, context) as string
  .toUpperCase();
)

const pad = getPadding(node, tensorMap, context) as number[],
return [tfOps.conv3dTranspose(
  const pad = getPadding(node, tensorMap, context) as number[],
  const dataFormat =
getParamValue('dataFormat', node, tensorMap, context) as string
  .toUpperCase();
)
getParamValue('x', node, tensorMap, context) as Tensor3D

const stride =
getParamValue('strides', node, tensorMap, context) as number[];

const pad =
getParamValue('pad', node, tensorMap, context);

const kernelSize =
getParamValue('kernelSize', node, tensorMap, context) as number[];

return tfOps.maxPool(
    getParamValue('x', node, tensorMap, context) as Tensor3D |
    Tensor4D,
    [kernelSize[1], kernelSize[2], kernelSize[3]],
    [stride[1], stride[2], stride[3]],
    pad as 'valid' | 'same')
);
getParamValue('value', node, tensorMap, context) as number;

const start = getParamValue('start', node, tensorMap, context) as number;

const stop = getParamValue('stop', node, tensorMap, context) as number;

const num = getParamValue('num', node, tensorMap, context) as number;

const logits = getParamValue('logits', node, tensorMap, context) as Tensor1D;

const numSamples = getParamValue('numSamples', node, tensorMap, context) as number;

return [tfOps.fill(shape, value, dtype)];

return [tfOps.linspace(start, stop, num)];

return [tfOps.randomUniform(shape, minval, maxval, dtype)];

return [tfOps.range(start, stop, step, dtype)];

return [tfOps.truncatedNormal(shape, mean, stdDev, dtype, seed)];

return [tfOps.zeros(shape, dtype)];

return [tfOps.onesLike(x, dtype)];

return [tfOps.zerosLike(x, dtype)];

throw TypeError(`Node type ${node.op} is not implemented`);
getParamValue('iouThreshold', node, tensorMap, context) as number;
const scoreThreshold =
getParamValue('scoreThreshold', node, tensorMap, context) as number;
const softNmsSigma =
getParamValue('softNmsSigma', node, tensorMap, context) as number;

const maxOutputSize, iouThreshold, scoreThreshold, softNmsSigma = nmsParams(node, tensorMap, context);

return {
  boxes,
  scores,
  maxOutputSize,
  iouThreshold,
  scoreThreshold,
  softNmsSigma
};

export const executeOp:
  InternalOpAsyncExecutor = async(
      node: Node, tensorMap: NamedTensorsMap,
      context: ExecutionContext): Promise<Tensor[]> => {
    switch (node.op) {
      case 'NonMaxSuppressionV5': {
        const
          {boxes, scores, maxOutputSize, iouThreshold, scoreThreshold,
          softNmsSigma} = nmsParams(node, tensorMap, context);
        
        const result = await
tfOps.image.nonMaxSuppressionWithScoreAsync(
          boxes as Tensor2D, scores as Tensor1D, maxOutputSize,
          iouThreshold, scoreThreshold, softNmsSigma);
        
        return [result.selectedIndices,
            result.selectedScores];
      }
      case 'NonMaxSuppressionV4': {
        const
          {boxes, scores, maxOutputSize, iouThreshold, scoreThreshold} =
            nmsParams(node, tensorMap, context);

        return {
          boxes,
          scores,
          maxOutputSize,
          iouThreshold,
          scoreThreshold
        };
      }
      case 'NonMaxSuppressionV3': {
        const
          {boxes, scores, maxOutputSize, iouThreshold, scoreThreshold} =
            nmsParams(node, tensorMap, context);

        return {
          boxes,
          scores,
          maxOutputSize,
          iouThreshold,
          scoreThreshold
        };
      }
      case 'NonMaxSuppressionV2': {
        const
          {boxes, scores, maxOutputSize, iouThreshold, scoreThreshold} =
            nmsParams(node, tensorMap, context);

        return {
          boxes,
          scores,
          maxOutputSize,
          iouThreshold,
          scoreThreshold
        };
      }
      case 'NonMaxSuppressionV1': {
        const
          {boxes, scores, maxOutputSize, iouThreshold, scoreThreshold} =
            nmsParams(node, tensorMap, context);

        return {
          boxes,
          scores,
          maxOutputSize,
          iouThreshold,
          scoreThreshold
        };
      }
      case 'TopKV2': {
        const x = getParamValue('x', node, tensorMap, context) as Tensor;
        const k = getParamValue('k', node, tensorMap, context) as number;
        const sorted =
        getParamValue('sorted', node, tensorMap, context) as boolean;
        
        return [result.values, result.indices];
      }
      case 'Unique': {
        const
          x = getParamValue('x', node, tensorMap, context) as Tensor;

        return [result.values, result.indices];
      }
      case 'UniqueV2': {
        const
          x = getParamValue('x', node, tensorMap, context) as Tensor;

        return [result.values, result.indices];
      }
      default:
        throw TypeError('Node type $ {node.type} is not implemented');
    }
  }

export const CATEGORY = 'dynamic';

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 *
 *============================================================================
 */

import {Tensor} from '@tensorflow/tfjs-core';
import * as tfOps from '@tensorflow/tfjs-core/dist/ops/ops_for_converter';
import {NamedTensorsMap} from '../../data/types';
import {ExecutionContext} from '../../executor/execution_context';
import {InternalOpExecutor, Node} from '../types';

import {getParamValue} from './utils';

export const executeOp: InternalOpExecutor =
  (node: Node, tensorMap: NamedTensorsMap, context: ExecutionContext): Tensor[] => {
    switch (node.op) {
      case 'TopKV2': {
        const x = getParamValue('x', node, tensorMap, context) as Tensor;
        const k = getParamValue('k', node, tensorMap, context) as number;
        const sorted =
        getParamValue('sorted', node, tensorMap, context) as boolean;
        
        return [result.values, result.indices];
      }
      case 'Unique': {
        const
          x = getParamValue('x', node, tensorMap, context) as Tensor;

        return [result.values, result.indices];
      }
      case 'UniqueV2': {
        const
          x = getParamValue('x', node, tensorMap, context) as Tensor;

        return [result.values, result.indices];
      }
      default:
        throw TypeError('Node type $ {node.type} is not implemented');
    }
  }

export const CATEGORY = 'evaluation';

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============================================================================

```javascript
import {Tensor} from '@tensorflow/tfjs-core';
import * as tfOps from '@tensorflow/tfjs-core/dist/ops_for_converter';
import {NamedTensorsMap} from '@tensorflow/tfjs-core/dist/data/types';
import {ExecutionContext} from '@tensorflow/tfjs-core/dist/executor/executor_context';
import {InternalOpExecutor, Node} from '@tensorflow/tfjs-core/dist/types';

  switch (node.op) {
    case 'Const': {
      return tensorMap[node.name];
    }
    case 'PlaceholderWithDefault': {
      const def = getParamValue('default', node, tensorMap, context) as Tensor;
      return [getTensor(node.name, tensorMap, context) || def];
    }
    case 'Placeholder':
      return [getTensor(node.name, tensorMap, context)];
    case 'Identity':
    case 'StopGradient':
    case 'FakeQuantWithMinMaxVars': {
      // This op is currently ignored.
      const data = getParamValue('x', node, tensorMap, context) as Tensor;
      return [cloneTensor(data)];
    }
    case 'IdentityN':
      return (getParamValue('x', node, tensorMap, context) as Tensor[]).map((t: Tensor) => cloneTensor(t));
    case 'Snapshot':
      const snapshot = getParamValue('x', node, tensorMap, context) as Tensor;
      return [cloneTensor(snapshot)];
    case 'Shape':
      return [tfOps.tensor1d((getParamValue('x', node, tensorMap, context) as Tensor).shape, 'int32')];
    case 'ShapeN':
      return (getParamValue('x', node, tensorMap, context) as Tensor[]).map((t: Tensor) => tfOps.tensor1d(t.shape));
    case 'Size':
      return [tfOps.scalar((getParamValue('x', node, tensorMap, context) as Tensor).size, 'int32')];
    case 'Rank':
      return [tfOps.scalar((getParamValue('x', node, tensorMap, context) as Tensor).rank, 'int32')];
    case 'NoOp':
      return [tfOps.scalar(1)];
    case 'Print':
      const input = getParamValue('x', node, tensorMap, context) as Tensor;
      const message = getParamValue('message', node, tensorMap, context) as string;
      const summarize = getParamValue('summarize', node, tensorMap, context) as number;
      console.warn('The graph has a tf.print() operation, usually used for debugging, which slows down performance.');
      console.log(message);
      for (let i = 0; i < input.dataSync().length; i++) {
        console.log(Array.prototype.slice.call(input.dataSync(), i, i + summarize));
      }
      return [input];
  }
  throw TypeError(`Node type ${node.op} is not implemented`);
};
```

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 */
```
```javascript
this.tensorMap.forEach((value) => value.dispose());
this.tensorMap.clear();
this.handle.dispose();

/**
 * The number of items in the hash table.
 * @returns {number} number
 */
size(): number {
    return this.tensorMap.size;
}

/**
 * Replaces the contents of the table with the specified keys and values.
 * @param {Tensor} keys - Keys to store in the hashtable.
 * @param {Values} values - Values to store in the hashtable.
 */
async import(keys, values) {
    this.checkKeyAndValueTensor(keys, values);
    this.tensorMap.forEach(value => value.dispose());
    this.tensorMap.clear();
    this.handle.dispose();
    this.tensorMap.clear();
    return tidy(() => {
        const keysLength = keys.length;
        const valuesLength = values.length;
        util.assert(
            keysLength === valuesLength,
            () => `The number of elements doesn't match, keys has ` +
                `${keysLength} elements, the values has ` +
                `${valuesLength} elements.`);
        for (let i = 0; i < keysLength; i++) {
            const key = keys[i];
            const value = values[i];
            keep(value);
            this.tensorMap.set(key, value);
        }
        return this.handle;
    });
}

/**
 * Looks up keys in a hash table, outputs the corresponding values.
 * @param {Keys} keys - Keys to look up.
 * @param {DefaultValue} defaultValue - The scalar `defaultValue` is the value output for keys
 *     not present in the table.
 * @returns {Values} return tensor.
 */
async find(keys, defaultValue) {
    this.checkKeyAndValueTensor(keys, defaultValue);
    const $keys = await keys.data();
    return tidy(() => {
        const result: Tensor[] = [];
        for (let i = 0; i < $keys.length; i++) {
            const key = $keys[i];
            const value = this.findWithDefault(key, defaultValue);
            result.push(value);
        }
        return stack(result);
    });
}

private findWithDefault(key, defaultValue) {
    const result = this.tensorMap.get(key);
    return result != null ? result : defaultValue;
}

private checkKeyAndValueTensor(key, value) {
    if (key.dtype !== this.keyDType) {
        throw new Error(`Expect key dtype ${this.keyDType}, but got ` +
            `${key.dtype}`);
    }
    if (value.dtype !== this.valueDType) {
        throw new Error(`Expect value dtype ${this.valueDType}, but got ` +
            `${value.dtype}`);
    }
}
```

---

`import {DataType, Tensor} from '@tensorflow/tfjs-core';
import {NamedTensorsMap} from '../../data/types';
import {ExecutionContext} from '../../executor/execution_context';
import {HashTable} from '../../executor/hash_table';
import {ResourceManager} from '../../executor/resource_manager';
import {InternalOpAsyncExecutor, Node} from '../types';
import {getNodeValue} from './utils';

export const executeOp: InternalOpAsyncExecutor = async (node, tensorMap, context, resourceManager) => {
    switch (node.op) {
        case 'HashTable':
            case 'HashTableV2': {
                const keyDType = getNodeValue('keyDType', node, tensorMap, context) as DataType;
                const valueDType = getNodeValue('valueDType', node, tensorMap, context) as DataType;
                const hashTable = new HashTable(keyDType, valueDType);
                resourceManager.addHashTable(node.name, hashTable);
                return [hashTable.handle];
            }
        case 'lookupTableImport':
            case 'lookupTableImportV2': {
                const handle = getNodeValue('tableHandle', node, tensorMap, context) as Tensor;
                const keys = getNodeValue('keys', node, tensorMap, context) as Tensor;
                const values = getNodeValue('values', node, tensorMap, context) as Tensor;
                const tableHandle = getParamValue('tableHandle', node, tensorMap, context) as TableHandle;
                const resourceManager = getParamValue('resourceManager', node, tensorMap, context) as ResourceManager;
                return [resourceManager.getHashTableById(handle.id)];
            }
    }
    return [
        'InvalidGraphError' + ' ' + (node.op + ' node ' + node.name + ' at ' + node.location + ' does not have an associated Tensor operation')
    ];
};
```
return [await hashTable.import(keys, values)];

  case 'LookupTableFind':
  case 'LookupTableFindV2':
    {  
      const handle = getParamValue('tableHandle', node, tensorMap, context)
      const keys = getParamValue('keys', node, tensorMap, context) as Tensor;
      const defaultValue = getParamValue('defaultValue', node, tensorMap, context) as Tensor;
      const hashTable = resourceManager.getHashTableById(handle.id);
      return [await hashTable.find(keys, defaultValue)];
    }

  default:
    throw TypeError(`Node type ${node.op} is not implemented`);
  }
}

export const CATEGORY = 'hash_table';

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 *
=============================================================================

*/

import {Tensor, Tensor1D, Tensor2D, Tensor3D, Tensor4D} from '@tensorflow/tfjs-core';
import * as tfOps from '@tensorflow/tfjs-core/dist/ops/ops_for_converter';
import {NamedTensorsMap} from '../../data/types';
import {ExecutionContext} from '../../executor/execution_context';
import {InternalOpExecutor, Node} from '../types';

import {getParamValue} from './utils';

  switch (node.op) {
    case 'ResizeBilinear': {
      const images = getParamValue('images', node, tensorMap, context) as Tensor;
      const size = getParamValue('size', node, tensorMap, context) as number[];
      const alignCorners = getParamValue('alignCorners', node, tensorMap, context) as boolean;
      const halfPixelCenters = getParamValue('halfPixelCenters', node, tensorMap, context) as boolean;
      return [tfOps.image.resizeBilinear(images as Tensor3D | Tensor4D, [size[0], size[1]], alignCorners, halfPixelCenters)];
    }
    case 'ResizeNearestNeighbor': {
      const images = getParamValue('images', node, tensorMap, context) as Tensor;
      const size = getParamValue('size', node, tensorMap, context) as number[];
      const alignCorners = getParamValue('alignCorners', node, tensorMap, context) as boolean;
      const halfPixelCenters = getParamValue('halfPixelCenters', node, tensorMap, context) as boolean;
      return [tfOps.image.resizeNearestNeighbor(images as Tensor3D | Tensor4D, [size[0], size[1]], alignCorners, halfPixelCenters)];
    }
    case 'CropAndResize': {
      const image = getParamValue('image', node, tensorMap, context) as Tensor;
      const boxes = getParamValue('boxes', node, tensorMap, context) as Tensor;
      const boxInd = getParamValue('boxInd', node, tensorMap, context) as Tensor;
      const cropSize = getParamValue('cropSize', node, tensorMap, context) as number[];
      const method = getParamValue('method', node, tensorMap, context) as string;
      const extrapolationValue = getParamValue('extrapolationValue', node, tensorMap, context) as number;
      return [tfOps.image.cropAndResize(image as Tensor4D, boxes as Tensor2D, boxInd as Tensor1D, cropSize as [number, number], method as 'bilinear' | 'nearest', extrapolationValue)];
    }
    default:
      throw TypeError(`Node type ${node.op} is not implemented`);
  }
}

export const CATEGORY = 'image';

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 */
```typescript
import {Tensor} from '@tensorflow/tfjs-core';
// tslint:disable-next-line: no-imports-from-dist
import * as
  tfOps from '@tensorflow/tfjs-core/dist/ops/ops_for_converter';
import {NamedTensorsMap} from
  '../data/types';
import {ExecutionContext} from '../executor/execution_context';
import {InternalOpExecutor, Node} from './types';
import {getParamValue} from './utils';

export const executeOp: InternalOpExecutor =
    (node: Node, tensorMap: NamedTensorsMap,
     context: ExecutionContext): Tensor[] => {
      switch (node.op) {
        case 'Equal': {
          return [tfOps.equal(
              getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context) as Tensor)];
        }
        case 'NotEqual': {
          return [tfOps.notEqual(
              getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context) as Tensor)];
        }
        case 'Greater': {
          return [tfOps.greater(
              getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context) as Tensor)];
        }
        case 'GreaterEqual': {
          return [tfOps.greaterEqual(
              getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context) as Tensor)];
        }
        case 'Less': {
          return [tfOps.less(
              getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context) as Tensor)];
        }
        case 'LessEqual': {
          return [tfOps.lessEqual(
              getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context) as Tensor)];
        }
        case 'LogicalAnd': {
          return [tfOps.logicalAnd(
              getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context) as Tensor)];
        }
        case 'LogicalNot': {
          return [tfOps.logicalNot(
              getParamValue('a', node, tensorMap, context) as Tensor)];
        }
        case 'LogicalOr': {
          return [tfOps.logicalOr(
              getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context) as Tensor)];
        }
        case 'Select':
        case 'SelectV2': {
          return [tfOps.where(
              getParamValue('condition', node, tensorMap, context) as Tensor,
              getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context) as Tensor)];
        }
        default:
          throw TypeError(`Node type ${node.op} is not implemented`);
      }
    };

// CATEGORY = 'logical';
```

if (isBiasAdd) {
  if (isPrelu && numArgs !== 2) {
    throw Error('Fused MatMul with BiasAdd and Prelu must have two extra arguments: bias and alpha.');
  }
}

if (isPrelu && numArgs !== 1) {
  throw Error('Fused MatMul with BiasAdd must have one extra argument: bias.');
}

getParamValue('args', node, tensorMap, context) as Tensor[
  function (a) {
    getParamValue('a', node, tensorMap, context) as Tensor2D
  }
  b: getParamValue('b', node, tensorMap, context) as Tensor2D
}

transposeA: getParamValue('transposeA', node, tensorMap, context) as

boolean,

transposeB: getParamValue('transposeB', node, tensorMap, context) as

boolean,

bias: biasArg,

activation: activationFunc as tfOps.fused.Activation,

preluActivationWeights:

preluArg,

leakyreluAlpha

}

export const CATEGORY = 'matrices';

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 */

import {Scalar, Tensor, Tensor3D, Tensor4D} from '@tensorflow/tfjs-core';

import * as tfOps from '@tensorflow/tfjs-core/dist/ops/ops_for_converter';

import {NamedTensorsMap} from '../../data/types';

import {ExecutionContext} from '../../executor/execution_context';

import {getParamValue} from './utils';

export const executeOp: InternalOpExecutor =
    (node: Node, tensorMap: NamedTensorsMap,

  context: ExecutionContext): Tensor[

  switch (node.op) {
    case 'FusedBatchNorm':
    case 'FusedBatchNormV2': {
      return [tfOps.batchNorm(
        getParamValue('x', node, tensorMap, context) as Tensor,
        getParamValue('mean', node, tensorMap, context) as Tensor,

        getParamValue('variance', node, tensorMap, context) as Tensor,

        getParamValue('offset', node, tensorMap, context) as Tensor,

        getParamValue('scale', node, tensorMap, context) as Tensor,

        getParamValue('epsilon', node, tensorMap, context) as number)
      ];
    }
    case 'FusedBatchNormV3': {
      return [tfOps.batchNorm(
        getParamValue('x', node, tensorMap, context) as Tensor,

        getParamValue('mean', node, tensorMap, context) as Tensor,

        getParamValue('variance', node, tensorMap, context) as Tensor,

        getParamValue('offset', node, tensorMap, context) as Tensor,

        getParamValue('scale', node, tensorMap, context) as Tensor,

        getParamValue('epsilon', node, tensorMap, context) as number)
      ];
    }
    case 'LRN': {
      return [tfOps.localResponseNormalization(
        getParamValue('x', node, tensorMap, context) as Tensor3D |

        Tensor4D,

        getParamValue('radius', node, tensorMap, context) as number,

        getParamValue('bias', node, tensorMap, context) as number,

        getParamValue('scale', node, tensorMap, context) as number,

        getParamValue('epsilon', node, tensorMap, context) as number,

        getParamValue('alpha', node, tensorMap, context) as number,

        getParamValue('beta', node, tensorMap, context) as number)
      ];
    }
    case 'Softmax': {
      return [tfOps.softmax(
        getParamValue('x', node, tensorMap, context) as Tensor)
      ];
    }
    case 'LogSoftmax': {
      return [tfOps.logSoftmax(
        getParamValue('x', node, tensorMap, context) as Tensor)
      ];
    }
    case 'SparseToDense': {
      return [tfOps.sparseToDense(
        getParamValue('sparseIndices', node, tensorMap, context) as

        Tensor,

        getParamValue('defaultValue', node, tensorMap, context) as

        number[],

        getParamValue('sparseValues', node, tensorMap, context) as

        Scalar)
      ];
    }
    default:
      throw TypeError(`Node type ${node.op} is not implemented`);
  }
}
import {Tensor, Tensor1D, Tensor2D} from '@tensorflow/tfjs-core';
import * as tfOps from '@tensorflow/tfjs-core/dist/ops_for_converter';

  switch (node.op) {
    case 'Max': {
      const axis = getParamValue('axis', node, tensorMap, context) as number[];
      const keepDims = getParamValue('keepDims', node, tensorMap, context) as boolean;
      return [tfOps.max(getParamValue('x', node, tensorMap, context) as Tensor, axis, keepDims)];
    }
    case 'Mean': {
      const axis = getParamValue('axis', node, tensorMap, context) as number[];
      const keepDims = getParamValue('keepDims', node, tensorMap, context) as boolean;
      return [tfOps.mean(getParamValue('x', node, tensorMap, context) as Tensor, axis, keepDims)];
    }
    case 'Min': {
      const axis = getParamValue('axis', node, tensorMap, context) as number[];
      const keepDims = getParamValue('keepDims', node, tensorMap, context) as boolean;
      return [tfOps.min(getParamValue('x', node, tensorMap, context) as Tensor, axis, keepDims)];
    }
    case 'Sum': {
      const axis = getParamValue('axis', node, tensorMap, context) as number[];
      const keepDims = getParamValue('keepDims', node, tensorMap, context) as boolean;
      return [tfOps.sum(getParamValue('x', node, tensorMap, context) as Tensor, axis, keepDims)];
    }
    case 'All': {
      const axis = getParamValue('axis', node, tensorMap, context) as number[];
      const keepDims = getParamValue('keepDims', node, tensorMap, context) as boolean;
      return [tfOps.all(getParamValue('x', node, tensorMap, context) as Tensor, axis, keepDims)];
    }
    case 'Any': {
      const axis = getParamValue('axis', node, tensorMap, context) as number[];
      const keepDims = getParamValue('keepDims', node, tensorMap, context) as boolean;
      return [tfOps.any(getParamValue('x', node, tensorMap, context) as Tensor, axis, keepDims)];
    }
    case 'ArgMax': {
      const axis = getParamValue('axis', node, tensorMap, context) as number;
      return [tfOps.argmax(getParamValue('x', node, tensorMap, context) as Tensor, axis)];
    }
    case 'ArgMin': {
      const axis = getParamValue('axis', node, tensorMap, context) as number;
      return [tfOps.argmin(getParamValue('x', node, tensorMap, context) as Tensor, axis)];
    }
    case 'Prod': {
      const axis = getParamValue('axis', node, tensorMap, context) as number[];
      const keepDims = getParamValue('keepDims', node, tensorMap, context) as boolean;
      return [tfOps.prod(getParamValue('x', node, tensorMap, context) as Tensor, axis, keepDims)];
    }
    case 'Cumsum': {
      const axis = getParamValue('axis', node, tensorMap, context) as number;
      const exclusive = getParamValue('exclusive', node, tensorMap, context) as boolean;
      return [tfOps.cumsum(getParamValue('x', node, tensorMap, context) as Tensor, axis, exclusive, reverse)];
    }
    case 'Bincount': {
      const x = getParamValue('x', node, tensorMap, context) as Tensor1D;
      const weights = getParamValue('weights', node, tensorMap, context) as Tensor1D;
      const size = getParamValue('size', node, tensorMap, context) as number;
      return [tfOps.bincount(x, weights, size)];
    }
    case 'DenseBincount': {
      const x = getParamValue('x', node, tensorMap, context) as Tensor1D;
      const weights = getParamValue('weights', node, tensorMap, context) as Tensor2D;
      const size = getParamValue('size', node, tensorMap, context) as number;
      return [tfOps.densebincount(x, weights, size, node, tensorMap, context) as boolean];
    }
  }
}
```javascript
binaryOutput) | throw TypeError(`Node type ${node.op} is not implemented`);

export const CATEGORY = 'reduction';

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 */

import {Scalar, Tensor, Tensor1D, tidy, util} from '@tensorflow/tfjs-core';
import * as tfOps from '@tensorflow/tfjs-core/dist/ops/ops_for_converter';
import {NamedTensorsMap} from '../../data/types';
import {ExecutionContext} from '../../executor/execution_context';
import {InternalOpExecutor, Node} from '../types';
import {getParamValue} from './utils';

    switch (node.op) {
        case 'ConcatV2':
        case 'Concat': {
            const n = getParamValue('n', node, tensorMap, context) as number;
            const axis = getParamValue('axis', node, tensorMap, context) as number;
            let inputs = getParamValue('tensors', node, tensorMap, context) as Tensor[];
            inputs = inputs.slice(0, n);
            return [tfOps.concat(inputs, axis)];
        }
        case 'Gather': {
            const input = getParamValue('x', node, tensorMap, context) as Tensor;
            const indices = getParamValue('indices', node, tensorMap, context) as Tensor1D;
            return [tfOps.gather(input, tfOps.cast(indices, 'int32'), 0)];
        }
        case 'GatherV2': {
            const axis = getParamValue('axis', node, tensorMap, context) as number;
            const batchDims = getParamValue('batchDims', node, tensorMap, context) as number;
            const input = getParamValue('x', node, tensorMap, context) as Tensor;
            const indices = getParamValue('indices', node, tensorMap, context) as Tensor1D;
            return [tfOps.gather(input, tfOps.cast(indices, 'int32'), axis, batchDims)];
        }
        case 'Reverse': {
            const dims = getParamValue('dims', node, tensorMap, context) as boolean[];
            const axis = [i];
            for (let i = 0; i < dims.length; i++) {
                if (dims[i]) {
                    axis.push(i);
                }
            }
            const input = getParamValue('x', node, tensorMap, context) as Tensor;
            return [tfOps.reverse(input, axis)];
        }
        case 'ReverseV2': {
            const axis = getParamValue('axis', node, tensorMap, context) as number;
            const input = getParamValue('x', node, tensorMap, context) as Tensor;
            return [tfOps.reverse(input, axis)];
        }
        case 'StridedSlice': {
            const begin = getParamValue('begin', node, tensorMap, context) as number[];
            const end = getParamValue('end', node, tensorMap, context) as number[];
            const strides = getParamValue('strides', node, tensorMap, context) as number[];
            const beginMask = getParamValue('beginMask', node, tensorMap, context) as number;
            const endMask = getParamValue('endMask', node, tensorMap, context) as number;
            const ellipsisMask = getParamValue('ellipsisMask', node, tensorMap, context) as number;
            const newAxisMask = getParamValue('newAxisMask', node, tensorMap, context) as number;
            const shrinkAxisMask = getParamValue('shrinkAxisMask', node, tensorMap, context) as number;
            const tensor = getParamValue('x', node, tensorMap, context) as Tensor;
            return [tfOps.stridedSlice(tensor, begin, end, strides, beginMask, endMask, ellipsisMask, newAxisMask, shrinkAxisMask)];
        }
        case 'Pack': {
            const axis = getParamValue('axis', node, tensorMap, context) as number;
            const tensors = getParamValue('tensors', node, tensorMap, context) as Tensor[];
            // Reshape the tensors to the first tensor's shape if they don't match.
            const shape = tensors[0].shape;
            const squeezedShape = tfOps.squeeze(tensors[0]).shape;
            const mapped =
```
```
tensors.map(tensor => {
  const sameShape = util.arraysEqual(tensor.shape, shape);
  if (!sameShape &&
      !util.arraysEqual(tensor.shape, tOps.squeeze(tensor.shape, squeezedShape))) {
    throw new Error('the input tensors shape does not match');
  } return sameShape ? tensor :
    tOps.reshape(tensor, shape);
})
```

```javascript
import {executeOp} from '../types';

import {getParamValue} from './utils';

export const executeOp: InternalOpExecutor =
```
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=============================================================================

*/

import {Tensor, Tensor4D} from '@tensorflow/tfjs-core';
import * as tfOps from '@tensorflow/tfjs-core/dist/ops/ops_for_converter';
import {NamedTensorsMap} from './data/types';
import {ExecutionContext} from './executor/execution_context';
import {InternalOpExecutor, Node} from './types';
import {getParamValue} from './utils';

export const executeOp: InternalOpExecutor =
    (node: Node, tensorMap: NamedTensorsMap,
     context: ExecutionContext): Tensor[] => {
      switch (node.op) {
        case 'Cast': {
          return [tfOps.cast(
              getParamValue('x', node, tensorMap, context) as Tensor,
              getParamValue('dtype', node, tensorMap, context) as 'int32' |

              'float32' | 'bool')];
        }
        case 'ExpandDims': {
          const axis =
              getParamValue('axis', node, tensorMap, context) as number;
          return [tfOps.expandDims(
              getParamValue('x', node, tensorMap, context) as Tensor, axis)];
        }
        case 'Squeeze': {
          const axis =
              getParamValue('axis', node, tensorMap, context) as number;
          return [tfOps.squeeze(
              getParamValue('x', node, tensorMap, context) as Tensor, axis)];
        }

        case 'Reshape': {
          return [tfOps.reshape(
              getParamValue('x', node, tensorMap, context) as Tensor,
              getParamValue('shape', node, tensorMap, context) as number[])];
        }
        case 'MirrorPad': {
          return [tfOps.mirrorPad(
              getParamValue('x', node, tensorMap, context) as Tensor,
              getParamValue('padding', node, tensorMap, context) as
                  Array<
                  [number, number]>,
              getParamValue('mode', node, tensorMap, context) as
                  'reflect' | 'symmetric')];
        }
        case 'PadV2':
        case 'Pad': {
          return [tfOps.pad(
              getParamValue('x', node, tensorMap, context) as Tensor,
              getParamValue('padding', node, tensorMap, context) as
                  Array<
                  [number, number]>,
              getParamValue('constantValue', node, tensorMap, context) as
                  number)];
        }
        case 'SpaceToBatchND': {
          const blockShape =
              getParamValue('blockShape', node, tensorMap, context) as number[];
          const paddings =
              getParamValue('paddings', node, tensorMap, context) as number[];
          return [tfOps.spaceToBatchND(
              getParamValue('x', node, tensorMap, context) as Tensor,
              blockShape, paddings)];
        }
        case 'BatchToSpaceND': {
          const blockShape =
              getParamValue('blockShape', node, tensorMap, context) as number[];
          const crops =
              getParamValue('crops', node, tensorMap, context) as number[];
          return [tfOps.batchToSpaceND(
              getParamValue('x', node, tensorMap, context) as Tensor,
              blockShape, crops)];
        }
        case 'DepthToSpace': {
          const blockSize =
              getParamValue('blockSize', node, tensorMap, context) as number;
          const dataFormat =
              getParamValue('dataFormat', node, tensorMap, context) as string;
          const nhwc =
              dataFormat.toUpperCase() as 'NHWC';
          return [tfOps.depthToSpace(
              getParamValue('x', node, tensorMap, context) as Tensor4D,
              blockSize, nhwc)];
        }
        case 'BroadcastTo': {
          return [tfOps.broadcastTo(
              getParamValue('x', node, tensorMap, context) as Tensor,
              getParamValue('shape', node, tensorMap, context) as number[])];
        }
        default:
          throw TypeError(`Node type ${node.op} is not implemented`);
      }
    };

export const CATEGORY =
    'transformation';
*/

import * as tfc from '@tensorflow/tfjs-core';

import {NamedTensorsMap} from '../data/types';
import {ExecutionContext} from '../executor/execution_context';
import {ResourceManager} from '../executor/resource_manager';

import {NodeValueImpl} from './custom_op/node_value_impl';
from './custom_op/register';
import * as arithmetic from
'./executors/arithmetic_executor';
import * as basicMath from './executors/basic_math_executor';
import * as control from './executors/control_executor';
import * as convolution from './executors/convolution_executor';
import * as creation from './executors/creation_executor';
import * as dynamic from './executors/dynamic_executor';
import * as evaluation from './executors/evaluation_executor';
import * as graph from './executors/graph_executor';
import * as hashTable from './executors/hash_table_executor';
import * as image from './executors/image_executor';
import * as logical from './executors/logical_executor';
import * as matrices from './executors/matrices_executor';
import * as normalization from './executors/normalization_executor';
import * as reduction from './executors/reduction_executor';
import * as sliceJoin from './executors/slice_join_executor';
import * as spectral from './executors/spectral_executor';
import * as transformation from './executors/transformation_executor';
import {Node} from './types';

/**
 * Executes the op defined by the node object.
 * @param node
 * @param tensorMap contains tensors for executed nodes and weights
 * @param context contains tensors and information for running the current node.
 * @param resourceManager Optional. Contains global resources of the model.
 */
export function executeOp(node, tensorMap, context, resourceManager)

  const value =
    ((node, tensorMap, context) => {
      switch (node.category) {
        case 'arithmetic':
          return tfc.tidy(() => arithmetic.executeOp(node, tensorMap, context));
        case 'basic_math':
          return tfc.tidy(() => basicMath.executeOp(node, tensorMap, context));
        case 'control':
          return control.executeOp(node, tensorMap, context);
        case 'convolution':
          return tfc.tidy(() => convolution.executeOp(node, tensorMap, context));
        case 'creation':
          return tfc.tidy(() => creation.executeOp(node, tensorMap, context));
        case 'dynamic':
          return tfc.tidy(() => dynamic.executeOp(node, tensorMap, context));
        case 'evaluation':
          return tfc.tidy(() => evaluation.executeOp(node, tensorMap, context));
        case 'image':
          return tfc.tidy(() => image.executeOp(node, tensorMap, context));
        case 'graph':
          return tfc.tidy(() => graph.executeOp(node, tensorMap, context));
        case 'logical':
          return tfc.tidy(() => logical.executeOp(node, tensorMap, context));
        case 'matrices':
          return tfc.tidy(() => matrices.executeOp(node, tensorMap, context));
        case 'normalization':
          return tfc.tidy(() => normalization.executeOp(node, tensorMap, context));
        case 'reduction':
          return tfc.tidy(() => reduction.executeOp(node, tensorMap, context));
        case 'slice_join':
          return tfc.tidy(() => sliceJoin.executeOp(node, tensorMap, context));
        case 'spectral':
          return tfc.tidy(() => spectral.executeOp(node, tensorMap, context));
        case 'hash_table':
          return tfc.tidy(() => hashTable.executeOp(node, tensorMap, context));
        case 'transformation':
          return tfc.tidy(() => transformation.executeOp(node, tensorMap, context));
        case 'hash_table':
          return tfc.tidy(() => hashTable.executeOp(node, tensorMap, context));
      }
    })(node, tensorMap, context);
  if (tfc.util.isPromise(value)) {
    return (value as Promise<Tfc.Tensor>).then((data) => 
        [].concat(data));
  }
  return 
    throw TypeError('Custom op $\{node.op\} is not registered.');
});

