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Version 2.1, February 1999

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1.2 tcp-dump 4.9.2

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1.3 bzip2 1.0.8

1.4 dhcpcd 9.1.1

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1.5 docker 19.03.5-r1

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Protocol Buffers for Go with Gadgets

Go support for Protocol Buffers - Google's data interchange format

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This program comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
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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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@center Version 2.1, February 1999

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`Frob' (a library for tweaking knobs) written by James Random Hacker.

@var{signature of Ty Coon}, 1 April 1990
Ty Coon, President of Vice
@end smallexample

That's all there is to it!
Files:
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

$Id: COPYING,v 1.3 2006-10-26 16:20:28 eggert Exp $

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m4/*.m4 files have nearly unlimited licenses.

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@center Version 2, June 1991

c This file is intended to be included within another document,
c hence no sectioning command or @node.

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heading Preamble

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an offer, in accord with Subsection b above.)
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The source code for a work means the preferred form of the work for
making modifications to it. For an executable work, complete source
code means all the source code for all modules it contains, plus any
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@end enumerate

@iftex
@heading END OF TERMS AND CONDITIONS
@end iftex
@ifinfo
@center END OF TERMS AND CONDITIONS
@end ifinfo

@page
@heading Appendix: How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest
possible use to the public, the best way to achieve this is to make it
free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest
to attach them to the start of each source file to most effectively
convey the exclusion of warranty; and each file should have at least
the ``copyright'' line and a pointer to where the full notice is found.

@smallexample
@var{one line to give the program's name and a brief idea of what it does.}
Copyright (C) @var{yyyy}  @var{name of author}

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it under the terms of the GNU General Public License as published by
the Free Software Foundation; either version 2 of the License, or
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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:

@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.

@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?]

[Please write your email address here.]

[Please write your postal address here.]

[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.)

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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:

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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:
stdlib
strdup
concat-filename
access
unistd

configure.ac:
gl_FINDPROG
gl_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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   b) Accompany it with a written offer, valid for at least three
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      cost of physically performing source distribution, a complete
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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]
malloc       [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:

#include <stdlib.h>

License:
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Maintainer:
all

Description:
Extract specific portions of filenames.

Files:
lib/dname.h
lib/dname-lgpl.c
lib/basename-lgpl.c
lib/stripslash.c
m4/dname.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"

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Maintainer:
Jim Meyering, Eric Blake

1.11 berkeley-db 4.4.20

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1.14 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
SHAREDLIBCPPFLAGS = -DPIC

## 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,- Bsymbolor

## 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/\(^.*\)/\1.o $@ : /g' > $<\n |
  -s $@ || rm -f $@"

%.d: $(srcdir)/%.cpp
@echo "generating dependency information for "$<"
@$(SHELL) -ec "$<$(GEN_DEPS.cc) $< \n
## 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 =

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1.20 asm 5.0.4

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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[])]
 * 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.
*/

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/** *
 * Creates a new {@link GeneratorAdapter}. <i>Subclasses must not use this
 * constructor</i>. Instead, they must use the
 * {@link #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 {@link Opcodes}).
 * @param name
 * the method's name.
 * @param desc
 * the method's descriptor (see {@link Type}).
 * @throws IllegalStateException
 * If a subclass calls this constructor.
 */
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 * Constructs a new {@link Textifier}. <i>Subclasses must not use this
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 *
 * @throws IllegalStateException
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 */

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/**
* Constructs a new {@link ClassNode}. <i>Subclasses must not use this
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* 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
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 * @param desc
 *    the class descriptor of the annotation class.
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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 \texttt{null}\).
* @throws IllegalStateException
  * If a subclass calls this constructor.
*

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1.28 ehcach-impl 3.8.1

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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/internal/resilience/RobustLoaderWriterResilienceStrategy.java
* /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/WriteBehindConfigurationBuilderInterface
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* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/sizeof/NoopSizeOfEngine.java
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* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/spi/copy/DefaultCopyProvider.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/config/loaderwriter/writebehind/WriteBehindProviderConfiguration.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/store/offheap/factories/EhcacheSegmentFactory.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/events/CloseableStoreEventSink.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/store/heap/holders/SerializedOnHeapValueHolder.java
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* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/store/disk/OffHeapDiskStore.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/spi/serialization/DefaultSerializationProvider.java
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* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/executor/PartitionedScheduledExecutor.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/store/offheap/EhcacheConcurrentOffHeapClockCache.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/internal/persistence/DefaultLocalPersistenceServiceFactory.java
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* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/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
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* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/serialization/FloatSerializer.java
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* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/persistence/FileBasedStateRepository.java
* /opt/cola/permits/1258059351_1643027373.36/0/ehcache-impl-3-8-1-sources-jar/org/ehcache/impl/config/copy/package-info.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/protobuf/ProtobufDecoder.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/EmptyHeaders.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/compression/JdkZlibDecoder.java
* /opt/ws_local/PERMITS_SQL/1072948336_1595240763.12/0/netty-codec-4-1-51-final-sources-
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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/LengthFieldPrepender.java
* /opt/ws_local/PERMITS_SQL/1072948336_1595240763.12/0/netty-codec-4-1-51-final-sources-jar/io/netty/handler/codec/MessageToMessageCodec.java
* /opt/ws_local/PERMITS_SQL/1072948336_1595240763.12/0/netty-codec-4-1-51-final-sources-jar/io/netty/handler/codec/MessageToByteEncoder.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/DateFormatter.java

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A decoder that splits the received `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.

```java
/**
 * A decoder that splits the received `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.
 * <pre>
 * <b>lengthFieldOffset</b> = <b>0</b>
 * <b>lengthFieldLength</b> = <b>2</b>
 * lengthAdjustment    = 0
 * initialBytesToStrip = 0 (= do not strip header)
 * <pre>

 * BEFORE DECODE (14 bytes) AFTER DECODE (14 bytes)
 * +----------------+----------------+
 * | Length | Actual Content | Length | Actual Content |
 * | 0x000C | "HELLO, WORLD" | 0x000C | "HELLO, WORLD" |
 * +----------------+----------------+

 * <h3>2 bytes length field at offset 0, strip header</h3>

 * The value of the length field in this example is &lt;tt&gt;12 (0x0C)&lt;/tt&gt; 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)
 * <pre>

 * Because we can get the length of the content by calling
 * { @link ByteBuf#readableBytes()}, you might want to strip the length
 * field by specifying &lt;tt&gt;initialBytesToStrip&lt;/tt&gt;. In this example, we
 * specified &lt;tt&gt;2&lt;/tt&gt;, that is same with the length of the length field, to
 * strip the first two bytes.
* <pre>
* lengthFieldOffset   = 0
* lengthFieldLength   = 2
* lengthAdjustment    = 0
* <b>initialBytesToStrip</b> = <b>2</b> (= the length of the Length field)
* 
* BEFORE DECODE (14 bytes)       AFTER DECODE (12 bytes)
* +--------+----------------+      +----------------+
* | Length | Actual Content |----->| Actual Content |
* | 0x000C | "HELLO, WORLD" |      | "HELLO, WORLD" |
* +--------+----------------+      +----------------+
* </pre>
*
* 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.
* <pre>
* lengthFieldOffset   =  0
* lengthFieldLength   =  2
* <b>lengthAdjustment</b>    = <b>-2</b> (= the length of the Length field)
* initialBytesToStrip =  0
* 
* BEFORE DECODE (14 bytes)       AFTER DECODE (14 bytes)
* +--------+----------------+      +--------+----------------+
* | Length | Actual Content |----->| Length | Actual Content |
* | 0x000E | "HELLO, WORLD" |      | 0x000E | "HELLO, WORLD" |
* +--------+----------------+      +--------+----------------+
* </pre>
*
* 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.
* <pre>
* <b>lengthFieldOffset</b>   = <b>2</b> (= the length of Header 1)
* <b>lengthFieldLength</b>   = <b>3</b>
* lengthAdjustment    = 0
* initialBytesToStrip = 0
* 
* </pre>
* 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>

* ch3>3 bytes length field at the beginning of 5 bytes header, do not strip header

* 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 lengthAdjustment so that the decoder counts the extra
* header into the frame length calculation.
* <pre>
* lengthFieldOffset   = 0
* lengthFieldLength   = 3
* <b>lengthAdjustment</b>    = <b>2</b> (= the length of Header 1)
* initialBytesToStrip = 0
* </pre>

* 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>

* ch3>2 bytes length field at offset 1 in the middle of 4 bytes header,
* strip the first header field and the length field

* 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 lengthFieldOffset and the extra
* header affects the lengthAdjustment. We also specified a non-zero
* initialBytesToStrip 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 initialBytesToSkip for initialBytesToStrip.
* <pre>
* lengthFieldOffset   = 1 (= the length of HDR1)
* lengthFieldLength   = 2
* <b>lengthAdjustment</b>    = <b>1</b> (= the length of HDR2)
* <b>initialBytesToStrip</b> = <b>3</b> (= the length of HDR1 + LEN)
* </pre>

* 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 <tt>lengthAdjustment</tt>.
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.
<pre>
lengthFieldOffset   =  1
lengthFieldLength   =  2
<b>lengthAdjustment</b>    = <b>-3</b> (= the length of HDR1 + LEN, negative)
<b>initialBytesToStrip</b> = <b> 3</b>

BEFORE DECODE (16 bytes)                       AFTER DECODE (13 bytes)
+-------+--------+-------+----------------+      +-------+----------------+
| HDR1  | Length  | HDR2  | Actual Content |----->| HDR2  | Actual Content |
| 0xCA   | 0x0010  | 0xFE  | "HELLO, WORLD" |      | 0xFE  | "HELLO, WORLD" |
+-------+--------+-------+----------------+
</pre>
@see LengthFieldPrepender

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* Enumeration of supported Base64 dialects.

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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.
<p>
The encoding and decoding algorithm in this class has been derived from
*/

1.41 netty-transport-native-unix-common

4.1.51.Final

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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/ChunkedStream.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-jar/io/netty/handler/timeout/package-info.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-jar/io/netty/handler/ssl/package-info.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-jar/io/netty/handler/ssl/NotSslRecordException.java
* /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/package-info.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-jar/io/netty/handler/stream/ChunkedFile.java
* /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
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-jar/io/netty/handler/timeout/package-info.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-jar/io/netty/handler/timeout/ReadTimeoutException.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-jar/io/netty/handler/timeout/IdleStateEvent.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-jar/io/netty/handler/timeout/package-info.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-jar/io/netty/handler/timeout/IdleState.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-jar/io/netty/handler/timeout/WriteTimeoutException.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-jar/io/netty/handler/ssl/package-info.java
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  jar/io/netty/handler/ssl/util/InsecureTrustManagerFactory.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/ssl/PemReader.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/ssl/JdkBaseApplicationProtocolNegotiator.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/ssl/SniHandler.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/ssl/OpenSslX509Certificate.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/ssl/Java7SslParametersUtils.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/ssl/SupportedCipherSuiteFilter.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/ipfilter/package-info.java
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  jar/io/netty/handler/ssl/JettyNpnSslEngine.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/ssl/OpenSslContext.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/ssl/UtilSimpleTrustManagerFactory.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/traffic/GlobalChannelTrafficCounter.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/ssl/UtilSimpleTrustManagerFactory.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
  jar/io/netty/handler/ssl/UtilSimpleTrustManagerFactory.java
* /opt/ws_local/PERMITS_SQL/1072948687_1595240769.66/0/netty-handler-4-1-51-final-sources-
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1.48 util-linux 2.28

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jar/io/netty/handler/codec/http/HttpObjectEncoder.java
* /opt/ws_local/PERMITS_SQL/1072411888_1594999339.260/netty-codec-http-4-1-51-final-sources-
jar/io/netty/handler/codec/http/multipart/package-info.java
* /opt/ws_local/PERMITS_SQL/1072411888_1594999339.260/netty-codec-http-4-1-51-final-sources-
jar/io/netty/handler/codec/spdy/SpdySession.java
* /opt/ws_local/PERMITS_SQL/1072411888_1594999339.260/netty-codec-http-4-1-51-final-sources-
jar/io/netty/handler/codec/rtsp/RtspRequestEncoder.java
* /opt/ws_local/PERMITS_SQL/1072411888_1594999339.260/netty-codec-http-4-1-51-final-sources-
jar/io/netty/handler/codec/http/multipart/MixedAttribute.java
* /opt/ws_local/PERMITS_SQL/1072411888_1594999339.260/netty-codec-http-4-1-51-final-sources-
jar/io/netty/handler/codec/http/multipart/InternalAttribute.java
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* /opt/ws_local/PERMITS_SQL/1072411888_1594999339.260/netty-codec-http-4-1-51-final-sources-
jar/io/netty/handler/codec/http/websocketx/WebSocketFrame.java
* /opt/ws_local/PERMITS_SQL/1072411888_1594999339.260/netty-codec-http-4-1-51-final-sources-
jar/io/netty/handler/codec/http/HttpHeaderDateFormat.java
* /opt/ws_local/PERMITS_SQL/1072411888_1594999339.260/netty-codec-http-4-1-51-final-sources-
jar/io/netty/handler/codec/http/CookieDecoder.java
* /opt/ws_local/PERMITS_SQL/1072411888_1594999339.260/netty-codec-http-4-1-51-final-sources-
jar/io/netty/handler/codec/http/websocketx/WebSocketVersion.java

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* /opt/ws_local/PERMITS_SQL/1072411888_1594999339.26/0/netty-codec-http-4-1-51-final-sources-
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* /opt/ws_local/PERMITS_SQL/1072411888_1594999339.26/0/netty-codec-http-4-1-51-final-sources-
jar/io/netty/handler/codec/http/cookie/ServerCookieEncoder.java
* /opt/ws_local/PERMITS_SQL/1072411888_1594999339.26/0/netty-codec-http-4-1-51-final-sources-
jar/io/netty/handler/codec/http/cookie/CookieDecoder.java
* /opt/ws_local/PERMITS_SQL/1072411888_1594999339.26/0/netty-codec-http-4-1-51-final-sources-
jar/io/netty/handler/codec/http/cookie/CookieEncoder.java
* /opt/ws_local/PERMITS_SQL/1072411888_1594999339.26/0/netty-codec-http-4-1-51-final-sources-
jar/io/netty/handler/codec/http/cookie/Cookie.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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  */opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-
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  */opt/ws_local/PERMITS_SQL/1075084041_1596044813.39/0/netty-transport-native-epoll-4-1-51-final-sources-
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* /opt/cola/permits/113588237_1613626355.04/0/spring-expression-5-2-8-release-sources-1-
ar/jar/org/springframework/expression/spel/standard/InternalSpelExpressionParser.java
* /opt/cola/permits/113588237_1613626355.04/0/spring-expression-5-2-8-release-sources-1-
jar/org/springframework/expression/spel/ast/OperatorBetween.java
* /opt/cola/permits/113588237_1613626355.04/0/spring-expression-5-2-8-release-sources-1-
jar/org/springframework/expression/spel/standard/Tokenizer.java
* /opt/cola/permits/113588237_1613626355.04/0/spring-expression-5-2-8-release-sources-1-
jar/org/springframework/expression/spel/ast/OpLT.java
* /opt/cola/permits/113588237_1613626355.04/0/spring-expression-5-2-8-release-sources-1-
jar/org/springframework/expression/spel/ast/OpDec.java
* /opt/cola/permits/113588237_1613626355.04/0/spring-expression-5-2-8-release-sources-1-
jar/org/springframework/expression/spel/ast/OpGT.java
* /opt/cola/permits/113588237_1613626355.04/0/spring-expression-5-2-8-release-sources-1-
jar/org/springframework/expression/spel/ast/NullLiteral.java
* /opt/cola/permits/113588237_1613626355.04/0/spring-expression-5-2-8-release-sources-1-
jar/org/springframework/expression/spel/ast/OperatorInstanceof.java
* /opt/cola/permits/113588237_1613626355.04/0/spring-expression-5-2-8-release-sources-1-
jar/org/springframework/expression/spel/ast/IntLiteral.java
* /opt/cola/permits/113588237_1613626355.04/0/spring-expression-5-2-8-release-sources-1-
jar/org/springframework/expression/spel/ast/Identifier.java
* /opt/cola/permits/113588237_1613626355.04/0/spring-expression-5-2-8-release-sources-1-
jar/org/springframework/expression/spel/ast/Selection.java
* /opt/cola/permits/113588237_1613626355.04/0/spring-expression-5-2-8-release-sources-1-
jar/org/springframework/expression/spel/ast/SpelNodeImpl.java
* /opt/cola/permits/113588237_1613626355.04/0/spring-expression-5-2-8-release-sources-1-
jar/org/springframework/expression/spel/ast/ConstructorReference.java
* /opt/cola/permits/113588237_1613626355.04/0/spring-expression-5-2-8-release-sources-1-
jar/org/springframework/expression/spel/ast/Indexer.java
* /opt/cola/permits/113588237_1613626355.04/0/spring-expression-5-2-8-release-sources-1-
jar/org/springframework/expression/spel/ast/Operator.java

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* /opt/cola/permits/1135880235_1613624044.20/jakarta-validation-api-2.0-2-sources-3-
  jar/javax/validation/Validator.java
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jar/javax/validation/metadata/ConstraintDescriptor.java
* /opt/cola/permits/1135880235_1613624044.20/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/ParameterDescriptor.java
* /opt/cola/permits/1135880235_1613624044.20/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/NotNull.java
* /opt/cola/permits/1135880235_1613624044.20/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/package-info.java
* /opt/cola/permits/1135880235_1613624044.20/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/GroupSequence.java
* /opt/cola/permits/1135880235_1613624044.20/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/Negative.java
* /opt/cola/permits/1135880235_1613624044.20/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ConstraintValidatorFactory.java
* /opt/cola/permits/1135880235_1613624044.20/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ValidationException.java
* /opt/cola/permits/1135880235_1613624044.20/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/OverridesAttribute.java
* /opt/cola/permits/1135880235_1613624044.20/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/spi/BootstrapState.java
* /opt/cola/permits/1135880235_1613624044.20/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/spi/ConfigurationState.java
* /opt/cola/permits/1135880235_1613624044.20/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/Email.java
* /opt/cola/permits/1135880235_1613624044.20/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/ConstraintDeclarationException.java
* /opt/cola/permits/1135880235_1613624044.20/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/PropertyDescriptor.java
* /opt/cola/permits/1135880235_1613624044.20/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/AssertFalse.java
* /opt/cola/permits/1135880235_1613624044.20/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/package-info.java
* /opt/cola/permits/1135880235_1613624044.20/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/ExecutableType.java
* /opt/cola/permits/1135880235_1613624044.20/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/package-info.java
* /opt/cola/permits/1135880235_1613624044.20/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/AssertFalse.java
* /opt/cola/permits/1135880235_1613624044.20/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/package-info.java
* /opt/cola/permits/1135880235_1613624044.20/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/package-info.java
* /opt/cola/permits/1135880235_1613624044.20/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/package-info.java
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* /opt/cola/permits/1135880235_1613624044.20/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/package-info.java
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1.66 kubernetes-apimachinery 1.8.11

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Protocol Buffers for Go with Gadgets

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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mpi/hppa1.1/udiv-qrnrd.S, mpi/hppa1.1/mpih-mul2.S,
mpi/hppa1.1/mpih-mul1.S, mpi/Makefile.am, tests/prime.c,
tests/register.c, tests/ac.c, tests/basic.c, tests/tsexp.c,
tests/keygen.c, tests/pubkey.c, configure.ac, acinclude.m4)

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Libgcrypt used to be part of GnuPG but has been taken out into its own package on 2000-12-21.

Most of the stuff in mpi has been taken from an old GMP library version by Torbjorn Granlund <tege@noisy.tmg.se>.

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1.71 zlib 1.2.8

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lib/gss_mechs/mech_spnego/mech/spnego_mech.c
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lib/krb5/kadm5/kadm_host_srv_names.c
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lib/krb5/kdb/kdb_convert.c
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The implementations of GSSAPI mechglue in GSSAPI-SPNEGO in "src/lib/gssapi", including the following files:

lib/gssapi/generic/gssapi_err_generic.et
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
lib/gssapi/mechglue/g_rel_cred.c
lib/gssapi/mechglue/g_rel_name.c
lib/gssapi/mechglue/g_rel_oid_set.c
lib/gssapi/mechglue/g_seal.c
lib/gssapi/mechglue/g_sign.c
lib/gssapi/mechglue/g_store_cred.c
lib/gssapi/mechglue/g_unseal.c
lib/gssapi/mechglue/g_userok.c
lib/gssapi/mechglue/g_utils.c
lib/gssapi/mechglue/g_verify.c
lib/gssapi/mechglue/gssd_pname_to_uid.c
lib/gssapi/mechglue/mglueP.h
lib/gssapi/mechglue/oid_ops.c
and the initial implementation of incremental propagation, including
the following new or changed files:

```
include/iprop_hdr.h
kadmin/server/ipropd_svc.c
lib/kdb/iprop.x
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
lib/kdb/kdb_log.h
lib/krb5/error_tables/kdb5_err.et
kprop/kpropd_rpc.c
kprop/kproplog.c
```

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* /opt/ws_local/PERMITS_SQL/1072948616_1595240775.72/0/netty-buffer-4-1-51-final-sources-jar/io/netty/buffer/UnpooledDirectByteBuf.java
* /opt/ws_local/PERMITS_SQL/1072948616_1595240775.72/0/netty-buffer-4-1-51-final-sources-jar/io/netty/buffer/ByteBuf.java
* /opt/ws_local/PERMITS_SQL/1072948616_1595240775.72/0/netty-buffer-4-1-51-final-sources-jar/io/netty/buffer/ReadOnlyByteBuf.java
* /opt/ws_local/PERMITS_SQL/1072948616_1595240775.72/0/netty-buffer-4-1-51-final-sources-jar/io/netty/buffer/SwappedByteBuf.java
* /opt/ws_local/PERMITS_SQL/1072948616_1595240775.72/0/netty-buffer-4-1-51-final-sources-jar/io/netty/buffer/ReadOnlyByteBuf.java
* /opt/ws_local/PERMITS_SQL/1072948616_1595240775.72/0/netty-buffer-4-1-51-final-sources-jar/io/netty/buffer/SwappedByteBuf.java
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* /opt/ws_local/PERMITS_SQL/1072948616_1595240775.72/0/netty-buffer-4-1-51-final-sources-jar/io/netty/buffer/AdvancedLeakAwareCompositeByteBuf.java
* /opt/ws_local/PERMITS_SQL/1072948616_1595240775.72/0/netty-buffer-4-1-51-final-sources-jar/io/netty/buffer/PooledSlicedByteBuf.java
* /opt/ws_local/PERMITS_SQL/1072948616_1595240775.72/0/netty-buffer-4-1-51-final-sources-jar/io/netty/buffer/SimpleLeakAwareCompositeByteBuf.java
* /opt/ws_local/PERMITS_SQL/1072948616_1595240775.72/0/netty-buffer-4-1-51-final-sources-jar/io/netty/buffer/AbstractPooledDerivedByteBuf.java
* /opt/ws_local/PERMITS_SQL/1072948616_1595240775.72/0/netty-buffer-4-1-51-final-sources-jar/io/netty/buffer/AbstractUnpooledSlicedByteBuf.java
* /opt/ws_local/PERMITS_SQL/1072948616_1595240775.72/0/netty-buffer-4-1-51-final-sources-jar/io/netty/buffer/WrappedCompositeByteBuf.java
* /opt/ws_local/PERMITS_SQL/1072948616_1595240775.72/0/netty-buffer-4-1-51-final-sources-jar/io/netty/buffer/WrappedUnpooledUnsafeDirectByteBuf.java
* /opt/ws_local/PERMITS_SQL/1072948616_1595240775.72/0/netty-buffer-4-1-51-final-sources-jar/io/netty/buffer/PooledDuplicatedByteBuf.java
* /opt/ws_local/PERMITS_SQL/1072948616_1595240775.72/0/netty-buffer-4-1-51-final-sources-jar/io/netty/buffer/UnpooledUnsafeNoCleanerDirectByteBuf.java

1.75 byte-buddy 1.10.14

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1. [1]Takao Abe <takao_abe@xurb.jp> Clock driver for JJY receivers
2. [2]Mark Andrews <mark_andrews@isc.org> Leitch atomic clock controller
3. [3]Bernd Altmeier <altmeier@atlsoft.de> hopf Elektronik serial line and PCI-bus devices
5. [6]Michael Barone <michael.barone@lmco.com> GPSVME fixes
6. [7]Karl Berry <karl@owl.HQ.ileaf.com> syslog to file option
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11. [12]Jean-Francois Boudreault <Jean-Francois.Boudreault@viagenie.qc.ca> IPv6 support
12. [13]Reg Clemens <reg@dwf.com> Oncore driver (Current maintainer)
13. [14]Steve Clift <clift@ml.csiro.au> OMEGA clock driver
14. [15]Casey Crellin <casey@csc.co.za> vxWorks (Tornado) port and help with target configuration
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Johannes Maximilian Kuehn <kuehn@ntp.org> Rewrote sntp to comply with NTPv4 specification, ntpq saveconfig
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Louis A. Mamakos <louie@ni.umd.edu> MD5-based authentication
Lars H. Mathiesen <thorinn@diku.dk> adaptation of foundation code for Version 3 as specified in RFC-1305
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David L. Mills <mills@udel.edu> Version 4 foundation, precision kernel; clock drivers: 1, 3, 4, 6, 7, 11, 13, 18, 19, 22, 36
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Nick Sayer <mrapple@quack.kfu.com> SunOS streams modules
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)
53. [57]Kenneth Stone <ken@sdd.hp.com> HP-UX port
54. [58]Ajit Thyagarajan <ajit@ee.udel.edu> IP multicast/anycast support
55. [59]Tomoaki TSURUOKA <tsuruoka@nc.fukuoka-u.ac.jp> TRAK clock driver
56. [60]Brian Utterback <brian.utterback@oracle.com> General codebase,
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57. [61]Loganaden Velvindron <loganaden@gmail.com> Sandboxing
    (libseccomp) support
58. [62]Paul A Vixie <vixie@vix.com> TrueTime GPS driver, generic
    TrueTime clock driver
59. [63]Ulrich Windl <Ulrich.Windl@rz.uni-regensburg.de> corrected and
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1.79 xz 5.2.4 1ubuntu1

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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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1.84 libunistring 0.9.10 1

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http://sourceforge.net/projects/e2fsprogs

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

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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
-
- Copyright (C) Andrew Tridgell 2005
+ Copyright (C) Andrew Tridgell 1999-2005
+ Copyright (C) Jeremy Allison 2000-2006
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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>.

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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 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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# 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)/$(BSD_LIB)
@-$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:
tsx-11.mit.edu:/pub/linux/packages/ext2fs/

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The most recent officially distributed version can be found at http://e2fsprogs.sourceforge.net. If you need to make a distribution, that's the one you should use. If there is some reason why you'd like a more recent version that is still in ALPHA testing (i.e., either using the "WIP" test distributions or one from the hg or git repository from the development branch, please contact me (tytso@mit.edu) before you ship. The release schedules for this package are flexible, if you give me enough lead time.

Theodore Ts'o
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Version 2, June 1991

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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.

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, while the latter only works together with the library.

Note that it is possible for a library to be covered by the ordinary General Public License rather than by this special one.

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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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   (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.

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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.

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uses the Library", as object code and/or source code, so that the
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executable containing the modified Library. (It is understood
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specified materials from the same place.

d) Verify that the user has already received a copy of these
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components (compiler, kernel, and so on) of the operating system on
which the executable runs, unless that component itself accompanies
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It may happen that this requirement contradicts the license
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Gadi Oxman, August 1995

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c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, 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 executable. 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.

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* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/tags/form/PasswordInputTag.java

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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
 * [...]
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.

@since 2.0

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* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/handler/AbstractDetectingUrlHandlerMapping.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/handler/SimpleServletHandlerAdapter.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/view/tiles3/SpringBeanPreparerFactory.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/mvc/HttpRequestHandlerAdapter.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/tags/form/RadioButtonsTag.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/view/tiles3/AbstractSpringPreparerFactory.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/tags/ParamAware.java

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* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/mvc/method/annotation/RequestAttributeMethodArgumentResolver.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/config/ViewControllerBeanDefinitionParser.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/resource/HttpResource.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/view/tiles3/SpringWildcardServletTilesApplicationContext.java
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- /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/mvc/condition/RequestConditionHolder.java
- /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/tags/Param.java
- /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/config/annotation/EnableWebMvc.java
- /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/config/annotation/RedirectViewControllerRegistration.java
- /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/LocaleContextResolver.java
- /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/view/freemarker/FreeMarkerConfig.java
- /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/handler/WebRequestHandlerInterceptorAdapter.java
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- /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/handler/SimpleServletPostProcessor.java
- /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/view/tiles3/TilesViewResolver.java
- /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/view/document/AbstractXlsView.java
- /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/resource/AbstractResourceResolver.java
- /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/i18n/AbstractLocaleContextResolver.java
- /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/config/annotation/ViewControllerRegistration.java
- /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/mvc/method/annotation/ServletModelAttributeMethodProcessor.java
- /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/view/groovy/GroovyMarkupView.java
- /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/view/support/RedirectAttributesModelMap.java
- /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2.jar/org/springframework/web/servlet/i18n/AbstractLocaleContextResolver.java
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* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/mvc/method/annotation/CallableMethodReturnValueHandler.java
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* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-
jar/org/springframework/web/servlet/resource/ResourceUrlProviderExposingInterceptor.java
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* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-
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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.
 * 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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* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/view/ViewResolverComposite.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/config/annotation/WebMvcConfigurerAdapter.java
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* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/mvc/Controller.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/view/tiles3/SpringLocaleResolver.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/handler/RequestMatchResult.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/config/annotation/WebMvcConfigurerComposite.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/resource/ResourceTransformer.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/config/MvcNamespaceHandler.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/config/annotation/StreamingResponseBody.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/config/DefaultServletHandlerBeanDefinitionParser.java
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  jar/org/springframework/web/servlet/tags/RequestContextAwareTag.java
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* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-
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* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-
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* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-
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* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-
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  jar/org/springframework/web/servlet/resource/AbstractVersionStrategy.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-
  jar/org/springframework/web/servlet/mvc/method/annotation/RequestParamMethodArgumentResolver.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-
  jar/org/springframework/web/servlet/FrameworkServlet.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-
  jar/org/springframework/web/servlet/config/annotation/ViewResolverRegistry.java

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* /opt/cola/permits/1135880860_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/mvc/AbstractController.java
* /opt/cola/permits/1135880860_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/mvc/method/annotation/RequestResponseBodyAdviceChain.java
* /opt/cola/permits/1135880860_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/view/json/AbstractJackson2View.java
* /opt/cola/permits/1135880860_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/tags/form/AbstractCheckedElementTag.java
* /opt/cola/permits/1135880860_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/view/feed/AbstractAtomFeedView.java
* /opt/cola/permits/1135880860_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/resource/DefaultServletHttpRequestHandler.java
* /opt/cola/permits/1135880860_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/tags/form/TagWriter.java
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* /opt/cola/permits/1135880860_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/tags/BindTag.java
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* /opt/cola/permits/1135880860_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/tags/form/FormTag.java
* /opt/cola/permits/1135880860_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/theme/CookieThemeResolver.java
jar/org/springframework/web/servlet/handler/HandlerMethodMappingNamingStrategy.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/MappedInterceptor.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/tags/form/InputTag.java
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* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/tags/form/AbstractDataBoundFormElementTag.java
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* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/view/groovy/GroovyMarkupConfigurer.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/mvc/method/annotation/ResponseBodyEmitter.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/mvc/method/annotation/ServletResponseMethodArgumentResolver.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/handler/HandlerMappingIntrospector.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/config/TilesConfigurerBeanDefinitionParser.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/config/ScriptTemplateConfigurerBeanDefinitionParser.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/config/annotation/InterceptorRegistry.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/View.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/HttpServletBean.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/mvc/method/annotation/MatrixVariableMethodArgumentResolver.java
* /opt/cola/permits/1135888060_1613626348.76/0/spring-webmvc-5-2-8-release-sources-2-jar/org/springframework/web/servlet/mvc/condition/CompositeRequestCondition.java
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1.108 curl 7.62.0-DEV

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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/expression/method/MethodSecurityEvaluationContext.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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* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources-jar/org/springframework/security/authentication/jaas/AbstractJaasAuthenticationProvider.java
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* 
* @author Luke Taylor
* @since 3.0
* @deprecated Use java.util.Base64
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 *
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jar/org/springframework/security/access/expression/SpringCacheBasedUserCache.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-access/hierarchicalroles/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core/token/ShаЛ2DigestUtils.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core/session/SessionCreationEvent.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core/hierarchicalroles/package-info.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core/authority/mapping/Attributes2GrantedAuthoritiesMapper.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core/scheduling/DelegatingSecurityContextSchedulingTaskExecutor.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/access/hierarchicalroles/package-info.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/package-info.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/authentication/ReactiveAuthenticationManagerResolver.java