/**
 * @license
 * Copyright 2018 Google LLC. All Rights Reserved.
 * Licensed under the Apache License, Version 2.0 (the
 * "License"); you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 * http://www.apache.org/licenses/LICENSE-2.0
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS, WITHOUT
 * WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */

import {Tensor} from '@tensorflow/tfjs-core';

import {NamedTensorsMap, TensorArrayMap,
Export interface ExecutionContextInfo

```javascript
export interface ExecutionContextInfo {
  id: number; // the unique id of the context info
  frameName: string; // The frame name of the loop, this comes from
  iterationId: number; // The iteration id of the loop
}
```

```javascript
/**
 * ExecutionContext captures the runtime environment of the node. It keeps
 * track of the current frame and iteration for the control flow ops.
 *
 * For example, typical Dynamic RNN model may contain loops, for which
 * TensorFlow will generate graphs with Enter/Exit nodes to control the
 * current execution frame, and NextIteration Nodes for iteration id increment.
 * For model with branch logic, TensorFlow will generate Switch/Merge ops.
 *
 * @param contexts: ExecutionContextInfo[] the current path of execution
 * @param frame: ExecutionContextInfo
 * @return {Number} the id of the next context
 */
export class ExecutionContext {
  private rootContext = {id: 0, frameName: '', iterationId: 0};
  private contexts: ExecutionContextInfo[] = [this.rootContext];
  private lastId = 0;
  private _currentContextIds: string[] = [];

  constructor(
      readonly weightMap: NamedTensorsMap = {};
      readonly tensorArrayMap: TensorArrayMap = {};
      readonly tensorListMap: TensorListMap = {};
      readonly functionMap: {[key: string]: FunctionExecutor} = {};
  ) {
    this.generateCurrentContextIds();
  }

  private generateCurrentContextIds() {
    const names = [];
    for (let i = 0; i < this.contexts.length - 1; i++) {
      const contexts = this.contexts.slice(0, this.contexts.length - i);
      names.push(this.contextIdFromContexts(contexts));
    }
    names.push('');
    this._currentContextIds = names;
  }

  private contextIdFromContexts(contexts: ExecutionContextInfo[]) {
    return contexts.length ?
        contexts
            .map(context => (context.id === 0 && context.iterationId === 0) ?
                    '' :
                    `${context.frameName}-${context.iterationId}`)
            .join('/') :
        '';
  }

  /**
   * Enter a new frame, a new context is pushed on the current context list.
   * @param frameId new frame id
   */
  enterFrame(frameId: string) {
    if (this.contexts) {
      this.lastId++;
      this.contexts = this.contexts.slice();
      this.contexts.push(this.newFrame(this.lastId, frameId));
      this._currentContextIds.unshift(this.contextIdFromContexts(this.contexts));
    }
  }

  /**
   * Exit the current frame, the last context is removed from the current
   * context list.
   * @param frameId old frame id
   */
  exitFrame() {
    if (this.contexts && this.contexts.length > 1) {
      this.contexts = this.contexts.slice();
      this.contexts.splice(-1);
      this.currentContextIds.shift();
    } else {
      throw new Error('Cannot exit frame, the context is empty');
    }
  }

  /**
   * Enter the next iteration of a loop, the iteration id of last context is
   * increased.
   */
  nextIteration() {
    if (this.contexts && this.contexts.length > 0) {
      this.contexts = this.contexts.slice();
      this.contexts[this.contexts.length - 1].iterationId++;
      this.contexts[this.contexts.length - 1].id = this.lastId;
      this.contexts[this.contexts.length - 1].frameName = ' '*0;
      this.contexts[this.contexts.length - 1].iterationId = 0;
      this.contexts[this.contexts.length - 1].exitFrame();
      if (this.contexts && this.contexts.length > 1) {
        this.contexts = this.contexts.slice();
        this.contexts.splice(-1);
        this.currentContextIds.shift();
      } else {
        throw new Error('Cannot enter frame, the context is empty');
      }
    } else {
      throw new Error('Cannot enter frame, the context is empty');
    }
    this.contexts[this.contexts.length - 1].iterationId++;
    this.contexts[this.contexts.length - 1].id = this.lastId;
    this.contexts[this.contexts.length - 1].frameName = ' '*0;
    this.contexts[this.contexts.length - 1].iterationId = 0;
    this.contexts[this.contexts.length - 1].exitFrame();
    if (this.contexts && this.contexts.length > 1) {
      this.contexts = this.contexts.slice();
      this.contexts[this.contexts.length - 1].id = this.lastId;
      this.contexts[this.contexts.length - 1].frameName = ' '*0;
      this.contexts[this.contexts.length - 1].iterationId = 0;
    } else {
      throw new Error('Cannot enter frame, the context is empty');
    }

    // the contextIdFromContexts() function
    // returns the id of the next context
    // which is the last context of the current frame
    // for more details, please refer to the
    // generateCurrentContextIds() function
  }

  getWeight(name: string): Tensor[] {
    return this.weightMap[name];
  }

  addTensorArray(tensorArray: TensorArray) {
    this.tensorArrayMap[tensorArray.id] = tensorArray;
  }

  getTensorArray(id: number): TensorArray {
    return this.tensorArrayMap[id];
  }

  addTensorList(tensorList: TensorList) {
    this.tensorListMap[tensorList.id] = tensorList;
  }

  getTensorList(id: number): TensorList {
    return this.tensorListMap[id];
  }

  dispose(keepIds: Set<number>) {
    for (const key in this.tensorArrayMap) {
      if (keepIds.has(key)) {
        delete this.tensorArrayMap[key];
        this.tensorArrayMap[key].clearAndClose();
      }
    }
  }
```
import {DataType, NamedTensorMap, Tensor, tidy, util} from '@tensorflow/tfjs-core';
import {ISignatureDef} from '../data/compiled_api';
import {NamedTensorsMap, TensorArrayMap, TensorInfo, TensorListMap} from '../data/types';
import {getNodeNameAndIndex, getParamValue, getTensor, getTensorsForCurrentContext, parseNodeName} from '../operations/executors/utils';
import {executeOp} from '../operations/operation_executor';
import {Graph, Node} from '../operations/types';

import {ExecutionContext, ExecutionContextInfo} from './execution_context';
import {getExecutionSubgraph, getNodesInTopologicalOrder, isControlFlow} from './model_analysis';
import {ResourceManager} from './resource_manager';
import {FunctionExecutor} from './types';
import interface NodeWithContexts {
  contexts: ExecutionContextContextInfo[];
  node: Node;
}

export class GraphExecutor implements FunctionExecutor {
  private compiledMap: Map<string, Node> = new Map();
  private _weightMap: NamedTensorsMap = {};
  private _weightIds: number[];
  private _signature: ISignatureDef;
  private _inputs: Node[];
  private _outputs: Node[];
  private _initNodes: Node[];  // Internal init nodes to start initialization.
  private SEPERATOR = ',';
  private _functions: {[key: string]: Graph} = {};
  private _functionExecutorMap: {[key: string]: FunctionExecutor} = {};
  private _resourceManager: ResourceManager;

  get weightIds(): number[] {
    return this.parent ? this.parent.weightIds : this._weightIds;
  }

  get functionExecutorMap(): {[key: string]: FunctionExecutor} {
    return this.parent ? this.parent.functionExecutorMap : this._functionExecutorMap;
  }

  get weightMap(): NamedTensorsMap {
    return this.parent ? this.parent.weightMap : this._weightMap;
  }

  set weightMap(weightMap: NamedTensorsMap) {
    const weightIds = Object.keys(weightMap).map(
      key => weightMap[key].map(tensor => tensor.id));
    this._weightIds = [...].concat(...weightIds);
    this._weightMap = weightMap;
  }

  /**
   * Set `ResourceManager` shared by executors of a model.
   * @param resourceManager: `ResourceManager` of the `GraphModel`.
   */
  set resourceManager(resourceManager: ResourceManager) {
    this._resourceManager = resourceManager;
  }

  get inputs(): TensorInfo[] {
    return this._inputs.map(node => {
      return {
        name: node.name,
        shape: node.attrParams['shape'] ?
              node.attrParams['shape'].value as number[] :
            undefined,
        dtype: node.attrParams['dtype'] ?
              node.attrParams['dtype'].value as DataType :
            undefined
      };
    });
  }

  get outputs(): TensorInfo[] {
    return this._outputs.map((node) => {
      const name = node.defaultOutput ? (`${node.name}:${node.defaultOutput}`) : node.name;
      return {
        name: name,
        shape: node.attrParams['shape'] ?
              node.attrParams['shape'].value as number[] :
            undefined,
        dtype: node.attrParams['dtype'] ?
              node.attrParams['dtype'].value as DataType :
            undefined
      };
    });
  }

  get inputNodes(): string[] {
    return this._inputs.map(node => node.name || node.name);
  }

  get outputNodes(): string[] {
    return this._outputs.map((node) => {
      const name = node.defaultOutput ? (`${node.name}:${node.defaultOutput}`) : node.name;
      return {
        name: name,
        shape: node.attrParams['shape'] ?
              node.attrParams['shape'].value as number[] :
            undefined,
        dtype: node.attrParams['dtype'] ?
              node.attrParams['dtype'].value as DataType :
            undefined
      };
    });
  }

  get functions(): {[key: string]: ISignatureDef} {
    return Object.keys(this._functions).reduce((map, key) => {
      map[key] = this._functions[key].signature;
      return map;
    }, {});
  }

  get functionExecutorMap(): {[key: string]: FunctionExecutor} {
    return this._functionExecutorMap;
  }

  get signature(): ISignatureDef {
    return this._signature;
  }

  constructor(private graph: Graph, private parent?: GraphExecutor) {
    this._outputs = graph.outputs;
    this._inputs = graph.inputs;
    this._initNodes = graph.initNodes;
    this._signature = graph.signature;
    this._functions = graph.functions;
    // create sub-graph executors
  }
}
Object.keys(graph.functions).forEach(name => {
    this._functionExecutorMap[name] =
        new GraphExecutor(graph.functions[name], this);
})

Object.keys(graph.functions).forEach(name => {
    this._functionExecutorMap[name] =
        new GraphExecutor(graph.functions[name], this);
})

const sortedOutputs = outputs.map(node => node.name).sort();

const sortedOutputs = outputs.map(node => node.name).sort();

this._functionExecutorMap[name] =
    new GraphExecutor(graph.functions[name], this);

this._functionExecutorMap[name] =
    new GraphExecutor(graph.functions[name], this);

/* */

/* */

this._functionExecutorMap[name] =
    new GraphExecutor(graph.functions[name], this);

this._functionExecutorMap[name] =
    new GraphExecutor(graph.functions[name], this);

return this.getCompilationKey(inputs, outputs);

return this.getCompilationKey(inputs, outputs);

if (dynamicNode != null) {
    throw new Error(
        `This execution contains the node '${dynamicNode.name}', which has the dynamic op '${dynamicNode.op}'. Please use model.executeAsync() instead. Alternatively, to avoid the dynamic ops, specify the inputs [${inputs}] and outputs [${outputs}].
    ` +
    `Please use model.executeAsync() instead. Alternatively, to avoid the dynamic ops, specify the inputs [${inputs}] and outputs [${outputs}].
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    `Please use model.executeAsync() instead. Alternatively, to avoid the dynamic ops, specify the inputs [${inputs}] and outputs [${outputs}].
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    `Please use model.executeAsync() instead. Alternatively, to avoid the dynamic ops, specify the inputs [${inputs}] and outputs [${outputs}].
    ` +
    `Please use model.executeAsync() instead. Alternatively, to avoid the dynamic ops, specify the inputs [${inputs}] and outputs [${outputs}].
    ` +
    `Please use model.executeAsync() instead. Alternatively, to avoid the dynamic ops, specify the inputs [${inputs}] and outputs [${outputs}].
    ` +
    `Please use model.executeAsync() instead. Alternatively, to avoid the dynamic ops, specify the inputs [${inputs}] and outputs [${outputs}].
    ` +
    `Please use model.executeAsync() instead. Alternatively, to avoid the dynamic ops, specify the inputs [${inputs}] and outputs [${outputs}].
    ` +
    `Please use model.executeAsync() instead. Alternatively, to avoid the dynamic ops, specify the inputs [${inputs}] and outputs [${outputs}].
    ` +
    `Please use model.executeAsync() instead. Alternatively, to avoid the dynamic ops, specify the inputs [${inputs}] and outputs [${outputs}].
    ` +
    `Please use model.executeAsync() instead. Alternatively, to avoid the dynamic ops, specify the inputs [${inputs}] and outputs [${outputs}].
    ` +
    `Please use model.executeAsync() instead. Alternatively, to avoid the dynamic ops, specify the inputs [${inputs}] and outputs [${outputs}].
    ` +
    `Please use model.executeAsync() instead. Alternatively, to avoid the dynamic ops, specify the inputs [${inputs}] and outputs [${outputs}].
    ` +
    `Please use model.executeAsync() instead. Alternatively, to avoid the dynamic ops, specify the inputs [${inputs}] and outputs [${outputs}].
    ` +
    `Please use model.executeAsync() instead. Alternatively, to avoid the dynamic ops, specify the inputs [${inputs}] and outputs [${outputs}].
nodes, since its dependency is tricky to track correctly. 
if (node.category !== 'control') {
  return;
}

if (tensor) {
  let disposeInNextFrame = true;
  let disposeHandler = null;
  tensorMap[tensor.id] = tensor;
}

if (node.category == 'control' || outputNames.indexOf(node.name) !== -1) {
  return;
}

node.inputs.forEach(input => {
  if (input.category !== 'control') {
    const tensors =
      getTensorsForCurrentContex(input.name, tensorMap, context);
    if (tensors) {
      tensors.forEach(tensor => {
        if (tensor) {
          const count =
            intermediateTensorConsumerCount[tensor.id];
          if (count === 1) {
            tensor.dispose();
            delete intermediateTensorConsumerCount[tensor.id];
          } else if (count) {
            intermediateTensorConsumerCount[tensor.id]--;
          }
        }
      });
    }
  }
});

		/*
 * Executes the inference for given input tensors in Async fashion.
 * @param inputs Tensor map for the model inputs, keyed by the input node's names. 
 * @param outputs output node name from the Tensorflow
 * model, if no outputs are specified, the default outputs of the model would be used. You can inspect intermediate nodes of the model by adding them to the outputs. 
 * @param isFunctionExecution Flag for executing a function.
 * @param tensorArrayMap Optional, global TensorArray map by id. Used for function. 
 * @param tensorListMap Optional global TensorList
 * map by id. Used for function. 
 * @param tensorArrayMap Optional, global TensorArray map by id. Used for function.
 * @param tensorListMap Optional global TensorList map by id. Used for function.
 * @param tensorArrayMap Optional, global TensorArray map by id. Used for function.
 * @param tensorListMap Optional global TensorList
 * map by id. Used for function.
 * @param context the execution context object for current execution. 
 * @param context the execution context object for current execution. 
 * @param context the execution context object for current execution. 
 * @param tensorArrayMap Optional, global TensorArray map by id. Used for function.
 * @param tensorListMap Optional global TensorList
 * map by id. Used for function.
 * @param context the execution context object for current execution. 
 * @param context the execution context object for current execution. 
 * @param context the execution context object for current execution. 
 * @param tensorArrayMap Optional, global TensorArray map by id. Used for function.
 * @param tensorListMap Optional global TensorList
 * map by id. Used for function.
 * @param context the execution context object for current execution. 
 * @param context the execution context object for current execution. 
 * @param context the execution context object for current execution. 
 * @param tensorArrayMap Optional, global TensorArray map by id. Used for function.
 * @param tensorListMap Optional global TensorList
 * map by id. Used for function.
 * @param context the execution context object for current execution. 
 * @param context the execution context object for current execution. 
 * @param context the execution context object for current execution. 
 * @param tensorArrayMap Optional, global TensorArray map by id. Used for function.
 * @param tensorListMap Optional global TensorList
 * map by id. Used for function.
 * @param context the execution context object for current execution. 
 * @param context the execution context object for current execution. 
 * @param context the execution context object for current execution. 
 * @param tensorArrayMap Optional, global TensorArray map by id. Used for function.
 * @param tensorListMap Optional global TensorList
 * map by id. Used for function.
 * @param context the execution context object for current execution. 
 * @param context the execution context object for current execution. 
 * @param context the execution context object for current execution. 
 * @param tensorArrayMap Optional, global TensorArray map by id. Used for function.
 * @param tensorListMap Optional global TensorList
 * map by id. Used for function.
 * @param context the execution context object for current execution. 
 * @param context the execution context object for current execution. 
 * @param context the execution context object for current execution. 
 * @param tensorArrayMap Optional, global TensorArray map by id. Used for function.
 * @param tensorListMap Optional global TensorList
 * map by id. Used for function.
 * @param context the execution context object for current execution. 
 * @param context the execution context object for current execution. 
 * @param context the execution context object for current execution. 
 * @param tensorArrayMap Optional, global TensorArray map by id. Used for function.
 * @param tensorListMap Optional global TensorList
 * map by id. Used for function.
ExecutionContext, outputNames?: string[] | null isFunctionExecution?: boolean): Promise<NamedTensorsMap> {
  const names = Object.keys(inputs); const inputNodes = names.map(name =>
  this.graph.nodes[parseNodeName(name)[0]]); const outputNodeNames = outputNames.map(name =>
  parseNodeName(name)[0]); let outputNodes = outputNodeNames.map(name => this.graph.nodes[name]);
  // If no outputs are specified, then use the default outputs of the model.
  if (outputNodes.length === 0) {
    outputNodes = this._outputs;
  }

  const tensorsMap: NamedTensorsMap = {...this.weightMap};
  Object.keys(inputs).forEach(name => {
    const [nodeName, index] = parseNodeName(name);
    const tensors: Tensor[] = [];
    tensors[index] = inputs[name];
    tensorsMap[nodeName] = tensors;
  });
  const intermediateTensorConsumerCount: {[key: number]: number} = {};
  const tensorsToKeep = this.getFrozenTensorIds(tensorsMap);
  const added: {[key: string]: boolean} = {};
  while (stack.length > 0) {
    const promises = this.processStack(inputNodes, stack, context, tensorsMap, added, tensorsToKeep, outputNodeNames, intermediateTensorConsumerCount, usedNodes);
    await Promise.all(promises);
  }

  if (dynamicNode == null && !isFunctionExecution) {
    console.warn(`This model execution did not contain any nodes with control flow ` +
      `or dynamic output shapes. You can use model.execute()` +
      `instead.`);
  }

  return tensorsMap;
}

private processChildNodes(node: Node, stack: NodeWithContexts[], context: ExecutionContext,
  tensorMap: NamedTensorsMap, added: {[key: string]: boolean},
  usedNodes: Set<string>) {
  node.children.forEach((childNode) => {
    const [nodeName, index] = parseNodeNameAndIndex(childNode.name, context);
    const tensors = executeOp(childNode, tensorMap, context, this._resourceManager);
    const currentContext = context.currentContext;
    if (util.isPromise(tensors)) {
      return;
    }

    if (dynamicNode == null) {
      this.processChildNodes(node, stack, context, tensorMap, added, usedNodes);
      return;
    }

    const tensorsToKeep = this.getFrozenTensorIds(tensorsMap);
    const added: {[key: string]: boolean} = {};
    while (stack.length > 0) {
      const promises = this.processStack(inputNodes, stack, context, tensorMap, added, tensorsToKeep, outputNodeNames, intermediateTensorConsumerCount, usedNodes);
      await Promise.all(promises);
    }

    if (dynamicNode == null) {
      console.warn(`This model execution did not contain any nodes with control flow ` +
        `or dynamic output shapes. You can use model.execute()` +
        `instead.`);
    }

    return tensorsMap;
  });
}

private processStack(inputNodes: Node[], stack: NodeWithContexts[], context: ExecutionContext,
  tensorMap: NamedTensorsMap, added: {[key: string]: boolean},
  usedNodes: Set<string>, outputNames: string[],
  intermediateTensorConsumerCount: {[key: number]: number},
  usedNodes: Set<string>) {
  const promises: Array<Promise<Tensor[]>> = [];
  while (stack.length > 0) {
  const item = stack.pop();

    context.currentContext = item.contexts;
    let nodeName = '';
    if (item.node.op === 'Enter' && getParamValue('isConstant', item.node, tensorMap, context)) {
      [nodeName] = getNodeNameAndIndex(item.node.name, context);
    }

    if (tensorMap[item.node.name] == null) {
      const tensors = executeOp(item.node, tensorMap, context, this._resourceManager);
      if (dynamicNode == null) {
        this.processChildNodes(item.node, stack, context, tensorMap, added, usedNodes);
        return;
      }

      if (dynamicNode == null) {
        this.processChildNodes(item.node, stack, context, tensorMap, added, usedNodes);
        return;
      }

      const currentContext = context.currentContext;
      if (util.isPromise(tensors)) {
        promises.push((tensors as Promise<Tensor[]>).then(t => {
          tensorMap[item.node.name] = t; context.currentContext =
          currentContext; this.checkTensorForDisposal(nodeName, item.node, tensorMap, context,
            outputNodes, intermediateTensorConsumerCount); this.processChildNodes(item.node, stack, context, tensorMap, added, usedNodes);
          return;
        }));
      } else {
      tensorMap[item.node.name] = tensors as Tensor[];
     this.checkTensorForDisposal(nodeName, item.node, tensorMap, context,
       outputNames, intermediateTensorConsumerCount);
     this.processChildNodes(item.node, stack, context, tensorMap, added, usedNodes);
     return;
      }
    } else {
      tensorMap[item.node.name] = tensors as Tensor[];
    this.checkTensorForDisposal(nodeName, item.node, tensorMap, context,
      outputNames, intermediateTensorConsumerCount);
      this.processChildNodes(item.node, stack, context, tensorMap, added, usedNodes);
      return;
    }
  }

  return promises;
}

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getNodeNameAndIndex(childNode.name, context); // Merge op can be pushed if any of its inputs has value.
  if (childNode.op !== 'Merge') {
    if (childNode.inputNames.some(name => {
        return !!getTensor(name, tensorMap, context);
      })) {
      stack.push({
        contexts: context.currentContext,
        node: childNode};)
    } else { // Otherwise all inputs must to have value.
      if (childNode.inputNames.every(name => {
          return !!getTensor(name, tensorMap, context);
        })) {
        return;
      }
    }
  }

  if (childNode.op === 'Merge') {
    if (childNode.inputNames.some(name => {
        return !!getTensor(name, tensorMap, context);
      })) {
      stack.push({
        contexts: context.currentContext,
        node: childNode};)
    } else { // Otherwise all inputs must to have value.
      if (childNode.inputNames.every(name => {
          return !!getTensor(name, tensorMap, context);
        })) {
        return;
      }
    }
  }

  /**
   * Releases the memory used by the weight tensors.
   */
  dispose() {
    Object.keys(this.weightMap)
      .forEach(
          key => this.weightMap[key].forEach(tensor =>
            tensor.dispose());
  }

  private checkInputShapeAndType(inputs: NamedTensorMap) {
    Object.keys(inputs).forEach(name => {
      const input = inputs[name];
      const [nodeName, ] =
        parseNodeName(name);
      const node = this.graph.nodes[nodeName];
      if (node.attrParams['shape'] &&
        node.attrParams['shape'].value) {
        const shape = node.attrParams['shape'].value as number[];
        const match = shape.length === input.shape.length &&
          input.shape.every(
            (dim, index) =>
              shape[index] === -1 || shape[index] === dim);
        util.assert(
          match,
          () => `The shape of dict['${nodeName}'] provided in` +
            `model.execute(dict) must be [${shape}], but was` +
            `[${input.shape}];` +
            `if (node.attrParams['dtype'] && node.attrParams['dtype'].value) {` +
            `util.assert(` +
              input.dtype === node.attrParams['dtype'].value as string,
            `() => ` +
              `The dtype of dict['${nodeName}'] provided in` +
              `model.execute(dict) must be` +
              `_${node.attrParams['dtype'].value}, but was` +
              `_${input.dtype};` +
              `if (this._signature != null && this._signature.inputs != null &&
                this._signature.inputs[nameName] != null) {` +
                `const tensor = this._signature.inputs[nameName];
              } else {
                throw new Error(`The output ` +
                  `${name} is not found in the graph`);
            };
        }
      }
    });
  }

  private mapOutputs(outputs: string[]) {
    return outputs.map(name => {
      if (this._signature != null &&
        this._signature.outputs != null &&
        this._signature.outputs[name] != null) {
        const tensor = this._signature.outputs[name];
        return tensor.name;
      }
      return name;
    }, {});
  }

  private checkOutputs(outputs: string[]): void {
    outputs.forEach(name => {
      const [normalizedName] =
        parseNodeName(name);
      if (!this.graph.nodes[normalizedName]) {
        throw new Error(`The output ` +
          `${name} is not found in the graph`);
      }
    });

    /**
     * @license
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     * All Rights Reserved.
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     * you may not use this file except in compliance with the License.
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     * software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.
     */

    import {HashTableMap, NamedTensorMap} from '../data/types';
    import {HashTable} from './hash_table';
    export class ResourceManager {
      constructor(
          readonly hashTableNameToHandle: NamedTensorMap = {},
          readonly hashTableMap: HashTableMap = {});

      /**
       * Register a `HashTable` in the resource manager.
       *
       * The `HashTable` can be retrieved by `resourceManager.getHashTableById`,
       * where id is the table handle tensor's id.
       * @param name Op node name that creates the `HashTable`. 
       * @param hashTable The `HashTable` to be added to resource manager.
       */
      addHashTable(name: string, hashTable: HashTable) {
        this.hashTableNameToHandle[name] = hashTable.handle;
        this.hashTableMap[hashTable.id] = hashTable;

      // you may not use this file except in compliance with the License.
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      http://www.apache.org/licenses/LICENSE-2.0
      // Unless required by applicable law or agreed to in writing,
      // software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.
  */


```javascript
/**
 * Get the table handle by node name.
 * @param name Op node name that creates the `HashTable`.
 * This name is also used in the inputs list of lookup and import `HashTable` ops.
 */
getHashTableHandleByName(name: string) {
    return this.hashTableNameToHandle[name];
}

/**
 * Get the actual `HashTable` by its handle tensor's id.
 * @param id The id of the handle tensor.
 */
getHashTableById(id: number): HashTable {
    return this.hashTableMap[id];
}

/**
 * Dispose `ResourceManager`, including its hashTables and tensors in them.
 */
dispose() {
    for (const key in this.hashTableMap) {
        this.hashTableMap[key].clearAndClose();
        delete this.hashTableMap[key];
    }
    for (const name in this.hashTableNameToHandle) {
        this.hashTableNameToHandle[name].dispose();
        delete this.hashTableNameToHandle[name];
    }
}
```

```
/**
 * @license
 * Copyright 2018 Google LLC. All Rights Reserved.
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
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 * software distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and limitations under the License.
 */

import {InferenceModel, io, ModelPredictConfig, NamedTensorMap, Tensor} from '@tensorflow/tfjs-core';
import * as tensorflow from '../data/compiled_api';
import {NamedTensorsMap, TensorInfo} from '../data/types';
import {OperationMapper} from '../operations/operation_mapper';

import {GraphExecutor} from './graph_executor';
import {ResourceManager} from './resource_manager';

export const TFHUB_SEARCH_PARAM = '?tfjs-format=file';
export const DEFAULT_MODEL_NAME = 'model.json';

/**
 * A `tf.GraphModel` is a directed, acyclic graph built from a savedModel GraphDef and
 * allows inference execution.
 * A `tf.GraphModel` can only be created by loading from a model converted
 * from a `SavedModel` [TensorFlow SavedModel](https://www.tensorflow.org/guide/saved_model) using
 * the command line converter tool and loaded via `tf.loadGraphModel`.
 * You may obtain a copy of the License at
 * http://www.apache.org/licenses/LICENSE-2.0
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 * software distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and limitations under the License.
 */

```
Promise<boolean> {\n  this.findIOHandler();\n  if (this.handler.load == null) {\n    throw new Error('Cannot proceed with model loading because the IOHandler provided `+\n    'does not have the `load` method implemented.');\n  }\n  const artifacts = await this.handler.load();\n  return this.loadSync(artifacts);\n}\n/**\n * Synchronously construct the in memory weight map and compile the inference graph. Also initialize hashable if any.\n * @doc {heading: 'Models', subheading: 'Classes', ignoreCI: true}\n */\nloadSync(artifacts: io.ModelArtifacts) {\n  this.artifacts = artifacts;\n  const graph = this.artifacts.modelTopology as tensorflow.IGraphDef;\n  this.version = `${graph.versions.producer}.${graph.versions.minConsumer}`;
  const weightMap = io.decodeWeights(this.artifacts.weightData, this.artifacts.weightSpecs);
  this.executor = new GraphExecutor(OperationMapper.Instance.transformGraph(graph, this.signature));
  this.executor.resourceManager = this.resourceManager;
  if (artifacts.modelInitializer != null && (artifacts.modelInitializer as tensorflow.IGraphDef).node != null) {\n    const initializer = OperationMapper.Instance.transformGraph(artifacts.modelInitializer);\n    this.initializer = new GraphExecutor(initializer);\n    this.initializer.weightMap = this.executor.weightMap;
  }\n  return true;
}

/**\n * Save the configuration and/or weights of the GraphModel.\n * The `save` method manages the storing of serialized data `"artifacts"` that represent\n * model's topology and weights onto or via a specific medium, such as file downloads, local storage,\n * IndexedDB in the web browser and HTTP requests to a server. TensorFlow.js provides `IOHandler` implementations\n * for a number of frequently used saving mediums, such as `tf.io.browserDownloads` and\n * `tf.io.browserLocalStorage`. See `tf.io` for more details.\n * This method also allows you to refer to certain types of `IOHandler` as URL-like string shortcuts, such as `localstorage://` and `indexeddb://`.\n * @param handlerOrURL An instance of `IOHandler` or a URL-like,\n * scheme-based string shortcut for `IOHandler`.\n * @param config Options for saving the model.\n * @returns A `Promise` of `SaveResult`, which summarizes the result of\n * the saving, such as byte sizes of the saved artifacts for the model’s\n * topology and weight values.\n * @doc {heading: 'Models', subheading: 'Classes', ignoreCI: true}\n */
async save(handlerOrURL: io.IOHandler|string, config?: io.SaveConfig): Promise<io.SaveResult> {\n  if (typeof handlerOrURL === 'string') {\n    const handlers = io.getSaveHandlers(handlerOrURL);
    if (handlers.length === 0) {\n      throw new Error(`Cannot find any save handlers for URL '${handlerOrURL}'`);
    } else if (handlers.length > 1) {\n      throw new Error('Found more than one (${handlers.length}) save handlers for `+\n      `URL '${handlerOrURL}'`');\n    }\n    handlerOrURL = handlers[0];\n  }\n  if (handlerOrURL.save == null) {\n    throw new Error('GraphModel.save() cannot proceed because the IOHandler `+\n    `provided does not have the `save` attribute defined.');\n  }\n  return handlerOrURL.save(this.artifacts);\n}

* Example 1: Save `model`’s topology and weights to browser [local\n * storage](https://developer.mozilla.org/en-US/docs/Web/API/Window/localStorage);\n * then load it back:\n * @param modelURL https://storage.googleapis.com/tfjs-models/savedmodel/mobilenet_v2_1.0_224/model.json;\n * const model = await tf.loadModel(modelURL);\n * const zeros = tf.zeros([1, 224, 224, 3]);\n * const saveResults = await model.save('localstorage://my-model-1');\n * const loadedModel = await tf.loadModel('localstorage://my-model-1');\n * console.log('Prediction from loaded model:');\n * model.predict(zeros).print();\n * return true;\n *}\n * \n * Example 2: Save `model`'s topology and weights to a URL-like string shortcut for `IOHandler`:\n * @param config Options for saving the model:\n * \n * @returns A `Promise` of `SaveResult`, which summarizes the result of\n * the saving, such as byte sizes of the saved artifacts for the model's\n * topology and weight values.\n * \n * Example 3: Save `model`'s topology and weights to browser `"localstorage://"` and\n * `"indexeddb://"`:

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should be a `tf.Tensor`. For models with multiple inputs,
* inputs params should be in either `tf.Tensor[]` if the
input order is fixed, or otherwise `NamedTensorMap` format.
* For model with multiple inputs, we
recommend you use `NamedTensorMap` as the input type, if you use `tf.Tensor[]`, the order of the array needs
follow the order of `inputNodes` array. @see {@link GraphModel.inputNodes}
* You can also feed any intermediate nodes using the `NamedTensorMap` as the input type. For example, given the graph:
* `InputNode => Intermediate => OutputNode`,
* you can execute the subgraph `Intermediate => OutputNode` by calling
* `model.execute('IntermediateNode' : tf.tensor(...));`
* This is useful for models that uses
* `tf.dynamic_rnn`, where the intermediate state needs to be fed manually.
* For batch inference execution, the tensors for each input need to be
* concatenated together.
* For example with mobilenet, the required input shape is
* `[1, 244, 244, 3]`, which represents the [batch, height, width, channel].
* If we are provide a batched data of 100 images, the input tensor should be
* in the shape of `[100, 244, 244, 3]`.
* @param config Prediction configuration for specifying the batch size and
* output node names. Currently the batch size option is ignored for graph
* model.
* @returns Inference result tensors. The output would be
* single `tf.Tensor` if model has single output node, otherwise `Tensor[]` or `NamedTensorMap[]` will be
* returned for model with multiple outputs.
* @doc {heading: 'Models', subheading: 'Classes'}