* /opt/ws_local/PERMITS_SQL/1081949690_1599626417.25/0/spring-security-core-5-3-4-release-sources.jar/org/springframework/security/authentication/AbstractUserDetailsReactiveAuthenticationManager.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/authentication/ReactiveAuthenticationManagerAdapter.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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1.118 coreutils 8.30 3ubuntu2

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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)`
or `init_by_array(init_key, key_length)`.

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Any feedback is very welcome.
http://www.math.sci.hiroshima-u.ac.jp/~m-mat/MT/emt.html
email: m-mat @ math.sci.hiroshima-u.ac.jp (remove space)

Sockets
-------

The `socket` module uses the functions, `getaddrinfo`, and
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Asynchronous socket services

-----------------------------

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UUencode and UUdecode functions
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Modified by Jack Jansen, CWI, July 1995:
- Use binascii module to do the actual line-by-line conversion between ascii and binary. This results in a 1000-fold speedup. The C version is still 5 times faster, though.
- Arguments more compliant with Python standard
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------------------------

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Select kqueue
-------------

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---------

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Original location:
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Solution inspired by code from:
  Samuel Neves (supercop/crypto_auth/siphash24/little)
  djb (supercop/crypto_auth/siphash24/little2)
  Jean-Philippe Aumasson (https://131002.net/siphash/siphash24.c)

strtod and dtoa
---------------

The file :file:`Python/dtoa.c`, which supplies C functions dtoa and
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----

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cfuhash
------

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THE BASIC LIBRARY FUNCTIONS

-----------------------------

Written by: Philip Hazel
Email local part: ph10
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University of Cambridge Computing Service,

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Written by: Zoltan Herczeg
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* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/core/metadata/GenericCallMetaDataProvider.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/datasource/embedded/DataSourceFactory.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/core/StatementCreatorUtils.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/datasource/DataSourceTransactionManager.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/datasource/init/ResourceDatabasePopulator.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/core/simple/AbstractJdbcCall.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/support/SQLStateSQLExceptionTranslator.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/core/SingleColumnRowMapper.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/datasource/LazyConnectionDataSourceProxy.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/datasource/TransactionAwareDataSourceProxy.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-
jar/org/springframework/jdbc/support/CustomSQLExceptionTranslatorRegistry.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-
jar/org/springframework/jdbc/core/simple/AbstractJdbcInsert.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-
jar/springframework/jdbc/support/rowset/ResultsetWrappingSqlRowSet.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-
jar/springframework/jdbc/datasource/JdbcTransactionObjectSupport.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-
jar/springframework/jdbc/core/namedparam/BeanPropertySqlParameterSource.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-
jar/springframework/jdbc/core/object/SqlFunction.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-
jar/springframework/jdbc/core/BeanPropertyRowMapper.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-
jar/springframework/jdbc/core/namedparam/AbstractSqlParameterSource.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-
jar/springframework/jdbc/core/support/AbstractLobStreamingResultSetExtractor.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-
jar/springframework/jdbc/core/PreparedStatementCreatorFactory.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-
jar/springframework/jdbc/support/rowset(SqlRowSet.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-
jar/springframework/jdbc/core/namedparam/MapSqlParameterSource.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-
jar/springframework/jdbc/core/namedparam/NamedParameterUtils.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-
jar/springframework/jdbc/support/JdbcUtils.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-
jar/springframework/jdbc/object/RdbmsOperation.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-
jar/springframework/jdbc/support/KeyHolder.java

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*/
/**
 * 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)
 */

Found in path(s):
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 */
/**
 * Strategy interface for translating between [link SQLException SQLExceptions]
 * and Spring's data access strategy-agnostic [link DataAccessException]
 * hierarchy.
 *
 * Implementation can be generic (for example, using
 * [link java.sql.SQLException#getSQLState() SQL-STATE] codes for JDBC) 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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/**
 * 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

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* 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).
*/

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jar/org/springframework/jdbc/datasource/embedded/EmbeddedDatabase.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-
jar/org/springframework/jdbc/datasource/init/ScriptStatementFailedException.java
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* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/metadata/DerbyTableMetaDataProvider.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/metadata/HsqlTableMetaDataProvider.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/datasource/lookup/IsolationLevelDataSourceRouter.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/datasource/ConnectionHolder.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/core/RowCountCallbackHandler.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/support/xml/SqlXmlHandler.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/core/support/JdbcBeanDefinitionReader.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/core/metadata/TableParameterMetaData.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/core/metadata/RowMapper.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/core/simple/SimpleJdbcInsertOperations.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/core/support/incrementer/AbstractDataFieldMaxValueIncrementer.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/object/StoredProcedure.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/core/SqlParameterizedPreparedStatementSetter.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/object/SqlUpdate.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/datasource/embedded/EmbeddedDatabaseConfigurer.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/datasource/AbstractFallbackSQLExceptionTranslator.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/core/RowMapper.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/core/metadata/TableParameterMetaData.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/core/ResultSetSupportingSqlParameter.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/core/SqlReturnResultSet.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/core/support/xml/SqlXmlHandler.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/core/ResultSetSupportingSqlParameter.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/core/simple/SimpleJdbcInsertOperations.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/core/SqlParameterizedPreparedStatementSetter.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/object/StoredProcedure.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/core/RowMapper.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/core/metadata/TableParameterMetaData.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/core/ResultSetSupportingSqlParameter.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/core/simple/SimpleJdbcInsertOperations.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/core/support/incrementer/AbstractDataFieldMaxValueIncrementer.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1.jar/org/springframework/jdbc/object/SqlUpdate.java
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* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/datasource/DataSourceUtils.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/BadSqlGrammarException.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/core/support/AbstractInterruptibleBatchPreparedStatement Setter.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/support/incrementer/HsqlSequenceMaxValueIncrementer.java
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* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/datasource/lookup/MapDataSourceLookup.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/support/incrementer/H2SequenceMaxValueIncrementer.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/datasource/embedded/EmbeddedDatabaseType.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/core/CallableStatementCreatorFactory.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/support/incrementer/SybaseAnywhereMaxValueIncrementer.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/datasource/embedded/HsqlEmbeddedDatabaseConfigurer.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/support/incrementer/AbstractColumnMaxValueIncrementer.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/core/ColumnMapRowMapper.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/core/support/JdbcTemplate.java
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* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/support/DataSourceUtils.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/support/DataSourceUtils.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/datasource/UserCredentialsDataSourceAdapter.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/datasource/UserCredentialsDataSourceAdapter.java
* /opt/cola/permits/1135888248_1613626225.19/0/spring-jdbc-5-2-8-release-sources-1-jar/org/springframework/jdbc/datasource/UserCredentialsDataSourceAdapter.java
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* /opt/cola/permits/1135888122_1613626080.95/0/spring-orm-5-2-8-release-sources-jar/org/springframework/orm/hibernate5/HibernateJdbcException.java
* /opt/cola/permits/1135888122_1613626080.95/0/spring-orm-5-2-8-release-sources-jar/org/springframework/orm/hibernate5/HibernateObjectRetrievalFailureException.java
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 */
*/
/**
 * Create a transactional EntityManager proxy for the given EntityManagerFactory.
 * @param emf the EntityManagerFactory to obtain EntityManagers from as needed
 * @param properties the properties to be passed into the
 * { @code createEntityManager} call (may be { @code null})
 * @param entityManagerInterfaces the interfaces to be implemented by the
 * EntityManager. Allows the addition or specification of proprietary interfaces.
 * @return a shareable transactional EntityManager proxy
 */

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   Written by Adam Twiss (adam@zeus.co.uk). March 1996

Thanks to the following people for their input:
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1.137 lombok 1.18.12

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1.138 boost 1.71.0-6ubuntu6

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1.139 py 1.6.0-2.ph3

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 */

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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
 *
 * @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();

}
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1.145 json-c 0.12.1

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1.147 glibc 2.31-0ubuntu9.7

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public

DomainDataRegion getRegion() {

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1.151 openssl 1.1.1f-1ubuntu2.3

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1.156 tftp-hpa 5.2

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1.158 spring-jcl 5.2.8.RELEASE

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1.159 libssh 0.9.3 2ubuntu2.2

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       include/libssh/bignum.h
       include/libssh/bind.h
       include/libssh/buffer.h
       include/libssh/channels.h
       include/libssh/crc32.h
       include/libssh/crypto.h
       include/libssh/dh.h
       include/libssh/ecdh.h
       include/libssh/ed25519.h
       include/libssh/gssapi.h
       include/libssh/kex.h
       include/libssh/keys.h
       include/libssh/legacy.h
       include/libssh/libcrypto.h
       include/libssh/libgcrypt.h
       include/libssh/libssh.h
       include/libssh/libsshpp.hpp
src/threads/pthread.c
src/wrapper.c
tests/benchmarks/bench_raw.c
tests/benchmarks/bench_scp.c
tests/benchmarks/bench_sftp.c
tests/benchmarks/benchmarks.c
tests/benchmarks/benchmarks.h
tests/benchmarks/latency.c
tests/client/torture_algorithms.c
tests/client/torture_auth.c
tests/client/torture_connect.c
tests/client/torture_knownhosts.c
tests/client/torture_session.c
tests/test_pcap.c
tests/test_socket.c
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Files: examples/exec.c
      examples/senddata.c
      examples/CMakeLists.txt
      include/libssh/ssh1.h
      include/libssh/ssh2.h
tests/authentication.c
tests/benchmarks/bench1.sh
tests/benchmarks/bench2.sh
tests/chmodtest.c
tests/client/torture_proxycommand.c
tests/client/torture_sftp_dir.c
tests/client/torture_sftp_read.c
tests/cmdline.c
tests/connection.c
tests/generate.py
tests/sftp_stress/main.c
tests/test_exec.c
tests/test_ssh_bind_accept_fd.c
tests/test_tunnel.c
tests/tests.h
tests/unittests/torture_buffer.c
tests/unittests/torture_callbacks.c
tests/unittests/torture_channel.c
tests/unittests/torture_init.c
tests/unittests/torture_isipaddr.c
tests/unittests/torture_keyfiles.c
tests/unittests/torture_list.c
tests/unittests/torture_misc.c
tests/unittests/torture_options.c
tests/unittests/torture_pki.c
files: examples/authentication.c
    examples/connect_ssh.c
    examples/examples_common.h
    examples/knownhosts.c
    examples/libssh_scp.c
    examples/libsshpp.cpp
    examples/libsshpp_noexcept.cpp
    examples/proxy.c
    examples/sample.c
    examples/samplesftp.c
    examples/samplesshd-cb.c
    examples/samplesshd-kbdint.c
    examples/scp_download.c
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    src/external/ed25519.c
    src/external/fe25519.c
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    src/external/ge25519_base.data
    src/external/sc25519.c
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files: tests/pkd/pkd_client.h
    tests/pkd/pkd_daemon.c
    tests/pkd/pkd_daemon.h
    tests/pkd/pkd_hello.c
    tests/pkd/pkd_keyutil.c
    tests/pkd/pkd_keyutil.h
    tests/pkd/pkd_util.c
    tests/pkd/pkd_util.h
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Files: src/channels.c
    src/channels1.c
    src/gzip.c
    src/known_hosts.c
    src/misc.c
    src/options.c
    src/pki.c
    src/pki_crypto.c
    src/pki_gcrypt.c
    src/sftp.c
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Files: include/libssh/agent.h
    include/libssh/options.h
    src/agent.c
    src/callbacks.c
    src/config.c
    tests/client/torture_forward.c
    tests/client/torture_request_env.c
    tests/torture.c
    tests/torture.h
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    src/scp.c
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   cmake/Modules/DefineCompilerFlags.cmake
   cmake/Modules/DefineInstallationPaths.cmake
   cmake/Modules/DefinePlatformDefaults.cmake
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Files: cmake/Modules/AddCMockaTest.cmake
   cmake/Modules/CheckCCompilerFlagSSP.cmake
   cmake/Modules/FindArgp.cmake
   cmake/Modules/FindCMocka.cmake
   cmake/Modules/FindGCrypt.cmake
   cmake/Modules/FindGSSAPI.cmake
   cmake/Modules/FindNaCl.cmake
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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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Go support for Protocol Buffers - Google's data interchange format

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```markdown
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- On Windows systems: delete $(JAVA_HOME)\bin\sunec.dll

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include/GL/glxext.h
include/GL/wglxext.h :

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</pre>

1.168 xz 5.2.2

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*
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1.177 libnftnetlink 1.0.1

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1.178 e2fsprogs 1.45.5 2ubuntu1

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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): $(OBJ)
(cd pic; ld -Bshareable -o $(BSD_LIB) $(LDFLAGS_SHLIB) $(OBJ))
$(MV) pic/$(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)/$(BSD_LIB)
@-$(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

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===================================================================
--- 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
-
-  Copyright (C) Andrew Tridgell              2005
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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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1.180 libpcap 1.2.1

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* /opt/cola/permits/1257259274_1642793180.98/0/hikarip-3-4-5-sources-jar/com/zaxxer/hikari/HikariJNDIFactory.java
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* /opt/cola/permits/1257259274_1642793180.98/0/hikarip-3-4-5-sources-jar/com/zaxxer/hikari/metrics/MetricsTracker.java
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* /opt/cola/permits/1257259274_1642793180.98/0/hikaricp-3-4-5-sources-jar/com/zaxxer/hikari/pool/ProxyStatement.java
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* /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/metrics/dropwizard/CodahaleMetricsTrackerFactory.java
* /opt/cola/permits/1257259274_1642793180.98/0/hikaricp-3-4-5-sources-jar/com/zaxxer/hikari/hibernate/HikariConnectionProvider.java
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* /opt/cola/permits/1257259274_1642793180.98/0/hikaricp-3-4-5-sources-jar/com/zaxxer/hikari/pool/PoolEntry.java
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1.188 bolt 1.2.1

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1.190 junixsocket-core 2.3.2

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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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/* 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 their continuing work on the DVB driver

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for his contributions to the dvb-net driver

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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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for the nxt2002 frontend driver

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for the nxt2004 frontend driver

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for the or51211 and or51132 frontend drivers, and
for merging the nxt2002 and nxt2004 modules into a
single nxt200x frontend driver.

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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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* /opt/cola/permits/1135880377_1613624050.66/0/javassist-3-24-0-ga-sources-5-jar/javassist/bytecode/ClassPath.java
*/
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jar/javassist/bytecode/DuplicateMemberException.java
* /opt/cola/permits/1135880377_1613624050.66/0/javassist-3-24-0-ga-sources-5-jar/javassist/expr/NewArray.java
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1.204 glibc 2.23

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1.210 tzdata 2021e-0ubuntu0.20.04

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1.211 c-ares 1.2.5

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* /opt/cola/permits/1258059374_1643027386.0/offheap-store-2-4-3-sources-
jar/org/terracotta/offheapstore/concurrent/WriteLockedOffHeapHashMapFactory.java
* /opt/cola/permits/1258059374_1643027386.0/offheap-store-2-4-3-sources-
jar/org/terracotta/offheapstore/AbstractOffHeapClockCache.java
* /opt/cola/permits/1258059374_1643027386.0/offheap-store-2-4-3-sources-
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* /opt/cola/permits/1258059374_1643027386.0/0/offheap-store-2-4-3-sources-jar/org/terracotta/offheapstore/disk/persistent/PersistentConcurrentOffHeapHashMap.java

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* /opt/cola/permits/1258059374_1643027386.0/0/offheap-store-2-4-3-sources-jar/org/terracotta/offheapstore/offheapstore/ReadWriteLockedOffHeapHashMap.java
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==============
libcurl can be built to use a fair amount of various third party libraries, libraries that are written and provided by other parties that are distributed using their own licenses. Even libcurl itself contains code that may cause problems to some. This document attempts to describe what licenses libcurl and the other libraries use and what possible dilemmas linking and mixing them all can lead to for end users.

I am not a lawyer and this is not legal advice!

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## libcurl

Uses an [MIT style license](https://curl.haxx.se/docs/copyright.html) that is very liberal.

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## c-ares

(Used for asynchronous name resolves) Uses an MIT license that is very liberal and imposes no restrictions on any other library or part you may link with.

## zlib

(Used for compressed Transfer-Encoding support) Uses an MIT-style license that shouldn't collide with any other library.

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## OpenLDAP

(Used for LDAP support) Uses a Modified BSD-style license. Since libcurl uses OpenLDAP as a shared library only, I have not heard of anyone that ships OpenLDAP linked with libcurl in an app.

## libssh2

(Used for scp and sftp support) libssh2 uses a Modified BSD-style license.

### freerdp 2.0.0-rc4

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1.217 keyutils 1.6-6ubuntu1

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* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/statistics/ZeroOperationStatistic.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/EhcacheManager.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/spi/time/TimeSource.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/PersistentUserManagedEhcache.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/exceptions/ExceptionFactory.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/spi/LifeCycledAdapter.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/spi/store/events/StoreEventFilter.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/config/store/StoreEventSourceConfiguration.java
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* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/spi/service/CacheManagerProviderService.java
* /opt/cola/permits/1258059284_1643027245.56/0/ehcache-core-3-8-1-sources-jar/org/ehcache/core/events/StoreEventSink.java
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1.222 jackson-dataformat-yaml 2.11.2

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1.224 nio-multipart-parser 1.1.0

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1.226 antlr 2.7.7

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1.227 uclibc 0.9.33.2

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to download the needed files from the original site each time it is ran?

> Thanks, Peter

> --
> Peter S. Mazinger <ps dot m at gmx dot net>           ID: 0xA5F059F2
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1.228 brotli 1.0.7-6ubuntu0.1

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1.229 glibc 2.28-10

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1.235 open-vm-tools 9.4.0

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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
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- web-app_3_0.xsd
- web-common_3_0.xsd
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* /opt/cola/permits/1129909886_1612394261.4/0/flyway-spring5-test-6-4-0-sources-jar/context/dataSourceSingleContext.xml
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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.

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Equivalent code is available from RSA Data Security, Inc.
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To compute the message digest of a chunk of bytes, declare an
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1.253 libpcap 1.2.1

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modules/audio_coding/codecs/g722/main/source/g722_enc_dec.h
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 * *
 * From: Wilco Dijkstra <Wilco.Dijkstra@ntlworld.com>
 * 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@digital.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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/*
 * SpanDSP - a series of DSP components for telephony
 *
 * g711.h - In line A-law and u-law conversion routines
 *
 * Written by Steve Underwood <steveu@coppice.org>
 *
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modules/audio_coding/codecs/g722/main/source/g722_encode.c
modules/audio_coding/codecs/g722/main/source/g722_enc_dec.h

License:
/*
 * SpanDSP - a series of DSP components for telephony
 *
 * g722_decode.c - The ITU G.722 codec, decode part.
 *
 * Written by Steve Underwood <steveu@coppice.org>
 *
 * Copyright (C) 2005 Steve Underwood
 *
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 *
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 *
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 * Computer Science, Speech Group
 * Chengxiang Lu and Alex Hauptmann
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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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* @author Rossen Stoyanchev
* @since 5.0
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  * /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-
    jar/org/springframework/web/reactive/button/ToStringVisitor.java
  * /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-
    jar/org/springframework/web/reactive/result/annotation/RequestHeaderMapMethodArgumentResolver.java
  * /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-
    jar/org/springframework/web/reactive/config/ResourceHandlerRegistry.java
  * /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-
    jar/org/springframework/web/reactive/function/server/ToStringVisitor.java
  * /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-
    jar/org/springframework/web/reactive/result/annotation/RequestMappingMethodArgumentResolver.java
  * /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-
    jar/org/springframework/web/reactive/result/view/rendering/RenderingContext.java
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* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/result/view/HttpMessageWriterView.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/config/CorsRegistration.java
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* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/resource/FixedVersionStrategy.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/resource/DefaultResourceTransformerChain.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/accept/HeaderContentTypeResolver.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/socket/adapter/NettyWebSocketSessionSupport.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/socket/adapter/AbstractWebSocketSession.java
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* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/result/method/SyncInvocableHandlerMethod.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/result/method/HandlerMethodArgumentResolverComposite.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/socket/WebSocketSession.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/function/server/support/HandlerFunctionAdapter.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/socket/adapter/TomcatWebSocketSession.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/resource/ResourceTransformerSupport.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/resource/AbstractPrefixVersionStrategy.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/accept/FixedContentTypeResolver.java
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* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1.jar/org/springframework/web/reactive/socket/adapter/UndertowWebSocketHandlerAdapter.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1.jar/org/springframework/web/reactive/resource/HttpResource.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1.jar/org/springframework/web/reactive/resource/ContentVersionStrategy.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1.jar/org/springframework/web/reactive/socket/server/support/HandshakeWebSocketService.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1.jar/org/springframework/web/reactive/config/PathMatchConfigurer.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1.jar/org/springframework/web/reactive/function/server/DefaultHandlerStrategiesBuilder.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1.jar/org/springframework/web/reactive/result/view/ViewResolver.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1.jar/org/springframework/web/reactive/resource/TransformedResource.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1.jar/org/springframework/web/reactive/function/server/RouterFunction.java
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* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1.jar/org/springframework/web/reactive/function/client/UnknownHttpStatusCodeException.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1.jar/org/springframework/web/reactive/function/server/RouterFunction.java
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jar/org/springframework/web/reactive/function/client/support/ClientResponseWrapper.java

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* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/resource/WebJarsResourceResolver.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/function/server/ServerResponseExtensions.kt
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/function/client/ExchangeFilterFunctions.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/socket/client/UndertowWebSocketClient.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/result/method/RequestMappingInfoHandlerMapping.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/function/server/RouterFunctionDsl.kt
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/result/method/annotation/RequestMappingInfoHandlerMapping.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/function/client/ExchangeFunctions.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/function/client/PrincipalMethodArgumentResolver.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/function/server/CoRouterFunctionDsl.kt
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/function/server/DefaultEntityResponseBuilder.java
* /opt/cola/permits/1138182584_1614269673.33/0/spring-webflux-5-2-8-release-sources-1-jar/org/springframework/web/reactive/handler/SimpleUrlHandlerMapping.java

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package engine

import (  
    "bytes"  
    "encoding/json"  
    "strings"  
    "testing"  
    "time"

    "github.com/docker/cli/cli/command/formatter"  
    "github.com/docker/cli/internal/licenseutils"  
    "github.com/docker/licensing/model"  
    "gotest.tools/assert"  
    is "gotest.tools/assert/cmp"
)

func TestSubscriptionContextWrite(t *testing.T) {
    cases := []struct {
        context formatter.Context
        expected string
    }{
        // Errors
        {
            formatter.Context{Format: "{{InvalidFunction}}"},
            `Template parsing error: template: :1: function "InvalidFunction" not defined`
        },
        {
            formatter.Context{Format: "{{nil}}"},
            `Template parsing error: template: :1:2: executing "" at <nil>: nil is not a command`
        },
        // Table format
        {
            formatter.Context{Format: NewSubscriptionsFormat("table", false)},
            "NUM          OWNER           PRODUCT ID       EXPIRES         PRICING COMPONENTS"
        }
    }
    for _, c := range cases {
        if assert.Error(t, c.expected, c.context.WriteString()) {
            t.Errorf("%s = %s", c.expected, c.context.String())
        }
    }
}

1  owner1  productid1  2020-01-01 10:00:00 +0000 UTC  compstring
2  owner2  productid2  2020-01-01 10:00:00 +0000 UTC  compstring

// Custom Format
{
formatter.Context{Format: NewSubscriptionsFormat("{{.Owner}}", false)},
'Owner:
 owner1
 owner2
'
},
// Raw Format
{
'license:
id1
 name:  name1
 owner:  owner1
 components:  compstring

 license:
id2
 name:  name2
 owner:  owner2
 components:  compstring
'
}
expiration, _ := time.Parse(time.RFC822, "01 Jan 20 10:00 UTC")

for _, testcase := range cases {
subscriptions := []licenseutils.LicenseDisplay{
{
Num: 1,
Owner: "owner1",
Subscription: model.Subscription{
ID: "id1",
Name: "name1",
ProductID: "productid1",
Expires: &expiration,
PricingComponents: model.PricingComponents{
&model.SubscriptionPricingComponent{
Name: "nodes",
Value: 10,
},
},
ComponentsString: "compstring",
},
{
Num: 2,
Owner: "owner2",
Subscription: model.Subscription{
ID: "id2",
Name: "name2",
ProductID: "productid2",
Expires: &expiration,
PricingComponents: model.PricingComponents{
&model.SubscriptionPricingComponent{
Name: "nodes",
Value: 20,
},
},
ComponentsString: "compstring",
},
}
out := &bytes.Buffer{}
testcase.context.Output = out
err := SubscriptionsWrite(testcase.context, subscriptions)
if err != nil {
    assert.Error(t, err, testcase.expected)
} else {
    assert.Check(t, is.Equal(testcase.expected, out.String()))
}

func TestSubscriptionContextWriteJSON(t *testing.T) {
    expiration, _ := time.Parse(time.RFC822, "01 Jan 20 10:00 UTC")
    subscriptions := []licenseutils.LicenseDisplay{
        {
            Num: 1,
            Owner: "owner1",
            Subscription: model.Subscription{
                ID:  "id1",
                Name:  "name1",
                ProductID: "productid1",
                Expires: &expiration,
                PricingComponents: model.PricingComponents{
                    &model.SubscriptionPricingComponent{
                        Name:  "nodes",
                        Value: 10,
                    },
                    
                },
                ComponentsString: "compstring",
            },
            
        },
        {
            Num: 2,
            Owner: "owner2",
            Subscription: model.Subscription{
                ID:  "id2",
                Name:  "name2",
                ProductID: "productid2",
                Expires: &expiration,
                PricingComponents: model.PricingComponents{
                    &model.SubscriptionPricingComponent{
                        Name:  "nodes",
                        Value: 20,