`predict(inputs: Tensor|Tensor[]|NamedTensorMap, config?: ModelPredictConfig):`

```typescript
Tensor|Tensor[]|NamedTensorMap {
    return this.execute(inputs, this.outputNodes);
  }
```

```typescript
private normalizeInputs(inputs: Tensor|Tensor[]|NamedTensorMap): NamedTensorMap {
    if (!(inputs instanceof Tensor) && !Array.isArray(inputs)) {
      // The input is already a NamedTensorMap.
      return inputs;
    }
    inputs = Array.isArray(inputs) ? inputs : [inputs];
    if (inputs.length !== this.inputNodes.length)
      throw new Error(`Input tensor count mismatch, the graph model has
                      ${this.inputNodes.length} placeholders, while there are
                      ${inputs.length} input tensors.`);

    let result = this.inputNodes.reduce((map, inputName, i) => {
      map[inputName] = (inputs as Tensor[])[i];
      return map;
    }, {} as NamedTensorMap);

    return result;
  }
```

```typescript
private normalizeOutputs(outputs: string|string[]): string[] {
    outputs = outputs || this.outputNodes;
    return !Array.isArray(outputs) ? [outputs] : outputs;
  }
```

```typescript
/**
 * Executes inference for the model for given input tensors.
 * @param inputs tensor, tensor array or tensor map of the inputs for the
 * model, keyed by the input node names.
 * @param outputs output node name from the Tensorflow model, if no outputs
 * are specified, the default outputs of the model would be used.
 * You can inspect intermediate nodes of the model by adding them to the
 * output array. A single tensor if provided with a single output or no outputs
 * are provided and there is only one default output, otherwise return a
 * tensor array. The order of the tensor array is the same as the outputs
 * if provided, otherwise the order of outputNodes attribute of the model.
 * @returns A Promise of single tensor if provided with a
 * single output or no outputs
 * are specified, the default outputs of the model would be used.
 * You can inspect intermediate nodes of the model by adding them to the
 * outputs array.
 * @doc {heading: 'Models', subheading: 'Classes'}
 */
```

```typescript
execute(inputs: Tensor|Tensor[]|NamedTensorMap, outputs?: string|string[]):
    const result = this.executor.execute(inputs, outputs);
    return result;
```

```typescript
/**
 * Releases the memory used by the weight tensors and
 * resourceManager.
 */
```
*\n
```javascript
/**
 * @doc {heading: 'Models', subheading: 'Classes'}
 */
  dispose() {
    this.executor.dispose();

    if (this.initializer) {
      this.initializer.dispose();
    }

    this.resourceManager.dispose();
  }
}

/**
 * Load a graph model given a URL to the model definition.
 * Example of loading MobileNetV2 from a URL and making a prediction with zeros input:
 * https://storage.googleapis.com/tfjs-models/savedmodel/mobilenet_v2_1.0_224/model.json
 * const model = await tf.loadGraphModel(modelUrl);
 * const zeros = tf.zeros([1, 224, 224, 3]);
 * model.predict(zeros).print();
 *
 * Example of loading MobileNetV2 from a TF Hub URL and making a prediction within a zeros input:
 * https://tfhub.dev/google/imagenet/mobilenet_v2_140_224/classification/2
 * const model = await tf.loadGraphModel(modelUrl, {fromTFHub: true});
 * const zeros = tf.zeros([1, 224, 224, 3]);
 * model.predict(zeros).print();
 */

export async function loadGraphModel(modelUrl: string|io.IOHandler, options: io.LoadOptions = {}): Promise<GraphModel> {
  if (modelUrl == null) {
    throw new Error('modelUrl in loadGraphModel() cannot be null. Please provide a url or an IOHandler that loads the model');
  }
  if (options == null) {
    options = {};
  }

  if (options.fromTFHub) {
    if ((modelUrl as io.IOHandler).load == null) {
      if (!(modelUrl as string).endsWith('/')) {
        modelUrl = (modelUrl as string) + '/';
      }
      modelUrl = `${modelUrl}${DEFAULT_MODEL_NAME}${TFHUB_SEARCH_PARAM}`;
    }
  }
  const model = new GraphModel(modelUrl, options);
  await model.load();
  return model;
}
```

```javascript
export default {
  color,
  controllers,
  dom,
  gui,
  GUI
};
```

```javascript
export default function(color, forceCSSHex) {
  const colorFormat = color.__state.conversionName.toString();

  const r = Math.round(color.r);
  const g = Math.round(color.g);
  const b = Math.round(color.b);
  const a = color.a;
  const h = Math.round(color.h);
  const s = color.s.toFixed(1);
  const v = color.v.toFixed(1);

  if (forceCSSHex || (colorFormat === 'THREE_CHAR_HEX') || (colorFormat === 'SIX_CHAR_HEX')) {
    let str = color.hex.toString(16);
    while (str.length < 6) {
      str = '0' + str;
    }
    return `#${str}`;
  } else if (colorFormat === 'CSS_RGB') {
    return 'rgb(' + r + ',' + g + ',' + b + ')
  } else if (colorFormat === 'CSS_RGBA') {
    return 'rgba(' + r + ',' + g + ',' + b + ')
  }
```
"License") \n * you may not use this file except in compliance with the License. \n * You may obtain a copy of the License at \n *
 * http://www.apache.org/licenses/LICENSE-2.0
 */

let tmpComponent;

const ColorMath =
{
  hsv_to_rgb: function(h, s, v) {
    const hi = Math.floor(h / 60) % 6;

    const f = h / 60 - Math.floor(h /
60);
const p = v * (1.0 - f);\nconst q = v * (1.0 - ((1.0 - f) * s));\nconst c = [\n  [v, t, p],\n  [q, v, t],\n  [p, q, v],\n  [t, p, v],\n  [v, q, p],\n  [p, v, q]\n][hi];\n
return \n  c[0] * 255,\ng: c[1] * 255,\nb: c[2] * 255\n};\n},\nrgb_to_hsv: function(r, g, b) {\nconst min = Math.min(r, g, b);\nconst delta = max - min;\nlet h =;\nreturn \n  h;\n},\n},\nhex_with_component: function(hex, componentIndex, value) {
    return value << (tmpComponent = componentIndex * 8) | (hex & ~(0xFF << tmpComponent));
},\n}

export default ColorMath;

/**
 * dat-gui JavaScript Controller Library
 * http://code.google.com/p/dat-gui
 *
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 * http://www.apache.org/licenses/LICENSE-2.0
 */

import interpret from './interpret';
import math from './math';
import colorToString from './toString';
import common from '../utils/common';

class Color {
  constructor() {
    this.__state = interpret.apply(this, arguments);

    if (this.__state === false) {
      throw new Error('Failed to interpret color arguments');
    }

    this.__state.a = this.__state.a || 1;
  }

  toString() {
    return colorToString(this);
  }

  toHexString() {
    return colorToString(this, true);
  }

  toOriginal() {
    return this.__state.conversion.write(this);
  }
}

function defineRGBComponent(target, component, componentHexIndex) {
  Object.defineProperty(target, component, {
    get: function() {
      if (this.__state.space === 'RGB') {
        return this.__state[component];
      }

      Color.recalculateRGB(this, component, componentHexIndex);

      return this.__state[component];
    },

    set: function(v) {
      if (this.__state.space !== 'RGB') {
        Color.recalculateRGB(this, component, componentHexIndex);
        this.__state.space = 'RGB';
      }

      this.__state[component] = v;
    }
  });
}

function defineHSVComponent(target, component) {
  Object.defineProperty(target, component, {
    get: function() {
      if (this.__state.space === 'HSV') {
        return this.__state[component];
      }

      Color.recalculateHSV(this, component, componentHexIndex);

      return this.__state[component];
    },

    set: function(v) {
      if (this.__state.space !== 'HSV') {
        Color.recalculateHSV(this, component, componentHexIndex);
        this.__state.space = 'HSV';
      }

      this.__state[component] = v;
    }
  });
}

Color.recalculateRGB = function(color, component, componentHexIndex) {
  if (color.__state.space === 'HEX') {
    color.__state[component] = math.component_from_hex(color.__state.hex, componentHexIndex);
  } else if (color.__state.space === 'HSV') {
    common.extend(color.__state, math.hsv_to_rgb(color.__state.h, color.__state.s, color.__state.v));

    if (color.__state.space === 'HEX') {
      color.__state[component] = math.component_from_hex(color.__state.hex, componentHexIndex);
    } else if (color.__state.space === 'HSV') {
      common.extend(color.__state, math.hsv_to_rgb(color.__state.h, color.__state.s, color.__state.v));
    } else {
      throw new Error('Corrupted color state');
    }

    color.__state.hex = math.rgb_to_hex(color.__state.r, color.__state.g, color.__state.b);
    color.__state.hex = math.cvtColor(color.__state.hex, color.__state.a);
  }

  return color.__state[component];
};

Object.defineProperty(Color.prototype, 'r', {get: function() {\n    return this.__state[\'r\'];\n  },\n  set: function(v) {\n    this.__state[\'r\'] = v;\n  }\n});

Object.defineProperty(Color.prototype, 'g', {get: function() {\n    return this.__state[\'g\'];\n  },\n  set: function(v) {\n    this.__state[\'g\'] = v;\n  }\n});

Object.defineProperty(Color.prototype, 'b', {get: function() {\n    return this.__state[\'b\'];\n  },\n  set: function(v) {\n    this.__state[\'b\'] = v;\n  }\n});
}\n});\n\nexport default Color;\n","/**\n * dat-gui JavaScript Controller Library\n * http://code.google.com/p/datgui\n *\n * Copyright 2011 Data Arts Team, Google Creative Lab\n *\n * Licensed under the Apache License,
Version 2.0 (the \"License\");\n * you may not use this file except in compliance with the License.\n * You may
obtain a copy of the License at\n *\n * http://www.apache.org/licenses/LICENSE-2.0\n */\n\n/**\n * @class An
\"abstract\" class that represents a given property of an object.\n *\n * @param {Object} object The object to be
manipulated\n * @param {string} property The name of the property to be manipulated\n */\nclass Controller {\n
constructor(object, property) {\n this.initialValue = object[property];\n\n /**\n * Those who extend this class
will put their DOM elements in here.\n * @type {DOMElement}\n */\n this.domElement =
document.createElement('div');\n\n /**\n * The object to manipulate\n * @type {Object}\n */\n
this.object = object;\n\n /**\n * The name of the property to manipulate\n * @type {String}\n */\n
this.property = property;\n\n /**\n * The function to be called on change.\n * @type {Function}\n *
@ignore\n */\n this.__onChange = undefined;\n\n /**\n * The function to be called on finishing change.\n
* @type {Function}\n * @ignore\n */\n this.__onFinishChange = undefined;\n }\n\n /**\n * Specify that a
function fire every time someone changes the value with\n * this Controller.\n *\n * @param {Function} fnc
This function will be called whenever the value\n * is modified via this Controller.\n * @returns {Controller}
this\n */\n onChange(fnc) {\n this.__onChange = fnc;\n return this;\n }\n\n /**\n * Specify that a function
fire every time someone \"finishes\" changing\n * the value wih this Controller. Useful for values that change\n *
incrementally like numbers or strings.\n *\n * @param {Function} fnc This function will be called whenever\n *
someone \"finishes\" changing the value via this Controller.\n * @returns {Controller} this\n */\n
onFinishChange(fnc) {\n this.__onFinishChange = fnc;\n return this;\n }\n\n /**\n * Change the value of
<code>object[property]</code>\n *\n * @param {Object} newValue The new value of
<code>object[property]</code>\n */\n setValue(newValue) {\n this.object[this.property] = newValue;\n if
(this.__onChange) {\n
this.__onChange.call(this, newValue);\n }\n\n this.updateDisplay();\n return this;\n
}\n\n /**\n * Gets the value of <code>object[property]</code>\n *\n * @returns {Object} The current value of
<code>object[property]</code>\n */\n getValue() {\n return this.object[this.property];\n }\n\n /**\n *
Refreshes the visual display of a Controller in order to keep sync\n * with the object's current value.\n * @returns
{Controller} this\n */\n updateDisplay() {\n return this;\n }\n\n /**\n * @returns {Boolean} true if the value
has deviated from initialValue\n */\n isModified() {\n return this.initialValue !== this.getValue();\n
}\n}\n\nexport default Controller;\n","/**\n * dat-gui JavaScript Controller Library\n *
http://code.google.com/p/dat-gui\n *\n * Copyright 2011 Data Arts Team, Google Creative Lab\n *\n * Licensed
under the Apache License, Version 2.0 (the \"License\");\n * you may not use this file except in compliance with the
License.\n * You may obtain a copy of the License at\n *\n * http://www.apache.org/licenses/LICENSE-2.0\n
*/\n\nimport common from '../utils/common';\n\nconst EVENT_MAP = {\n HTMLEvents: ['change'],\n
MouseEvents: ['click', 'mousemove', 'mousedown', 'mouseup', 'mouseover'],\n KeyboardEvents:
['keydown']\n};\n\nconst EVENT_MAP_INV = {};\ncommon.each(EVENT_MAP, function(v, k) {\n
common.each(v, function(e) {\n EVENT_MAP_INV[e] = k;\n });\n});\n\nconst CSS_VALUE_PIXELS =
/(\\d+(\\.\\d+)?)px/;\n\nfunction cssValueToPixels(val) {\n if (val === '0' || common.isUndefined(val)) {\n return
0;\n }\n\n const match = val.match(CSS_VALUE_PIXELS);\n\n if (!common.isNull(match)) {\n return
parseFloat(match[1]);\n }\n\n // TODO ...ems? %?\n\n return 0;\n}\n\n/**\n * @namespace\n * @member
dat.dom\n */\nconst dom = {\n\n /**\n *\n * @param elem\n * @param selectable\n */\n makeSelectable:
function(elem, selectable) {\n if (elem === undefined || elem.style === undefined) return;\n\n elem.onselectstart
= selectable ? function() {\n
return false;\n } : function() {\n };\n\n elem.style.MozUserSelect = selectable ?
'auto' : 'none';\n elem.style.KhtmlUserSelect = selectable ? 'auto' : 'none';\n elem.unselectable = selectable ? 'on' :
'off';\n },\n\n /**\n *\n * @param elem\n * @param horizontal\n * @param vert\n */\n makeFullscreen:
function(elem, hor, vert) {\n let vertical = vert;\n let horizontal = hor;\n\n if (common.isUndefined(horizontal))
{\n
horizontal = true;\n }\n\n if (common.isUndefined(vertical)) {\n
vertical = true;\n }\n\n
elem.style.position = 'absolute';\n\n if (horizontal) {\n
elem.style.left = 0;\n
elem.style.right = 0;\n }\n if
(vertical) {\n
elem.style.top = 0;\n
elem.style.bottom = 0;\n }\n },\n\n /**\n *\n * @param elem\n *

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@param eventType
   * @param params
   */
  fakeEvent: function(elem, eventType, pars, aux) {
    const

    params = pars || {};
    const className = EVENT_MAP_INV[eventType];
    if (!className) {
      throw new
      Error('Event type ' + eventType + ' not supported.');
    }
    const evt = document.createEvent(className);

    switch (className) {
      case 'MouseEvents':
        {
          const clientX = params.x || params.clientX || 0;
          const clientY = params.y || params.clientY || 0;
          evt.initMouseEvent(eventType, params.bubbles || false,

          //screenX
          1,  // //screenY
          0, // clientX,
          clientY, // clientY
          false, false, false, 0, null);
        break;
    }

    common.defaults(params, { cancelable: true, ctrlKey: false, altKey: false, shiftKey: false, metaKey: false, keyCode: undefined, charCode: undefined });

    initEventType, params.bubbles || false, params.cancelable, window, params.ctrlKey,
    params.altKey,
    params.shiftKey, params.metaKey,
    params.keyCode, params.charCode); 

    break;
  };

  defualt: (\n    \n    \n  )

  eventType, params.bubbles || false, params.cancelable || true); 

  break;
\n  \n  );

  common.defaults(aux, aux); 

  elem.dispatchEvent(evt);

  /**
   *
   * @param elem
   * @param event
   * @param func
   * @param bool
   */
  bind: function(elem, event, func, newBool) {
    const bool = newBool || false;
    if (elem.addEventListener) {
      elem.addEventListener(event, func, bool);
    } else if (elem.attachEvent) {
      elem.attachEvent('on' + event, func);
    }
    return dom;

  },

  /**
   *
   * @param elem
   * @param event
   * @param func
   * @param bool
   */
  unbind: 

    if (elem.removeEventListener) {
      elem.removeEventListener(event, func, bool);
    } else if (elem.detachEvent) {
      elem.detachEvent('on' + event, func);
    }
    return dom;

  },

  /**
   *
   * @param elem
   * @param className
   */
  addClass: function(elem, className) {
    if (elem.className === undefined) {
      elem.className = className;
    } else
    if (elem.className !== className) {
      const classes = elem.className.split(/ +/);
      if

      classes.indexOf(className) === -1) {
        classes.push(className);
        elem.className = classes.join(' ');
      }
    }
    return dom;

  },

  /**
   *
   * @param elem
   * @param className
   */
  removeClass: function(elem, className) {
    if (className) {
      if

      elem.className === className) {
        elem.removeAttribute('class');
      } else {
        const classes = elem.className.split(/ +/);
        const index = classes.indexOf(className);
        if (index !== -1) {
          classes.splice(index, 1);
          elem.className = classes.join(' ');
        }
      }
    } else {
      elem.className = undefined;
    }
    return dom;

  },

  hasClass: function(elem, className) {
    return new
      RegExp('(?:^|\\s+)' + className + '(?:\\s+|$)').test(elem.className) || false;
  },

  /**
   *
   * @param elem
   */
  getWidth: function(elem) {
    const style = getComputedStyle(elem);

    return

      cssValueToPixels(style['border-left-width']) +
        cssValueToPixels(style['border-right-width']) +
          cssValueToPixels(style['padding-left']) +

    cssValueToPixels(style['padding-right']) +
      cssValueToPixels(style['width']) ||

    cssValueToPixels(style['width']) +

    \n  )

    const index = classes.indexOf(className);
    if (index !== -1) {
      classes.splice(index, 1);
      elem.className = classes.join(' ');
    }
    return dom;

  },

  isActive: function(elem) {
    return elem === document.activeElement && (elem.type || elem.href);
  }

};

export default
  dom;

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 *
 * http://www.apache.org/licenses/LICENSE-2.0
 */

import Controller from './Controller';
import dom from '../dom/dom';

/**
 * @class Provides a checkbox input to alter the boolean property of an object.
 */

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@extends dat.controllers.Controller

*\n  * @param {Object} object The object to be manipulated
  * @param {String} property The name of the property to be manipulated
  *
  * @constructor(object, property)
  * @param {Object} object The object to be manipulated
  * @param {String} property The name of the property to be manipulated
  *
  * @extends dat.controllers.Controller
  *
  * @param {Object} object The object to be manipulated
  *
  * @constructor(object, property)
  * @param {Object} object The object to be manipulated
  * @param {String} property The name of the property to be manipulated
  *
  * @extends dat.controllers.Controller
  *
  * @param {Object} object The object to be manipulated
  *
  * @constructor(object, property)
  * @param {Object} object The object to be manipulated
  * @param {String} property The name of the property to be manipulated
  *
  * @extends dat.controllers.Controller
  *
  * @constructor(object, property)
import common from '../utils/common';
import Controller from './Controller';

function numDecimals(x) {
  const _x = x.toString();

  if (_x.indexOf('.') > -1) {
    return _x.length - _x.indexOf('.') - 1;
  }

  return 0;
}

/**
 * @class
 * Represents a given property of an object that is a number.
 *
 * @extends dat.controllers.Controller
 *
 * @param {Object} object The object to be manipulated
 * @param {string} property The name of the property to be manipulated
 * @param {Object} [params] Optional parameters
 * @param {Number} [params.min] Minimum allowed value
 * @param {Number} [params.max] Maximum allowed value
 * @param {Number} [params.step] Increment by which to change value
 */
class NumberController extends Controller {
  constructor(object, property, params) {
    super(object, property);

    const _params = params || {};

    this.__min = _params.min;
    this.__max = _params.max;
    this.__step = _params.step;

    if (common.isUndefined(this.__step)) {
      if (this.initialValue === 0) {
        this.__impliedStep = 1; // What are we, psychics?
      } else {
        // Hey Doug, check this out.
        this.__impliedStep = Math.pow(10, Math.floor(Math.log(Math.abs(this.initialValue)) / Math.LN10)) / 10;
      }
    } else {
      this.__impliedStep = this.__step;
    }

    this.__precision = numDecimals(this.__impliedStep);
  }

  setValue(v) {
    let _v = v;

    if (this.__min !== undefined && _v < this.__min) {
      _v = this.__min;
    } else if (this.__max !== undefined && _v > this.__max) {
      _v = this.__max;
    }

    if (this.__step !== undefined && _v % this.__step !== 0) {
      _v = Math.round(_v / this.__step) * this.__step;
    }

    return super.setValue(_v);
  }

  /**
   * Specify a minimum value for <code>object[property]</code>.
   *
   * @param {Number} minValue The minimum value for
   * <code>object[property]</code>
   * @returns {dat.controllers.NumberController} this
   */
  min(minValue) {
    this.__min = minValue;
    return this;
  }

  /**
   * Specify a maximum value for <code>object[property]</code>.
   *
   * @param {Number} maxValue The maximum value for
   * <code>object[property]</code>
   * @returns {dat.controllers.NumberController} this
   */
  max(maxValue) {
    this.__max = maxValue;
    return this;
  }

  /**
   * Specify a step value that dat.controllers.NumberController
   * increments by.
   *
   * @param {Number} stepValue The step value for
   * dat.controllers.NumberController
   * @default if minimum and maximum specified increment is 1% of the
   * difference otherwise stepValue is 1
   * @returns {dat.controllers.NumberController} this
   */
  step(stepValue) {
    this.__step = stepValue;
    this.__impliedStep = stepValue;
    this.__precision = numDecimals(stepValue);
    return this;
  }
}

export default NumberController;

import NumberController from './NumberController';
import dom from '../dom/dom';
import common from '../utils/common';

function roundToDecimal(value, decimals) {
  const tenTo = Math.pow(10, decimals);
  return Math.round(value * tenTo) / tenTo;
}

/**
 * @class
 * Represents a given property of an object that is a number and
 * provides an input element with which to manipulate it.
 *
 * @extends dat.controllers.Controller
 * @extends dat.controllers.NumberController
 *
 * @param {Object} object The object to be manipulated
 * @param {string} property The name of the property to be manipulated
 * @param {Object} [params] Optional parameters
 * @param {Number} [params.min] Minimum allowed value
 * @param {Number} [params.max] Maximum allowed value
 * @param {Number} [params.step] Increment by which to change value
 */
class NumberControllerBox extends NumberController {
  constructor(object, property, params) {
    super(object, property, params);

    this.__truncationSuspended = false;

    const _this = this;

    /**
     * {Number} Previous mouse y position
     * @ignore
     */
    let prevY;

    function onChange() {
      const attempted = parseFloat(_this.__input.value);
      if (!common.isNaN(attempted)) {
        _this.setValue(attempted);
      }
    }

    function onFinish() {
      if (_this.__onFinishChange) {
        _this.__onFinishChange.call(_this,
    }

    function onInput() {
      if (_this.__onInputChange) {
        _this.__onInputChange.call(_this,
    }

    function onKeyUp() {
      if (_this.__onKeyUpChange) {
        _this.__onKeyUpChange.call(_this,
    }

    function onkeydown() {
      if (_this.__onKeyDownChange) {
        _this.__onKeyDownChange.call(_this,
    }

    function onMouseDown() {
      _this.__truncationSuspended = false;
      _this.__input.focus();
    }

    function onMouseMove() {
      prevY = _this.__input.y;
    }

    function onMouseUp() {
      _this.__input.y = prevY;
      _this.__input.blur();
    }

    function updateValue() {
      _this.__input.value = roundToDecimal(_this.value, _this.__precision);
    }

    _this.__input.onchange = onChange;
    _this.__input.onfinish = onFinish;
    _this.__input.oninput = onInput;
    _this.__input.onkeyup = onKeyUp;
    _this.__input.onkeydown = onkeydown;
    _this.__input.onmousedown = onMouseDown;
    _this.__input.onmousemove = onMouseMove;
    _this.__input.onmouseup = onMouseUp;
    _this.__input.onkeyupend = updateValue;
    _this.__input.onmousedownend = updateValue;
    _this.__input.onmouseupend = updateValue;
    _this.__input.onmousemoveend = updateValue;
  }

  **/
class NumberControllerSlider extends NumberController {
  constructor(object, property, min, max, step) {
    super(object, property, { min: min, max: max, step: step });

    const _this = this;

    this.__background = document.createElement('div');
    this.__foreground = document.createElement('div');

    dom.bind(this.__background, 'mousedown', onMouseDown);
    dom.bind(this.__background, 'touchstart', onTouchStart);

    dom.addClass(this.__background, 'slider');
    dom.addClass(this.__foreground, 'slider-fg');

    function onMouseDown(e) {
      document.activeElement.blur();

      dom.bind(window, 'mousemove', onMouseDrag);
      dom.bind(window, 'mouseup', onMouseUp);

      onMouseDrag(e);
    }

    function onMouseDrag(e) {
      e.preventDefault();

      const bgRect = _this.__background.getBoundingClientRect();

      _this.setValue(
        map(e.clientX, bgRect.left, bgRect.right, _this.__min, _this.__max)
      );

      return false;
    }

    function onMouseUp() {
      dom.unbind(window, 'mousemove', onMouseDrag);
      dom.unbind(window, 'mouseup', onMouseUp);
      if (_this.__onFinishChange) {
        _this.__onFinishChange.call(_this, _this.getValue());
      }
    }

    function onTouchStart(e) {
      if (e.touches.length !== 1) { return; }
      dom.bind(window, 'touchmove', onTouchMove);
      dom.bind(window, 'touchend', onTouchEnd);
      onTouchMove(e);
    }

    function onTouchMove(e) {
      const clientX = e.touches[0].clientX;
      const bgRect = _this.__background.getBoundingClientRect();

      _this.setValue(
        map(clientX, bgRect.left, bgRect.right, _this.__min, _this.__max)
      );

      function onTouchEnd() {
        dom.unbind(window, 'touchmove', onMouseMove);
        dom.unbind(window, 'touchend', onTouchEnd);
        if (_this.__onFinishChange) {
          _this.__onFinishChange.call(_this, _this.getValue());
        }
      }
    }

    this.updateDisplay();

    this.__background.appendChild(this.__foreground);
    this.domElement.appendChild(this.__background);
  }

  updateDisplay() {
    const pct = (this.getValue() - this.__min) / (this.__max - this.__min);
    this.__foreground.style.width = pct * 100 + '%';
    return super.updateDisplay();
  }
}

export default NumberControllerSlider;
function setSV(e) {
  if (e.type.indexOf('touch') === -1) { e.preventDefault(); }

  const fieldRect = _this.__saturation_field.getBoundingClientRect();
  const { clientX, clientY } = (e.touches && e.touches[0]) || e;
  let s = (clientX - fieldRect.left) / (fieldRect.right - fieldRect.left);
  let v = 1 - (clientY - fieldRect.top) / (fieldRect.bottom - fieldRect.top);

  if (v > 1) { v = 1; }
  else if (v < 0) { v = 0; }

  _this.__color.s = s;
  _this.__color.v = v;

  _this.setValue(_this.__color.toOriginal());

  return false;
}

function setH(e) {
  if (e.type.indexOf('touch') === -1) { e.preventDefault(); }

  const fieldRect = _this.__hue_field.getBoundingClientRect();
  const { clientY } = (e.touches && e.touches[0]) || e;
  let h = 1 - (clientY - fieldRect.top) / (fieldRect.bottom - fieldRect.top);

  if (h > 1) { h = 1; }
  else if (h < 0) { h = 0; }

  _this.__color.h = h * 360;

  _this.setValue(_this.__color.toOriginal());

  return false;
}

this.updateDisplay();

function setHSV(e) {
  if (e.type.indexOf('touch') !== -1) { e.preventDefault(); }

  const fieldRect = _this.__saturation_field.getBoundingClientRect();
  const { clientX: x, clientY: y } = (e.touches && e.touches[0]) || e;

  let s = (clientX - fieldRect.left) / (fieldRect.right - fieldRect.left);
  let v = 1 - (clientY - fieldRect.top) / (fieldRect.bottom - fieldRect.top);

  if (v > 1) { v = 1; }
  else if (v < 0) { v = 0; }

  _this.__color.s = s;
  _this.__color.v = v;

  _this.setValue(_this.__color.toOriginal());

  return false;
}

this.updateDisplay();

if (this.__color.toString() !== this.__color.toOriginal()) {
  this.__color.__state = this.__color.toOriginal();
}

if (this.__color.toString() !== this.__color.toOriginal()) {
  this.__color.__state = this.__color.toOriginal();
}

function setHSV(e) {
  if (e.type.indexOf('touch') !== -1) { e.preventDefault(); }

  const fieldRect = _this.__saturation_field.getBoundingClientRect();
  const { clientX: x, clientY: y } = (e.touches && e.touches[0]) || e;

  let s = (clientX - fieldRect.left) / (fieldRect.right - fieldRect.left);
  let v = 1 - (clientY - fieldRect.top) / (fieldRect.bottom - fieldRect.top);

  if (v > 1) { v = 1; }
  else if (v < 0) { v = 0; }

  _this.__color.s = s;
  _this.__color.v = v;

  _this.setValue(_this.__color.toOriginal());

  return false;
}

this.updateDisplay();

if (this.__color.toString() !== this.__color.toOriginal()) {
  this.__color.__state = this.__color.toOriginal();
}

if (this.__color.toString() !== this.__color.toOriginal()) {
  this.__color.__state = this.__color.toOriginal();
}
common.each(vendors, function(vendor) {
    elem.style.cssText += 'background: ' + vendor + 'linear-gradient(' + x + ', ' + a + ' 0%, ' + b + ' 100%); ';
  });
}

function hueGradient(elem) {
  elem.style.background = '';
  elem.style.cssText += 'background: -moz-linear-gradient(top,  #ff0000 0%, #ff00ff 17%, #0000ff 34%, #00ff00 50%,
    #0000ff 67%, #ff00ff 84%, #ff0000 100%);';
  elem.style.cssText += 'background: -webkit-linear-gradient(top, #ff0000 0%, #ff00ff 17%, #0000ff 34%, #00ff00 50%,
    #0000ff 67%, #ff00ff 84%, #ff0000 100%);';
  elem.style.cssText += 'background: -o-linear-gradient(top,  #ff0000 0%, #ff00ff 17%, #0000ff 34%, #00ff00 50%,
    #0000ff 67%, #ff00ff 84%, #ff0000 100%);';
  elem.style.cssText += 'background: -ms-linear-gradient(top, #ff0000 0%, #ff00ff 17%, #0000ff 34%, #00ff00 50%,
    #0000ff 67%, #ff00ff 84%, #ff0000 100%);';
  elem.style.cssText += 'background: linear-gradient(top,  #ff0000 0%, #ff00ff 17%, #0000ff 34%, #00ff00 50%,
    #0000ff 67%, #ff00ff 84%, #ff0000 100%);';
}

export default ColorController;

/**
 * dat-gui JavaScript Controller Library
 * http://code.google.com/p/dat-gui/
 *
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 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 * http://www.apache.org/licenses/LICENSE-2.0
 */

const css = {
  load: function(url, indoc) {
    const doc = indoc || document;
    const link = doc.createElement('link');
    link.type = 'text/css';
    link.rel = 'stylesheet';
    link.href = url;
    doc.getElementsByTagName('head')[0].appendChild(link);
  },

  inject: function(cssContent, indoc) {
    const doc = indoc || document;
    const injected = document.createElement('style');
    injected.type = 'text/css';
    injected.innerHTML = cssContent;
    const head = doc.getElementsByTagName('head')[0];
    try {
      head.appendChild(injected);
    } catch (e) { // Unable to inject CSS, probably because of a Content Security Policy
      }
    }
};

export default css;

const saveDialogContents = `<div id="dg-save" class="dialogue">
  Here's the new load parameter for your <code>GUI</code>'s constructor:
  <textarea id="dg-new-constructor"></textarea>

  <div id="dg-save-locally">
    <input id="dg-local-storage" type="checkbox"/> Automatically save
    values to <code>localStorage</code> on exit.
  </div>

  <div id="dg-local-explain">
    The values saved to <code>localStorage</code> will override those passed to
    <code>dat.GUI</code>'s constructor.
  </div>
</div>`;

export default saveDialogContents;

/**
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 * http://code.google.com/p/dat-gui/
 *
 * Copyright 2011 Data Arts Team, Google Creative Lab
 * Licensed under the Apache License, Version 2.0 (the "License");
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 * You may obtain a copy of the License at
 * http://www.apache.org/licenses/LICENSE-2.0
 */

import OptionController from './OptionController';
import NumberControllerBox from './NumberControllerBox';
import NumberControllerSlider from './NumberControllerSlider';
import StringController from './StringController';
import FunctionController from './FunctionController';
import BooleanController from './BooleanController';
import ControllerFactory = function(object, property) {
  const initialValue = object[property];

  // Providing options?
  if (common.isArray(arguments[2]) || common.isObject(arguments[2])) {
    return new OptionController(object, property, arguments[2]);
  }

  // Providing a map?
  if (common.isNumber(initialValue)) {
    // Has min and max? (slider)
    if (common.isNumber(arguments[2]) && common.isNumber(arguments[3])) {
      // has step?
      if (common.isNumber(arguments[4])) {
        return new NumberControllerSlider(object, property,
                                             arguments[2], arguments[3], arguments[4]);
      }

      return new NumberControllerBox(object, property, { min: arguments[2], max: arguments[3], step: arguments[4] });
    }

    return new NumberControllerBox(object, property, { min: arguments[2], max: arguments[3] });
  }

  if (common.isString(initialValue)) {
    return new StringController(object, property);
  }

  if (common.isFunction(initialValue)) {
    return new FunctionController(object, property, '');
  }

  if (common.isBoolean(initialValue)) {
    return new BooleanController(object, property);
  }

  return null;
};

export default ControllerFactory;
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function requestAnimationFrame(callback) {
  setTimeout(callback, 1000 / 60);
}

export default window.requestAnimationFrame ||
    window.webkitRequestAnimationFrame ||
    window.mozRequestAnimationFrame ||
    window.oRequestAnimationFrame ||
    requestAnimationFrame;

/*
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 */

import dom from '../dom/dom';
import common from '../utils/common';

class CenteredDiv {
  constructor() {
    this.backgroundElement = document.createElement('div');
    common.extend(this.backgroundElement.style, { backgroundColor: 'rgba(0,0,0,0.8)', top: 0, left: 0, display: 'none', zIndex: '1000', opacity: 0, WebkitTransition: 'opacity 0.2s linear', transition: 'opacity 0.2s linear' });

    dom.makeFullscreen(this.backgroundElement);
    this.backgroundElement.style.position = 'fixed';

    this.domElement = document.createElement('div');
    common.extend(this.domElement.style, { position: 'fixed', display: 'none', zIndex: '1001', opacity: 0, WebkitTransition: '-webkit-transform 0.2s ease-out, opacity 0.2s linear', transition: 'transform 0.2s ease-out, opacity 0.2s linear' });

    document.body.appendChild(this.backgroundElement);
    document.body.appendChild(this.domElement);

    const _this = this;
    dom.bind(this.backgroundElement, 'click', function() {
      _this.hide();
    });

    this.domElement.style.display = 'block';

    this.domElement.style.opacity = 0;

    this.domElement.style.top = 52%;
    this.domElement.style.webkitTransform = 'scale(1.1)';

    this.domElement.style.opacity = 1;

    this.domElement.style.webkitTransform = 'scale(1)';

    dom.show();
    this.domElement.style.display = 'block';

    dom.bind(this.domElement, 'click', function() {
      _this.hide();
    });

    this.domElement.style.opacity = 1;

    this.domElement.style.transform = 'scale(1)';

    dom.show();

    dom.unbind(_this.domElement, 'webkitTransitionEnd', hide);
    dom.unbind(_this.domElement, 'transitionend', hide);
    dom.unbind(_this.domElement, 'oTransitionEnd', hide);

    dom.bind(this.domElement, 'webkitTransitionEnd', hide);
    dom.bind(this.domElement, 'transitionend', hide);

    dom.bind(this.domElement, 'webkitTransitionEnd', hide);

    dom.bind(this.domElement, 'oTransitionEnd', hide);

    dom.bind(this.domElement, 'transitionend', hide);

    dom.bind(this.domElement, 'webkitTransitionEnd', hide);

    dom.bind(this.domElement, 'transitionend', hide);
/* Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6 */

let DEFAULT_DEFAULT_PRESET_NAME = 'Default';

const SUPPORTS_LOCAL_STORAGE = (function() {

  try {
    return !!window.localStorage;
  } catch (e) {
    return false;
  }
}());

let SAVE_DIALOGUE;

/** @ignore Have we yet to create an autoPlace GUI? */
let autoPlaceVirgin = true;

/** @ignore Fixed position div that auto place GUI's go inside */
let autoPlaceContainer;

/** @ignore Are we hiding the GUI's? */
let hide = false;

/** @ignore 
 Are we hiding the GUI's? */
let hideableGuis = [];

/** @ignore Have we yet to create an autoPlace GUI? */
let autoPlaceVirgin = true;

/** @ignore Fixed position div that auto place GUI's go inside */
let autoPlaceContainer;

/** @ignore Are we hiding the GUI's? */
let hide = false;

/** @ignore 
 Are we hiding the GUI's? */
let hideableGuis = [];

/**
 * @class A lightweight controller library for JavaScript. It allows you to easily manipulate variables and fire functions on the fly
 */

const gui = function(pars) {
  const _this = this;

  let params = pars || {};

  /**
   * Outermost DOM Element
   */
  this.domElement = document.createElement('div');
  this.domElement.className = 'gui';

  /**
   * Nested GUI's by name
   */
  this.__folders = {};

  /**
   * List of objects I'm remembering for save, only used in top level GUI
   */
  this.__rememberedObjects = [];

  /**
   * Maps the index of remembered objects to a map of controllers, only used in top level GUI
   */
  this.__rememberedObjectIndecesToControllers = [];

  this.__listening = [];

  // Default parameters
  params = common.defaults(params, {
    closeOnTop: false,
    autoPlace: true,
    width: 300
  });

  params = common.defaults(params, {
    resizable: params.autoPlace,
    hideable: params.autoPlace
  });

  if (common.isUndefined(params.load)) {
    params.load = { preset: DEFAULT_DEFAULT_PRESET_NAME };
  }

  if (common.isUndefined(params.parent) && params.hideable) { hideableGuis.push(this); }