                    },
                    
                },
                ComponentsString: "compstring",
            },
            
        }
    }
    expectedJSONs := []map[string]interface{}{
        
    }

"Owner": "owner1",
"ComponentsString": "compstring",
"Expires": "2020-01-01T10:00:00Z",
"DockerID": "",
"Eusa": nil,
"ID": "id1",
"Start": nil,
"Name": "name1",
"Num": float64(1),
"PricingComponents": []interface{}{
    map[string]interface{}{
        "name": "nodes",
        "value": float64(10),
    },
},
"ProductID": "productid1",
"ProductRatePlan": "",
"ProductRatePlanID": "",
"State": "",
"Summary": "License Name: name1
Quantity: 10 nodes
Expiration date: 2020-01-01",
},
{}
"Owner": "owner2",
"ComponentsString": "compstring",
"Expires": "2020-01-01T10:00:00Z",
"DockerID": "",
"Eusa": nil,
"ID": "id2",
"Start": nil,
"Name": "name2",
"Num": float64(2),
"PricingComponents": []interface{}{
    map[string]interface{}{
        "name": "nodes",
        "value": float64(20),
    },
},
"ProductID": "productid2",
"ProductRatePlan": "",
"ProductRatePlanID": "",
"State": "",
"Summary": "License Name: name2
Quantity: 20 nodes
Expiration date: 2020-01-01",
},
{}
out := &bytes.Buffer{
}
err := SubscriptionsWrite(formatter.Context{Format: "{{json .}}", Output: out}, subscriptions)
if err != nil {

func TestSubscriptionContextWriteJSONField(t *testing.T) {
    subscriptions := []licenseutils.LicenseDisplay{
        {Num: 1, Owner: "owner1"},
        {Num: 2, Owner: "owner2"},
    }
    out := &bytes.Buffer{
    }
    if err != nil {
        t.Fatal(err)
    }
    for i, line := range strings.Split(strings.TrimSpace(out.String()), "\n") {
        var s string
        if err := json.Unmarshal([]byte(line), &s); err != nil {
            t.Fatal(err)
        }
        assert.Check(t, is.Equal(subscriptions[i].Owner, s))
    }
}

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SOFTWARE.

package licensing

import (
    "context"
    "crypto/hmac"
    "crypto/sha256"
    "encoding/base64"
    "encoding/json"
    "fmt"
    "time"

    "github.com/docker/libtrust"
    "github.com/docker/licensing/lib/errors"
    "github.com/docker/licensing/lib/go-clientlib"
    "github.com/docker/licensing/model"
)

func (c *client) getLicenseFile(ctx context.Context, subID string) (*model.IssuedLicense, error) {
    url := c.baseURI
    url.Path += fmt.Sprintf("/api/billing/v4/subscriptions/%s/license-file", subID)

    license := new(model.IssuedLicense)
    if _, _, err := c.doReq(ctx, "GET", &url, clientlib.RecvJSON(license)); err != nil {
        return nil, err
    }

    return license, nil
}

// Check verifies that the license identified by the given key id is valid. Note that it does not
// interrogate the contents of the license.
func (c *client) check(ctx context.Context, license model.IssuedLicense) (*model.CheckResponse, error) {
    keyID := license.KeyID
    privateKey := license.PrivateKey

    authorization, err := c.getAuthorization(ctx, license)
    if err != nil {
        return nil, err
    }

    signature, err := libtrust.ParseJWS(authorization)
    if err != nil {
        return nil, errors.Wrapf(err, errors.Fields{
            "key_id": keyID,
        }, "license parse JWS failed")
    }

    return nil, err
}
keys, err := signature.Verify()
if err != nil {
    return nil, errors.Wrapf(err, errors.Fields{
        "key_id": keyID,
    }, "license signature verification failed")
}

keyCnt := len(keys)
if keyCnt != 1 {
    err = fmt.Errorf("unexpected number of signing keys (%d)", keyCnt)
    return nil, errors.WithStack(err).With(errors.Fields{
        "key_id": keyID,
    })
}

key := keys[0]
if !c.recognizedSigningKey(key) {
    return nil, errors.New("unrecognized signing key")
}

payload, err := signature.Payload()
if err != nil {
    return nil, errors.Wrapf(err, errors.Fields{
        "key_id": keyID,
    }, "malformed signature payload")
}

checkRes := new(model.CheckResponse)
err = json.Unmarshal(payload, &checkRes)
if err != nil {
    return nil, errors.Wrapf(err, errors.Fields{
        "key_id": keyID,
    }, "license payload unmarshal failed")
}

msg := checkRes.Expiration.Format(time.RFC3339)
if err := checkToken(msg, checkRes.Token, privateKey); err != nil {
    return nil, errors.Wrap(err, errors.Fields{
        "key_id": keyID,
    })
}

return checkRes, nil
// recognizedSigningKey returns true if the given key is signed with a recognized signing key, false otherwise
func (c *client) recognizedSigningKey(key libtrust.PublicKey) bool {
    for _, publicKey := range c.publicKeys {
        if key.KeyID() == publicKey.KeyID() {
            return true
        }
    }
    return false
}

// getAuthorization returns the decoded license authorization
func (c *client) getAuthorization(ctx context.Context, license model.IssuedLicense) ([]byte, error) {
    decoded, err := base64.StdEncoding.DecodeString(license.Authorization)
    if err != nil {
        return nil, errors.Wrap(err, errors.Fields{
            "key_id": license.KeyID,
        }, "decoding license authorization failed")
    }
    return decoded, nil
}

// All of the functions in this file assume that they are receiving a properly
// formatted private key.

// checkToken performs a MAC algorithm (where token is generated by hashing the
// message with the privateKey via GenerateToken) with the purpose of authenticating
// the validity of both the message and the private key of the person who generated
// the token.
func checkToken(message, token, privateKey string) error {
    tokenBytes, err := base64.URLEncoding.DecodeString(token)
    if err != nil {
        return errors.Wrap(err, errors.Fields{
            "token": token
        })
    }
    generatedToken, err := generateToken(message, privateKey)
    if err != nil {
        return errors.Wrap(err, errors.Fields{
            "token": generatedToken
        })
    }
    generatedBytes, err := base64.URLEncoding.DecodeString(generatedToken)
    if err != nil {
        return errors.Wrap(err, errors.Fields{
            "token": generatedBytes
        })
    }
    if !hmac.Equal(tokenBytes, generatedBytes) {
        return errors.Forbidden(errors.Fields{
            "token": token, "invalid token"
        })
    }
}
return nil
}

// generateToken generates a hash of the message with the privateKey via the
// sha256 algorithm.
func generateToken(message, privateKey string) (string, error) {
    key, err := base64.URLEncoding.DecodeString(privateKey)
    if err != nil {
        return "", errors.Wrap(err, errors.Fields{"msg": message})
    }
    h := hmac.New(sha256.New, key)
    h.Write([]byte(message))
    return base64.URLEncoding.EncodeToString(h.Sum(nil)), nil
}

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procfs provides functions to retrieve system, kernel and process metrics from the pseudo-filesystem proc.

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package model

import "time"

// A CheckResponse is the internal content of the PublicCheckResponse signed
// json blob.
type CheckResponse struct {
    Expiration time.Time `json:"expiration"
    Token string `json:"token"
    MaxEngines int `json:"maxEngines"
    ScanningEnabled bool `json:"scanningEnabled"
    Type string `json:"licenseType"
    Tier string `json:"tier"
}

// IssuedLicense represents an issued license
type IssuedLicense struct {
    KeyID string `json:"key_id"
    PrivateKey string `json:"private_key"
    Authorization string `json:"authorization"
}

// Valid returns true if the License is syntactically valid, false otherwise
func (l *IssuedLicense) Valid() (bool, string) {
    if l.KeyID == "" {
        return false, "empty key_id"
    }

    if l.PrivateKey == "" {
        return false, "empty private_key"
    }

    if l.Authorization == "" {
        return false, "empty authorization"
    }

    return true, ""
}

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import (
    "time"
    
    "github.com/docker/cli/cli/command/formatter"
    "github.com/docker/cli/internal/licenseutils"
    "github.com/docker/licensing/model"
)

const (
    defaultSubscriptionsTableFormat = "table
    {{.Num}}	{{.Owner}}	{{.ProductID}}	{{.Expires}}	{{.ComponentsString}}"
    defaultSubscriptionsQuietFormat = "{{.Num}}:{{.Summary}}"
    numHeader               = "NUM"
    ownerHeader             = "OWNER"
    licenseNameHeader       = "NAME"
    idHeader                = "ID"
    dockerIDHeader          = "DOCKER ID"
    productIDHeader         = "PRODUCT ID"
    productRatePlanHeader   = "PRODUCT RATE PLAN"
    productRatePlanIDHeader = "PRODUCT RATE PLAN ID"
    startHeader             = "START"
    expiresHeader           = "EXPIRES"
    stateHeader             = "STATE"
    eusaHeader              = "EUSA"
    pricingComponentsHeader = "PRICING COMPONENTS"
)

// NewSubscriptionsFormat returns a Format for rendering using a license Context
func NewSubscriptionsFormat(source string, quiet bool) formatter.Format {
    switch source {
    case formatter.TableFormatKey:
        if quiet {
            return defaultSubscriptionsQuietFormat
        }
        return defaultSubscriptionsTableFormat
    case formatter.RawFormatKey:
        if quiet {
            return `license: {{.ID}}`
        }
        return `license: {{.ID}}
            name: {{.Name}}
            owner: {{.Owner}}
            components: {{.ComponentsString}}
        `
    }
    return formatter.Format(source)
}

// SubscriptionsWrite writes the context
func SubscriptionsWrite(ctx formatter.Context, subs []licenseutils.LicenseDisplay) error {
    render := func(format func(subContext formatter.SubContext) error) error {
        return
for _, sub := range subs {
    licenseCtx := &licenseContext{trunc: ctx.Trunc, l: sub}
    if err := format(licenseCtx); err != nil {
        return err
    }
}
return nil

licenseCtx := licenseContext{}
licenseCtx.Header = map[string]string{
    "Num":               numHeader,
    "Owner":             ownerHeader,
    "Name":              licenseNameHeader,
    "ID":                idHeader,
    "DockerID":          dockerIDHeader,
    "ProductID":         productIDHeader,
    "ProductRatePlan":   productRatePlanHeader,
    "ProductRatePlanID": productRatePlanIDHeader,
    "Start":             startHeader,
    "Expires":           expiresHeader,
    "State":             stateHeader,
    "Eusa":              eusaHeader,
    "ComponentsString":  pricingComponentsHeader,
}
return ctx.Write(&licenseCtx, render)

func (c *licenseContext) Num() int {
    return c.l.Num
}

func (c *licenseContext) Owner() string {
    return c.l.Owner
}

func (c *licenseContext) ComponentsString() string {
    return c.l.ComponentsString
}
func (c *licenseContext) Summary() string {
    return c.l.String()
}

func (c *licenseContext) Name() string {
    return c.l.Name
}

func (c *licenseContext) ID() string {
    return c.l.ID
}

func (c *licenseContext) DockerID() string {
    return c.l.DockerID
}

func (c *licenseContext) ProductID() string {
    return c.l.ProductID
}

func (c *licenseContext) ProductRatePlan() string {
    return c.l.ProductRatePlan
}

func (c *licenseContext) ProductRatePlanID() string {
    return c.l.ProductRatePlanID
}

func (c *licenseContext) Start() *time.Time {
    return c.l.Start
}

func (c *licenseContext) Expires() *time.Time {
    return c.l.Expires
}

func (c *licenseContext) State() string {
    return c.l.State
}

func (c *licenseContext) Eusa() *model.EusaState {
    return c.l.Eusa
}

func (c *licenseContext) PricingComponents() []model.SubscriptionPricingComponent {
    // Dereference the pricing component pointers in the pricing components
    // so it can be rendered properly with the template formatter
var ret []model.SubscriptionPricingComponent
for _, spc := range c.l.PricingComponents {
    if spc == nil {
        continue
    }
    ret = append(ret, *spc)
}
return ret

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1.269 open-ldap 2.4.49+dfsg-2ubuntu1.8

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1.270 logback-core 1.2.3

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1.271 docker 1.9.1

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1.272 zlib 1.2.11

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1.275 spring-test 5.2.8.RELEASE

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* /opt/cola/permits/1138182575_1614269671.49/0/spring-test-5-2-8-release-sources-1-jar/org/springframework/test/context/junit4/statements/RunBeforeTestMethodCallbacks.java
* /opt/cola/permits/1138182575_1614269671.49/0/spring-test-5-2-8-release-sources-1-jar/org/springframework/test/context/junit4/statements/SpringRepeat.java
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* /opt/cola/permits/1138182575_1614269671.49/0/spring-test-5-2-8-release-sources-1-jar/org/springframework/test/context/BootstrapUtils.java
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* /opt/cola/permits/1138182575_1614269671.49/0/spring-test-5-2-8-release-sources-1-jar/org/springframework/mock/web/MockRequestDispatcher.java
* /opt/cola/permits/1138182575_1614269671.49/0/spring-test-5-2-8-release-sources-1-jar/org/springframework/test/web/servlet/setup/ConfigurableMockMvcBuilder.java
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* /opt/cola/permits/1138182575_1614269671.49/0/spring-test-5-2-8-release-sources-1-jar/org/springframework/test/web/servlet/setup/ConfigurableMockMvcBuilder.java
* /opt/cola/permits/1138182575_1614269671.49/0/spring-test-5-2-8-release-sources-1-jar/org/springframework/test/web/servlet/TestDispatcherServlet.java
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/**
 * Kotlin compliant `WebTestClient.BodySpec` for expectations on the response body decoded
 * to a single Object, see [KT-5464](https://youtrack.jetbrains.com/issue/KT-5464) for
 * more details.
 * @since 5.0.6
 */

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  jar/org/springframework/test/web/servlet/request/RequestPostProcessor.java
* /opt/cola/permits/1138182575_1614269671.49/0/spring-test-5-2-8-release-sources-1-
  jar/org/springframework/test/context/web/WebTestContextBootstrapper.java
* /opt/cola/permits/1138182575_1614269671.49/0/spring-test-5-2-8-release-sources-1-
  jar/org/springframework/test/web/servlet/DispatcherServletCustomizer.java
* /opt/cola/permits/1138182575_1614269671.49/0/spring-test-5-2-8-release-sources-1-
  jar/org/springframework/test/web/htmlunit/WebRequestMatcher.java
* /opt/cola/permits/1138182575_1614269671.49/0/spring-test-5-2-8-release-sources-1-
  jar/org/springframework/test/context/cache/ContextCacheUtils.java
* /opt/cola/permits/1138182575_1614269671.49/0/spring-test-5-2-8-release-sources-1-
  jar/org/springframework/test/context/junit4/statements/RunAfterTestClassCallbacks.java
* /opt/cola/permits/1138182575_1614269671.49/0/spring-test-5-2-8-release-sources-1-
  jar/org/springframework/test/context/ContextCustomizer.java
* /opt/cola/permits/1138182575_1614269671.49/0/spring-test-5-2-8-release-sources-1-
  jar/org/springframework/test/context/jdbc/SqlGroup.java
* /opt/cola/permits/1138182575_1614269671.49/0/spring-test-5-2-8-release-sources-1-
  jar/org/springframework/test/web/htmlunit/UrlRegexRequestMatcher.java
* /opt/cola/permits/1138182575_1614269671.49/0/spring-test-5-2-8-release-sources-1-
  jar/org/springframework/test/web/servlet/AbstractRequestMatcher.java

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# Jackson JSON processor

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1.278 spring-framework 5.2.8.RELEASE

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1.280 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): $(OBJ)
(cd pic; ld -Bshareable -o $(BSD_LIB) $(LDFLAGS_SHLIB) $(OBJ))
$(MV) pic/$(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)/$(BSD_LIB)
@-$(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)
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

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--- tdbus.orig/tdb.c
+++ tdbus/tdb.c
@@ -4,11 +4,11 @@ Rev: 23371
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>.

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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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Gadi Oxman, August 1995

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* /opt/cola/permits/1258059202_1643027219.24/0/ehcache-api-3-8-1-sources-jar/org/ehcache/spi/loaderwriter/package-info.java
* /opt/cola/permits/1258059202_1643027219.24/0/ehcache-api-3-8-1-sources-jar/org/ehcache/spi/loaderwriter/CacheLoaderWriterProvider.java
* /opt/cola/permits/1258059202_1643027219.24/0/ehcache-api-3-8-1-sources-jar/org/ehcache/spi/loaderwriter/CacheLoaderWriter.java
* /opt/cola/permits/1258059202_1643027219.24/0/ehcache-api-3-8-1-sources-jar/org/ehcache/spi/loaderwriter/WriteBehindProvider.java
* /opt/cola/permits/1258059202_1643027219.24/0/ehcache-api-3-8-1-sources-jar/org/ehcache/spi/loaderwriter/package-info.java

* /opt/cola/permits/1258059202_1643027219.24/0/ehcache-api-3-8-1-sources-jar/org/ehcache/spi/copy/CopyProvider.java
* /opt/cola/permits/1258059202_1643027219.24/0/ehcache-api-3-8-1-sources-jar/org/ehcache/spi/copy/package-info.java

* /opt/cola/permits/1258059202_1643027219.24/0/ehcache-api-3-8-1-sources-jar/org/ehcache/PersistentCacheManager.java
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wagon-http-lightweight (3.0.0)

* License: Pending
* Project: https://maven.apache.org/wagon/
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xz for java (1.8)

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1.287 cairo 1.14.2

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## version 0.1
##
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* /opt/cola/permits/1274024552_1645166710.08/0/flyway-commandline-7-3-1-sources-jar/META-INF/maven/org.flywaydb/flyway-commandline/pom.xml
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* /opt/cola/permits/1274024552_1645166710.08/0/flyway-commandline-7-3-1-sources-jar/org/flywaydb/commandline/MultiLogCreator.java
* /opt/cola/permits/1274024552_1645166710.08/0/flyway-commandline-7-3-1-sources-jar/org/flywaydb/commandline/FileLogCreator.java
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* /opt/cola/permits/1274024552_1645166710.08/0/flyway-commandline-7-3-1-sources-jar/org/flywaydb/commandline/MultiLogger.java
* /opt/cola/permits/1274024552_1645166710.08/0/flyway-commandline-7-3-1-sources-jar/org/flywaydb/commandline/ColorizedConsoleLog.java
* /opt/cola/permits/1274024552_1645166710.08/0/flyway-commandline-7-3-1-sources-jar/org/flywaydb/commandline/ConsoleLog.java
* /opt/cola/permits/1274024552_1645166710.08/0/flyway-commandline-7-3-1-sources-jar/org/flywaydb/commandline/CommandLineArguments.java
1.296 log4j-api 2.13.3

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<?xml version="1.0"?>
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<!-- Automatically converted from haarcascade2, window size = 64x16 -->
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Vincent Rijmen, Antoon Bosselaers, Paulo Barreto

AES in libhcrypto

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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D3DES (V5.09) -

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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
 * When tag and version are not compatible, program exits with error code 1.
 * When they are compatible, it exists with a code 0.
 * checkTag is intended to be used in automated testing environment.
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* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/jsr107/Eh107IdentityCopier.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/spi/loaderwriter/BulkCacheLoadingException.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/impl/spi/loaderwriter/DefaultCacheLoaderWriterProviderFactory.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/impl/spi/loaderwriter/LocalLoaderWriterStore.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/impl/spi/loaderwriter/BulkCacheLoadingException.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/config/binders/package-info.java
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5 3589

jar/org/ehcache/impl/internal/store/offheap/BinaryOffHeapValueHolder.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/xml/ServiceConfigurationParser.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/xml/XmlConfiguration.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/statistics/TierStatistics.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/config/store/package-info.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/xml/service/SimpleCoreServiceConfigurationParser.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/xml/model/CacheDefinition.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/configuration/loaderwriter/DefaultCacheLoaderWriterConfiguration.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/xml/configuration/package-info.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/persistence/package-info.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache/xml/service/Unwrap.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache/xml/service/NullCompletionListener.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache/impl/internal/store/heap/SimpleBackend.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache/impl/persistence/package-info.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache/core/statistics/DefaultTierStatistics.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache/impl/loaderwriter/writebehind/AbstractWriteBehind.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache/config/builders/CacheManagerBuilder.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache/config/package-info.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/config/package-info.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/statistics/DefaultTierStatistics.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/config/builders/CacheManagerBuilder.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/config/package-info.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/config/package-info.java
jar/org/ehcache/impl/copy/ReadWriteCopier.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/event/EventType.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/config/persistence/DefaultPersistenceConfiguration.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/core/events/EventListenerWrapper.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/config/FluentConfigurationBuilder.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/impl/internal/store/heap/OnHeapStoreProviderFactory.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/impl/internal/store/basic/NopStore.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/xml/CacheManagerServiceConfigurationParser.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/impl/config/loaderwriter/writebehind/WriteBehindProviderConfiguration.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/core/spi/store/events/StoreEvent.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/impl/internal/store/offheap/OffHeapValueHolder.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/config/SizedResourcePool.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/impl/internal/classes/ClassInstanceConfiguration.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/core/spi/store/tiering/package-info.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/impl/internal/executor/OnDemandExecutionService.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/core/events/CacheManagerListener.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/impl/internal/store/loaderwriter/LoaderWriterStoreProviderFactory.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/jsr107/ConfigurationMerger.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/core/InternalRuntimeConfiguration.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/config/builders/ConfigurationBuilder.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/spi/service/Service.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/expiry/Duration.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/spi/loaderwriter/CacheLoaderWriterConfiguration.java

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* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/impl/internal/executor/OutOfBandScheduledExecutor.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/impl/config/event/DefaultCacheEventListenerConfiguration.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/core/spi/ServiceLocator.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/core/EhcacheManager.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/config/units/MemoryUnit.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/core/statistics/HigherCachingTierOperationOutcomes.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/core/statistics/DelegatingOperationObserver.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/core/spi/store/tiering/AuthoritativeTier.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/core/spi/store/events/StoreEventSource.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/core/CacheConfigurationProperty.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/impl/copy/package-info.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/impl/internal/loaderwriter/writebehind/WriteBehind.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/impl/config/event/DefaultCacheEventDispatcherConfiguration.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/impl/config/builders/CacheEventListenerConfigurationBuilder.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/impl/config/event/DefaultEventSourceConfiguration.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/core/statistics/LowerCachingTierOperationsOutcome.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/core/spi/store/tiering/AuthoritativeTier.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/core/spi/store/events/StoreEventSource.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/core/CacheConfigurationProperty.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/impl/copy/package-info.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/impl/copy/SerializingCopier.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/impl/copy/SerializingCopier.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/core/DefaultCacheManagerProviderService.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/core/spi/ResourcePools.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/core/spi/loaderwriter/package-info.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/core/PersistentUserManagedCache.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/impl/internal/spi/serialization/DefaultSerializationProvider.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/impl/config/builders/CacheEventListenerConfigurationBuilder.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1.jar/org/ehcache/impl/config/event/DefaultEventSourceConfiguration.java
jar/org/ehcache/config/builders/CacheConfigurationBuilder.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/xml/XmlModel.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/config/builders/ExpiryPolicyBuilder.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/internal/store/offheap/EhcacheConcurrentOffHeapClockCache.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/internal/resilience/ThrowingResilienceStrategy.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/Cache.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/internal/store/offheap/OffHeapStoreUtils.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/internal/spi/resilience/DefaultResilienceStrategyProvider.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/spi/loaderwriter/CacheLoaderWriterProvider.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/expiry/package-info.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/internal/store/disk/OffHeapDiskStore.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/config/persistence/package-info.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/internal/loaderwriter/writebehind/operations/DeleteAllOperation.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/statistics/TierOperationOutcomes.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/config/ResourcePool.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/CachePersistenceException.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/events/CacheEventDispatcher.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/spi/service/MaintainableService.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/xml/DomUtil.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/config/builders/UserManagedCacheBuilder.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/config/executor/package-info.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/xml/model/CacheTemplate.java
jar/org/ehcache/core/spi/LifeCycled.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/internal/store/loaderwriter/LoaderWriterStoreProvider.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/config/store/disk/OffHeapDiskStoreConfiguration.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/xml/provider/OffHeapDiskStoreProviderConfigurationParser.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/spi/resilience/ResilienceStrategy.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/expiry/Expirations.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/xml/model/ListenersConfig.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/config/builders/UserManagedCacheConfiguration.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/exceptions/package-info.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/ehcache/jar107/EventListenerAdaptors.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/xml/service/DefaultWriteBehindConfigurationParser.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/statistics/OperationObserver.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/internal/store/disk/OffHeapDiskStoreProviderFactory.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/config/ResourceType.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/implementspi/event/DefaultCacheEventListenerProviderFactory.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/internal/loaderwriter/writebehind/StripedWriteBehind.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/internal/loaderwriter/writebehind/operations/KeyBasedOperation.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/spi/store/events/StoreEventFilter.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/spi/serialization/SerializationProvider.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/internal/resilience/RobustLoaderWriterResilienceStrategy.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/spi/service/CacheManagerProviderService.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/internal/events/StoreEventImpl.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/internal/resilience/AbstractResilienceStrategy.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/spi/loaderwriter/CacheWritingException.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/statistics/CachingTierOperationOutcomes.java
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* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/xml/BaseConfigParser.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/statistics/DelegatedMappedOperationStatistics.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/events/CacheEventListenerConfiguration.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/executor/PartitionedOrderedExecutor.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/config/builders/CacheManagerConfiguration.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/internal/store/offheap/SwitchableEvictionAdvisor.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/spi/resilience/RecoveryStore.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/xml/multi/XmlMultiConfiguration.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/spi/serialization/StatefulSerializer.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/internal/time/package-info.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/jsr107/Eh107Expiry.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/collections/ConcurrentWeakIdentityHashMap.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/spi/service/PluralService.java

* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/xml/model/SizeOfEngineLimits.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/xml/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/xml/BaseConfigParser.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/statistics/DelegatedMappedOperationStatistics.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/events/CacheEventListenerConfiguration.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/executor/PartitionedOrderedExecutor.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/config/builders/CacheManagerConfiguration.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/internal/store/offheap/SwitchableEvictionAdvisor.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/spi/resilience/RecoveryStore.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/xml/multi/XmlMultiConfiguration.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/spi/serialization/StatefulSerializer.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/internal/time/package-info.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/jsr107/Eh107Expiry.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/collections/ConcurrentWeakIdentityHashMap.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/spi/service/PluralService.java
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* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/ValueSupplier.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/internal/events/StoreEvents.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/persistence/DefaultLocalPersistenceService.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/statistics/ChainedOperationObserver.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/osgi/SafeOsgi.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/statistics/StoreOperationOutcomes.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/jsr107/Eh107Cache.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/serialization/IntegerSerializer.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/serialization/TransientStateHolder.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/config/store/disk/package-info.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/impl/config/copy/DefaultCopierConfiguration.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/xml/model/Expiry.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/spi/serialization/Serializer.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/spi/service/FileBasedPersistenceContext.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/spi/service/ServiceUtils.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/xml/service/DefaultCacheLoaderWriterConfigurationParser.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/xml/model/Expiry.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/spi/serialization/Serializer.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/spi/service/FileBasedPersistenceContext.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/core/spi/service/ServiceUtils.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/jsr107/Eh107MXBean.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-jar/org/ehcache/xml/CacheResourceConfigurationParser.java
jar/org/ehcache/impl/config/copy/package-info.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-
jar/org/ehcache/core/CacheConfigurationChangeEvent.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-
jar/org/ehcache/impl/config/resilience/DefaultResilienceStrategyConfiguration.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-
jar/org/ehcache/core/statistics/SourceStatistic.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-
jar/org/ehcache/core/spi/store/ConfigurationChangeSupport.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-
jar/org/ehcache/impl/config/AbstractResourcePool.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-
jar/org/ehcache/event/EventOrdering.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-
jar/org/ehcache/core/statistics/CacheStatistics.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-
jar/org/ehcache/config/CacheRuntimeConfiguration.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-