  // Not part of params because I don't want people passing this in via constructor. Should be a 'remembered' value.
  let useLocalStorage = SUPPORTS_LOCAL_STORAGE && localStorage.getItem(getLocalStorageHash(this, 'isLocal')) === 'true';

  let saveToLocalStorage;
  let titleRow;

  Object.defineProperties(this,

    /**
     * The parent <code>GUI</code>
     * @type dat.gui.GUI
     */
    parent: {
      get: function() {
        return params.parent;
      }
    },

    /**
     * The width of <code>GUI</code> element
     * @type Number
     */
    width: {
      get: function() {
        return params.width;
      },
      set: function(v) {
        params.width = v;
        setWidth(_this, v);
      }
    },

    /**
     * The name of <code>GUI</code>. Used for folders. i.e
     */
    preset: {
      get: function() {
        if (_this.parent) {
          return _this.getRoot().preset;
        }

        return params.load.preset;
      },
      set: function(v) {
        if (_this.parent) {
          _this.getRoot().preset = v;
          setPresetSelectIndex(this);
          _this.revert();
        }

        params.load.preset = v;
      }
    },

    /**
     * Handles <code>GUI</code>'s position of open/close button
     */
    closeOnTop: {
      get: function() {
        return params.closeOnTop;
      },
      set: function(v) {
        if (_this.parent) {
          _this.getRoot().preset = v;
          params.loadpreset = v;
          _this.revert();
        }

        params.loadpreset = v;
      }
    },

    /**
     * The identifier for a set of saved values
     */
    preset: {
      get: function() {
        if (_this.parent) {
          _this.getRoot().preset = v;
        }

        return params.loadpreset;
      },
      set: function(v) {
        if (_this.parent) {
          _this.getRoot().preset = v;
          params.loadpreset = v;
          _this.revert();
        }

        params.loadpreset = v;
      }
    },

    /**
     * Handles <code>GUI</code>'s element placement for you
     */
    autoPlace: {
      get: function() {
        return params.autoPlace;
      },
      set: function(v) {
        if (_this.parent) {
          _this.getRoot().preset = v;
          params.loadpreset = v;
          _this.revert();
        }

        params.loadpreset = v;
      }
    },

    /**
     * The saveToLocalStorage.getToLocalStorageHash(this, _isLocal)
     */
    saveToLocalStorage: {
      get: function() {
        return localStorage.getItem('isLocal');
      },
      set: function(v) {
        localStorage.setItem('isLocal', v);
      }
    }
  );

  this.__controllers = [];

  this.__controllers.push(gui.prototype);
a folder's name

    * @type String
    * @name name: {get: function() {return params.name};
    set: function(v) {titleRow.innerHTML = v;}
    }:
    * @type Boolean
    * @name closed: {get: function() {return params.closed;}}:
    * @type Object
    * @name load:
    * @type Boolean
    * @name useLocalStorage:

    get: function() {
      return params.load;
    },
    set: function(bool) {
      if (SUPPORTS_LOCAL_STORAGE) {
        useLocalStorage = bool;
        if (bool) {
          dom.bind(window, 'unload', saveToLocalStorage);
        } else {
          dom.unbind(window, 'unload', saveToLocalStorage);
        }
        localStorage.setItem(getLocalStorageHash(_this, 'gui'), JSON.stringify(_this.getSaveObject()));
      }
    },

    get: function() {
      return useLocalStorage;
    },
    set: function(bool) {
      if (SUPPORTS_LOCAL_STORAGE) {
        useLocalStorage = bool;
        if (bool) {
          dom.bind(window, 'unload', saveToLocalStorage);
        } else {
          dom.unbind(window, 'unload', saveToLocalStorage);
        }
        localStorage.setItem(getLocalStorageHash(_this, 'gui'), JSON.stringify(_this.getSaveObject()));
      }
    },

    // Are we a root level GUI?
    if (common.isUndefined(params.parent)) {
      this.closed = params.closed || false;
      dom.addClass(this.domElement, GUI.CLASS_MAIN);
      dom.makeSelectable(this.domElement, false);
      // Are we supposed to be loading locally?
      if (SUPPORTS_LOCAL_STORAGE) {
        if (useLocalStorage) {
          _this.useLocalStorage = true;
          const savedGui = localStorage.getItem(getLocalStorageHash(_this, 'gui'));
          if (savedGui) {
            params.load = JSON.parse(savedGui);
          }
        }
      }
    }

    // Are we supposed to be loading locally?
    if (SUPPORTS_LOCAL_STORAGE) {
      if (useLocalStorage) {
        _this.useLocalStorage = true;
        const savedGui = localStorage.getItem(getLocalStorageHash(_this, 'gui'));
        if (savedGui) {
          params.load = JSON.parse(savedGui);
        }
      }
    }

    // Make it not elastic.
    if (!this.parent) {
      setWidth(_this, params.width);
    }

    // Apply the auto styles
    dom.addClassName(this.domElement, GUI.CLASS_AUTO_PLACE);
    if (autoPlaceVirgin) {
      autoPlaceContainer = document.createElement('div');
      dom.addClass(autoPlaceContainer, CSS_NAMESPACE);
      dom.addClassName(autoPlaceContainer, GUI.CLASS_AUTO_PLACE_CONTAINER);
      document.body.appendChild(autoPlaceContainer);
    }

    autoPlaceVirgin = false;
    // Put it in the dom for you.
    autoPlaceContainer.appendChild(this.domElement);
expose this method publicly
  this.saveToLocalStorageIfPossible = saveToLocalStorage;

  function resetWidth()
  { // this.getRoot();
    const root = _this.getRoot();
    const rootWidth = root.width;
    root.width += 1;
    common.defer(function()
    { // root.width -= 1;
      const root = _this.getRoot();
      root.width -= 1;
      common.each(hideableGuis, function (gui)
      { // gui.domElement.style.display = hide ? 'none' : '';
        gui.domElement.style.display = hide ? 'none' : '';
      });
      _ unarmedGUI.toggleHide = function()
      { // gui.domElement.style.display = hide ? 'none' : '';
        gui.domElement.style.display = hide ? 'none' : '';
      };
      unarmedGUI.CLASS_AUTO_PLACE = 'ac';
      unarmedGUI.CLASS_MAIN = 'main';
      unarmedGUI.CLASS_CONTROLLER_ROW = 'cr';
      unarmedGUI.DEFAULT_WIDTH = 245;
      unarmedGUI.TEXT_CLOSED = 'Close Controls';
      unarmedGUI.toggleHide = function()
      { // gui.domElement.style.display = hide ? 'none' : '';
        gui.domElement.style.display = hide ? 'none' : '';
      };
    })(this);
  }

  if (!params.parent) {
    resetWidth();
  }
};

GUI.toggleHide = function() {
  hide = !hide;
  common.each(hideableGuis, function (gui) {
    gui.domElement.style.display = hide ? 'none' : '';
  });
};

GUI.CLASS_AUTO_PLACE = 'a';
GUI.CLASS_AUTO_PLACE_CONTAINER = 'ac';
GUI.CLASS_MAIN = 'main';
GUI.CLASS_CONTROLLER_ROW = 'cr';
GUI.CLASS_TOO_TALL = 'taller-than-window';
GUI.CLASS_CLOSE_BUTTON = 'close-button';
GUI.CLASS_CLOSE_TOP = 'close-top';
GUI.CLASS_CLOSE_BUTTON = 'close-bottom';
GUI.CLASS_DRAG = 'drag';
GUI.TEXT_CLOSED = 'Close Controls';
GUI.TEXT_OPEN = 'Open Controls';

GUI.DEFAULT_WIDTH = 245;
GUI.TEXT_CLOSED = 'Close Controls';
GUI.TEXT_OPEN = 'Open Controls';

GUI._keydownHandler = function(e) {
  if (document.activeElement.type !== 'text' &&
      (e.which === HIDE_KEY_CODE || e.keyCode === HIDE_KEY_CODE)) {
    GUI.toggleHide();
  }
};
dom.bind(window, 'keydown', GUI._keydownHandler, false);

GUI.add = function(object, property) {
  return add(
    this,
    object,
    property,
    {
      factoryArgs: Array.prototype.slice.call(arguments, 2)
    }
  );
};

GUI.addColor = function(object, property) {
  return add(
    this,
    object,
    property,
    {
      color: true
    }
  );
};

GUI.remove = function(controller) {
  // TODO listening?
  this.__ul.removeChild(controller.__li);
  this.__controllers.splice(this.__controllers.indexOf(controller), 1);
  const _this = this;
  common.defer(function() {
    _this.onResize();
  });
};

GUI.destroy = function() {
  if (this.parent) {
    throw new Error(
      'Only the root GUI should be removed with .destroy().
      ' +
      'For subfolders, use gui.removeFolder(folder). instead.' +
      'If this.parent is undefined, .destroy() will throw a new Error(' +
      '
    );
  }

  const _this = this;
  common.each(this.__folders, function(subfolder) {
    _this.removeFolder(subfolder);
  });
  dom.unbind(window, 'keydown', GUI_keydownHandler, false);
  removeListeners(this);

  /* Remove the root GUI from the document and uns bind all event listeners */
  /* For subfolders, use gui.removeFolder(folder). instead. */
  /* If this.parent is undefined, .destroy() will throw a new Error(' +
  /* Only the root GUI should be removed with .destroy(). ' +
  /* For subfolders, use gui.removeFolder(folder). instead. ' +
  /* If this.parent is undefined, .destroy() will throw a new Error(' +
  /* Only the root GUI should be removed with .destroy(). ' +
  /* For subfolders, use gui.removeFolder(folder). instead. */
  /* If this.parent is undefined, .destroy() will throw a new Error(' +
  /* Only the root GUI should be removed with .destroy(). ' +
  /* For subfolders, use gui.removeFolder(folder). instead. */
  /* If this.parent is undefined, .destroy() will throw a new Error(' +
  /* Only the root GUI should be removed with .destroy(). ' +
  /* For subfolders, use gui.removeFolder(folder). instead. */
  /* If this.parent is undefined, .destroy() will throw a new Error(' +
  /* Only the root GUI should be removed with .destroy(). ' +
  /* For subfolders, use gui.removeFolder(folder). instead. */
  /* If this.parent is undefined, .destroy() will throw a new Error(' +
  /* Only the root GUI should be removed with .destroy(). ' +
  /* For subfolders, use gui.removeFolder(folder). instead. */
  /* If this.parent is undefined, .destroy() will throw a new Error(' +
  /* Only the root GUI should be removed with .destroy(). ' +
  /* For subfolders, use gui.removeFolder(folder). instead. */
  /* If this.parent is undefined, .destroy() will throw a new Error(' +
  /* Only the root GUI should be removed with .destroy(). ' +
  /* For subfolders, use gui.removeFolder(folder). instead. */
  /* If this.parent is undefined, .destroy() will throw a new Error(' +
  /* Only the root GUI should be removed with .destroy(). ' +
  /* For subfolders, use gui.removeFolder(folder). instead. */
  /* If this.parent is undefined, .destroy() will throw a new Error(' +
  /* Only the root GUI should be removed with .destroy(). ' +
  /* For subfolders, use gui.removeFolder(folder). instead. */
  /* If this.parent is undefined, .destroy() will throw a new Error(' +
  /* Only the root GUI should be removed with .destroy(). ' +
  /* For subfolders, use gui.removeFolder(folder). instead. */
  /* If this.parent is undefined, .destroy() will throw a new Error(' +
  /* Only the root GUI should be removed with .destroy(). ' +
  /* For subfolders, use gui.removeFolder(folder). instead. */
  /* If this.parent is undefined, .destroy() will throw a new Error(' +
  /* Only the root GUI should be removed with .destroy(). ' +
  /* For subfolders, use gui.removeFolder(folder). instead. */
  /* If this.parent is undefined, .destroy() will throw a new Error(' +
  /* Only the root GUI should be removed with .destroy(). ' +
  /* For subfolders, use gui.removeFolder(folder). instead. */
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  /* For subfolders, use gui.removeFolder(folder). instead. */
  /* If this.parent is undefined, .destroy() will throw a new Error(' +
  /* Only the root GUI should be removed with .destroy(). ' +
  /* For subfolders, use gui.removeFolder(fold
newGuiParams.load = this.load.folders[name];

        // Pass down the loaded data

        this.__folders[name] = gui;

        const li = addRow(this, gui.domElement);

        dom.addClass(li, 'folder');

        return gui;
    },

    /**
     * Removes a subfolder GUI instance.
     * @param {dat.gui.GUI} folder
     * @instance
     */
    removeFolder: function(folder) {

        this.__ul.removeChild(folder.domElement.parentElement);

        delete this.__folders[folder.name];

        // Do we have saved appearance data for this folder?
        if (this.load && this.load.folders &&
            this.load.folders[folder.name]) {
            delete this.load.folders[folder.name];

            removeListeners(folder);

            const _this = this;

            common.each(folder.__folders, function(subfolder) {
              _this.removeFolder(subfolder);
            });

            common.defer(function() {
              _this.onResize();
            });
          }

          delete _this.load.folders[name];

          return;
    },

    /**
     * Opens the GUI.
     */
    open: function() {
      this.closed = false;
    },

    /**
     * Closes the GUI.
     */
    close: function() {
      this.closed = true;
    },

    /**
     * Hides the GUI.
     */
    hide: function() {
      this.domElement.style.display = 'none';
    },

    /**
     * Shows the GUI.
     */
    show: function() {
      this.domElement.style.display = '';
    },

    onResize: function() {
      // we debounce this function to prevent performance issues when rotating on tablet/mobile
      const root = this.getRoot();

      if (root.scrollable) {
        const top = dom.getOffset(root.__ul).top;

        let h = 0;

        common.each(root.__ul.childNodes, function(node) {
          if (!(root.autoPlace && node === root.__save_row)) {
            h += dom.getHeight(node);
          }
        });

        if (window.innerHeight - top - CLOSE_BUTTON_HEIGHT < h) {
          dom.addClass(root.domElement, GUI.CLASS_TOO_TALL);
          root.__ul.style.height = window.innerHeight - top - CLOSE_BUTTON_HEIGHT + 'px';
        } else {
          dom.removeClass(root.domElement, GUI.CLASS_TOO_TALL);
          root.__ul.style.height = 'auto';
        }

        if (root.__resize_handle) {
          common.defer(function() {
            root.__resize_handle.style.height = root.__ul.offsetHeight + 'px';
          });
        }

        if (root.__closeButton) {
          root.__closeButton.style.width = root.width + 'px';
        }
      }
    },

    onResizeDebounced: common.debounce(function() { this.onResize(); }, 50),

    /**
     * Mark objects for saving. The order of these objects cannot change as
     * the GUI grows.
     * @param {...Object} objects
     * @throws {Error} if not called on a top level GUI.
     * @instance
     * @ignore
     */
    remember: function() {
      if (common.isUndefined(SAVE_DIALOGUE)) {
        SAVE_DIALOGUE = new CenteredDiv();
        SAVE_DIALOGUE.domElement.innerHTML = saveDialogueContents;
      }

      if (this.parent) {
        throw new Error('You can only call remember on a top level GUI.');
      }

      const _this = this;

      common.each(Array.prototype.slice.call(arguments), function(object) {
        if (_this.__rememberedObjects.length === 0) {
          addSaveMenu(_this);
        }

        if (_this.__rememberedObjects.indexOf(object) === -1) {
          _this.__rememberedObjects.push(object);
        }
      });

      if (this.autoPlace) {
        // Set save row width
        setWidth(this, this.width);
      }
    },

    /**
     * @returns {dat.gui.GUI} the topmost parent GUI of a nested GUI.
     * @instance
     */
    getRoot: function() {
      let gui = this;
      while (gui.parent) {
        gui = gui.parent;
      }
      return gui;
    },

    /**
     * @returns {Object} a JSON object representing the current state of
     * this GUI as well as its remembered properties.
     * @instance
     * @getSaveObject:
     */
    getSaveObject: function() {
      const toReturn = this.load;

      toReturn.closed = this.closed;

      // Am I remembering any values?
      if (this.__rememberedObjects.length > 0) {
        toReturn.remembered = {};

        common.each(this.__folders, function(element, key) {
          toReturn.folders[key] = element.getSaveObject();
        });

        toReturn.remembered = {};

        common.each(Array.prototype.slice.call(arguments), function(object) {
          toReturn.remembered[object] = true;
        });

        toReturn.remembered[DEFAULT_DEFAULT_PRESET_NAME] = true;
      }

      return toReturn;
    },

    save: function() {
      if (!this.load.remembered) {
        this.load.remembered = {};
      }

      this.load.remembered[DEFAULT_DEFAULT_PRESET_NAME] = true;

      markPresetModified(this, false);

      saveToLocalStorageIfPossible();
    },

    saveAs: function(presetName) {
      if (!this.load.remembered) {
        // Retain default values upon first save
        this.load.remembered[DEFAULT_DEFAULT_PRESET_NAME] = true;
      }
    },

    __folders: undefined,
    __ul: undefined,
    __closeButton: undefined,
    __root: undefined,
    __save_row: undefined,
    __rememberedObjects: undefined,
    __rememberedObjectsIndexes: undefined,
    __rememberedObjectsIndexLength: undefined,
    __save_menu: undefined,
    __dlg: undefined,
    __dlgParent: undefined,
    __closeDialog: undefined,
    __closeDialogParent: undefined,
  }

  return gui;
}
getCurrentPreset(this, true);
}

this.load.remembered[ presetName ] = getCurrentPreset(this);
addPresetOption(this, presetName, true);
this.saveToLocalStorageIfPossible();
}

revert: function (gui) {
  common.each(this.__controllers, function (controller) {
    // Make revert work on Default
    if (!this.getRoot().load.remembered)
      { controller.setValue(controller.initialValue); } else
      { recallSavedValue(gui || this.getRoot(), controller); }
    }

  if (controller.__onFinishChange)
    { controller.__onFinishChange.call(controller, controller.get_value()); }

  common.each(this.__folders, function (folder) {
    // Make revert work on Default.
    if (!this.getRoot().load.remembered) {
      controller.setValue(controller.initialValue);
    } else {
      recallSavedValue(gui || this.getRoot(), controller);
    }

    // fire onFinishChange callback
    if (controller.__onFinishChange) { controller.__onFinishChange.call(controller, controller.get_value()); }

  }, this);

  common.each(this.__controllers, function (controller) {
    controller.updateDisplay();
  });

  common.each(this.__folders, function (folder) {
    folder.updateDisplay();
  });
}

listen: function (controller) {
  const init = this.__listening.length === 0;
  this.__listening.push(controller);
  if (init) {
    updateDisplays(this.__listening);
  }
}

updateDisplay: function () {
  common.each(this.__controllers, function (controller) {
    controller.updateDisplay();
  });

  common.each(this.__folders, function (folder) {
    folder.updateDisplay();
  });
}

/**
 * Add a row to the end of the GUI or before another row.
 * @param gui
 * @param [newDom] If specified, places the new row before another row
 * @param [liBefore] If specified, places the new row before another row
 * @ignore
 */
function addRow (gui, newDom, liBefore) {
  const li = document.createElement('li');
  if (newDom) {
    li.appendChild(newDom);
  }

  if (liBefore) {
    gui.__ul.insertBefore(li, liBefore);
  } else {
    gui.__ul.appendChild(li);
  }
  gui.onResize();
  return li;
}

function removeListeners (gui) {
  dom.unbind(window, 'resize', gui.__resizeHandler);

  if (gui.saveToLocalStorageIfPossible) {
    dom.unbind(window, 'unload', gui.saveToLocalStorageIfPossible);
  }
}

function markPresetModified (gui, modified) {
  const opt = gui.__preset_select[ gui.__preset_select.selectedIndex ];

  if (modified) {
    opt.innerHTML = opt.value + '*';
  } else {
    opt.innerHTML = opt.value;
  }
}

function augmentController (gui, li, controller) {
  controller.__li = li;
  controller.__gui = gui;

  common.extend(controller, /** @lends Controller.prototype */ {
    /**
     * @param  {Array|Object} options
     * @return {Controller}
     */
    options: function (options) {
      if (arguments.length > 1) {
        const nextSibling = controller.__li.nextElementSibling;
        controller.remove();

        return add(
          gui,
          controller.object,
          controller.property,
          {
            before: nextSibling,
            factoryArgs: [common.toArray(arguments)]
          }
        );
      }

      if (common.isArray(options) || common.isObject(options)) {
        const nextSibling = controller.__li.nextElementSibling;

        controller.remove();

        return add(
          gui,
          controller.object,
          controller.property,
          {
            before: nextSibling,
            factoryArgs: [options]
          }
        );
      }
    },

    /**
     * Sets the name of the controller.
     * @param  {string} name
     * @return {Controller}
     */
    name: function (name) {
      controller.__li.firstElementChild.firstElementChild.innerHTML = name;
      return controller;
    },

    /**
     * Removes the controller from its parent GUI.
     * @return {Controller}
     */
    remove: function () {
      controller.__li.firstElementChild.firstElementChild.innerHTML = name;
      return controller;
    }
  });

  // All sliders should be accompanied by a box.
  if (controller instanceof NumberControllerSlider) {
    const box = new NumberControllerBox (controller.object, controller.property, {
      [\min: controller._min, \max: controller._max, \step: controller._step] : \common.each(['updateDisplay', 'onChange', 'onFinishChange', 'step', 'min', 'max'], function (method) {
        [\const \p = controller[method]; \const \p = box[method]; \controller[method] = function () {
          \const \args = Array.prototype.slice.call(arguments);
          \p.apply(box, args);
          \p.apply (controller, args); }
        ];
      }]
    }());
    dom.addClass(li, 'has-slider');
    controller.domElement.insertBefore(box.domElement, controller.domElement.firstElementChild);
  }
}

}
newController = add(gui, controller.object, controller.property, 
    { 
        before: controller.__li.nextElementSibling, 
        factoryArgs: [controller.__min, controller.__max, controller.__step] 
    });
newController.name(oldName); 
if (wasListening) newController.listen(); 
return newController;
}
return returned;
}
controller.min = common.compose(r, controller.min);
controller.max = common.compose(r, controller.max);
}
else if (controller instanceof BooleanController) {
    dom.bind(li, 'click', function() {
        dom.fakeEvent(controller.__checkbox, 'click');
    });
    dom.bind(controller.__checkbox, 'click', function(e) {
        e.stopPropagation(); // Prevents double-toggle
    });
}
else if (controller instanceof FunctionController) {
    dom.bind(li, 'click', function() {
        dom.fakeEvent(controller.__button, 'click');
    });
    dom.bind(li, 'mouseover', function() {
        dom.addClass(controller.__button, 'hover');
    });
    dom.bind(li, 'mouseout', function() {
        dom.removeClass(controller.__button, 'hover');
    });
}
else if (controller instanceof ColorController) {
    dom.addClass(li, 'color');
    controller.updateDisplay = common.compose(function(val) {
        li.style.borderLeftColor = controller.__color.toString();
        return val;
    }, controller.updateDisplay);
    controller.updateDisplay();
}
controller.setValue = common.compose(function(val) {
    if (gui.getRoot().__preset_select && controller.isModified()) {
        markPresetModified(gui.getRoot(), true);
    }
    return val;
}, controller.setValue);

function recallSavedValue(gui, controller) {
    // Find the topmost GUI, that's where remembered objects live.
    const root = gui.getRoot();
    // Does the object we're controlling match anything we've been told to
    // remember?
    const matchedIndex = root.__rememberedObjects.indexOf(controller.object);
    // Why yes, it does!
    if (matchedIndex !== -1) {
        // Let me fetch a map of controllers for this object.
        let controllerMap = root.__rememberedObjectIndecesToControllers[matchedIndex];
        // Ok, now have we saved any values for this controller?
        if (root.load && root.load.remembered) {
            const presetMap = root.load.remembered;
            // Which preset are we trying to load?
            let preset;
            if (presetMap[gui.preset]) {
                preset = presetMap[gui.preset];
            } else if (presetMap[DEFAULT_DEFAULT_PRESET_NAME]) {
                preset = presetMap[DEFAULT_DEFAULT_PRESET_NAME];
            } else {
                return;
            }
            // Did the loaded object remember this controller?
            if (preset[matchedIndex] && preset[matchedIndex][controller.property] !== undefined) {
                // We did remember something for this guy ...
                const value = preset[matchedIndex][controller.property];
                // And that's what it is.
                const value = preset[matchedIndex][controller.property];
            }
        }
    }
}

function add(ui, object, property, params) {
    if (object[property] === undefined) {
        throw new Error(`Object 
‘${object}’ has no property ‘${property}’`);
    }
    let controller;
    if (params.color) {
        controller = new ColorController(object, property);
    } else {
        const factoryArgs = [object, property].concat(params.factoryArgs);
        controller = ControllerFactory.apply(gui, factoryArgs);
    }
    recallSavedValue(gui, controller);
    dom.addClass(controller.domElement, 'c');
    const name = document.createElement('span');
    dom.addClass(name, 'property-name');
    name.innerHTML = controller.property;
    const container = document.createElement('div');
    container.appendChild(name);
    container.appendChild(controller.domElement);
    const li = addRow(gui, container, params.before);
    dom.addClass(li, 'color');
    augmentController(gui, li, controller);
    gui.__controllers.push(controller);
    return controller;
}

function getLocalStorageHash(gui, key) {
    return document.location.href + '.' + key;
}

function addPresetOption(gui, name, setSelected) {
    const opt = document.createElement('option');
    opt.innerHTML = name;
    opt.value = name;
}
The controllers I've made for thcommon.isObject by property

const controllerMap =

const controllerMap =

const controllerMap =


// Remember each value for each property

function(controller, property) {

  // Save the values for thcommon.isObject

  function setPresetSelectIndex(gui) {

    // for (let

    index = 0; index < gui._presetsSelect.length; index++) {

      if (gui._presetsSelect[index].value === gui.preset)

        return toPresetSelectIndex(gui) == index;

    }

    return toPresetSelectIndex(gui);

  }

  // Call the function with the new preset

  function requestAnimationFrame() {

    // Update the displays

    common.each(controllerArray, function(c) {

      c.updateDisplay();

    });

  }

  return {;

  };

}
e[1]])
c
childToParentEdges=parentChildrenTuples.map(function(e) { return e[0] });

function getDisplacement(e,t,r) { var n=r.shape[2]; return y.r.get(t.y,x,e.x).x.r.get(t.y,x.n+n+e) ];

function getStridedIndexNearPoint(e,t,r) { return y:clamp(Math.round(e.y/t),0,r-1),x:clamp(Math.round(e.x/t),0,n-1) ];

function traverseToTargetKeypoint(e,t,r,o,i) { return s=t.shape[2],a=parentToChildEdges.length,u=new Array(s),l=e.part,f=e.score,c=getImageCoords(l,n,r); u[l.id]={score:f,part:partNames[l.id],position:c};

var g=getStridedIndexNearPoint(d,i,l,f),_=n.get(g.y,g.x,r); return {position:d,part:partNames[r],score:_};

var kLocalMaximumRadius=1;

function decodeMultiplePoses(e,t,r,n,o,s,a) { void 0===s&&(s=.5),void 0===a&&(a=20); for(var u=[],l=buildPartWithScoreQueue(s,kLocalMaximumRadius,e),f=a*a;u.length<i&&!l.empty();){ var c=l.dequeue(); if(!withinNmsRadiusOfCorrespondingPoint(u,f,getImageCoords(c.part,o,t),c.part.id)){ var d=decodePose(c,e,t,o,r,n),p=getInstanceScore(u,f,d); u.push({keypoints:d,score:p})} } return u;

var NEGATIVE_INFINITY=Number.NEGATIVE_INFINITY,

POSITIVE_INFINITY=Number.POSITIVE_INFINITY;

function getBoundingBox(e) { return e.reduce(function(e,t) { return t }); } function getBoundingBoxPoints(e,t) { return e.reduce(function(e,t) { return t }); } function getAdjacentKeyPoints(e,t) { return e.reduce(function(e,t) { return t }); } function getConnectedPartIndices(e,t) { return e.reduce(function(e,t) { return t }); } function getNmsRadiusOfCorrespondingPoint(e,t,r) { return e.reduce(function(e,t) { return t }); } function getBoundingBox(e) { return e.reduce(function(e,t) { return t }); } function getBoundingBoxPoints(e) { return e.reduce(function(e,t) { return t }); } function toTensorBuffer(e,t) { return e.reduce(function(e,t) { return t }); } function toTensorBuffers3D(e) { return e.reduce(function(e,t) { return t }); }

function validateModelConfig(e) {if (null == (e = e || MOBILENET_V1_CONFIG).architecture && (e.architecture = 'MobileNetV 1'), VALID_ARCHITECTURE.indexOf(e.architecture) < 0) throw new Error('Invalid architecture "+e.architecture+". Should be one of 
"+VALID_ARCHITECTURE+"');
if (null == e.inputResolution && (e.inputResolution = 257), VALID_INPUT_RESOLU TION.indexOf(e.inputResolution) < 0) throw new Error('Invalid inputResolution "+e.inputResolution+". Should be one of 
"+VALID_INPUT_RESOLUTION+"');
if (null == e.outputStride && (e.outputStride = 16), VALID_STRIDE[e.architectur e].indexOf(e.outputStride) < 0) throw new Error('Invalid outputStride "+e.outputStride+". Should be one of 
"+VALID_STRIDE[e.architecture]+" for architecture 
"+e.architecture+"');
if (null == e.multiplier && (e.multiplier = 1), VALID_MULTIPLIER[e.architecture].indexOf(e. multiplier) < 0) throw new Error('Invalid multiplier "+e.multiplier+". Should be one of 
"+VALID_MULTIPLIER[e.architecture]+" for architecture 
"+e.architecture+"');
if (null == e.quantBytes && (e.quantBytes = 4), VALID_QUANT_BYTES.indexOf(e.quantByte s) < 0) throw new Error('Invalid quantBytes "+e.quantBytes+". Should be one of 
"+VALID_QUANT_BYTES+" for architecture 
"+e.architecture+"');
return e;
}

var SINGLE_PERSON_INFEERENCE_CONFIG={flipHorizontal:!1}, MULTI_PERSON_INFEERENCE_CONFIG={fli pHorizontal:!1,maxDetections:5,scoreThreshold:0.5,nmsRadius:20};

function validateMultiPersonInputConfig(t) {
if (t.maxDetections <= 0) throw new Error('Invalid maxDetections "+t+". Should be > 0');
if (t.scoreThreshold < 0.0 || t.scoreThreshold > 1.0) throw new Error('Invalid scoreThreshold "+t+". Should be in range [0.0, 1.0]');
if (t.nmsRadius <= 0) throw new Error('Invalid nmsRadius "+t+".');
}

var PoseNet=function(){
return function(e,t){this.baseModel=e,inputResolution=t};
}

PoseNet.prototype.estimateMultiplePoses=function(e,t){
var r=__assign({},MULTI_PERSON_INFERENCE_CONFIG,t),validateMultiPersonInputConfig(t),n=this.baseModel.outputStride,o=this.inputResolution,assertValidOutputStride(n),assertValidResolution(o,n),i=getInputTensorDimensions(e),s=i[0],a=i[1],u=padAndResizeTo(e,[o,o]),l=u.resized,p=n.padding,c=this.baseModel.predict(l),d=c.heatmapScores,p=c.offsets,h=c.displacementFwd,m=c.displacementBwd,
return decodeMultiplePoses(l,p,h,m,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION,VALID_STRIDE,VALID_MULTIPLIER,VALID_QUANT_BYTES,VALID_ARCHITECTURE,VALID_INPUT_RESOLUTION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Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6

```javascript
import * as posenet from '@tensorflow-models/posenet';
import * as tf from '@tensorflow/tfjs-core';

const COLOR = 'aqua';
const BOUNDING_BOX_COLOR = 'red';
const LINE_WIDTH = 2;

export const TRY_RESNET_BUTTON_NAME = 'tryResNetButton';
export const TRY_RESNET_BUTTON_TEXT = '[New] Try ResNet50';
const TRY_RESNET_BUTTON_TEXT_CSS = 'width:100%;text-decoration:underline;';
const TRY_RESNET_BUTTON_BACKGROUND_CSS = 'background:#e61d5f;';

function isAndroid() {
  return /Android/i.test(navigator.userAgent);
}

function isiOS() {
  return /iPhone|iPad|iPod/i.test(navigator.userAgent);
}

export function isMobile() {
  return isAndroid() || isiOS();
}

function setDatGuiPropertyCss(propertyText, liCssString, spanCssString = '') {
  var spans = document.getElementsByClassName('property-name');
  for (var i = 0; i < spans.length; i++) {
    var text = spans[i].textContent || spans[i].innerText;
    if (text == propertyText) {
      spans[i].parentNode.parentNode.style = liCssString;
      if (spanCssString !== '') {
        spans[i].style = spanCssString;
      }
    }
  }
}

export function updateTryResNetButtonDatGuiCss() {
  setDatGuiPropertyCss(TRY_RESNET_BUTTON_TEXT, TRY_RESNET_BUTTON_TEXT_CSS, TRY_RESNET_BUTTON_BACKGROUND_CSS);
}

/**
 * Toggles between the loading UI and the main canvas UI.
 */
export function toggleLoadingUI(showLoadingUI, loadingDivId = 'loading', mainDivId = 'main') {
  if (showLoadingUI) {
    document.getElementById(loadingDivId).style.display = 'block';
    document.getElementById(mainDivId).style.display = 'none';
  } else {
    document.getElementById(loadingDivId).style.display = 'none';
    document.getElementById(mainDivId).style.display = 'block';
  }
}
```

---

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```
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=============================================================================
```

**Commercial Use Policy:**

```
/*�import * as posenet from '@tensorflow-models/posenet';
*import const BOUNDING_BOX_COLOR = 'red';
*const LINE_WIDTH = 2;
*export const TRY_RESNET_BUTTON_NAME = 'tryResNetButton';
*export const TRY_RESNET_BUTTON_TEXT = '\[New\] Try ResNet50';
*export const TRY_RESNET_BUTTON_TEXT_CSS = '\width:100%;text-decoration:underline;\';
*export const TRY_RESNET_BUTTON_BACKGROUND_CSS = '\background:#e61d5f;\';
*function updateTryResNetButtonDatGuiCss() {
  setDatGuiPropertyCss(TRY_RESNET_BUTTON_TEXT, TRY_RESNET_BUTTON_TEXT_CSS, TRY_RESNET_BUTTON_BACKGROUND_CSS);
}
```

---

**drawPoint**:

```
drawPoint(ctx, y, x, r, color) {
  ctx.beginPath();
  ctx.arc(x, y, r, 2 * Math.PI);
  ctx.fillStyle = color;
  ctx.fill();
}
```

**drawSegment**:

```
drawSegment([ay, ax], [by, bx], color, scale, ctx) {
  ctx.beginPath();
  ctx.moveTo(ax * scale, ay * scale);
  ctx.lineTo(bx * scale, by * scale);
  ctx.lineWidth = LINE_WIDTH;
  ctx.strokeStyle = color;
  ctx.stroke();
}
```

**drawSkeleton**:

```
drawSkeleton(keypoints, minConfidence, ctx, scale = 1) {
  const adjacentKeyPoints = posenet.getAdjacentKeyPoints(keypoints, minConfidence);
  for (let [y, x] of adjacentKeyPoints) {
    if (drawSegment([y, x], keypoints, minConfidence)) {
      return [y, x];
    }
  }
}
```
toTuple(keypoints[0].position), toTuple(keypoints[1].position), COLOR, \n scale, ctx);\n });\n}\n\n/**
 * Draw pose keypoints onto a canvas
 */
export function drawKeypoints(keypoints, minConfidence, ctx, scale = 1) {
  for (let i = 0; i < keypoints.length; i++) {
    if (keypoint.score < minConfidence) {
      continue;
    }
    const {y, x} = keypoint.position;
    drawPoint(ctx, y * scale, x * scale, COLOR);
  }
}

/**
 * Draw the bounding box of a pose. For example, for a whole person standing
 * in an image, the bounding box will begin at the nose and extend to one of
 * ankles
 */
export function drawBoundingBox(keypoints, ctx) {
  const boundingBox = posenet.getBoundingBox(keypoints);
  ctx.rect(boundingBox.minX, boundingBox.minY, boundingBox.maxX - boundingBox.minX,
            boundingBox.maxY - boundingBox.minY);
  ctx.strokeStyle = boundingBoxColor;
  ctx.stroke();
}

/**
 * Converts an array of pixel data into an ImageData object
 */
export async function renderToCanvas(a, ctx) {
  const [height, width] = a.shape;
  const imageData = new ImageData(width, height);
  const data = await a.data();
  for (let i = 0; i < height * width; ++i) {
    const j = i * 4;
    const k = i * 3;
    imageData.data[j + 0] = data[k + 0];
    imageData.data[j + 1] = data[k + 1];
    imageData.data[j + 2] = data[k + 2];
    imageData.data[j + 3] = 255;
  }
  ctx.putImageData(imageData, 0, 0);
}

/**
 * Draw heatmap values, one of the model outputs, on to the canvas
 * Read our blog post for a description of PoseNet's heatmap outputs
 */
export function drawHeatMapValues(heatMapValues, outputStride, canvas) {
  const ctx = canvas.getContext('2d');
  const heatmapData = heatMapValues.buffer().values;
  ctx.strokeStyle = heatmapColor;
  ctx.strokeStyle = heatmapStrokeStyle;
  for (let i = 0; i < heatmapData.length; i += 2) {
    const heatmapY = heatmapData[i];
    const heatmapX = heatmapData[i + 1];
    if (pointX !== 0 && pointY !== 0) {
      ctx.beginPath();
      ctx.arc(pointX, pointY, radius, 0, 2 * Math.PI);
      ctx.fillStyle = color;
      ctx.fill();
    }
  }
}

/**
 * Used by the drawHeatMapValues method to draw heatmap points on to
 * the canvas
 */
function drawPoints(ctx, points, radius, color) {
  const data = points.buffer().values;
  for (let i = 0; i < data.length; i += 2) {
    const pointY = data[i];
    const pointX = data[i + 1];
    if (pointX !== 0 && pointY !== 0) {
      ctx.beginPath();
      ctx.arc(pointX, pointY, radius, 0, 2 * Math.PI);
      ctx.fillStyle = color;
      ctx.fill();
    }
  }
}

/**
 * Draw offset vector values, one of the model outputs, on to the canvas
 * Read our blog post for a description of PoseNet's offset vector outputs
 */
export function drawOffsetVectors(heatMapValues, offsets, outputStride, scale = 1, ctx) {
  const offsetPoints = posenet.singlePose.getOffsetPoints(heatMapValues, outputStride, offsets);
  const heatmapData = heatMapValues.buffer().values;
  const offsetPointsData = offsets.buffer().values;
  for (let i = 0; i < heatmapData.length; i += 2) {
    const heatmapY = heatmapData[i];
    const heatmapX = heatmapData[i + 1];
    const offsetPointY = offsetPointsData[i];
    const offsetPointX = offsetPointsData[i + 1];
    ctx.beginPath();
    ctx.strokeStyle = offsetPointColor;
    ctx.strokeStyle = offsetPointStrokeStyle;
    ctx.beginPath();
    ctx.arc(heatmapX, heatmapY, radius, 0, 2 * Math.PI);
    ctx.fillStyle = offsetPointColor;
    ctx.fill();
    ctx.beginPath();
    ctx.arc(heatmapX, heatmapY, radius, 0, 2 * Math.PI);
    ctx.strokeStyle = heatmapColor;
    ctx.strokeStyle = heatmapStrokeStyle;
    ctx.beginPath();
    ctx.arc(heatmapX, heatmapY, radius, 0, 2 * Math.PI);
    ctx.fillStyle = heatmapColor;
    ctx.fill();
    ctx.beginPath();
    ctx.arc(heatmapX, heatmapY, radius, 0, 2 * Math.PI);
    ctx.strokeStyle = heatmapColor;
    ctx.strokeStyle = heatmapStrokeStyle;
    ctx.beginPath();
    ctx.arc(heatmapX, heatmapY, radius, 0, 2 * Math.PI);
    ctx.fillStyle = heatmapColor;
    ctx.fill();
    ctx.beginPath();
    ctx.arc(heatmapX, heatmapY, radius, 0, 2 * Math.PI);
    ctx.strokeStyle = heatmapColor;
    ctx.strokeStyle = heatmapStrokeStyle;
    ctx.beginPath();
    ctx.arc(heatmapX, heatmapY, radius, 0, 2 * Math.PI);
    ctx.fillStyle = heatmapColor;
    ctx.fill();
    ctx.beginPath();
    ctx.arc(heatmapX, heatmapY, radius, 0, 2 * Math.PI);
    ctx.strokeStyle = heatmapColor;
    ctx.strokeStyle = heatmapStrokeStyle;
    ctx.beginPath();
    ctx.arc(heatmapX, heatmapY, radius, 0, 2 * Math.PI);
    ctx.fillStyle = heatmapColor;
    ctx.fill();
  }
}
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export const spectral = [
  [158, 1, 66],    [181, 26, 71],   [202, 50, 74],   [219, 73, 74],
  [232, 94, 73], [242, 117, 75],  [248, 142, 83],  [251, 167, 96],
  [253, 190, 112], [254, 210, 129], [254, 227, 149], [254, 240, 166],
  [251, 248, 176], [243, 249, 172], [231, 245, 163], [213, 238, 159],
  [190, 229, 160], [164, 218, 163], [137, 207, 165], [110, 192, 168],
  [86, 173, 179],  [67, 127, 180],  [77, 103, 173]
];

import '@tensorflow/tfjs-backend-webgl';
import * as bodyPix from '@tensorflow-models/body-pix';
import dat from 'dat.gui';
import Stats from 'stats.js';

import {drawKeypoints, drawSkeleton, toggleLoadingUI,
TRY_RESNET_BUTTON_NAME, TRY_RESNET_BUTTON_TEXT, updateTryResNetButtonDatGuiCss} from
'./demo_util';
import * as partColorScales from './part_color_scales';

const stats = new Stats();

const state = {
  video: null,
  stream: null,
  net: null,
  videoConstraints: {},

  // Triggers the TensorFlow model to reload with
  changingArchitecture: false,
  changingMultiplier: false,
  changingStride: false,
  changingResolution: false,
  changingQuantBytes: false,
};

function isAndroid() {
  return /
Android/i.test(navigator.userAgent);
}

function isiOS() {
  return /
iPhone|iPad|iPod/i.test(navigator.userAgent);
}

function isMobile() {
  return isAndroid() ||
  isiOS();
}

async function getVideoInputs() {
  if (!navigator.mediaDevices ||
  !navigator.mediaDevices.enumerateDevices) {
    console.log('enumerateDevices() not supported.');
    return [];
  }

  const devices = await navigator.mediaDevices.enumerateDevices();

  const videoDevices =
  devices.filter(device => device.kind === 'videoinput');

  return videoDevices;
}

function stopExistingVideoCapture() {
  if (state.video && state.video.srcObject) {
    state.video.srcObject.getTracks().forEach(track => {
      track.stop();
    })
    state.video.srcObject = null;
  }
}

async function getDeviceIdForLabel(cameraLabel) {
  const videoInputs = await getVideoInputs();

  for (let i = 0; i < videoInputs.length; i++) {
    const videoInput = videoInputs[i];
    if (videoInput.label ===
        cameraLabel) {
      return videoInput.deviceId;
    }
  }

  return null;
}

// on mobile, facing mode is the
// preferred way to select a camera.
// Here we use the camera label to determine if its the environment or
// user facing camera
function getFacingMode(cameraLabel) {
  if (!cameraLabel) {
    return 'user';
  }
  if
  (cameraLabel.toLowerCase().includes('back')) {
    return 'environment';
  } else {
    return 'user';
  }
}

async function getConstraints(cameraLabel) {
  let deviceId;
  let facingMode;

  if (cameraLabel) {
    deviceId = await getDeviceIdForLabel(cameraLabel);
    // on mobile, use the facing mode based on the camera.
    facingMode = isMobile() ? getFacingMode(cameraLabel) : null;
  };
  return {deviceId, facingMode};
}

/**
* Loads a the camera to be used in the demo.
*/
async function setupCamera(cameraLabel) {
  if
  (!navigator.mediaDevices ||
  !navigator.mediaDevices.getUserMedia) {
    throw new Error('Browser API
  navigator.mediaDevices.getUserMedia not available');
  }

  const videoElement =
  document.getElementById('video');

  stopExistingVideoCapture().then
  (state.video.srcObject.getTracks() => {
    state.track.stop();
  });

  const videoConstraints = await
  getConstraints(cameraLabel);

  // on mobile, use the facing mode based on the camera.
  const facingMode = isMobile() ?
  getFacingMode(cameraLabel) : null;
  state.video = await

  navigator.mediaDevices.getUserMedia({
    audio: false,
    video: videoConstraints
  }).then
  (videoElement => {
    state.video.play();
    state.video.srcObject = videoElement;
    state.video.onloadedmetadata = () => {
      state.videoElement.width = videoElement.width;
      state.videoElement.height = videoElement.height;
      state.videoElement.loadVideo(cameraLabel);
    }
  }).catch
  (e => {
    console.log('Error loading camera');
    throw new Error('Error loading camera');
  });

  return state;
}
0.75;\nconst defaultMobileNetStride = 16;\nconst defaultMobileNetInternalResolution = 'medium';\nconst defaultMobileNetMultiplier = 1.0;\nconst defaultResNetStride = 16;\nconst defaultResNetInternalResolution = 'low';\nconst guiState = {\n  algorithm: 'multi-person-instance',\n  estimate: 'partmap',\n  camera: null,\n  flipHorizontal: true,\n  input: {\n    architecture: 'MobileNetV1',\n    outputStride: 16,\n    internalResolution: 'low',\n    multiplier: 0.50,\n    quantBytes: 2n },\n  multiPersonDecoding: {\n    maxDetections: 5,\n    scoreThreshold: 0.3,\n    nmsRadius: 20,\n    numKeypointForMatching: 17,\n    refineSteps: 10n },\n  segmentation: {\n    segmentationThreshold: 0.7,\n    effect: 'mask',\n    maskBackground: true,\n    opacity: 0.7,\n    backgroundBlurAmount: 3,\n    maskBlurAmount: 0,\n    edgeBlurAmount: 3n },\n  partMap: {\n    colorScale: 'rainbow',\n    effect: 'partMap',\n    segmentationThreshold: 0.5,\n    opacity: 0.9,\n    blurBodyPartAmount: 3,\n    bodyPartEdgeBlurAmount: 3n },\n  showFps: !isMobile(),\n  function toCameraOptions(cameras) {\n    const result = {default: null};\n    cameras.forEach(camera => {\n      result[camera.label] = camera.label;\n    });\n    return result;\n  },\n  flipHorizontal: true,\n  input: {\n    architecture: 'MobileNetV1',\n    outputStride: 16,\n    internalResolution: 'low',\n    multiplier: 0.50,\n    quantBytes: 2n },\n  multiPersonDecoding: {\n    maxDetections: 5,\n    scoreThreshold: 0.3,\n    nmsRadius: 20,\n    numKeypointForMatching: 17,\n    refineSteps: 10n },\n  segmentation: {\n    segmentationThreshold: 0.7,\n    effect: 'mask',\n    maskBackground: true,\n    opacity: 0.7,\n    backgroundBlurAmount: 3,\n    maskBlurAmount: 0,\n    edgeBlurAmount: 3n },\n  partMap: {\n    colorScale: 'rainbow',\n    effect: 'partMap',\n    segmentationThreshold: 0.5,\n    opacity: 0.9,\n    blurBodyPartAmount: 3,\n    bodyPartEdgeBlurAmount: 3n },\n  showFps: !isMobile(),\n  function toCameraOptions(cameras) {\n    const result = {default: null};\n    cameras.forEach(camera => {\n      result[camera.label] = camera.label;\n    });\n    return result;\n  },\n  flipHorizontal: true,\n  input: {\n    architecture: 'MobileNetV1',\n    outputStride: 16,\n    internalResolution: 'low',\n    multiplier: 0.50,\n    quantBytes: 2n },\n  multiPersonDecoding: {\n    maxDetections: 5,\n    scoreThreshold: 0.3,\n    nmsRadius: 20,\n    numKeypointForMatching: 17,\n    refineSteps: 10n },\n  segmentation: {\n    segmentationThreshold: 0.7,\n    effect: 'mask',\n    maskBackground: true,\n    opacity: 0.7,\n    backgroundBlurAmount: 3,\n    maskBlurAmount: 0,\n    edgeBlurAmount: 3n },\n  partMap: {\n    colorScale: 'rainbow',\n    effect: 'partMap',\n    segmentationThreshold: 0.5,\n    opacity: 0.9,\n    blurBodyPartAmount: 3,\n    bodyPartEdgeBlurAmount: 3n },\n  showFps: !isMobile()};\n
// There are two algorithms 'person' and 'multi-person-instance'. \n// The 'person' algorithm returns one single \n// segmentation mask (or body\n// part map) for all people in the image. The 'multi-person-instance' \n// algorithm \n// returns an array of segmentation mask (or body part map). \n// Each element in the array corresponding to one of \n// the people. In other\n// words, 'multi-person-instance' algorithm does instance-level person\n// segmentation and \n// body part segmentation for every person in the image.\nconst algorithmController = gui.add(guiState, 'algorithm', ['person', 'multi-person-instance']);\n
// Architecture: there are a few BodyPix models varying in size \n// and\n// accuracy.\nconst architectureController = gui.add(guiState, 'architecture', ['MobileNetV1', 'ResNet50']);\n
// Updates outputStride \n// Output stride: Internally, this parameter affects the \n// height and width\n// of the layers in the neural network. The lower the value of the output\n// stride the higher the \n// accuracy but slower the speed, the higher the\n// value the faster the speed but lower the accuracy.\nconst outputStrideController = gui.add(guiState, 'outputStride', [16, 32, 64]);\n
// Updates internalResolution \n// Internal resolution: Internally, this parameter affects the height and\n// width of the layers in the neural network. The higher the value of the internal\n// resolution the better the accuracy but slower the speed.\nconst internalResolutionController = gui.add(guiState, 'internalResolution', [320, 640, 1280]);

byte, 2 bytes, and 4 bytes. The higher the value, the larger the model size and thus the longer the loading time, the lower the value, the shorter the loading time but the lower the accuracy. Let quantBytesController = null; function updateGuiQuantBytes(quantBytes, quantBytesArray) { // if (quantBytesController) { quantBytesController.remove(); } guiState.quantBytes = +quantBytes; guiState.input.quantBytes = +quantBytes; quantBytesController = guiState.input.add(guiState.input.quantBytes, 'quantBytes', quantBytesController.remove()); quantBytesController.onChange(function(quantBytes) { if (guiState.input.architecture === 'MobileNetV1') { updateGuiInternalResolution(guiState.input.MobileNetInternalResolution, ['low', 'medium', 'high', 'full']); updateGuiOutputStride(guiState.MobileNetStride, [8, 16]); updateGuiMultiplier(guiState.MobileNetMultiplier, [0.50, 0.75, 1.0]); } else { // guiState.input.architecture === 'ResNet50' updateGuiInternalResolution(guiState.ResNet50InternalResolution, ['low', 'medium', 'high', 'full']); updateGuiOutputStride(guiState.ResNet50Stride, [32, 16]); updateGuiMultiplier(guiState.ResNetMultiplier, [1.0]); } guiState.architecture = guiState.input.architecture; architectureController.onChange(function(architecture) { if (architecture === 'ResNet50') then show ResNet50 options; guiState.architecture = architecture; updateGuiInputSection(); } else if (architecture === 'MobileNetV1') then show MobileNetV1 options; guiState.input.architecture = architecture; updateGuiInputSection(); }; updateGuiInputSection(); input.open(); algorithmController.onChange(function(value) { switch (guiState.algorithm) { case 'single-person': multiPersonDecoding.close(); singlePersonDecoding.open(); break; case 'multi-person': singlePersonDecoding.close(); multiPersonDecoding.open(); break; } }); darknessLevel, let bokehBlurAmount, let edgeBlurAmount, let maskBlurAmount, let maskBackground; segmentationEffectController.onChange(function(effectType) { if (effectType === 'mask') { if (bokehBlurAmount) { bokehBlurAmount.remove(); } if (edgeBlurAmount) { edgeBlurAmount.remove(); } if (maskBlurAmount) { maskBlurAmount.remove(); } if (maskBackground) { maskBackground.remove(); } } else if (effectType === 'bokeh') { if (darknessLevel) { darknessLevel.remove(); } if (maskBlurAmount) { maskBlurAmount.remove(); } if (maskBackground) { maskBackground.remove(); } } } bokehBlurAmount = segmentation.add(guiState.segmentation, 'mask'); guiState.segmentation, 'backgroundBlurAmount'; guiState.segmentation, 'edgeBlurAmount'; guiState.segmentation, 'colorScale'; guiState.segmentation, 'opacity'; guiState.segmentation, 'partMap', 'pixelation', 'blurBodyPart'; guiState.partMap, 'opacity', 0.0, 1.0); partMap.add(guiState.partMap, 'effect', ['partMap', 'pixelation', 'blurBodyPart']); partMap.add(guiState.partMap, 'colorScale', 'opacity', 0.0, 1.0); partMap.add(guiState.partMap, 'colorScale');
Object.keys(partColorScales).forEach(colorScale => {
  setShownPartColorScales(colorScale);
});

setShownPartColorScales(guiState.partMap.colorScale);

partMap.add(guiState.partMap, 'blurBodyPartAmount').min(1).max(20).step(1);

partMap.add(guiState.partMap, 'bodyPartEdgeBlurAmount').min(1).max(20).step(1);

partMap.open();

estimateController.onChange(function(estimationType) {
  if (estimationType === 'segmentation') {
    segmentation.open();
    partMap.close();
  }
});

document.getElementById('colors').style.display = 'none';

setShownPartColorScales(guiState.partMap.colorScale);

partMap.add(guiState.partMap, 'bodyPartEdgeBlurAmount').min(1).max(20).step(1);

partMap.open();

estimateController.onChange(function(estimationType) {
  if (estimationType === 'segmentation') {
    segmentation.open();
    partMap.close();
  }
});

gui.add(guiState, 'showFps').onChange(showFps => {
  if (showFps) {
    document.body.appendChild(stats.dom);
  } else {
    document.body.removeChild(stats.dom);
  }
});

function setShownPartColorScales(colorScale) {
  const colors = document.getElementById('colors');
  colors.innerHTML = '';

  const partColors = partColorScales[colorScale];
  const partNames = bodyPix.PART_CHANNELS;

  for (let i = 0; i < partColors.length; i++) {
    const partColor = partColors[i];
    const child = document.createElement('li');
    child.innerHTML = `<div class='color' style='background-color:rgb(${partColor[0]},${partColor[1]},${partColor[2]})'></div>${partNames[i]}`;
    colors.appendChild(child);
  }
}

/**
 * Sets up a frames per second panel on the top-left of the window
 */

function setupFPS() {
  stats.showPanel(0);  // 0: fps, 1: ms, 2: mb, 3+: custom
  if (guiState.showFps) {
    document.body.appendChild(stats.dom);
  }
}

async function estimateSegmentation() {
  let multiPersonSegmentation = null;
  switch (guiState.algorithm) {
    case 'multi-person-instance':
      return await state.net.segmentMultiPerson(state.video, {
        internalResolution: guiState.input.internalResolution,
        segmentationThreshold: guiState.segmentation.segmentationThreshold,
        maxDetections: guiState.multiPersonDecoding.maxDetections,
        scoreThreshold: guiState.multiPersonDecoding.scoreThreshold,
        nmsRadius: guiState.multiPersonDecoding.nmsRadius,
        numKeypointForMatching: guiState.multiPersonDecoding.numKeypointForMatching,
        refineSteps: guiState.multiPersonDecoding.refineSteps
      });
    case 'person':
      return await state.net.segmentPerson(state.video, {
        internalResolution: guiState.input.internalResolution,
        segmentationThreshold: guiState.segmentation.segmentationThreshold,
        maxDetections: guiState.multiPersonDecoding.maxDetections,
        scoreThreshold: guiState.multiPersonDecoding.scoreThreshold,
        nmsRadius: guiState.multiPersonDecoding.nmsRadius,
        numKeypointForMatching: guiState.multiPersonDecoding.numKeypointForMatching,
        refineSteps: guiState.multiPersonDecoding.refineSteps
      });
    default:
      break;
  }
  return multiPersonSegmentation;
}

async function estimatePartSegmentation() {
  switch (guiState.algorithm) {
    case 'multi-person-instance':
      return await state.net.segmentMultiPersonParts(state.video, {
        internalResolution: guiState.input.internalResolution,
        segmentationThreshold: guiState.segmentation.segmentationThreshold,
        maxDetections: guiState.multiPersonDecoding.maxDetections,
        scoreThreshold: guiState.multiPersonDecoding.scoreThreshold,
        nmsRadius: guiState.multiPersonDecoding.nmsRadius,
        numKeypointForMatching: guiState.multiPersonDecoding.numKeypointForMatching,
        refineSteps: guiState.multiPersonDecoding.refineSteps
      });
    case 'person':
      return await state.net.segmentPersonParts(state.video, {
        internalResolution: guiState.input.internalResolution,
        segmentationThreshold: guiState.segmentation.segmentationThreshold,
        maxDetections: guiState.multiPersonDecoding.maxDetections,
        scoreThreshold: guiState.multiPersonDecoding.scoreThreshold,
        nmsRadius: guiState.multiPersonDecoding.nmsRadius,
        numKeypointForMatching: guiState.multiPersonDecoding.numKeypointForMatching,
        refineSteps: guiState.multiPersonDecoding.refineSteps
      });
    default:
      break;
  }
  return multiPersonPartSegmentation;
}

function drawPoses(personOrPersonPartSegmentation, flipHorizontally, ctx) {
  if (Array.isArray(personOrPersonPartSegmentation)) {
    personOrPersonPartSegmentation.forEach(personSegmentation => {
      let pose = personSegmentation.pose;
      if (flipHorizontally) {
        pose = bodyPix.flipPoseHorizontal(pose, personSegmentation.width);
      }
      drawKeypoints(pose.keypoints, 0.1, ctx);
      drawSkeleton(pose.keypoints, 0.1, ctx);
    });
  } else if (personOrPersonPartSegmentation.allPoses) {
    personOrPersonPartSegmentation.allPoses.forEach(pose => {
      if (flipHorizontally) {
        pose = bodyPix.flipPoseHorizontal(pose, personOrPersonPartSegmentation.width);
      }
      drawKeypoints(pose.keypoints, 0.1, ctx);
      drawSkeleton(pose.keypoints, 0.1, ctx);
    });
  } else {
    drawPoses(personOrPersonPartSegmentation, flipHorizontally, ctx);
  }
}
drawKeypoints(POSE.KEYPOINTS, 0.1, ctx); drawSkeleton(POSE.KEYPOINTS, 0.1, ctx); })

async function loadBodyPix() {
  state.net = await bodyPix.load({
    architecture: guiState.input.architecture, outputStride: guiState.input.outputStride, multiplier: guiState.input.multiplier, quantBytes: guiState.input.quantBytes
  });
  toggleLoadingUI(false);
}

function loadBodyPix() {
  toggleLoadingUI(true);
  state.net = await bodyPix.load({
    architecture: guiState.input.architecture, outputStride: guiState.input.outputStride, multiplier: guiState.input.multiplier, quantBytes: guiState.input.quantBytes
  });
  toggleLoadingUI(false);
}

async function bodySegmentationFrame() {
  // if changing the model or the camera, wait a second for it to complete
  if (state.changingArchitecture || state.changingCamera || state.changingStride || state.changingQuantBytes)
  { console.log('load model...');
    loadBodyPix();
    state.changingArchitecture = false;
    state.changingCamera = false;
    state.changingStride = false;
    state.changingQuantBytes = false;
  }
  // Begin monitoring code for frames per second
  stats.begin();

  const flipHorizontally = guiState.flipHorizontal;
  const case 'mask'
  {
    const ctx = canvas.getContext('2d');
    const foregroundColor = {r: 255, g: 255, b: 255, a: 255};
    const backgroundColor = {r: 0, g: 0, b: 0, a: 255};
    const mask = bodyPix.toMask(multiPersonSegmentation, foregroundColor, backgroundColor, true);
    bodyPix.drawMask(canvas, state.video, mask, guiState.segmentation.opacity, guiState.segmentation.maskBlurAmount, flipHorizontally);
  }

  const case 'partmap'
  {
    const ctx = canvas.getContext('2d');
    const coloredPartImageData = bodyPix.toColoredPartMask(multiPersonPartSegmentation, guiState.partMap.colorScale);
    const maskBlurAmount = 0;
    switch (guiState.partMap.effect) {
      case 'pixelation'
      {
        const pixelCellWidth = 10.0;
        bodyPix.drawPixelatedMask(canvas, state.video, coloredPartImageData, guiState.partMap.opacity, maskBlurAmount, flipHorizontally, pixelCellWidth);
      }

      case 'blurBodyPart'
      {
        const blurBodyPartIds = [0, 1];
        bodyPix.blurBodyPart(canvas, state.video, multiPersonPartSegmentation, blurBodyPartIds, guiState.partMap.blendBodyPartAmount, guiState.partMap.edgeBlurAmount, flipHorizontally);
      }
    }
  }

  drawPoses(multiPersonPartSegmentation, flipHorizontally, ctx);
}

bindPage();

1.292 importlib-metadata 0.18

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1.293 unbound 1.9.4-2ubuntu1.2

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1.294 pcre 8.39-12build1

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1.295 hd-parm 9.38
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Because of this blurred distinction, using the ordinary General Public License for libraries did not effectively promote software sharing, because most developers did not use the libraries. We concluded that weaker conditions might promote sharing better.

However, unrestricted linking of non-free programs would deprive the users of those programs of all benefit from the free status of the libraries themselves. This Library General Public License is intended to permit developers of non-free programs to use free libraries, while preserving your freedom as a user of such programs to change the free libraries that are incorporated in them. (We have not seen how to achieve this as regards changes in header files, but we have achieved it as regards changes in the actual functions of the Library.) The hope is that this will lead to faster development of free libraries.
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1.300 libunistring 0.9.10 2

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Written by Adam Twiss (adam@zeus.co.uk). March 1996

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<link href="./style/css/manual-print.css" rel="stylesheet" media="print" type="text/css" />
<link rel="stylesheet" type="text/css" href="./style/css/prettify.css" />
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</div>
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" alt="&lt;-
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A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

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Accompany the work with the complete corresponding
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Sections 1 and 2 above); and, if the work is an executable linked
with the Library, with the complete machine-readable "work that
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library already present on the user's computer system, rather than
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properly with a modified version of the library, if the user installs
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@end enumerate

@subheading END OF TERMS AND CONDITIONS

@page
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@end smallexample

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In the interest of fostering an open and welcoming environment, we as contributors and maintainers pledge to making participation in our project and our community a harassment-free experience for everyone, regardless of age, body size, disability, ethnicity, sex characteristics, gender identity and expression, level of experience, education, socio-economic status, nationality, personal appearance, race, religion, or sexual identity and orientation.

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[homepage]: https://www.contributor-covenant.org

For answers to common questions about this code of conduct, see https://www.contributor-covenant.org/faq

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Including attribution to #612
As the userbase of Click grows, more and more major feature requests pop up in Click's bugtracker. As reasonable as it may be for those features to be bundled with Click instead of being a standalone project, many of those requested features are either highly experimental or have unproven practical use, while potentially being a burden to maintain.

This is why click-contrib exists. The GitHub organization is a collection of possibly experimental third-party packages whose featureset does not belong into Click, but also a playground for major features that may be added to Click in the future. It is also meant to coordinate and concentrate effort on writing third-party extensions for Click, and to ease the effort of searching for such extensions. In that sense it could be described as a low-maintenance alternative to extension repositories of other frameworks.

Please note that the quality and stability of those packages may be different than what you expect from Click itself. While published under a common organization, they are still projects separate from Click.

.. _click-contrib: https://github.com/click-contrib/

1.326 management-model 5.7.3
1.326.1 Available under license:

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1.327 libjpeg-turbo 2.0.3-0ubuntu1.20.04.1

1.327.1 Available under license:

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This license applies to the libjpeg API library and associated programs (any code inherited from libjpeg, and any modifications to that code.)

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This license covers the TurboJPEG API library and associated programs, as well as the build system.

- The [zlib License](https://opensource.org/licenses/Zlib)

This license is a subset of the other two, and it covers the libjpeg-turbo SIMD extensions.

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1.328 libjpeg 6b

1.328.1 Notifications :
This software is based in part on the work of the Independent JPEG Group.

1.328.2 Available under license :
The Independent JPEG Group's JPEG software

README for release 6b of 27-Mar-1998

This distribution contains the sixth public release of the Independent JPEG Group's free JPEG software. You are welcome to redistribute this software and to use it for any purpose, subject to the conditions under LEGAL ISSUES, below.

Serious users of this software (particularly those incorporating it into larger programs) should contact IJG at jpeg-info@uunet.uu.net to be added to our electronic mailing list. Mailing list members are notified of updates and have a chance to participate in technical discussions, etc.

This software is the work of Tom Lane, Philip Gladstone, Jim Boucher, Lee Crocker, Julian Minguillon, Luis Ortiz, George Phillips, Davide Rossi, Guido Vollbeding, Ge’ Weijers, and other members of the Independent JPEG Group.

IJG is not affiliated with the official ISO JPEG standards committee.

DOCUMENTATION ROADMAP

This file contains the following sections:
OVERVIEW
========

This package contains C software to implement JPEG image compression and
decompression. JPEG (pronounced "jay-peg") is a standardized compression
method for full-color and gray-scale images. JPEG is intended for compressing
"real-world" scenes; line drawings, cartoons and other non-realistic images
are not its strong suit. JPEG is lossy, meaning that the output image is not
exactly identical to the input image. Hence you must not use JPEG if you
have to have identical output bits. However, on typical photographic images,
very good compression levels can be obtained with no visible change, and
remarkably high compression levels are possible if you can tolerate a
low-quality image. For more details, see the references, or just experiment
with various compression settings.
This software implements JPEG baseline, extended-sequential, and progressive compression processes. Provision is made for supporting all variants of these processes, although some uncommon parameter settings aren't implemented yet. For legal reasons, we are not distributing code for the arithmetic-coding variants of JPEG; see LEGAL ISSUES. We have made no provision for supporting the hierarchical or lossless processes defined in the standard.

We provide a set of library routines for reading and writing JPEG image files, plus two sample applications "cjpeg" and "djpeg", which use the library to perform conversion between JPEG and some other popular image file formats. The library is intended to be reused in other applications.

In order to support file conversion and viewing software, we have included considerable functionality beyond the bare JPEG coding/decoding capability; for example, the color quantization modules are not strictly part of JPEG decoding, but they are essential for output to colormapped file formats or colormapped displays. These extra functions can be compiled out of the library if not required for a particular application. We have also included "jpegtran", a utility for lossless transcoding between different JPEG processes, and "rdjpgcom" and "wrjpgcom", two simple applications for inserting and extracting textual comments in JFIF files.

The emphasis in designing this software has been on achieving portability and flexibility, while also making it fast enough to be useful. In particular, the software is not intended to be read as a tutorial on JPEG. (See the REFERENCES section for introductory material.) Rather, it is intended to be reliable, portable, industrial-strength code. We do not claim to have achieved that goal in every aspect of the software, but we strive for it.

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=============

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These conditions apply to any software derived from or based on the IJG code, not just to the unmodified library. If you use our work, you ought to acknowledge us.

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The Unix configuration script "configure" was produced with GNU Autoconf. It is copyright by the Free Software Foundation but is freely distributable. The same holds for its supporting scripts (config.guess, config.sub,
ltconfig, ltmain.sh). Another support script, install-sh, is copyright by M.I.T. but is also freely distributable.

It appears that the arithmetic coding option of the JPEG spec is covered by patents owned by IBM, AT&T, and Mitsubishi. Hence arithmetic coding cannot legally be used without obtaining one or more licenses. For this reason, support for arithmetic coding has been removed from the free JPEG software. (Since arithmetic coding provides only a marginal gain over the unpatented Huffman mode, it is unlikely that very many implementations will support it.) So far as we are aware, there are no patent restrictions on the remaining code.

The IJG distribution formerly included code to read and write GIF files. To avoid entanglement with the Unisys LZW patent, GIF reading support has been removed altogether, and the GIF writer has been simplified to produce "uncompressed GIFs". This technique does not use the LZW algorithm; the resulting GIF files are larger than usual, but are readable by all standard GIF decoders.

We are required to state that
"The Graphics Interchange Format(c) is the Copyright property of CompuServe Incorporated. GIF(sm) is a Service Mark property of CompuServe Incorporated."

REFERENCES
==========

We highly recommend reading one or more of these references before trying to understand the innards of the JPEG software.

The best short technical introduction to the JPEG compression algorithm is Wallace, Gregory K. "The JPEG Still Picture Compression Standard", Communications of the ACM, April 1991 (vol. 34 no. 4), pp. 30-44. (Adjacent articles in that issue discuss MPEG motion picture compression, applications of JPEG, and related topics.) If you don't have the CACM issue handy, a PostScript file containing a revised version of Wallace's article is available at ftp://ftp.uu.net/graphics/jpeg/wallace.ps.gz. The file (actually a preprint for an article that appeared in IEEE Trans. Consumer Electronics) omits the sample images that appeared in CACM, but it includes corrections and some added material. Note: the Wallace article is copyright ACM and IEEE, and it may not be used for commercial purposes.

A somewhat less technical, more leisurely introduction to JPEG can be found in "The Data Compression Book" by Mark Nelson and Jean-loup Gailly, published by M&T Books (New York), 2nd ed. 1996, ISBN 1-55851-434-1. This book provides good explanations and example C code for a multitude of compression methods including JPEG. It is an excellent source if you are comfortable reading C
code but don't know much about data compression in general. The book's JPEG sample code is far from industrial-strength, but when you are ready to look at a full implementation, you've got one here...


The JPEG standard itself is not available electronically; you must order a paper copy through ISO or ITU. (Unless you feel a need to own a certified official copy, we recommend buying the Pennebaker and Mitchell book instead; it's much cheaper and includes a great deal of useful explanatory material.) In the USA, copies of the standard may be ordered from ANSI Sales at (212) 642-4900, or from Global Engineering Documents at (800) 854-7179. (ANSI doesn't take credit card orders, but Global does.) It's not cheap: as of 1992, ANSI was charging $95 for Part 1 and $47 for Part 2, plus 7% shipping/handling. The standard is divided into two parts, Part 1 being the actual specification, while Part 2 covers compliance testing methods. Part 1 is titled "Digital Compression and Coding of Continuous-tone Still Images, Part 1: Requirements and guidelines" and has document numbers ISO/IEC IS 10918-1, ITU-T T.81. Part 2 is titled "Digital Compression and Coding of Continuous-tone Still Images, Part 2: Compliance testing" and has document numbers ISO/IEC IS 10918-2, ITU-T T.83.

Some extensions to the original JPEG standard are defined in JPEG Part 3, a newer ISO standard numbered ISO/IEC IS 10918-3 and ITU-T T.84. IJG currently does not support any Part 3 extensions.

The JPEG standard does not specify all details of an interchangeable file format. For the omitted details we follow the "JFIF" conventions, revision 1.02. A copy of the JFIF spec is available from:

Literature Department
C-Cube Microsystems, Inc.
1778 McCarthy Blvd.
Milpitas, CA 95035
phone (408) 944-6300, fax (408) 944-6314

A PostScript version of this document is available by FTP at
ftp://ftp.uu.net/graphics/jpeg/jfif.ps.gz. There is also a plain text
version at ftp://ftp.uu.net/graphics/jpeg/jfif.txt.gz, but it is missing
the figures.

The TIFF 6.0 file format specification can be obtained by FTP from
found in the TIFF 6.0 spec of 3-June-92 has a number of serious problems.
IJG does not recommend use of the TIFF 6.0 design (TIFF Compression tag 6).
Instead, we recommend the JPEG design proposed by TIFF Technical Note #2 (Compression tag 7). Copies of this Note can be obtained from ftp.sgi.com or from ftp://ftp.uu.net/graphics/jpeg/. It is expected that the next revision of the TIFF spec will replace the 6.0 JPEG design with the Note's design. Although IJG's own code does not support TIFF/JPEG, the free libtiff library uses our library to implement TIFF/JPEG per the Note. libtiff is available from ftp://ftp.sgi.com/graphics/tiff/.

ARCHIVE LOCATIONS
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The "official" archive site for this software is ftp.uu.net (Internet address 192.48.96.9). The most recent released version can always be found there in directory graphics/jpeg. This particular version will be archived as ftp://ftp.uu.net/graphics/jpeg/jpegsrc.v6b.tar.gz. If you don't have direct Internet access, UUNET's archives are also available via UUCP; contact help@uunet.uu.net for information on retrieving files that way.

Numerous Internet sites maintain copies of the UUNET files. However, only ftp.uu.net is guaranteed to have the latest official version.

You can also obtain this software in DOS-compatible "zip" archive format from the SimTel archives (ftp://ftp.simtel.net/pub/simtelnet/msdos/graphics/), or on CompuServe in the Graphics Support forum (GO CIS:GRAPHSUP), library 12 "JPEG Tools". Again, these versions may sometimes lag behind the ftp.uu.net release.

The JPEG FAQ (Frequently Asked Questions) article is a useful source of general information about JPEG. It is updated constantly and therefore is not included in this distribution. The FAQ is posted every two weeks to Usenet newsgroups comp.graphics.misc, news.answers, and other groups. It is available on the World Wide Web at http://www.faqs.org/faqs/jpeg-faq/ and other news.answers archive sites, including the official news.answers archive at rtfm.mit.edu: ftp://rtfm.mit.edu/pub/usenet/news.answers/jpeg-faq/.

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RELATED SOFTWARE
=================

Numerous viewing and image manipulation programs now support JPEG. (Quite a few of them use this library to do so.) The JPEG FAQ described above lists some of the more popular free and shareware viewers, and tells where to obtain them on Internet.
If you are on a Unix machine, we highly recommend Jef Poskanzer's free PBMPLUS software, which provides many useful operations on PPM-format image files. In particular, it can convert PPM images to and from a wide range of other formats, thus making cjpeg/djpeg considerably more useful. The latest version is distributed by the NetPBM group, and is available from numerous sites, notably ftp://wuarchive.wustl.edu/graphics/graphics/packages/NetPBM/. Unfortunately PBMPLUS/NETPBM is not nearly as portable as the IJG software is; you are likely to have difficulty making it work on any non-Unix machine.

A different free JPEG implementation, written by the PVRG group at Stanford, is available from ftp://havefun.stanford.edu/pub/jpeg/. This program is designed for research and experimentation rather than production use; it is slower, harder to use, and less portable than the IJG code, but it is easier to read and modify. Also, the PVRG code supports lossless JPEG, which we do not. (On the other hand, it doesn't do progressive JPEG.)

FILE FORMAT WARS

Some JPEG programs produce files that are not compatible with our library. The root of the problem is that the ISO JPEG committee failed to specify a concrete file format. Some vendors "filled in the blanks" on their own, creating proprietary formats that no one else could read. (For example, none of the early commercial JPEG implementations for the Macintosh were able to exchange compressed files.)

The file format we have adopted is called JFIF (see REFERENCES). This format has been agreed to by a number of major commercial JPEG vendors, and it has become the de facto standard. JFIF is a minimal or "low end" representation. We recommend the use of TIFF/JPEG (TIFF revision 6.0 as modified by TIFF Technical Note #2) for "high end" applications that need to record a lot of additional data about an image. TIFF/JPEG is fairly new and not yet widely supported, unfortunately.

The upcoming JPEG Part 3 standard defines a file format called SPIFF. SPIFF is interoperable with JFIF, in the sense that most JFIF decoders should be able to read the most common variant of SPIFF. SPIFF has some technical advantages over JFIF, but its major claim to fame is simply that it is an official standard rather than an informal one. At this point it is unclear whether SPIFF will supersede JFIF or whether JFIF will remain the de-facto standard. IJG intends to support SPIFF once the standard is frozen, but we have not decided whether it should become our default output format or not. (In any case, our decoder will remain capable of reading JFIF indefinitely.)

Various proprietary file formats incorporating JPEG compression also exist. We have little or no sympathy for the existence of these formats. Indeed,
one of the original reasons for developing this free software was to help
force convergence on common, open format standards for JPEG files. Don't
use a proprietary file format!

TO DO
=====

The major thrust for v7 will probably be improvement of visual quality.
The current method for scaling the quantization tables is known not to be
very good at low Q values. We also intend to investigate block boundary
smoothing, "poor man's variable quantization", and other means of improving
quality-vs-file-size performance without sacrificing compatibility.

In future versions, we are considering supporting some of the upcoming JPEG
Part 3 extensions --- principally, variable quantization and the SPIFF file
format.

As always, speeding things up is of great interest.

Please send bug reports, offers of help, etc. to jpeg-info@uunet.uu.net.

1.329 openssl 1.1.1f-1ubuntu2.3

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* /opt/cola/permits/1200523838_1654022813.457056/0/activation-1-1-sources-11-jar/com/sun/activation/registries/MailcapFile.java
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*/
* @(#)MailcapTokenizer.java 1.6 05/11/16
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/*
* MailcapParseException.java 1.4 05/11/16
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* /opt/cola/permits/1200523838_1654022813.457056/0/activation-1-1-sources-11-
  jar/com/sun/activation registries/MailcapParseException.java

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ANSI-C code for the Adaptive Multi-Rate (AMR) speech codec
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b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those
sections when you distribute them as separate works. But when you
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it.

Thus, it is not the intent of this section to claim rights or contest
your rights to work written entirely by you; rather, the intent is to
exercise the right to control the distribution of derivative or
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In addition, mere aggregation of another work not based on the Library
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subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of
the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or
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under the terms of Sections 1 and 2 above provided that you accompany
it with the complete corresponding machine-readable source code, which
must be distributed under the terms of Sections 1 and 2 above on a
medium customarily used for software interchange.

If distribution of object code is made by offering access to copy
from a designated place, then offering equivalent access to copy the
source code from the same place satisfies the requirement to
distribute the source code, even though third parties are not
compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the
Library, but is designed to work with the Library by being compiled or
linked with it, is called a "work that uses the Library". Such a
work, in isolation, is not a derivative work of the Library, and
therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library
creates an executable that is a derivative of the Library (because it
contains portions of the Library), rather than a "work that uses the
library". The executable is therefore covered by this License.
Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file
that is part of the Library, the object code for the work may be a
derivative work of the Library even though the source code is not.
Whether this is true is especially significant if the work can be
linked without the Library, or if the work is itself a library. The
threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data
structure layouts and accessors, and small macros and small inline
functions (ten lines or less in length), then the use of the object
file is unrestricted, regardless of whether it is legally a derivative
work. (Executables containing this object code plus portions of the
Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may
distribute the object code for the work under the terms of Section 6.
Any executables containing that work also fall under Section 6,
whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or
link a "work that uses the Library" with the Library to produce a
work containing portions of the Library, and distribute that work
under terms of your choice, provided that the terms permit
modification of the work for the customer's own use and reverse
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You must give prominent notice with each copy of the work that the
Library is used in it and that the Library and its use are covered by
this License. You must supply a copy of this License. If the work
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directing the user to the copy of this License. Also, you must do one
of these things:

a) Accompany the work with the complete corresponding
machine-readable source code for the Library including whatever
changes were used in the work (which must be distributed under
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b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise
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"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

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2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1.
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d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do
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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

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When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline
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Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

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* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/Histogram.java
* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/LogarithmicIterator.java
* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/Version.java
* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/RecordedValuesIterator.java
* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/LinearIterator.java
* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/PackedDoubleHistogram.java
* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/AtomicHistogram.java
* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/HistogramIterationValue.java
* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/Recorder.java
* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/ConcurrentDoubleHistogram.java
* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/HistogramLogReader.java
* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/HistogramLogProcessor.java
* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/PackedHistogram.java
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* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/SynchronizedDoubleHistogram.java
* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/PercentileIterator.java
* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/PackedConcurrentHistogram.java
* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/DoubleRecordedValuesIterator.java
* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/DoubleAllValuesIterator.java
* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/SingleWriterRecorder.java
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* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/ShortCountsHistogram.java
* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/EncodableHistogram.java
* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/HistogramLogScanner.java
* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/packedarray/PackedArrayRecorder.java
* /opt/cola/permits/1257203437_1642787675.09/0/hdrhistogram-2-1-12-sources-jar/org/HdrHistogram/ConcurrentHistogram.java

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package org.HdrHistogram;

final class Version {
    public static final String version="$VERSION$";
    public static final String build_time="$BUILD_TIME$";
}

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1.344 cache-api 1.1.1

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# Contributions to the urllib3 project

## Creator & Maintainer

* Andrey Petrov <andrey.petrov@shazow.net>
## Contributors

In chronological order:

* victor.vde <http://code.google.com/u/victor.vde/>
  * HTTPS patch (which inspired HTTPSConnectionPool)

* erikcederstrand <http://code.google.com/u/erikcederstrand/>
  * NTLM-authenticated HTTPSConnectionPool
  * Basic-authenticated HTTPSConnectionPool (merged into make_headers)

* niphlod <niphlod@gmail.com>
  * Client-verified SSL certificates for HTTPSConnectionPool
  * Response gzip and deflate encoding support
  * Better unicode support for filepost using StringIO buffers

* btoconnor <brian@btoconnor.net>
  * Non-multipart encoding for POST requests

* p.dobrogost <http://code.google.com/u/@WBRSRIBZDhBFXQ56/>
  * Code review, PEP8 compliance, benchmark fix

* kennethreitz <me@kennethreitz.com>
  * Bugfixes, suggestions, Requests integration

* georgemarshall <https://github.com/georgemarshall>
  * Bugfixes, Improvements and Test coverage

* Thomas Kluyver <thomas@kluyver.me.uk>
  * Python 3 support

* brandon-rhodes <http://rhodesmill.org/brandon>
  * Design review, bugfixes, test coverage.

* studer <theo.studer@gmail.com>
  * IPv6 url support and test coverage

* Shivaram Lingamneni <slingamn@cs.stanford.edu>
  * Support for explicitly closing pooled connections

* hartator <hartator@gmail.com>
  * Corrected multipart behavior for params

* Thomas Weischuh <thomas@t-8ch.de>
  * Support for TLS SNI
  * API unification of ssl_version/cert_reqs
  * SSL fingerprint and alternative hostname verification
  * Bugfixes in testsuite
* Sune Kirkeby <mig@ibofobi.dk>
  * Optional SNI-support for Python 2 via PyOpenSSL.

* Marc Schlaich <marc.schlaich@gmail.com>
  * Various bugfixes and test improvements.

* Bryce Boe <bbzbryce@gmail.com>
  * Correct six.moves conflict
  * Fixed pickle support of some exceptions

* Boris Figovsky <boris.figovsky@ravellosystems.com>
  * Allowed to skip SSL hostname verification

* Cory Benfield <https://lukasa.co.uk/about/>
  * Stream method for Response objects.
  * Return native strings in header values.
  * Generate 'Host' header when using proxies.

* Jason Robinson <jaywink@basshero.org>
  * Add missing WrappedSocket.fileno method in PyOpenSSL

* Audrius Butkevicius <audrius.butkevicius@elastichosts.com>
  * Fixed a race condition

* Stanislav Vitkovskiy <stas.vitkovsky@gmail.com>
  * Added HTTPS (CONNECT) proxy support

* Stephen Holsapple <sholsapp@gmail.com>
  * Added abstraction for granular control of request fields

* Martin von Gagern <Martin.vGagern@gmx.net>
  * Support for non-ASCII header parameters

* Kevin Burke <kev@inburke.com> and Pavel Kirichenko <juanych@yandex-team.ru>
  * Support for separate connect and request timeouts

* Peter Waller <p@pwaller.net>
  * HTTPResponse.tell() for determining amount received over the wire

* Nipunn Koorapati <nipunn1313@gmail.com>
  * Ignore default ports when comparing hosts for equality

* Danilo @dbrgn <https://dbrgn.ch/>
  * Disabled TLS compression by default on Python 3.2+
  * Disabled TLS compression in pyopenssl contrib module
  * Configurable cipher suites in pyopenssl contrib module
* Roman Bogorodskiy <roman.bogorodskiy@ericsson.com>
  * Account retries on proxy errors

* Nicolas Delaby <nicolas.delaby@ezeep.com>
  * Use the platform-specific CA certificate locations

* Josh Schneier <https://github.com/jschneier>
  * HTTPHeaderDict and associated tests and docs
  * Bugfixes, docs, test coverage

* Tahia Khan <http://tahia.tk/>
  * Added Timeout examples in docs

* Arthur Grunseid <https://grunseid.com>
  * source_address support and tests (with https://github.com/bui)

* Ian Cordasco <graffatcolmingov@gmail.com>
  * PEP8 Compliance and Linting
  * Add ability to pass socket options to an HTTP Connection

* Erik Tollerud <erik.tollerud@gmail.com>
  * Support for standard library io module.

* Krishna Prasad <kprasad.iitd@gmail.com>
  * Google App Engine documentation

* Aaron Meurer <asmeurer@gmail.com>
  * Added Url.url, which unparses a Url

* Evgeny Kapun <abacabadabacaba@gmail.com>
  * Bugfixes

* Benjamen Meyer <bm_witness@yahoo.com>
  * Security Warning Documentation update for proper capture

* Shivan Sornarajah <github@sornars.com>
  * Support for using ConnectionPool and PoolManager as context managers.

* Alex Gaynor <alex.gaynor@gmail.com>
  * Updates to the default SSL configuration

* Tomas Tomecek <ttomecek@redhat.com>
  * Implemented generator for getting chunks from chunked responses.

* tlynn <https://github.com/tlynn>
  * Respect the warning preferences at import.

* David D. Riddle <ddriddle@illinois.edu>
* IPv6 bugfixes in testsuite

* Thea Flowers <magicalgirl@google.com>
  * App Engine environment tests.
  * Documentation re-write.

* John Krauss <https://github.com/talos>
  * Clues to debugging problems with `cryptography` dependency in docs

* Disassem <https://github.com/Disassem>
  * Fix pool-default headers not applying for url-encoded requests like GET.

* James Atherfold <jlatherfold@hotmail.com>
  * Bugfixes relating to cleanup of connections during errors.

* Christian Pedersen <https://github.com/chripede>
  * IPv6 HTTPS proxy bugfix

* Jordan Moldow <https://github.com/jmoldow>
  * Fix low-level exceptions leaking from `HTTPResponse.stream()`.
  * Bugfix for `ConnectionPool.urlopen(release_conn=False)`.
  * Creation of `HTTPConnectionPool.ResponseCls`.

* Predrag Gruevski <https://github.com/obi1kenobi>
  * Made cert digest comparison use a constant-time algorithm.

* Adam Talsma <https://github.com/a-tal>
  * Bugfix to ca_cert file paths.

* Evan Meagher <https://evanmeagher.net>
  * Bugfix related to `memoryview` usage in PyOpenSSL adapter

* John Vandenberg <jayvdb@gmail.com>
  * Python 2.6 fixes; pyflakes and pep8 compliance

* Andy Caldwell <andy.m.caldwell@googlemail.com>
  * Bugfix related to reusing connections in indeterminate states.

* Ville Skytt <ville.skytta@iki.fi>
  * Logging efficiency improvements, spelling fixes, Travis config.

* Shige Takeda <smtakeda@gmail.com>
  * Started Recipes documentation and added a recipe about handling concatenated gzip data in HTTP response

* Jess Shapiro <jesse@Jesseshapiro.net>
  * Various character-encoding fixes/tweaks
  * Disabling IPv6 DNS when IPv6 connections not supported
* David Foster <http://dafoster.net/>
  * Ensure order of request and response headers are preserved.

* Jeremy Cline <jeremy@jcline.org>
  * Added connection pool keys by scheme

* Aviv Palivoda <palaviv@gmail.com>
  * History list to Retry object.
  * HTTPResponse contains the last Retry object.

* Nate Prewitt <nate.prewitt@gmail.com>
  * Ensure timeouts are not booleans and greater than zero.
  * Fixed infinite loop in `stream` when amt=None.
  * Added length_remaining to determine remaining data to be read.
  * Added enforce_content_length to raise exception when incorrect content-length received.

* Seth Michael Larson <sethmichaellarson@protonmail.com>
  * Created selectors backport that supports PEP 475.

* Alexandre Dias <alex.dias@smarkets.com>
  * Don't retry on timeout if method not in whitelist

* Moinuddin Quadri <moin18@gmail.com>
  * Lazily load idna package

* Tom White <s6yg1ez3@mail2tor.com>
  * Made SOCKS handler differentiate socks5h from socks5 and socks4a from socks4.

* Tim Burke <tim.burke@gmail.com>
  * Stop buffering entire deflate-encoded responses.

* Tuukka Mustonen <tuukka.mustonen@gmail.com>
  * Add counter for status_forcelist retries.

* Erik Rose <erik@mozilla.com>
  * Bugfix to pyopenssl vendoring

* Wolfgang Richter <wolfgang.richter@gmail.com>
  * Bugfix related to loading full certificate chains with PyOpenSSL backend.

* Mike Miller <github@mikeage.net>
  * Logging improvements to include the HTTP(S) port when opening a new connection

* Ioannis Tziakos <mail@itziakos.gr>
  * Fix `util.selectors._fileobj_to_fd` to accept `long`.
  * Update appveyor tox setup to use the 64bit python.

* Akamai (through Jess Shapiro) <jshapiro@akamai.com>
* Ongoing maintenance; 2017-2018

* Dominique Leuenberger <dimstar@opensuse.org>
  * Minor fixes in the test suite

* Will Bond <will@wbond.net>
  * Add Python 2.6 support to `contrib.securetransport`

* Aleksei Alekseev <alekseev.yeskela@gmail.com>
  * using auth info for socks proxy

* Chris Wilcox <git@crwilcox.com>
  * Improve contribution guide
  * Add `\`HTTPResponse.geturl\` method to provide `urllib2.urlopen().geturl()` behavior

* Bruce Merry <https://www.brucemerry.org.za>
  * Fix leaking exceptions when system calls are interrupted with zero timeout

* Hugo van Kemenade <https://github.com/hugovk>
  * Drop support for EOL Python 2.6

* Tim Bell <https://github.com/timb07>
  * Bugfix for responses with Content-Type: message/* logging warnings

* Justin Bramley <https://github.com/jbramleycl>
  * Add ability to handle multiple Content-Encodings

* Katsuhiko YOSHIDA <https://github.com/kyoshidajp>
  * Remove Authorization header regardless of case when redirecting to cross-site

* [Your name or handle] <[email or website]>
  * [Brief summary of your changes]

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## 1.347 zstd 1.3.8+dfsg-3+deb10u2

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Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)
Otherwise, if the work is a derivative of the Library, you may
distribute the object code for the work under the terms of Section 6.
Any executables containing that work also fall under Section 6,
whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or
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of these things:

a) Accompany the work with the complete corresponding
machine-readable source code for the Library including whatever
changes were used in the work (which must be distributed under
Sections 1 and 2 above); and, if the work is an executable linked
with the Library, with the complete machine-readable "work that
uses the Library", as object code and/or source code, so that the
user can modify the Library and then relink to produce a modified
executable containing the modified Library. (It is understood
that the user who changes the contents of definitions files in the
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to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the
Library. A suitable mechanism is one that (1) uses at run time a
copy of the library already present on the user's computer system,
rather than copying library functions into the executable, and (2)
will operate properly with a modified version of the library, if
the user installs one, as long as the modified version is
interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at
least three years, to give the same user the materials
specified in Subsection 6a, above, for a charge no more
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jar/org/springframework/security/web/authentication/rememberme/package-info.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-
jar/org/springframework/security/web/authentication/preauth/x509/package-info.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-
jar/org/springframework/security/web/security/WebAttributes.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-
jar/org/springframework/security/web/util/package-info.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-
jar/org/springframework/security/web/authentication/preauth/j2ee/package-info.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-
jar/org/springframework/security/web/authentication/logout/DelegatingLogoutSuccessHandler.java
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6 6150

* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/web/savedrequest/RequestCache.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/web/authentication/rememberme/PersistentRememberMeToken.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/security/web/util/matcher/AndRequestMatcher.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/security/web/security/webcontext/HttpRequestResponseHolder.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/security/web/session/InvalidSessionStrategy.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/security/web/session/PreAuthenticatedAuthenticationProvider.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/security/web/session/PreAuthenticatedAuthenticationToken.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/security/web/session/RegisteredSessionManager.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/security/web/session/SessionManagementFilter.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/security/web/session/SessionRepository.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/security/web/session/SessionStatusListener.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/security/web/session/SessionStatusListenerRegistry.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/security/web/session/SwitchUserAuthenticationStrategy.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/security/web/session/AbstractSessionManagementBean.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/security/web/session/AbstractSessionRepository.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/security/web/session/SessionManagementBean.java
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jar/org/springframework/security/web/savedrequest/RequestCacheAwareFilter.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-
jar/org/springframework/security/web/access/channel/AbstractRetryEntryPoint.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-
jar/org/springframework/security/web/context/SecurityContextPersistenceFilter.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-
jar/org/springframework/security/web/savedrequest/SavedRequest.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-
jar/org/springframework/security/web/context/SecurityContextPersistenceFilter.java
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jar/org/springframework/security/web/session/SessionManagementFilter.java
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jar/org/springframework/security/web/authentication/preauth/x509/X509PrincipalExtractor.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-
jar/org/springframework/security/web/authentication/rememberme/InMemoryTokenRepositoryImpl.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-
jar/org/springframework/security/web/authentication/package-info.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-
jar/org/springframework/security/web/authentication/AuthenticationFailureHandler.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-
jar/org/springframework/security/web/authentication/package-info.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-
jar/org/springframework/security/web/util/RedirectUrlBuilder.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-
jar/org/springframework/security/web/util/RedirectUrlBuilder.java

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* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/security/web/util/matcher/RequestVariablesExtractor.java

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* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/security/web/csrf/CookieCsrfTokenRepository.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/security/web/session/SessionInformationExpiredEvent.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/security/web/access/expression/DelegatingEvaluationContext.java

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* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/security/web/server/util/matcher/RequestHeaderRequestMatcher.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/security/web/server/util/matcher/AndServerWebExchangeMatcher.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/security/web/server/context/WebSessionServerSecurityContextRepository.java
* /opt/cola/permits/1351887195_1656319607.7368119/0/spring-security-web-5-4-10-sources-jar/org/springframework/security/web/firewall/RequestRejectedHandler.java
1.356 junixsocket-native-common 2.3.2

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1.357 protobuf 3.6.1.3-2ubuntu5

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  * VI syntax highlighting tweaks.
  * Fix compiler to not make output executable.

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  * Heuristic detection of sub-messages when printing unknown fields in text format.

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  * Added @Override annotation to generated Java code where appropriate.

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  * Solaris 10 + Sun Studio fixes.

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Oleg Smolsky <oleg.smolsky@gmail.com>
  * MS Visual Studio error format option.
  * Detect unordered_map in stl_hash.m4.

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  * gzip/zlib I/O support.

Michael Poole <mdpoole@troilus.org>
  * Fixed warnings about generated constructors not explicitly initializing all fields (only present with certain compiler settings).
  * Added generation of field number constants.

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  * Fixed initialization ordering problem in logging code.

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  * Small patch improving performance of in Python serialization.

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  * Emacs mode for Protocol Buffers (editors/protobuf-mode.el).

Scott Stafford <scott.stafford@gmail.com>
  * Added Swap(), SwapElements(), and RemoveLast() to Reflection interface.

Alexander Melnikov <alm@sibmail.ru>
  * HPUX support.

Oliver Jowett <oliver.jowett@gmail.com>
  * Detect whether zlib is new enough in configure script.
  * Fixes for Solaris 10 32/64-bit confusion.

Evan Jones <evanj@mit.edu>
  * Optimize Java serialization code when writing a small message to a stream.
  * Optimize Java serialization of strings so that UTF-8 encoding happens only once per string per serialization call.
  * Clean up some Java warnings.
  * Fix bug with permanent callbacks that delete themselves when run.

Michael Kucharski <m.kucharski@gmail.com>
  * Added CodedInputStream.getTotalBytesRead().

Kacper Kowalik <xarthisius.kk@gmail.com>
  * Fixed m4/acx_pthread.m4 problem for some Linux distributions.

William Orr <will@worrbase.com>
  * Fixed detection of sched_yield on Solaris.
* Added atomicops for Solaris
Andrew Paprocki <andrew@ishiboo.com>
* Fixed minor IBM xIC compiler build issues
* Added atomicops for AIX (POWER)

1.358 gvfs 1.28.2-1ubuntu1~16.04.2

1.358.1 Available under license:

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executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

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1.360 objenesis 3.1

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1.361 libffi 3.2.1 9

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1.364 libiconv 1.14

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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also compile or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

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b) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

c) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

d) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

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   b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

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END OF TERMS AND CONDITIONS

Appendix: How to Apply These Terms to Your New Libraries

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GNU LIBICONV - character set conversion library

This library provides an iconv() implementation, for use on systems which don't have one, or whose implementation cannot convert from/to Unicode.

It provides support for the encodings:

**European languages**
- ASCII, ISO-8859-{1,2,3,4,5,7,9,10,13,14,15,16}, KOI8-R, KOI8-U, KOI8-RU, CP{1250,1251,1252,1253,1254,1257}, CP{850,866,1131}, Mac{Roman,CentralEurope,Iceland,Croatian,Romania}, Mac{Cyrillic,Ukraine,Greek,Turkish}, Macintosh

**Semitic languages**
- ISO-8859-{6,8}, CP{1255,1256}, CP862, Mac{Hebrew,Arabic}

**Japanese**

**Chinese**

**Korean**

**Armenian**
- ARMSCII-8

**Georgian**
- Georgian-Academy, Georgian-PS

**Tajik**
- KOI8-T

**Kazakh**
- PT154, RK1048

**Thai**
- ISO-8859-11, TIS-620, CP874, MacThai

**Laotian**
- MuleLao-1, CP1133

**Vietnamese**
- VISCII, TCVN, CP1258

**Platform specifics**
- HP-ROMAN8, NEXTSTEP
Full Unicode
UTF-8
UCS-2, UCS-2BE, UCS-2LE
UCS-4, UCS-4BE, UCS-4LE
UTF-16, UTF-16BE, UTF-16LE
UTF-32, UTF-32BE, UTF-32LE
UTF-7
C99, JAVA

Full Unicode, in terms of 'uint16_t' or 'uint32_t'
(with machine dependent endianness and alignment)
UCS-2-INTERNAL, UCS-4-INTERNAL

Locale dependent, in terms of 'char' or 'wchar_t'
(with machine dependent endianness and alignment, and with OS and locale dependent semantics)
char, wchar_t
The empty encoding name "" is equivalent to "char": it denotes the locale dependent character encoding.

When configured with the option --enable-extra-encodings, it also provides support for a few extra encodings:

European languages
CP{437,737,775,852,853,855,857,858,860,861,863,865,869,1125}

Semitic languages
CP864

Japanese

Chinese
BIG5-2003 (experimental)

Turkmen
TDS565

Platform specifics
ATARIST, RISCOS-LATIN1

It can convert from any of these encodings to any other, through Unicode conversion.

It has also some limited support for transliteration, i.e. when a character cannot be represented in the target character set, it can be approximated through one or several similarly looking characters. Transliteration is activated when "//TRANSLIT" is appended to the target encoding name.

libiconv is for you if your application needs to support multiple character encodings, but that support lacks from your system.

Installation
----------
As usual for GNU packages:

$ ./configure --prefix=/usr/local
$ make
$ make install

After installing GNU libiconv for the first time, it is recommended to recompile and reinstall GNU gettext, so that it can take advantage of libiconv.

On systems other than GNU/Linux, the iconv program will be internationalized only if GNU gettext has been built and installed before GNU libiconv. This means that the first time GNU libiconv is installed, we have a circular dependency between the GNU libiconv and GNU gettext packages, which can be resolved by building and installing either
- first libiconv, then gettext, then libiconv again,
  or (on systems supporting shared libraries, excluding AIX)
- first gettext, then libiconv, then gettext again.

Recall that before building a package for the second time, you need to erase the traces of the first build by running "make distclean".

This library can be built and installed in two variants:

- The library mode. This works on all systems, and uses a library 'libiconv.so' and a header file '<iconv.h>'. (Both are installed through "make install".)

  To use it, simply #include <iconv.h> and use the functions.

  To use it in an autoconfiguring package:
  - If you don't use automake, append m4/iconv.m4 to your aclocal.m4 file.
  - If you do use automake, add m4/iconv.m4 to your m4 macro repository.
  - Add to the link command line of libraries and executables that use the functions the placeholder @LIBICONV@ (or, if using libtool for the link, @LTLIBICONV@). If you use automake, the right place for these additions are the *_LDADD variables.

Note that 'iconv.m4' is also part of the GNU gettext package, which installs it in /usr/local/share/aclocal/iconv.m4.

- The libc plug/override mode. This works on GNU/Linux, Solaris and OSF/1 systems only. It is a way to get good iconv support without having glibc-2.1.

  It installs a library 'preloadable_libiconv.so'. This library can be used with LD_PRELOAD, to override the iconv* functions present in the C library.

On GNU/Linux and Solaris:
$ export LD_PRELOAD=/usr/local/lib/preloadable_libiconv.so

On OSF/1:
$ export _RLD_LIST=/usr/local/lib/preloadable_libiconv.so:DEFAULT

A program's source need not be modified, the program need not even be recompiled. Just set the LD_PRELOAD environment variable, that's it!

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Homepage
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http://www.gnu.org/software/libiconv/

Bug reports to
-------------

<bug-gnu-libiconv@gnu.org>

Bruno Haible <bruno@clisp.org>

1.365 openjdk-jre 11.0.11u9
1.365.1 Available under license :

## The Unicode Standard, Unicode Character Database, Version 10.0.0

### Unicode Character Database

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```

```
## xwd v1.0.7
### xwd utility
```
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list.h, multiVis.h, wsutils.h, list.c, multiVis.c

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structure layouts and accessors, and small macros and small inline
functions (ten lines or less in length), then the use of the object
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include/GL/glxext.h
include/GL/wglxext.h :

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1.371 zlib 1.2.11.dfsg-2ubuntu1.1

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/* zlib.h -- interface of the 'zlib' general purpose compression library
version 1.2.11, January 15th, 2017

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 */

Found in path(s):
* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-
jar/org/springframework/web/server/adapter/ForwardedHeaderTransformer.java
* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-
jar/org/springframework/web/bind/annotation/RestControllerAdvice.java
* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-
jar/org/springframework/web/util/ContentCachingResponseWrapper.java
* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-
jar/org/springframework/web/client/HttpServerErrorException.java
* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-
jar/org/springframework/web/method/annotation/ModelFactory.java
* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-
jar/org/springframework/http/codec/FormHttpMessageReader.java
* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-
jar/org/springframework/http/server/ServerHttpRequest.java
* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-
jar/org/springframework/http/server/ServerHttpResponse.java
* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-
jar/org/springframework/http/client/reactive/ClientHttpResponse.java
* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-
jar/org/springframework/http/codec/FormHttpMessageWriter.java
* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-
jar/org/springframework/web/accept/MediaTypeFileExtensionResolver.java
* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-
jar/org/springframework/web/context/support/ServletContextResourceLoader.java
* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-
jar/org/springframework/web/context/support/ServletContextResourceLoader.java

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Found in path(s):
* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-
jar/org/springframework/web/context/support/ServletContextResourceLoader.java

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 */

Found in path(s):
* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-jar/org/springframework/web/filter/ServletContextRequestLoggingFilter.java
No license file was found, but licenses were detected in source scan.

# This file maps Internet media types to unique file extension(s).
# Although created for httpd, this file is used by many software systems
# and has been placed in the public domain for unlimited redistribution.
#
# The table below contains both registered and (common) unregistered types.
# A type that has no unique extension can be ignored -- they are listed
# here to guide configurations toward known types and to make it easier to
# identify "new" types. File extensions are also commonly used to indicate
# content languages and encodings, so choose them carefully.
#
# Internet media types should be registered as described in RFC 4288.
# The registry is at <https://www.iana.org/assignments/media-types/>.
#
# This file was retrieved from
#
# MIME type (lowercased)Extensions
# ==---------------------------------------------------------------
# application/1d-interleaved-parityfec
# application/3gpdash-qoe-report+xml
# application/3gpp-ims+xml
# application/a2l
# application/activemessage
# application/alto-costmap+json
# application/alto-costmapfilter+json
# application/alto-directory+json
# application/alto-endpointcost+json
application/gpx+xml
gpx
# application/gxf
# application/h224
# application/held+xml
# application/http
application/hyperstudiotk
# application/ibe-key-request+xml
# application/ibe-pkg-reply+xml
# application/ibe-pp-data
# application/iges
# application/im-iscomposing+xml
# application/index
# application/index.cmd
# application/index.obj
# application/index.response
# application/index.vnd
application/inkml+xml
ink
inkml
# application/iotp
application/ipfix
ipfix
# application/ipp
# application/isup
# application/its+xml
application/java-archive
application/java-serialized-object
application/java-vm
application/javascript
# application/jose
# application/jose+json
# application/jrd+json
application/json
# application/json-patch+json
# application/json-seq
application/jsonml+json
# application/jwk+json
# application/jwk-set+json
# application/jwt
# application/kpml-request+xml
# application/kpml-response+xml
# application/ld+json
# application/lost+xml
# application/lostsync+xml
# application/lostxml
# application/lxf
application/mac-binhex40
application/mac-compactpro
cpt
# application/news-transmission
# application/nlsml+xml
# application/nss
# application/ocsp-request
# application/ocsp-response
application/octet-stream	bind
dm lrf mar so dist distz pkg bpk dump elc deploy
application/oda
# application/odx
application/oebps-package+xml
dep
application/ogx
application/omdoc+xml
# application/onenote
application/onenote
application/onenote2
application/onetmp
application/onepkg
application/odsx
# application/p2p-overlay+xml
# application/parityfec
application/patch-ops-error+xml
application/pdf
# application/pdx
application/pgp-encrypted
# application/pgp-keys
application/pgp-signature
application/pics-rules
# application/pidf+xml
# application/pidf-diff+xml
application/pkcs10
# application/pkcs12
application/pkcs7-mime
application/pkcs7-signature
application/pkcs8
application/pkix-attr-cert
application/pkix-cert
application/pkix-crl
application/pkix-pkipath
application/pkixcmp
application/pls+xml
# application/poc-settings+xml
application/postscript
application/pps-tracker+json
# application/problem+json
# application/problem+xml
# application/provenance+xml
# application/prs.alvestrand.titrax-sheet
application/prs.cww
# application/prs.hpub+zip
# application/prs.nprend
# application/prs.plucker
# application/prs.rdf-xml-crypt
# application/prs.xsf+xml
application/vnd.3gpp.pic-bw-small
application/vnd.3gpp.pic-bw-var
# application/vnd.3gpp.sms
# application/vnd.3gpp.sms+xml
# application/vnd.3gpp.srvcc-ext+xml
# application/vnd.3gpp.srvcc-info+xml
# application/vnd.3gpp.state-and-event-info+xml
# application/vnd.3gpp.ussd+xml
# application/vnd.3gpp2.bcmcsinfo+xml
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application/vnd.3gpp2.tcap
# application/vnd.3lightssoftware.imagescal
application/vnd.3m.post-it-notes
application/vnd.accpac.simply.aso
application/vnd.accpac.simply.imp
application/vnd.acucobol
application/vnd.acucorpac.acutc
application/vnd.adobe.air-application-installer-package+zip
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application/vnd.adobe.formscentral.fcd
application/vnd.adobe.fxp fxpl
# application/vnd.adobe.partial-upload
application/vnd.adobe.xdp+xml xdp
application/vnd.adobe.xfx df
# application/vnd.aether.imp
# application/vnd.ah-barcode
application/vnd.ahead.spaceahead
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application/vnd.airzip.filesecure.azs
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application/vnd.amiga.amiami
# application/vnd.amundsen.maze+xml
application/vnd.android.package-archiveapk
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# application/vnd.apache.thrift.binary
# application/vnd.apache.thrift.compact
# application/vnd.apache.thrift.json
# application/vnd.api+json
application/vnd.apple.installer+xml mpkg
application/vnd.apple.mpegurl m3u8
# application/vnd.arastra.swi
application/vnd.aristanetworks.swiswi
# application/vnd.artsquare
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6 6429
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6  6431
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.6

# application/vnd.syncml.ds.notification
application/vnd.tao.intent-module-archivetao
application/vnd.tcpdump.pcapcap cap dmp
# application/vnd.tmd.mediaflex.api+xml
# application/vnd.tml
application/vnd.tmobile-livetvtmo
application/vnd.trid.tpt
application/vnd.triscape.mxs
application/vnd.trueapptra
# application/vnd.truedoc
# application/vnd.ubisoft.webplayer
application/vnd.ufdlufdl ufdl
application/vnd.uiq.themeutz
application/vnd.umajinumj
application/vnd.unityunityweb
application/vnd.uoml+xml
application/vnd.uplanet.alert
# application/vnd.uplanet.alert-wbxml
# application/vnd.uplanet.bearer-choice
# application/vnd.uplanet.bearer-choice-wbxml
# application/vnd.uplanet.cacheop
# application/vnd.uplanet.cacheop-wbxml
# application/vnd.uplanet.channel
# application/vnd.uplanet.channel-wbxml
# application/vnd.uplanet.list
# application/vnd.uplanet.list-wbxml
# application/vnd.uplanet.listcmd
# application/vnd.uplanet.listcmd-wbxml
# application/vnd.uplanet.signal
# application/vnd.uri-map
# application/vnd.valve.source.material
application/vnd.vcxvcx
# application/vnd.vd-study
# application/vnd.vectorworks
# application/vnd.vel+json
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<th>File Path</th>
<th>Description</th>
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<tr>
<td>/opt/cola/permits/1301486287_1649248809.64/spring-web-5-2-20-release-sources.jar/http/server/reactive/ReactorServerHttpResponse.java</td>
<td>Spring Framework HTTP Server response implementation</td>
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<td>/opt/cola/permits/1301486287_1649248809.64/spring-web-5-2-20-release-sources.jar/http/client/reactive/JettyClientHttpConnector.java</td>
<td>Spring Framework HTTP client reactive connector implementation</td>
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<tr>
<td>/opt/cola/permits/1301486287_1649248809.64/spring-web-5-2-20-release-sources.jar/http/server/reactive/UndertowServerHttpRequest.java</td>
<td>Spring Framework Undertow Server request implementation</td>
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<tr>
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<td>Spring Framework Jetty client reactive request implementation</td>
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<tr>
<td>/opt/cola/permits/1301486287_1649248809.64/spring-web-5-2-20-release-sources.jar/http/codec/json/Jackson2JsonDecoder.java</td>
<td>Spring Framework Jackson2 JSON decoder implementation</td>
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* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-jar/org/springframework/web/client/UnknownContentTypeException.java
* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-jar/org/springframework/web/client/HttpMessageConverterExtractor.java
* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-jar/org/springframework/context/reactive/DefaultServerHttpRequestBuilder.java
* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-jar/org/springframework/context/support/ServletContextResourcePatternResolver.java
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* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-jar/org/springframework/context/support/web/util/WebUtils.java
* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-jar/org/springframework/context/support/web/util/DefaultUriBuilderFactory.java
* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-jar/org/springframework/web/client/reactive/ReactorServerHttpRequest.java
* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-jar/org/springframework/web/context/support/web/UriBuilder.java
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/**
* Return the web session for the current request. Always guaranteed to
* return an instance either matching to the session id requested by the
* client, or with a new session id either because the client did not
* specify one or because the underlying session had expired. Use of this
* method does not automatically create a session. See {@link WebSession}
* for more details.
* /

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* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-jar/org/springframework/web/context/support/LiveBeansViewServlet.java
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* /opt/cola/permits/1301486287_1649248809.64/0/spring-web-5-2-20-release-sources-jar/org/springframework/web/context/support/ContextExposingHttpServletRequest.java
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The primary ANTLR guy:

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ISO C9x compliant stdint.h for Microsoft Visual Studio
Based on ISO/IEC 9899:TC2 Committee draft (May 6, 2005) WG14/N1124

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set terminal pngcairo font 'Sans, 8' lw 1 size 1400,1024
set xtics rotate by -45
set style histogram errorbars gap 2 lw 1
set style fill solid border -1
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1.383 byte-buddy 1.10.14

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Protocol Buffers for Go with Gadgets

Go support for Protocol Buffers - Google's data interchange format

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https://github.com/golang/protobuf

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Julian Seward, Cambridge, UK.
jseward@acm.org
bzip2/libbzip2 version 1.0.2 of 30 December 2001

/*
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 usage: minibz2 [-d] [-[1,2,..9]] [[srcfilename] destfilename]
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1.391 libunistring 0.9.10

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1.392 nss-pam-ldapd 0.9.11

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* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/classes/commonslang/reflect/MethodUtils.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/classes/commonslang/ArrayUtils.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-
jar/org/ehcache/impl/internal/classes/commonslang/reflect/ConstructorUtils.java
*/
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* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/serialization/StringSerializer.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/DefaultTimeSourceService.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/resilience/AbstractResilienceStrategy.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/config/loaderwriter/DefaultCacheLoaderWriterConfiguration.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/spi/serialization/DefaultSerializationProviderFactory.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/events/CacheEventDispatcherImpl.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/config/resilience/DefaultResilienceStrategyProviderConfiguration.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/serialization/IntegerSerializer.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/loaderwriter/writebehind/AbstractWriteBehind.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/store/heap/Backend.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/config/builders/WriteBehindConfigurationBuilderFactory.java

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* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/executor/OnDemandExecutionService.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/config/builders/CacheManagerConfiguration.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/config/builders/CacheEventListenerConfigurationBuilder.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/persistence/package-info.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/sizeof/NoopSizeOfEngine.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/config/loaderwriter/DefaultCacheLoaderWriterProviderConfiguration.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/config/store/heap/DefaultSizeOfEngineProviderConfiguration.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/store/disk/EhcachePersistentConcurrentOffHeapClockCache.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/spi/resilience/DefaultResilienceStrategyProviderFactory.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/loaderwriter/writebehind/operations/BatchOperation.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/serialization/CompactJavaSerializer.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/config/persistence/CacheManagerPersistenceConfiguration.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/config/serializer/DefaultSerializationProviderConfiguration.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/classes/ClassInstanceProviderConfiguration.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/serialization/LongSerializer.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/loaderwriter/writebehind/WriteBehindProviderFactory.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/executor/OutOfBandScheduledExecutor.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/config/event/DefaultCacheEventListenerConfiguration.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/classes/ClassInstanceProviderConfiguration.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/serialization/LongSerializer.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/executor/DefaultExecutorServiceFactory.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/store/disk/factories/EhcachePersistentSegmentFactory.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/store/heap/OnHeapStoreProviderFactory.java
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* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/config/builders/CacheConfigurationBuilder.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/implement/impl/internal/util/Pacer.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/impl/config/executors/PooledExecutionServiceConfiguration.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/impl/implement/store/offheap/OffHeapValueHolder.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/impl/config/store/heap/DefaultSizeOfEngineConfiguration.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/impl/implement/internal/events/CacheEventDispatcherFactoryImpl.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/implement/impl/internal/concurrent/package-info.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/implement/impl/internal/executors/PartitionedScheduledExecutor.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/implement/impl/internal/store/offheap/EhcacheConcurrentOffHeapClockCache.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/implement/impl/internal/persistence/DefaultLocalPersistenceServiceFactory.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/implement/impl/internal/events/CacheEventNotificationListenerServiceProviderFactory.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/implement/impl/internal/loaderwriter/writebehind/operations/DeleteOperation.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/implement/impl/internal/store/offheap/MemorySizeParser.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/implement/impl/internal/loaderwriter/writebehind/operations/DeleteAllOperation.java
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* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/implement/impl/internal/store/loaderwriter/LocalLoaderWriterStore.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/implement/impl/internal/loaderwriter/writebehind/StripedWriteBehind.java
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* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/impl/internal/classes/ClassInstanceConfiguration.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/impl/serialization/FloatSerializer.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/impl/internal/concurrent/EvictingConcurrentMap.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/impl/persistence/FileBasedStateRepository.java
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* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/impl/internal/store/heap/holders/OnHeapKey.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/impl/internal/store/heap/OnHeapStrategy.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/impl/config/store/heap/package-info.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/impl/internal/sizeof/listeners/exceptions/VisitorListenerException.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/impl/internal/store/heap/holders/BaseOnHeapKey.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/impl/config/resilience/DefaultResilienceStrategyConfiguration.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/impl/internal/store/heap/holders/CopiedOnHeapKey.java
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* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/impl/serialization/DoubleSerializer.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/impl/internal/executor/PartitionedOrderedExecutor.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/impl/config/AbstractResourcePool.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/impl/config/store/disk/package-info.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/impl/internal/spi/loaderwriter/DefaultCacheLoaderWriterProvider.java
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* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/impl/serialization/ByteArraySerializer.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources.jar/org/ehcache/impl/internal/store/loaderwriter/LoaderWriterValueHolder.java
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1    32  7679    7648 3.7M   8f8378c0-01
2  7680 16383    8704 4.3M   8f8378c0-02
5  7936 12799    4864 2.4M
6 12544 16127    3584 1.8M
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  jar/org/ehcache/core/spi/store/package-info.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
  jar/org/ehcache/core/spi/time/package-info.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
  jar/org/ehcache/core/InternalStatus.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
  jar/org/ehcache/core/statistics/LatencyHistogramConfiguration.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
  jar/org/ehcache/core/package-info.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
  jar/org/ehcache/core/events/EventListenerWrapper.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
  jar/org/ehcache/core/config/store/StoreEventSourceConfiguration.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
  jar/org/ehcache/core/store/StoreConfigurationImpl.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
  jar/org/ehcache/core/spi/package-info.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
  jar/org/ehcache/core/statistics/CacheOperationOutcomes.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
  jar/org/ehcache/core/osgi/EhcacheActivator.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
  jar/org/ehcache/core/spi/service/CacheManagerProviderService.java
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* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/service/StatisticsService.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/events/CacheEventListenerConfiguration.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/exceptions/StorePassThroughException.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core>StatusTransitioner.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/Ehcache.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/spi/service/FileBasedPersistenceContext.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/spi/store/heap/package-info.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/statistics/LowerCachingTierOperationsOutcome.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/statistics/HigherCachingTierOperationOutcomes.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/events/CacheManagerListener.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/spi/store/heap/SizeOfEngineProvider.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/events/StateChangeListener.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/spi/store/WrapperStore.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/spi/store/tiering/HigherCachingTier.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/config/CoreConfigurationBuilder.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/spi/service/FileBasedPersistenceContext.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/spi/store/tiering/AuthoritativeTier.java
* /opt/ cola/ permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/*
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jar/org/ehcache/core/spi/ServiceLocator.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
jar/org/ehcache/core/spi/store/events/StoreEvent.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
jar/org/ehcache/core/statistics/AuthoritativeTierOperationOutcomes.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
jar/org/ehcache/core/osgi/SafeOsgi.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
jar/org/ehcache/core/statistics/DelegatingOperationObserver.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
jar/org/ehcache/core/CacheConfigurationChangeListener.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
jar/org/ehcache/core/util/ClassLoading.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
jar/org/ehcache/core/util/ByteBufferInputStream.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
jar/org/ehcache/core/spi/store/InternalCacheManager.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
jar/org/ehcache/core/statistics/SuppliedValueStatistic.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
jar/org/ehcache/core/statistics/DefaultTierStatistics.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
jar/org/ehcache/core/spi/store/events/package-info.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
jar/org/ehcache/core/DefaultCacheManagerProviderService.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
jar/org/ehcache/core/config/store/package-info.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
jar/org/ehcache/core/spi/store/AbstractWrapperStoreProvider.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
jar/org/ehcache/core/statistics/ChainedOperationObserver.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
jar/org/ehcache/core/config/ExpiryUtils.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
jar/org/ehcache/core/spi/store/AbstractWrapperStoreProvider.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
jar/org/ehcache/core/service/ServiceFactory.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
jar/org/ehcache/core/spi/store/AbstractValueHolder.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
jar/org/ehcache/core/spi/time/SystemTimeSource.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
jar/org/ehcache/core/spi/store/heap/SizeOfEngine.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-
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* /opt/ws_local/PERMITS_SQL/1072948336_159240763.12/0/netty-codec-4-1-51-final-sources-jar/io/netty/handler/codec/protobuf/ProtobufDecoderNano.java
jar/io/netty/handler/codec/HeadersUtils.java
* /opt/ws_local/PERMITS_SQL/1072948336_1595240763.12/0/netty-codec-4-1-51-final-sources.jar/io/netty/handler/codec/protobuf/ProtobufEncoder.java

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* /opt/ws_local/PERMITS_SQL/1072948336_1595240763.12/0/netty-codec-4-1-51-final-sources.jar/io/netty/handler/codec/Headers.java

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 */

/**
 * A decoder that splits the received {@link ByteBuf}s dynamically by the
 * value of the length field in the message. It is particularly useful when you
 * decode a binary message which has an integer header field that represents the
 * length of the message body or the whole message.
 * <p>
 * {@link LengthFieldBasedFrameDecoder} has many configuration parameters so
 * that it can decode any message with a length field, which is often seen in
 * proprietary client-server protocols. Here are some example that will give
 * you the basic idea on which option does what.
 *
 * <h3>2 bytes length field at offset 0, do not strip header</h3>
 *
 * The value of the length field in this example is \texttt{12 (0x0C)} which
 * represents the length of "HELLO, WORLD". By default, the decoder assumes
 * that the length field represents the number of the bytes that follows the
 * length field. Therefore, it can be decoded with the simplistic parameter
 * combination.
 * <pre>
 * &lt;b&gt;lengthFieldOffset&lt;/b&gt; = &lt;b&gt;0&lt;/b&gt;
 * &lt;b&gt;lengthFieldLength&lt;/b&gt; = &lt;b&gt;2&lt;/b&gt;
 * lengthAdjustment = 0
 * initialBytesToStrip = 0 (= do not strip header)
 * 
 * BEFORE DECODE (14 bytes) AFTER DECODE (14 bytes)
 * +-----------------+-----------------+
 * | Length | Actual Content | Length | Actual Content |
 * | \texttt{0x000C} | "HELLO, WORLD" | \texttt{0x000C} | "HELLO, WORLD" |
 * +-----------------+-----------------+
 * &lt;/pre&gt
 */
* 2 bytes length field at offset 0, strip header

* Because we can get the length of the content by calling
  * [ByteBuf#readableBytes()], you might want to strip the length
  * field by specifying <tt>initialBytesToStrip</tt>. In this example, we
  * specified <tt>2</tt>, that is same with the length of the length field, to
  * strip the first two bytes.

  *
  * lengthFieldOffset = 0
  * lengthFieldLength = 2
  * lengthAdjustment = 0
  * <tt>initialBytesToStrip</tt> = <tt>2</tt> (= the length of the Length field)

  *
  * BEFORE DECODE (14 bytes)         AFTER DECODE (12 bytes)
  *
  * +--------+----------------+      +----------------+
  * | Length | Actual Content |----->| Actual Content |
  * | 0x000C | "HELLO, WORLD" |      | "HELLO, WORLD" |
  * +--------+----------------+      +----------------+

  *

* 2 bytes length field at offset 0, do not strip header, the length field

  * represents the length of the whole message

  *

* In most cases, the length field represents the length of the message body

  * only, as shown in the previous examples. However, in some protocols, the
  * length field represents the length of the whole message, including the
  * message header. In such a case, we specify a non-zero
  * <tt>lengthAdjustment</tt>. Because the length value in this example message
  * is always greater than the body length by <tt>2</tt>, we specify <tt>-2</tt>
  * as <tt>lengthAdjustment</tt> for compensation.

  *
  *
  * BEFORE DECODE (14 bytes)         AFTER DECODE (14 bytes)
  *
  * +--------+----------------+      +--------+----------------+
  * | Length | Actual Content |----->| Length | Actual Content |
  * | 0x000C | "HELLO, WORLD" |      | 0x000C | "HELLO, WORLD" |
  * +--------+----------------+      +--------+----------------+

  *

* 3 bytes length field at the end of 5 bytes header, do not strip header

  * The following message is a simple variation of the first example. An extra
  * header value is prepended to the message. <tt>lengthAdjustment</tt> is zero
* again because the decoder always takes the length of the prepended data into
* account during frame length calculation.
* ...
* \[<b>lengthFieldOffset</b> = \langle b\rangle 2 \langle/ b\rangle (= the length of Header 1)
* \[<b>lengthFieldLength</b> = \langle b\rangle 3 \langle/ b\rangle
* lengthAdjustment = 0
* initialBytesToStrip = 0
  *
  * BEFORE DECODE (17 bytes)          AFTER DECODE (17 bytes)
  * +---------------------------------+---------------------------------+
  * | Header 1 | Length | Actual Content | -----> | Header 1 | Length | Actual Content |
  * | 0xCAFE | 0x00000C | "HELLO, WORLD" |      | 0xCAFE | 0x00000C | "HELLO, WORLD" |
  * +---------------------------------+---------------------------------+
  * \[/pre\]
  *
  * \[h3\]3 bytes length field at the beginning of 5 bytes header, do not strip header\[/h3\]
  *
  * This is an advanced example that shows the case where there is an extra
  * header between the length field and the message body. You have to specify a
  * positive \[tt\]lengthAdjustment\[/tt\] so that the decoder counts the extra
  * header into the frame length calculation.
  * \[pre\]
  * lengthFieldOffset = 0
  * lengthFieldLength = 3
  * \[<b>lengthAdjustment</b> = \langle b\rangle 2 \langle/ b\rangle (= the length of Header 1)
  * initialBytesToStrip = 0
  *
  * BEFORE DECODE (17 bytes)          AFTER DECODE (17 bytes)
  * +---------------------------------+---------------------------------+
  * | Length | Header 1 | Actual Content | -----> | Length | Header 1 | Actual Content |
  * | 0x00000C | 0xCAFE | "HELLO, WORLD" |      | 0x00000C | 0xCAFE | "HELLO, WORLD" |
  * +---------------------------------+---------------------------------+
  * \[/pre\]
  *
  * \[h3\]2 bytes length field at offset 1 in the middle of 4 bytes header,
  * strip the first header field and the length field\[/h3\]
  *
  * This is a combination of all the examples above. There are the prepended
  * header before the length field and the extra header after the length field.
  * The prepended header affects the \[tt\]lengthFieldOffset\[/tt\] and the extra
  * header affects the \[tt\]lengthAdjustment\[/tt\]. We also specified a non-zero
  * \[tt\]initialBytesToStrip\[/tt\] to strip the length field and the prepended
  * header from the frame. If you don't want to strip the prepended header, you
  * could specify \[tt\]0\[/tt\] for \[tt\]initialBytesToSkip\[/tt\].
  * \[pre\]
  * lengthFieldOffset = 1 (= the length of HDR1)
  * lengthFieldLength = 2
  * \[<b>lengthAdjustment</b> = \langle b\rangle 1 \langle/ b\rangle (= the length of HDR2)
* initialBytesToStrip = 3 (= the length of HDR1 + LEN)

* BEFORE DECODE (16 bytes) AFTER DECODE (13 bytes)
  +-----+--------+-----+----------------+      +-----+----------------+
  | HDR1 | Length | HDR2 | Actual Content |----->| HDR2 | Actual Content |
  | 0xCA | 0x000C | 0xFE | "HELLO, WORLD" |      | 0xFE | "HELLO, WORLD" |
  +-----+--------+-----+----------------+      +-----+----------------+

* </pre>

* 2 bytes length field at offset 1 in the middle of 4 bytes header,
* strip the first header field and the length field, the length field
* represents the length of the whole message

* Let's give another twist to the previous example. The only difference from
* the previous example is that the length field represents the length of the
* whole message instead of the message body, just like the third example.
* We have to count the length of HDR1 and Length into lengthAdjustment.
* Please note that we don't need to take the length of HDR2 into account
* because the length field already includes the whole header length.

* lengthFieldOffset = 1
* lengthFieldLength = 2
* initialBytesToStrip = 3

* BEFORE DECODE (16 bytes) AFTER DECODE (13 bytes)
  +-----+--------+-----+----------------+      +-----+----------------+
  | HDR1 | Length | HDR2 | Actual Content |----->| HDR2 | Actual Content |
  | 0xCA | 0x0010 | 0xFE | "HELLO, WORLD" |      | 0xFE | "HELLO, WORLD" |
  +-----+--------+-----+----------------+      +-----+----------------+

* @see LengthFieldPrepender

*/

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* /opt/ws_local/PERMITS_SQL/1072948336_1595240763.12/0/netty-codec-4-1-51-final-sources-jar/io/netty/handler/codec/LengthFieldBasedFrameDecoder.java

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/**
 * Utility class for {@link ByteBuf} that encodes and decodes to and from
 * <a href="http://en.wikipedia.org/wiki/Base64">Base64</a> notation.
 * 
 * The encoding and decoding algorithm in this class has been derived from
 * <a href="http://iharder.sourceforge.net/current/java/base64/">Robert Harder's Public Domain</a>
 * Base64 Encoder/Decoder</a>.
 */

1.411 jackson-annotations 2.11.2

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* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1.5.4-sources-jar/io/micrometer/core/instrument/logging/LoggingRegistryConfig.java
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* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/binder/httpcomponents/PoolingHttpClientConnectionManagerMetricsBinder.java

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* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-
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* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/binder/jetty/JettyClientTagsProvider.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/binder/jvm/JvmHeapPressureMetrics.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/config/validate/ValidationException.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/binder/db/MetricsDSLContext.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/distribution/TimeWindowSum.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/binder/http/DefaultHttpServletRequestTagsProvider.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/binder/httpcomponents/DefaultUriMapper.java
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* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/config/MeterRegistryConfigValidator.java

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* `/opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/util/internal/logging/Slf4JLoggerFactory.java`

* `/opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/util/internal/logging/InternalLogLevel.java`

* `/opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/util/internal/logging/AbstractInternalLogger.java`

* `/opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/util/internal/logging/ILoggerFactory.java`

* `/opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/util/internal/logging/ILogger.java`
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* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/tree/ElementIterator.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/ElementHandler.java
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* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/Document.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/rule/Action.java
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* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/rule/Rule.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/tree/NamespaceStack.java
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* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/io/DOMReader.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/QName.java

* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/jaxb/JAXBModifier.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/jaxb/JAXBObjectHandler.java
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* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/rule/Pattern.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/rule/Rule.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/io/DOMReader.java
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jar/org/dom4j/tree/AbstractCharacterData.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-
jar/org/dom4j/rule/pattern/NodeTypePattern.java
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jar/org/dom4j/swing/DocumentTreeModel.java
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In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see https://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

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### 1.436 react-zoom-pan-pinch 1.6.1

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1.438 databases 0.5.5

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Metadata-Version: 2.1
Name: databases
Version: 0.5.5
Summary: Async database support for Python.
Home-page: https://github.com/encode/databases
Author: Tom Christie
Author-email: tom@tomchristie.com
License: BSD
Description: # Databases

Databases gives you simple asyncio support for a range of databases.

It allows you to make queries using the powerful [SQLAlchemy Core][sqlalchemy-core] expression language, and provides support for PostgreSQL, MySQL, and SQLite.

Databases is suitable for integrating against any async Web framework, such as [Starlette][starlette], [Sanic][sanic], [Responder][responder], [Quart][quart], [aiohttp][aiohttp], [Tornado][tornado], or [FastAPI][fastapi].
**Documentation**: [https://www.encode.io/databases/](https://www.encode.io/databases/)

**Requirements**: Python 3.6+

---

## Installation

```shell
$ pip install databases
```

You can install the required database drivers with:

```shell
$ pip install databases[postgresql]
$ pip install databases[mysql]
$ pip install databases[sqlite]
```

Default driver support is provided using one of [asyncpg][asyncpg], [aiomysql][aiomysql], or [aiosqlite][aiosqlite].

You can also use other database drivers supported by `databases`:

```shell
$ pip install databases[postgresql+aiopg]
$ pip install databases[mysql+asyncmy]
```

Note that if you are using any synchronous SQLAlchemy functions such as `engine.create_all()` or [alembic][alembic] migrations then you still have to install a synchronous DB driver: [psycopg2][psycopg2] for PostgreSQL and [pymysql][pymysql] for MySQL.

---

## Quickstart

For this example we'll create a very simple SQLite database to run some queries against.

```shell
$ pip install databases[sqlite]
$ pip install ipython
```

We can now run a simple example from the console.
Note that we want to use `ipython` here, because it supports using `await` expressions directly from the console.

```python
# Create a database instance, and connect to it.
from databases import Database
database = Database('sqlite:///example.db')
await database.connect()

# Create a table.
query = "CREATE TABLE HighScores (id INTEGER PRIMARY KEY, name VARCHAR(100), score INTEGER)"
await database.execute(query=query)

# Insert some data.
query = "INSERT INTO HighScores(name, score) VALUES (:name, :score)"
values = [
    {'name': "Daisy", "score": 92},
    {'name': "Neil", "score": 87},
    {'name': "Carol", "score": 43},
]
await database.execute_many(query=query, values=values)

# Run a database query.
query = "SELECT * FROM HighScores"
rows = await database.fetch_all(query=query)
print('High Scores:', rows)
```

Check out the documentation on [making database queries](https://www.encode.io/databases/database_queries/) for examples of how to start using databases together with SQLAlchemy core expressions.

<p align="center">&mdash; &mdash;</p>

[sqlalchemy-core]: https://docs.sqlalchemy.org/en/latest/core/
[psycopg2]: https://www.psycopg.org/
[pymysql]: https://github.com/PyMySQL/PyMySQL
[asyncpg]: https://github.com/MagicStack/asyncpg
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[tornado]: https://github.com/tornadoweb/tornado
[fastapi]: https://github.com/tiangolo/fastapi

Platform: UNKNOWN
Classifier: Development Status :: 3 - Alpha
Classifier: Environment :: Web Environment
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Classifier: Programming Language :: Python :: 3.6
Classifier: Programming Language :: Python :: 3.7
Classifier: Programming Language :: Python :: 3.8
Classifier: Programming Language :: Python :: 3.9
Classifier: Programming Language :: Python :: 3.10
Classifier: Programming Language :: Python :: 3 :: Only
Requires-Python: >=3.6
Description-Content-Type: text/markdown
Provides-Extra: postgresql
Provides-Extra: mysql
Provides-Extra: mysql+asyncmy
Provides-Extra: sqlite
Provides-Extra: postgresql+aiopg

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### 1.439 swagger-annotations 1.5.22

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 */

package io.swagger.annotations;

import java.lang.annotation.ElementType;
import java.lang.annotation.Retention;
import java.lang.annotation.RetentionPolicy;
import java.lang.annotation.Target;

/**
 * License metadata available within the info section of a Swagger definition, see
 * https://github.com/OAI/OpenAPI-Specification/blob/master/versions/2.0.md#licenseObject
 * <p>
 * @since 1.5.0
 */

@Target(ElementType.ANNOTATION_TYPE)
@Retention(RetentionPolicy.RUNTIME)
public @interface License {

/**
 * The name of the license.
 */
* @return the name of the license
*/

String name();

/**
 * An optional URL for the license.
 *
 * @return an optional URL for the license.
 */

String url() default "";


1.440 gnulib 2019-09-23
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Files:
tests/test-update-copyright.sh

Depends-on:

configure.ac:
abs_aux_dir=`cd "$ac_aux_dir"; pwd`
AC_SUBST([abs_aux_dir])

Makefile.am:
TESTS += test-update-copyright.sh
TESTS_ENVIRONMENT += abs_aux_dir='$(abs_aux_dir)'
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@page
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That's all there is to it!

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tests/test-canonicalize-lgpl.c
tests/signature.h
tests/null-ptr.h
tests/macros.h

Depends-on:
ignore-value
same_inode
symlink

configure.ac:

Makefile.am:
TESTS += test-canonicalize-lgpl
check_PROGRAMS += test-canonicalize-lgpl

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MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
GNU General Public License for more details.

You should have received a copy of the GNU General Public License
along with this program; if not, write to the Free Software
Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.
@end smallexample

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this
when it starts in an interactive mode:

@include smallexample
Gnomovision version 69, Copyright (C) @var{year} @var{name of author}
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
@end smallexample

The hypothetical commands @samp{show w} and @samp{show c} should show
the appropriate parts of the General Public License. Of course, the
commands you use may be called something other than @samp{show w} and
@samp{show c}; they could even be mouse-clicks or menu items---whatever
suits your program.

You should also get your employer (if you work as a programmer) or your
school, if any, to sign a "copyright disclaimer" for the program, if
necessary. Here is a sample; alter the names:

@example
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
@end example

@var{signature of Ty Coon}, 1 April 1989
Ty Coon, President of Vice
@end example

This General Public License does not permit incorporating your program into
proprietary programs. If your program is a subroutine library, you may
consider it more useful to permit linking proprietary applications with the
library. If this is what you want to do, use the GNU Lesser General
Public License instead of this License.
Description:
Concatenate two arbitrary file names.

Files:
lib/filenamecat.h
lib/filenamecat-lgpl.c
m4/filenamecat.m4

Depends-on:
dirname-lgpl

configure.ac:
gl_FILE_NAME_CONCAT_LGPL

Makefile.am:
lib_SOURCES += filenamecat-lgpl.c

Include:
"filenamecat.h"

License:
LGPLv2+

Maintainer:
Jim Meyering
Please email the following information to assign@gnu.org, and we will send you the assignment form for your past and future changes.

Please use your full legal name (in ASCII characters) as the subject line of the message.

REQUEST: SEND FORM FOR PAST AND FUTURE CHANGES

[What is the name of the program or package you're contributing to?]

[Did you copy any files or text written by someone else in these changes? Even if that material is free software, we need to know about it.]

[Do you have an employer who might have a basis to claim to own your changes? Do you attend a school which might make such a claim?]

[For the copyright registration, what country are you a citizen of?]

[What year were you born?]
Which files have you changed so far, and which new files have you written so far?

Description:
Provide the GNU Free Documentation License in Texinfo format.

Files:
doc/fdl.texi

Depends-on:

configure.ac:

Makefile.am:

Include:

License:
unmodifiable license text

Maintainer:
all

Description:
Help make libraries relocatable, that is, to allow them to function properly when copied to an arbitrary directory.

Files:
doc/relocatable.texi
lib/relocatable.h
lib/relocatable.c
lib/relocatable.valgrind
m4/relocatable-lib.m4

Depends-on:
strdup

configure.ac:
gl_RELOCATABLE_LIBRARY
if test $RELOCATABLE = yes; then
   AC_LIBOBJ([relocatable])
fi

Makefile.am:
DEFS += -DNO_XMALLOC

Include:
"relocatable.h"

License:
LGPLv2+

Maintainer:
Ben Pfaff
Description:
Ensure getcwd(NULL, 0) returns a buffer allocated by the malloc() function.

Files:
lib/getcwd-lgpl.c
m4/getcwd.m4

Depends-on:
unistd
strdup          [test $REPLACE_GETCWD = 1]

configure.ac:
gl_FUNC_GETCWD_LGPL
if test $REPLACE_GETCWD = 1; then
   AC_LIBOBJ([getcwd-lgpl])
fi
gl_UNISTD_MODULE_INDICATOR([getcwd])

Makefile.am:

Include:
<unistd.h>

License:
LGPLv2+

Maintainer:
Eric Blake
Legal Issues about Contributing Code to GNUlast updated 14 July 2015

Project GNU has to be careful to obey copyright laws, even though these laws are wrong when they stop people from sharing generally useful published information such as software, because we are in the
public eye. We also use copyright to defend users' freedom, by means of copyleft (though this does not excuse copyright law for helping to make software proprietary).

This means that if you want to contribute software to GNU, you have to do something to give us legal permission to use it. There are three ways this can be done:

* Assign the copyright to the Free Software Foundation. This allows the FSF to act to stop violations of the GPL.

* Keep the copyright and release the program yourself under the GNU GPL. (This alternative is too impractical for contributions to a preexisting FSF-copyrighted GNU program.)

* Put the code in the public domain. Then there is nothing to stop hoarding of modified versions, but we can still use the program in GNU.

Most of these alternatives require a signed piece of paper, or in some cases a digital signature, to make it happen.

* Assigning copyright.

Assigning the copyright means signing a contract that makes the Free Software Foundation the "owner" of the program according to the law. As the copyright holder, the Foundation can sue anyone who tries to distribute the program as a proprietary product. We are willing to keep your name on the program as the author for as long as the program remains recognizably distinct. ("Owner" is in quotes to show that we don't really believe in this kind of ownership.)

The assignment contract commits the foundation to setting distribution terms that permit free redistribution.

Often we don't want to do the work of starting to distribute a program right away. There are many things which we will need in order to have a complete system but which aren't really useful until the rest of the system is done. But signing the assignment does not stop you from distributing the program yourself--as long as you do so under the GNU terms. You don't have to wait for us to start distributing. You can start distributing as soon as you attach our standard copyleft to the files. (Ask for our advice on how to do this.)

The assignment contract we normally use has a clause that permits you to use your code in proprietary programs, on 30 days' notice. (The 30 days' notice is there because, through a legal technicality, it would improve our position in a suit against a hoarder.) Although we believe that proprietary software is wrong, we include this clause
because it would serve no purpose to ask you to promise not to do it. You're giving us a gift in the first place.

You don't need to invoke this clause in order to distribute copies as free software under the GNU GPL, since everyone is allowed to do that.

* Releasing it yourself.

You can release a program yourself under copyleft distribution terms such as the GNU GPL. (In order to accept the program as GNU software, we would have to be happy with your choice of terms.) This does not require a contract between you and the FSF, but we would appreciate having a signed piece of paper to confirm your decision.

If someone violates your terms--for example, if someone gets a copy from us, and uses it as a basis for a proprietary product in violation of the terms--we cannot sue him. You would have to sue, or he gets away with it.

* Public domain.

If you put the program in the public domain, we prefer to have a signed piece of paper--a disclaimer of rights--from you confirming this. If the program is not very important, we can do without one; the worst that could happen is that we might some day be forced to stop using it.

The law says that anyone can copyright a modified version of the public domain work. (This doesn't restrict the original, which remains in the public domain; only the changes are copyrighted.) If we make extensive changes, we will probably do this and add our usual copyleft. If we make small changes, we will leave the version we distribute in the public domain.

* What about your employer?

If you are employed to do programming, or have made an agreement with your employer that says it owns programs you write, we need a signed piece of paper from your employer disclaiming rights to the program. It should be signed by a vice president or general manager of the company. If you can't get at them, it is almost as good to find someone who signs licenses for software that is purchased. Here is a sample wording:

Digital Simulation Corporation hereby disclaims all copyright interest in the program "sample.el" (a program to direct assemblers to make passes at compilers under GNU Emacs) written by Hugh Hacker.

<signature of Mo Ghoul>, 1 April 1987
Mo Ghoul, President of Vice, Digital Simulation Corp.
The description of what the program does is just to make it clearer what the disclaimer covers.

If what you did was change an existing program, it should say this:

...in the changes and enhancements made by Hugh Hacker to the program "sample.el".

* Did anyone else contribute?

If someone else contributed more than a few lines here or there to the program, then that person too is an author, and that person too needs to sign papers just as you do. So may that person's employer. However, if his contribution is just a fraction of the whole work, it is satisfactory if he disclaims his own rights, even if you are assigning yours. (If just the minor contributors' work goes in the public domain, that doesn't leave much of a loophole for hoarders.)

If you incorporated packages which you found floating around as "public domain", we might still want to track down their authors, to get disclaimers to reassure us that they really are in the public domain. So keep track of what these packages are and who wrote them.

* A reminder:

In working on a project for GNU, DO NOT study and follow any Unix sources or other non-free software that might have any bearing on the project. Don't refer to them at all, unless you are forced to for non-GNU reasons.

It is not considered a serious problem if you have read Unix sources or other non-free source code in the past for other purposes, provided you don't copy anything in particular from them. However, referring to them while you do the work could cause us legal problems later.

Description:
Locating a program in PATH (LGPLed version).

Files:
lib/findprog.h
lib/findprog.c
lib/findprog-lgpl.c
m4/findprog.m4
m4/eaccess.m4

Depends-on:
stdbool
strdup
concat-filename
access
unistd

configure.ac:
%g_FINDPROG
%g_MODULE_INDICATOR(findprog-lgpl)

Makefile.am:
lib_SOURCES += findprog.h findprog.c

Include:
"findprog.h"

License:
LGPLv2+

Maintainer:
all
The files in this directory describe the gnulib modules.
The following copyright notice applies to each of these
description files.

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Version 2, June 1991

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freedom to share and change it. By contrast, the GNU General Public
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software--to make sure the software is free for all its users. This
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the GNU Lesser General Public License instead.) You can apply it to
your programs, too.

When we speak of free software, we are referring to freedom, not
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For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

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<one line to give the program's name and a brief idea of what it does.>
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Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c': they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program `Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice

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Version 2.1, February 1999

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[Do you have an employer who might have a basis to claim to own your changes?]

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[Please list the files involved, or give a brief description of the changes being disclaimed.]
Files:
tests/test-getcwd-lgpl.c
tests/signature.h
tests/macros.h

Depends-on:

configure.ac:

Makefile.am:
TESTS += test-getcwd-lgpl
check_PROGRAMS += test-getcwd-lgpl
test_getcwd_lgpl_LDADD = $(LDADD) $(LIBINTL)
Description:
realpath, canonicalize_file_name: Provide canonical absolute file name

Files:
lib/canonicalize-lgpl.c
m4/canonicalize.m4
m4/double-slash-root.m4

Depends-on:
extensions
stdlib
nocrash
alloca-opt [test $HAVE_CANONICALIZE_FILE_NAME = 0 || test $REPLACE_CANONICALIZE_FILE_NAME = 1]
errno [test $HAVE_CANONICALIZE_FILE_NAME = 0 || test $REPLACE_CANONICALIZE_FILE_NAME = 1]
lstat [test $HAVE_CANONICALIZE_FILE_NAME = 0 || test $REPLACE_CANONICALIZE_FILE_NAME = 1]
malloca [test $HAVE_CANONICALIZE_FILE_NAME = 0 || test $REPLACE_CANONICALIZE_FILE_NAME = 1]
memmove [test $HAVE_CANONICALIZE_FILE_NAME = 0 || test $REPLACE_CANONICALIZE_FILE_NAME = 1]
pathmax [test $HAVE_CANONICALIZE_FILE_NAME = 0 || test $REPLACE_CANONICALIZE_FILE_NAME = 1]
readlink [test $HAVE_CANONICALIZE_FILE_NAME = 0 || test $REPLACE_CANONICALIZE_FILE_NAME = 1]
sys_stat [test $HAVE_CANONICALIZE_FILE_NAME = 0 || test $REPLACE_CANONICALIZE_FILE_NAME = 1]

configure.ac:
gl_CANONICALIZE_LGPL
if test $HAVE_CANONICALIZE_FILE_NAME = 0 || test $REPLACE_CANONICALIZE_FILE_NAME = 1; then
   AC_LIBOBJ([canonicalize-lgpl])
fi
gl_MODULE_INDEX([canonicalize-lgpl])
gl_STDLIB_MODULE_INDEX([canonicalize_file_name])
gl_STDLIB_MODULE_INDEX([realpath])

Makefile.am:

Include:
<stdlib.h>

License:
LGPLv2+

Maintainer:
all
Description:
Extract specific portions of filenames.

Files:
lib/dirname.h
lib/dirname-lgpl.c
lib/basename-lgpl.c
lib/stripslash.c
m4/dirname.m4

Depends-on:
dosname
double-slash-root
malloc-posix
stdbool

configure.ac:
gl_DIRNAME_LGPL

Makefile.am:
lib_SOURCES += dirname-lgpl.c basename-lgpl.c stripslash.c

Include:
"dirname.h"

License:
LGPLv2+

Maintainer:
Jim Meyering, Eric Blake

1.441 tdb 1.45.5
1.441.1 Available under license :

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Version 3, 29 June 2007

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1.442 log4j-api 2.13.3
1.442.1 Available under license:

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1.443 expat 2.2.9 1ubuntu0.4

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   Upstream-Contact: Sebastian Pipping <sebastian@pipping.org>
   Source: https://github.com/libexpat/libexpat
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1.444 servlet-api 4.0.0

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1.445 junixsocket-core 2.3.2
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* /opt/cola/permits/1135880377_1613624050.66/0/javassist-3-24-0-ga-sources-5-
  jar/javassist/tools/rmi/StubGenerator.java
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  jar/javassist/compiler/ast/BinExpr.java
* /opt/cola/permits/1135880377_1613624050.66/0/javassist-3-24-0-ga-sources-5-
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* /opt/cola/permits/1135880377_1613624050.66/0/javassist-3-24-0-ga-sources-5-jar/javassist/compiler/ast/Type.java
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1.447 swagger 2.1.9

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1.448 jctools-core 3.0.0

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        <goal>jar</goal>
      </goals>
    </execution>
  </executions>
</plugin>

</plugins>
</build>

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  </repository>
</distributionManagement>

<url>https://github.com/JCTools</url>
<inceptionYear>2013</inceptionYear>

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  <url>http://www.apache.org/licenses/LICENSE-2.0.txt</url>
</license>

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  <tag>HEAD</tag>
</scm>

<developers>
  <developer>
    <url>https://github.com/nitsanw</url>
  </developer>
  <developer>
    <url>https://github.com/mjpt777</url>
  </developer>
  <developer>
    <url>https://github.com/RichardWarburton</url>
  </developer>
  <developer>
    <url>https://github.com/kay</url>
  </developer>
  <developer>
    <url>https://github.com/franz1981</url>
  </developer>
</developers>

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</prerequisites>

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  <maven.compiler.source>${java.version}</maven.compiler.source>
  <maven.compiler.target>${java.version}</maven.compiler.target>
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  <maven.compiler.testTarget>${java.test.version}</maven.compiler.testTarget>
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No license file was found, but licenses were detected in source scan.

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*/

Found in path(s):
* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources-jar/org/jctools/queues/MessagePassingQueueUtil.java
* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources-jar/org/jctools/util/UnsafeJvmInfo.java
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* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources-jar/org/jctools/maps/NonBlockingHashMapLong.java
* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources-jar/org/jctools/queues/ConcurrentCircularArrayQueue.java
* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources-jar/org/jctools/maps/NonBlockingSetInt.java
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* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources-jar/org/jctools/util/UnsafeLongArrayAccess.java
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* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources-jar/org/jctools/queues/MpmcArrayQueue.java
1.449 openssh 8.0-p1

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   * @version 3.0 (December 2000)
   *
   * Optimised ANSI C code for the Rijndael cipher (now AES)
   *
   * @author Vincent Rijmen <vincent.rijmen@esat.kuleuven.ac.be>
   * @author Antoon Bosselaers <antoon.bosselaers@esat.kuleuven.ac.be>
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1.450 bzip2 1.0.8

1.451 pydantic 1.9.0
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1.452 systemd 231
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 * The tag is then compared to zstd version number.
 * They are compatible if first 3 digits are identical.
 * Anything beyond that is free, and doesn't impact validation.
 * Example : tag v1.8.1.2 is compatible with version 1.8.1
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*/
/**
* Determines if the {link getAuthentication()} has permission to access the target
* given the permission
* @param target the target domain object to check permission on
*/
* @param permission the permission to check on the domain object (i.e. "read",
* "write", etc).
* @return true if permission is granted to the [ @link #getAuthentication()], else
* false
*/

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*/
/**
* @param authentication represents the user in question. Should not be null.
* @param targetDomainObject the domain object for which permissions should be
* checked. May be null in which case implementations should return false, as the null
* condition can be checked explicitly in the expression.
* @param permission a representation of the permission object as supplied by the
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* @return true if the permission is granted, false otherwise
*/

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jar/org/springframework/security/authentication/rcp/RemoteAuthenticationException.java
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- /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources.jar/org/springframework/security/access/vote/AffirmativeBased.java
- /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources.jar/org/springframework/security/access/annotation/SecuredAnnotationSecurityMetadataSource.java
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  jar/org/springframework/security/crypto/encrypt/BouncyCastleAesGcmBytesEncryptor.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
  jar/org/springframework/security/crypto/keygen/BytesKeyGenerator.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
  jar/org/springframework/security/crypto/keygen/SharedKeyGenerator.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
  jar/org/springframework/security/crypto/keygen/HexEncodingStringKeyGenerator.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
  jar/org/springframework/security/crypto/encrypt/HexEncodingTextEncryptor.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
  jar/org/springframework/security/crypto/keygen/StringKeyGenerator.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
  jar/org/springframework/security/crypto/encrypt/CipherUtils.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
  jar/org/springframework/security/crypto/password/PasswordEncoder.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
  jar/org/springframework/security/crypto/encrypt/BytesEncryptor.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
  jar/org/springframework/security/crypto/keygen/SecureRandomBytesKeyGenerator.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
  jar/org/springframework/security/crypto/password/NoOpPasswordEncoder.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
  jar/org/springframework/security/crypto/encrypt/TextEncryptor.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
  jar/org/springframework/security/crypto/password/StandardPasswordEncoder.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
  jar/org/springframework/security/crypto/encrypt/AesBytesEncryptor.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
  jar/org/springframework/security/crypto/encrypt/BouncyCastleAesCbcBytesEncryptor.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
  jar/org/springframework/security/crypto/encrypt/BouncyCastleAesBytesEncryptor.java
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* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/authentication/CachingUserDetailsService.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/authorization/AuthorityReactiveAuthorizationManager.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/crypto/password/DelegatingPasswordEncoder.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/crypto/password/LdapShaPasswordEncoder.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/jackson2/UnmodifiableListDeserializer.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/authentication/DelegatingReactiveAuthenticationManager.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/crypto/keygen/Base64StringKeyGenerator.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/crypto/password/MessageDigestPasswordEncoder.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/concurrent/DelegatingSecurityContextCallable.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/crypto/password/LdapShaPasswordEncoder.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/jackson2/UnmodifiableListDeserializer.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/authentication/DelegatingReactiveAuthenticationManager.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
jar/org/springframework/security/concurrent/DelegatingSecurityContextRunnable.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
jar/org/springframework/security/jackson2/BadCredentialsExceptionMixin.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
jar/org/springframework/security/core/userdetails/ReactiveUserDetailsPasswordService.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
jar/org/springframework/security/provisioning/JdbcUserDetailsManager.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
jar/org/springframework/security/crypto/password/Md4PasswordEncoder.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
jar/org/springframework/security/jackson2/UnmodifiableListMixin.java
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jar/org/springframework/security/core/Transient.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
jar/org/springframework/security/converter/RsaKeyConverters.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
jar/org/springframework/security/core/annotation/CurrentSecurityContext.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
jar/org/springframework/security/authentication/ReactiveAuthenticationManagerResolver.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
jar/org/springframework/security/authentication/event/LogoutSuccessEvent.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
jar/org/springframework/security/authentication/ReactiveAuthenticationManagerAdapter.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
jar/org/springframework/security/authentication/AuthenticationManagerResolver.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
jar/org/springframework/security/crypto/script/SCryptPasswordEncoder.java
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* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/core/token/SecureRandomFactoryBean.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/authentication/AbstractUserDetailsReactiveAuthenticationManager.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/authentication/UserDetailsRepositoryReactiveAuthenticationManager.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/crypto/argon2/Argon2PasswordEncoder.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/crypto/argon2/Argon2EncodingUtils.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/access/hierarchicalroles/RoleHierarchyImpl.java

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/**
 * Reviews the <code>Object</code> returned from a secure object invocation, being able to
 * modify the <code>Object</code> or throw an [ @link AccessDeniedException ].
 * <p>
 * Typically used to ensure the principal is permitted to access the domain object
 * instance returned by a service layer bean. Can also be used to mutate the domain object
 * instance so the principal is only able to access authorised bean properties or
 * <code>Collection</code> elements.
 * <p>
 * Special consideration should be given to using an <code>AfterInvocationManager</code>
 * on bean methods that modify a database. Typically an
 * <code>AfterInvocationManager</code> is used with read-only methods, such as
 * <code>public DomainObject getById(id)</code>. If used with methods that modify a
 * database, a transaction manager should be used to ensure any
 * <code>AccessDeniedException</code> will cause a rollback of the changes made by the
 * transaction.
 * <p>
 * @author Ben Alex
 */

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* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/core/annotation/AuthenticationPrincipal.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/core/userdetails/MapReactiveUserDetailsService.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/core/crypto/factory/PasswordEncoderFactories.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/authentication/ReactiveAuthenticationManager.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/authorization/AuthorizationDecision.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/core/SpringSecurityCoreVersion.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/crypto/password/PasswordEncoderUtils.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/core/context/ReactiveSecurityContextHolder.java
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* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/access/expression/SecurityExpressionHandler.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/access/method/package-info.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/access/authentication/AuthenticationEventPublisher.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/access/prepost/package-info.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/core/authority/AuthorityUtils.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/access/prepost/PostAuthorize.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/access/prepost/PrePostInvocationAttributeFactory.java
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* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/access/expression/method/ExpressionBasedPostInvocationAdvice.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/core/authority/package-info.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/provisioning/UserDetailsManager.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-jar/org/springframework/security/authentication/AccountStatusUserDetailsChecker.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
jar/org/springframework/security/core/userdetails/cache/package-info.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
jar/org/springframework/security/access/expression/method/MethodSecurityExpressionRoot.java
* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
jar/org/springframework/security/access/hierarchicalroles/package-info.java
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* /opt/cola/permits/1351887212_1656319604.455229/0/spring-security-core-5-4-10-sources-
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/**
* Base64 encoder which is a reduced version of Robert Harder's public domain
* implementation (version 2.3.7). See <a href="http://iharder.sourceforge.net/current/java/base64/">http://iharder.sourceforge.net/current/java/base64/</a>
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*
* @author Luke Taylor
* @since 3.0
* @deprecated Use java.util.Base64
*/

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1.463 spring-web-mvc 5.2.20.RELEASE

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jar/org/springframework/web/servlet/mvc/condition/ProducesRequestCondition.java
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* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-jar/org/springframework/web/servlet/config/annotation/InterceptedRegistryBeanDefinitionParser.java
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* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-jar/org/springframework/web/servlet/view/freemarker/FreeMarkerConfigurer.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-jar/org/springframework/web/servlet/resource/ResourceResolverChain.java
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* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-jar/org/springframework/web/servlet/resource/AbstractHtmlElementBodyTag.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-jar/org/springframework/web/servlet/mvc/method/annotation/AnnotationConfigDispatcherServletInitializer.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-jar/org/springframework/web/servlet/mvc/method/annotation/MatrixVariableMapMethodArgumentResolver.java
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/**
* A contract for inspecting and potentially modifying request data values such
* as URL query parameters or form field values before they are rendered by a
* view or before a redirect.
*
* <p>Implementations may use this contract for example as part of a solution
* to provide data integrity, confidentiality, protection against cross-site
* request forgery (CSRF), and others or for other tasks such as automatically
* adding a hidden field to all forms and URLs.
*
* <p>View technologies that support this contract can obtain an instance to
* delegate to via {@link RequestContext#getRequestDataValueProcessor()}.  
*  
* @author Rossen Stoyanchev
* @since 3.1
*/

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/**
 */

XSLT-driven View that allows for response context to be rendered as the
* result of an XSLT transformation.
*
* <p>The XSLT Source object is supplied as a parameter in the model and then
* {#@link locateSource detected} during response rendering. Users can either specify
* a specific entry in the model via the {#@link setSourceKey sourceKey} property or
* have Spring locate the Source object. This class also provides basic conversion
* of objects into Source implementations. See {#@link getSourceTypes() here}
* for more details.
*
* <p>All model parameters are passed to the XSLT Transformer as parameters.
* In addition the user can configure {#@link setOutputProperties output properties}
* to be passed to the Transformer.
*
* @author Rob Harrop
* @author Juergen Hoeller
* @since 2.0
* /

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* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-
jar/org/springframework/web/servlet/view/xslt/XsltView.java

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jar/org/springframework/web/servlet/handler/RequestMatchResult.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-
jar/org/springframework/web/servlet/config/MvcNamespaceHandler.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-
jar/org/springframework/web/servlet/config/DefaultServletHandlerBeanDefinitionParser.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-
jar/org/springframework/web/servlet/mvc/Controller.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-
jar/org/springframework/web/servlet/view/AbstractTemplateView.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-
jar/org/springframework/web/servlet/mvc/method/annotation/StreamingResponseBody.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-
jar/org/springframework/web/servlet/view/tiles3/SpringLocaleResolver.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-
jar/org/springframework/web/servlet/mvc/condition/RequestCondition.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-
jar/org/springframework/web/servlet/config/annotation/WebMvcConfigurerAdapter.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-
jar/org/springframework/web/servlet/config/annotation/WebMvcConfigurerComposite.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-
jar/org/springframework/web/servlet/resource/ResourceTransformer.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-
jar/org/springframework/web/servlet/view/ViewResolverComposite.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-
jar/org/springframework/web/servlet/config/InterceptorsBeanDefinitionParser.java

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  jar/org/springframework/web/servlet/tags/form/HiddenInputTag.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-
  jar/org/springframework/web/servlet/i18n/AbstractLocaleResolver.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-
  jar/org/springframework/web/servlet/theme/ThemeChangeInterceptor.java
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  jar/org/springframework/web/servlet/mvc/annotation/ModelAndViewResolver.java
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* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-
  jar/org/springframework/web/servlet/resource/VersionPathStrategy.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-
  jar/org/springframework/web/servlet/view/groovy/GroovyMarkupViewResolver.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-
  jar/org/springframework/web/servlet/tags/ArgumentAware.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-
  jar/org/springframework/web/servlet/tags/HtmlEscapingAwareTag.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-
  jar/org/springframework/web/servlet/resource/VersionStrategy.java
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* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-jar/org/springframework/web/servlet/FlashMapManager.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-jar/org/springframework/web/servlet/support/SessionFlashMapManager.java
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* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-jar/org/springframework/web/servlet/ServletForwardingController.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-jar/org/springframework/web/servlet/view/InternalResourceViewResolver.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-jar/org/springframework/web/servlet/mvc/support/RedirectAttributesModelMap.java
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* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-jar/org/springframework/web/servlet/SmartView.java
* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-jar/org/springframework/web/view/tiles3/SpringBeanPreparerFactory.java
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* /opt/cola/permits/1301486303_1649248822.91/0/spring-webmvc-5-2-20-release-sources-jar/org/springframework/web/mvc/AbstractUrlViewController.java

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* /opt/cola/permits/1129909867_1612394256.07/0/flyway-test-6-4-0-sources-jar/org/flywaydb/test/annotation/FlywayTests.java

1.465 pam 1.3.1-5

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1.467 pcre 8.42
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End

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THE BASIC LIBRARY FUNCTIONS

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Written by: Philip Hazel
Email local part: ph10
Email domain: cam.ac.uk

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PCRE JUST-IN-TIME COMPILATION SUPPORT

-----------------------------------------

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Comment: This package was debianized by Andy Cress on 2010-10-29, with Debian package updates by Alex Waite on 2013-06-14

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Gocheck - A rich testing framework for Go

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Go support for Protocol Buffers - Google's data interchange format

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procfs provides functions to retrieve system, kernel and process metrics from the pseudo-filesystem proc.

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* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2.0.2-sources-3.jar/javax/validation/valueextraction/ValueExtractorDeclarationException.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2.0.2-sources-3.jar/javax/validation/metadata/ConstructorDescriptor.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2.0.2-sources-3.jar/javax/validation/metadata/MethodDescriptor.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2.0.2-sources-3.jar/javax/validation/valueextraction/ValueExtractorDeclarationException.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2.0.2-sources-3.jar/javax/validation/metadata/ConstructorDescriptor.java
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1.474 jakarta-persistence-api 2.2.3
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1.475 json-c 0.12

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1.476 slf4j-log4j 1.7.30

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1.477 spring-jdbc 5.2.20.RELEASE

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*/
/** *
* Strategy interface for translating between [@link SQLException SQLExceptions]
* and Spring’s data access strategy-agnostic `@link DataAccessException`
* hierarchy.
*
* <p>Implementations can be generic (for example, using
* `@link java.sql.SQLException#getResource()` SQLState) or wholly
* proprietary (for example, using Oracle error codes) for greater precision.
*
* `@author Rod Johnson`
* `@author Juergen Hoeller`
* `@see org.springframework.dao.DataAccessException`
*/

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* /opt/cola/permits/1301486295_1649248795.81/0/spring-jdbc-5-2-20-release-sources-jar/org/springframework/jdbc/SqlReturnResultSet.java
* /opt/cola/permits/1301486295_1649248795.81/0/spring-jdbc-5-2-20-release-sources-jar/org/springframework/jdbc/support/incrementer/PostgreSQLSequenceMaxValueIncrementer.java
* /opt/cola/permits/1301486295_1649248795.81/0/spring-jdbc-5-2-20-release-sources-jar/org/springframework/jdbc/InvalidResultSetAccessException.java
* /opt/cola/permits/1301486295_1649248795.81/0/spring-jdbc-5-2-20-release-sources-jar/org/springframework/jdbc/core/metadata/PostgresTableMetaDataProvider.java
* /opt/cola/permits/1301486295_1649248795.81/0/spring-jdbc-5-2-20-release-sources-jar/org/springframework/jdbc/support/lob/TemporaryLobCreator.java
* /opt/cola/permits/1301486295_1649248795.81/0/spring-jdbc-5-2-20-release-sources-jar/org/springframework/jdbc/core/metadata/PostgresTableMetaDataProvider.java
* /opt/cola/permits/1301486295_1649248795.81/0/spring-jdbc-5-2-20-release-sources-jar/org/springframework/jdbc/core/metadata/HsqlTableMetaDataProvider.java
* /opt/cola/permits/1301486295_1649248795.81/0/spring-jdbc-5-2-20-release-sources-jar/org/springframework/jdbc/datasource/UserCredentialsDataSourceAdapter.java
* /opt/cola/permits/1301486295_1649248795.81/0/spring-jdbc-5-2-20-release-sources-jar/org/springframework/jdbc/support/incrementer/AbstractDataFieldMaxValueIncrementer.java
* /opt/cola/permits/1301486295_1649248795.81/0/spring-jdbc-5-2-20-release-sources-jar/org/springframework/jdbc/datasource/SqlQuery.java
* /opt/cola/permits/1301486295_1649248795.81/0/spring-jdbc-5-2-20-release-sources-jar/org/springframework/jdbc/datasource/lookup/MapDataSourceLookup.java
* /opt/cola/permits/1301486295_1649248795.81/0/spring-jdbc-5-2-20-release-sources-jar/org/springframework/jdbc/support/SQLErrorCodes.java
* /opt/cola/permits/1301486295_1649248795.81/0/spring-jdbc-5-2-20-release-sources-jar/org/springframework/jdbc/support/incrementer/PostgreSQLSequenceMaxValueIncrementer.java
* /opt/cola/permits/1301486295_1649248795.81/0/spring-jdbc-5-2-20-release-sources-jar/org/springframework/jdbc/core/metadata/OracleTableMetaDataProvider.java
* /opt/cola/permits/1301486295_1649248795.81/0/spring-jdbc-5-2-20-release-sources-jar/org/springframework/jdbc/core/SqLReturnResultSet.java

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open-source-used-in-cisco-meeting-server-(formerly-acano-server)-3.6-7610

* /opt/cola/permits/1301486295_1649248795.81/0/spring-jdbc-5-2-20-release-sources.jar/org/springframework/jdbc/support/rowset/ResultSetWrappingSqlRowSet.java
* /opt/cola/permits/1301486295_1649248795.81/0/spring-jdbc-5-2-20-release-sources.jar/org/springframework/jdbc/datasource/JdbcTemplateObjectSupport.java
* /opt/cola/permits/1301486295_1649248795.81/0/spring-jdbc-5-2-20-release-sources.jar/org/springframework/jdbc/datasource/LazyConnectionDataSourceProxy.java
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* /opt/cola/permits/1301486295_1649248795.81/0/spring-jdbc-5-2-20-release-sources.jar/org/springframework/jdbc/object/SqlFunction.java

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 */
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* limitations under the License.
*/
/**
* Implement this interface when parameters need to be customized based
* on the connection. We might need to do this to make use of proprietary
* features, available only with a specific Connection type.
*
* @author Rod Johnson
* @author Thomas Risberg
* @see CallableStatementCreatorFactory#newCallableStatementCreator(ParameterMapper)
* @see org.springframework.jdbc.object.StoredProcedure#execute(ParameterMapper)
*/
/**
* Create a Map of input parameters, keyed by name.
* @param con a JDBC connection. This is useful (and the purpose of this interface)
* if we need to do something RDBMS-specific with a proprietary Connection
* implementation class. This class conceals such proprietary details. However,
* it is best to avoid using such proprietary RDBMS features if possible.
* @return a Map of input parameters, keyed by name (never { @code null})
* @throws SQLException if an SQLException is encountered setting
* parameter values (that is, there's no need to catch SQLException)
*/

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  jar/org/springframework/jdbc/support/incrementer/DB2MainframeSequenceMaxValueIncrementer.java
* /opt/cola/permits/1301486295_1649248795.81/0/spring-jdbc-5-2-20-release-sources-
  jar/org/springframework/jdbc/support/incrementer/DB2SequenceMaxValueIncrementer.java
* /opt/cola/permits/1301486295_1649248795.81/0/spring-jdbc-5-2-20-release-sources-
  jar/org/springframework/jdbc/core/DisposableSqlTypeValue.java
* /opt/cola/permits/1301486295_1649248795.81/0/spring-jdbc-5-2-20-release-sources-
  jar/org/springframework/jdbc/support/xml/SqlXmlValue.java

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/**
 * Close this LobCreator session and free its temporarily created BLOBs and CLOBs.
 * Will not need to do anything if using PreparedStatement's standard methods,
 * but might be necessary to free database resources if using proprietary means.
* <p><b>NOTE</b>: Needs to be invoked after the involved PreparedStatements have
* been executed or the affected O/R mapping sessions have been flushed.
* Otherwise, the database resources for the temporary BLOBs might stay allocated.
*

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/**
* The classes in this package make JDBC easier to use and
* reduce the likelihood of common errors. In particular, they:
* <ul>
* <li>Simplify error handling, avoiding the need for try/catch/finally
* blocks in application code.
* <li>Present exceptions to application code in a generic hierarchy of
* unchecked exceptions, enabling applications to catch data access
* exceptions without being dependent on JDBC, and to ignore fatal
* exceptions there is no value in catching.
* <li>Allow the implementation of error handling to be modified
* to target different RDBMSes without introducing proprietary
* dependencies into application code.
* </ul>
*
* <p>This package and related packages are discussed in Chapter 9 of
* <a href="https://www.amazon.com/exec/obidos/tg/detail/-/0764543857/">Expert One-On-One J2EE Design and
Development</a>
* by Rod Johnson (Wrox, 2002).
*

Found in path(s):
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jar/org/springframework/jdbc/package-info.java

1.478 glibc 2.31-0ubuntu9.7

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In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see https://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

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Mersenne Twister

The :mod:`random` module includes code based on a download from http://www.math.sci.hiroshima-u.ac.jp/~m-mat/MT/MT2002/emt19937ar.html. The following are the verbatim comments from the original code:

A C-program for MT19937, with initialization improved 2002/1/26.
Coded by Takuji Nishimura and Makoto Matsumoto.

Before using, initialize the state by using init_genrand(seed)
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Any feedback is very welcome.
http://www.math.sci.hiroshima-u.ac.jp/~m-mat/MT/emt.html
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Sockets
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Modified by Jack Jansen, CWI, July 1995:
- Use binascii module to do the actual line-by-line conversion
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  version is still 5 times faster, though.
- Arguments more compliant with Python standard

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-----------------------------

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--------

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Original location:
https://github.com/majek/csiphash/

Solution inspired by code from:
Samuel Neves (supercop/crypto_auth/siphash24/little)
djb (supercop/crypto_auth/siphash24/little2)
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------

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* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/util/package.html
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/tree/package.html
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/signature/package.html
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jar/org/objectweb/asm/xml/SAXAdapter.java
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jar/org/objectweb/asm/xml/SAXAnnotationAdapter.java
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jar/org/objectweb/asm/xml/ASMContentHandler.java
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*/
/**
   * Creates a new JSRInliner. <i>Subclasses must not use this
   * constructor</i>. Instead, they must use the
   * @link JSRInlinerAdapter(int, MethodVisitor, int, String, String, String, String[])\</i>
   * version.
   *
   * @param mv
   *      the <code>MethodVisitor</code> to send the resulting inlined
   *      method code to (use <code>null</code> for none).
   * @param access
   *      the method's access flags (see @link Opcodes). This
   *      parameter also indicates if the method is synthetic and/or
   *      deprecated.
   * @param name
   *      the method's name.
   * @param desc
   *      the method's descriptor (see @link Type).
   * @param signature
   *      the method's signature. May be <tt>null</tt>.
   * @param exceptions
   *      the internal names of the method's exception classes (see
   *      { @link Type#getInternalName() getInternalName }\). May be
   *      <tt>null</tt>.
   * @throws IllegalStateException
   *      If a subclass calls this constructor.
   */
Found in path(s):
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/commons/JSRInlinerAdapter.java

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/**
 *
**
* Creates a new GeneratorAdapter. Subclasses must not use this constructor. Instead, they must use the
* GeneratorAdapter(int, MethodVisitor, int, String, String)
* version.
*
* @param mv
* the method visitor to which this adapter delegates calls.
* @param access
* the method's access flags (see Opcodes).
* @param name
* the method's name.
* @param desc
* the method's descriptor (see Type).
* @throws IllegalStateException
* If a subclass calls this constructor.
*/

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/**
 * Constructs a new {@link Textifier}. <i>Subclasses must not use this
 * constructor</i>. Instead, they must use the {@link #Textifier(int)}
 * version.
 *
 * @throws IllegalStateException
 *             If a subclass calls this constructor.
 */

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/**
 * Constructs a new {@link ClassNode}. <i>Subclasses must not use this
 * constructor</i>. Instead, they must use the { @link #ClassNode(int)}
 * version.
 *
 * @throws IllegalStateException
 *             If a subclass calls this constructor.
 */

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/**
* Constructs a new [@link LocalVariableAnnotationNode]. <i>Subclasses must
* not use this constructor</i>. Instead, they must use the
* [@link #LocalVariableAnnotationNode(int, TypePath, LabelNode[], LabelNode[], int[], String)]
* version.
*
* @param typeRef
*   a reference to the annotated type. See [@link TypeReference].
* @param typePath
*   the path to the annotated type argument, wildcard bound, array
*   element type, or static inner type within 'typeRef'. May be
*   <tt>null</tt> if the annotation targets 'typeRef' as a whole.
* @param start
*   the fist instructions corresponding to the continuous ranges
*   that make the scope of this local variable (inclusive).
* @param end
*   the last instructions corresponding to the continuous ranges
*   that make the scope of this local variable (exclusive). This
*   array must have the same size as the 'start' array.
* @param index
*   the local variable's index in each range. This array must have
*   the same size as the 'start' array.
* @param desc
*   the class descriptor of the annotation class.
*/

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* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/AnnotationWriter.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/tree/analysis/SimpleVerifier.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/optimizer/NameMapping.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/util/Printer.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/optimizer/Shrinker.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/commons/Method.java
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* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/commons/RemappingFieldAdapter.java
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jar/org/objectweb/asm/tree/ParameterNode.java
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* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/tree/analysis/Analyzer.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/tree/analysis/SmallSet.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/commons/Remapping/AnnotationAdapter.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/tree/TypeInsnNode.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/util/TraceSignatureVisitor.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/tree/IincInsnNode.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/optimizer/MethodOptimizer.java
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* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/util/CheckMethodAdapter.java
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* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/tree/AnnotationNode.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/signature/SignatureWriter.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/commons/TryCatchBlockSorter.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/Item.java
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* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/ClassVisitor.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/tree/FrameNode.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/optimizer/ConstantPool.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/Opcodes.java
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/**
 * Creates a new [@link AnalyzerAdapter]. <i>Subclasses must not use this
 * constructor</i>. Instead, they must use the
 * [@link #AnalyzerAdapter(int, String, int, String, String, MethodVisitor)]
 * version.
 *
 * @param owner
 *    the owner's class name.
 * @param access
 *    the method's access flags (see [@link Opcodes]).
 * @param name
 *    the method's name.
 * @param desc
 *    the method's descriptor (see [@link Type Type]).
 * @param mv
 *    the method visitor to which this adapter delegates calls. May
 *    be <tt>null</tt>.
 * @throws IllegalStateException
 *    If a subclass calls this constructor.
 */

---

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* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/optimizer/shrink-frames.properties
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* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/TypeReference.java
1.482 xz 5.2.4 1

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- **Upstream-Contact:** Lasse Collin <lasse.collin@tukaani.org>
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Date: Sun, 19 Jul 2009 13:28:23 +0300
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1.484 py 1.6.0-2.ph3

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lib/gssapi/mechglue/g_accept_sec_context.c
lib/gssapi/mechglue/g_acquire_cred.c
lib/gssapi/mechglue/g_canon_name.c
lib/gssapi/mechglue/g_compare_name.c
lib/gssapi/mechglue/g_context_time.c
lib/gssapi/mechglue/g_delete_sec_context.c
lib/gssapi/mechglue/g_dsp_name.c
lib/gssapi/mechglue/g_dsp_status.c
lib/gssapi/mechglue/g_dup_name.c
lib/gssapi/mechglue/g_exp_sec_context.c
lib/gssapi/mechglue/g_export_name.c
lib/gssapi/mechglue/g_glue.c
lib/gssapi/mechglue/g_imp_name.c
lib/gssapi/mechglue/g_imp_sec_context.c
lib/gssapi/mechglue/g_init_sec_context.c
lib/gssapi/mechglue/g_initialize.c
lib/gssapi/mechglue/g_inquire_context.c
lib/gssapi/mechglue/g_inquire_cred.c
lib/gssapi/mechglue/g_inquire_names.c
lib/gssapi/mechglue/g_process_context.c
lib/gssapi/mechglue/g_rel_buffer.c
and the initial implementation of incremental propagation, including
the following new or changed files:

#include/iprop_hdr.h
#include/ipropd_svc.c
#include/ipropd_svc.c
lib/kdb/ipropd_svc.c
lib/kdb/kdb_convert.c
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
lib/kdb/kdb_log.h
lib/kdb/kdb_log.h
lib/krb5/error_tables/kdb5_err.et
lib/krb5/error_tables/kdb5_err.et
kprop/kpropd_rpc.c
kprop/kpropd_rpc.c
kprop/kproplog.c
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