jar/org/ehcache/xml/CoreCacheConfigurationParser.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-
jar/org/ehcache/jsr107/internal/Js107CacheConfigurationParser.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-
jar/org/ehcache/ws/provider/DefaultSizeOfEngineProviderConfigurationParser.java
* /opt/cola/permits/1135872409_1613620769.24/0/ehcache-3-8-1-sources-1-
jar/org/ehcache/impl/internal/spi/event/DefaultCacheEventListenerProvider.java

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Protocol Buffers for Go with Gadgets

Go support for Protocol Buffers - Google's data interchange format

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* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1- 
  jar/org/springframework/web/bind/support/SessionStatus.java

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Found in path(s):
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1- 
  jar/org/springframework/remoting/jaxws/AbstractJaxWsServiceExporter.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1- 
  jar/org/springframework/http/HttpEntity.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1- 
  jar/org/springframework/http/client/InterceptingClientHttpRequestFactory.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1- 
  jar/org/springframework/http/ZeroCopyHttpOutputMessage.java
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* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/accept/ContentNegotiationStrategy.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/util/pattern/CaptureTheRestPathElement.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/multipart/support/StandardServletMultipartResolver.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/bind/support/webRequestDataBinder.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/http/server/reactive/SslInfo.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/http/server/handler/FilteringWebHandler.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/http/codec/multipart/FilePart.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/http/codec/HttpMessageReader.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/multipart/MultipartFileResource.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/bind/ServletRequestParameterPropertyValues.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/bind/UnsatisfiedServletRequestParameterException.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/bind/MissingRequestCookieException.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/http/converter/xml/AbstractXmlHttpMessageConverter.java
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* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/util/pattern/WildcardPathElement.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/util/JavaScriptUtils.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/client/ResponseErrorHandler.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/HttpRequestMethodNotSupportedException.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/http/client/BufferingClientHttpRequestFactory.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/server/DefaultServerWebExchangeBuilder.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/context/request/async/CallableInterceptorChain.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/context/async/ContextLoaderListener.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/server/session/HeaderWebSessionIdResolver.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/util/CookieGenerator.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/http/client/reactive/ClientHttpRequestDecorator.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/http/server/reactive/JettyHttpHandlerAdapter.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/http/server/reactive/HttpHandler.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/http/StreamingHttpOutputMessage.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/method/annotation/SessionAttributesHandler.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/context/support/XmlWebApplicationContext.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/http/client/reactive/ClientHttpRequest.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/accept/AbstractMappingContentNegotiationStrategy.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/remoting/caucho/SimpleHessianServiceExporter.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/http/InvalidMediaTypeException.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/http/HttpLogging.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/http/HttpMessageWriter.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/http/server/reactive/ServerHttpResponseDecorator.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/server/ServerErrorException.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/server/ServerErrorIOException.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/server/ServerErrorMissingServletRequestPartException.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/client/ResponseExtractor.java

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* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/http/client/ClientHttpRequestInterceptor.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/remoting/caucho/HessianServiceExporter.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/remoting/httpinvoker/SimpleHttpInvokerRequestExecutor.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/http/server/reactive/UndertowHttpHandlerAdapter.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/http/client/reactive/JettyClientHttpRequest.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/bind/WebDataBinder.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/method/annotation/AbstractCookieValueMethodArgumentResolver.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/context/support/GroovyWebApplicationContext.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/context/request/async/DeferredResultInterceptorChain.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/context/support/CompositeUriComponentsContributor.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/context/request/AbstractRequestAttributes.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/context/HttpMessageConverters.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/context/support/ServletRequestAttributes.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/context/SecurityContext.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/context/SecurityContextHolder.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/context/AbstractRequestAttributes.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/context/RequestContextHolder.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/context/RequestAttributes.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/context/WebRequest.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/context/WebRequest.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/context/AbstractWebRequest.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/context/support/DeferredResultInterceptorChain.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/context/AbstractServletRequest.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/context/ServletRequest.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/context/AbstractRequest.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/context/Request.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/context/AbstractRequest.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/context/support/AbstractFilterRegistrationBean.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/context/support/AbstractContext schöne Repräsentation der Dokumentation.
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* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/HttpMediaTypeException.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/http/server/ServerHttpResponse.java

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* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/context/annotation/RequestScope.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/context/request/RequestContextHolder.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/bind/annotation/ModelAttribute.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/bind/annotation/RequestAttribute.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/context/request/WebRequestInterceptor.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/context/request/SpringWebMessageSource.java
* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/web/context/webapp/SpringWebServlet.java

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# Although created for httpd, this file is used by many software systems
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#
# 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/alto-endpointcostparams+json
# application/alto-endpointprop+json
# application/alto-endpointpropparams+json
# application/alto-error+json
# application/alto-networkmap+json
# application/alto-networkmapfilter+json
# application/aol
application/andrew-insetez
# application/applefile
application/applixware
# application/atf
# application/atfx
application/atom+xml
application/atomcat+xml
# application/atomdeleted+xml
# application/atomicmail
application/atomsvc+xml
# application/atom+xml
# application/auth-policy+xml
# application/bacnet-xdd+xml
# application/batch-smtp
# application/beep+xml
# application/calendar+json
# application/calendar+xml
# application/call-completion
# application/cals-1840
# application/cbor
# application/ccmp+xml
application/ccxml+xml
# application/cdmi-capability
application/cdmi-container
application/cdmi-domain
application/cdmi-object
application/cdmi-queue
# application/eshop
# application/example
application/exi
# application/fastinfoset
# application/fastsoap
# application/fdt+xml
# application/fits
# application/font-sfnt
application/font-tdpfr
application/font-woff
# application/framework-attributes+xml
# application/geo+json
application/gml+xml
application/gpx+xml
application/gxf
# application/gzip
# application/h224
# application/held+xml
# application/http
application/hyperstudio
# 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
# application/iotp
application/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+json
application/json-ld
application/json-ld+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/lgr+xml
# application/link-format
# application/load-control+xml
application/lost+xml lostxml
# application/lostsync+xml
# application/lxf
application/mac-binhex40.hqx
application/mac-compactpro .cpt
application/macs+xml mads
application/marcml
application/marcxml+xml xmlmr
application/mathematica nb mb
application/mathml+xml mathml
# application/mathml-content+xml
# application/mathml-presentation+xml
# application/mbms-associated-procedure-description+xml
# application/mbms-deregister+xml
# application/mbms-envelope+xml
# application/mbms-msk+xml
# application/mbms-msk-response+xml
# application/mbms-protection-description+xml
# application/mbms-reception-report+xml
# application/mbms-register+xml
# application/mbms-register-response+xml
# application/mbms-schedule+xml
# application/mbms-user-service-description+xml
application/mbox mbox
# application/media-policy-dataset+xml
# application/media_control+xml
application/mediaservercontrol+xml mscml
# application/merge-patch+xml
application/metalink+xml metalink
application/metalink4+xml meta4
application/mets+xml mets
# application/mf4
# application/mikey
application/mods+xml mods
# application/moss-keys
# application/moss-signature
# application/mosskey-data
# application/mosskey-request
application/mp21 m21 mp21
application/mp4s
# application/mpeg4-generic
# application/mpeg4-iod
# application/mpeg4-iod-xmt
# application/mrb-consumer+xml
# application/mrb-publish+xml
# application/msc-ivr+xml
# application/msc-mixer+xml
application/msword
doc dot
application/mxf
# application/nasdata
# application/news-checkgroups
# application/news-groupinfo
# application/news-transmission
# application/nlsml+xml
# application/nss
# application/ocsp-request
# application/ocsp-response
application/octet-stream
bin dms lrf mar so dist distz pkg bpk dump elc deploy
application/oda
# application/odx
application/oebps-package+xml
application/ogg
application/omdoc+xml
application/onenote	onetoc onetoc2 onetmp onepkg
application/oxps
# application/p2p-overlay+xml
# application/parityfec
application/patch-ops-error+xml
application/pdf
# application/pd
application/pgp-encrypted
gpg
# application/pgp-keys
application/pgp-signature
asc sig
application/pics-rules
prf
# application/pidf+xml
# application/pidf-diff+xml
application/pkcs10
p10
# application/pkcs12
application/pkcs7-mime
m7m p7c
application/pkcs7-signature
p7s
application/pkcs8
application/pkix-attr-cert
ac
application/pkix-certificate
pki
certcer
application/pkix-crl
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application/pls+xml
plsls
# application/poc-settings+xml
application/postscriptai eps ps
# application/psp-tracker+json
# application/problem+json
# application/problem+xml
# application/provenance+xml
# application/prs.alvestrand.titrax-sheet
application/prs.cwwcww
# application/prs.hpud+zip
# application/prs.nprend
# application/prs.plucker
# application/prs.rdf-xml-crypt
# application/prs.xsf+xml
application/pskc+xml
# application/qsig
# application/raptorfec
# application/rdap+json
application/rdf+xml
application/reginfo+xml
application/resource-lists+xml
application/resource-lists-diff+xml
# application/rfc+xml
# application/riscos
# application/rlmi+xml
application/rls-services+xml
application/rpki-ghostbusters+xml
application/rpki-manifest+xml
application/rpki-roa+xml
# application/rpki-updown
application/rsd+xml
application/rss+xml
application/rtf
# application/rtploopback
# application/rtx
# application/samlassertion+xml
# application/samlmetadata+xml
application/sbml+xml
# application/scaip+xml
# application/scim+json
application/scvp-cv-request+xml
application/scvp-cv-responses+xml
application/scvp-vp-request+xml
application/scvp-vp-responses+xml
application/sdp+xml
# application/sep+xml
# application/sep-exi
# application/session-info
# application/set-payment
application/set-payment-initiation	setpay
# application/set-registration
application/set-registration-initiation	setreg
# application/sgml
# application/sgml-open-catalog
application/shf+xml	shf
# application/sieve
# application/simple-filter+xml
# application/simple-message-summary
# application/simplesymbolcontainer
# application/slate
# application/smil
application/smil+xml	smil
# application/spime336m
# application/soap+fastinfoset
# application/soap+xml
application/sparql-query	rq
application/sparql-results+xml	srx
# application/spires-event+xml
# application/sql
application/srgsgram
application/srgs+xml	srgxml
application/ssdl+xml	ssdl
application/ssml+xml	ssml
# application/tamp-apex-update
# application/tamp-apex-update-confirm
# application/tamp-community-update
# application/tamp-community-update-confirm
# application/tamp-error
# application/tamp-sequence-adjust
# application/tamp-sequence-adjust-confirm
# application/tamp-status-query
# application/tamp-status-response
# application/tamp-update
# application/tamp-update-confirm
application/tei+xml	tei teicorpus
application/thraud+xml	tfi
# application/timestamp-query
# application/timestamp-reply
application/timestamped-data
tsrd
# application/tttml+xml
# application/tve-trigger
# application/ulpfec
# application/urc-grpsheet+xml
application/vnd.commonspace
csp
application/vnd.contact.cmsg
cdbcmsg
# application/vnd.coreos.ignition+json
application/vnd.cosmocaller
cmc
application/vnd.crick.clicker
clkx
application/vnd.crick.clicker.keyboard
clkk
application/vnd.crick.clicker.palette
clpk
application/vnd.crick.clicker.template
cltk
application/vnd.crick.clicker.wordbank
clkw
application/vnd.criticaltools.wbs+xml
wbs
application/vnd.ctc-posml
pml
# application/vnd.ctct.ws+xml
# application/vnd.cups-pdf
# application/vnd.cups-postscript
application/vnd.cups-ppd
ppd
# application/vnd.cups-raster
# application/vnd.cups-raw
# application/vnd.curl
curl
carpcurl
# application/vnd.cybank
cyan.dean.root+xml
# application/vnd.dart
dart
application/vnd.data-vision.rdz
rdz
application/vnd.debian.binary-package
deb
application/vnd.dece.data
uvf
application/vnd.dece.datavf
uvf
application/vnd.dece.html+xml
uvv
application/vnd.dece.unspecified
uvx
application/vnd.dece.zip
uvz
application/vnd.denovo.fcselayout-link
fe_launch
# application/vnd.desmume.movie
desmume.movie
# application/vnd.dir-bi.plate-dl-nosuffix
# application/vnd.dm.delegation+xml
dm.delegation+xml
application/vnd.dna
dna
# application/vnd.document+json
document+json
application/vnd.dolby.mlp
mlp
# application/vnd.dolby.mobile.1
# application/vnd.dolby.mobile.2
# application/vnd.doremir.scorecloud-binary-document
doremir.scorecloud-binary-document
dreamfactory
application/vnd.dpgraph
dpg
dreamfactory
dfac
drive+json
drive+json
ds-keypoint
# application/vnd.dtg.local
dtg.local
dtg.local.flash
dtg.local.html
dvb.aitait
# application/vnd.dvb.dvbj
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5 3785
application/vnd.jisp
application/vnd.joost.joda-archive
# application/vnd.jsk.isdn-ngn
application/vnd.kahootz ktz
application/vnd.kde.karbon
application/vnd.kde.kchart
application/vnd.kde.kformula
application/vnd.kde.kivio
application/vnd.kde.kkontour
application/vnd.kde.kpresenter
application/vnd.kde.kspread
application/vnd.kde.kword
application/vnd.kenameaapp
application/vnd.kidspiration
application/vnd.kinar
application/vnd.koan
application/vnd.kodak-descriptor
application/vnd.las.las+xml
# application/vnd.liberty-request+xml
application/vnd.llamagraphics.life-balance.desktop
application/vnd.llamagraphics.life-balance.exchange+xml
application/vnd.lotus-1-2-3
application/vnd.lotus-approach
application/vnd.lotus-freelance
application/vnd.lotus-notes
application/vnd.lotus-organizer
application/vnd.lotus-screencam
application/vnd.lotus-wordpro
application/vnd.macports.portpkg
# application/vnd.mapbox-vector-tile
# application/vnd.marlin.drm.actiontoken+xml
# application/vnd.marlin.drm.conftoken+xml
# application/vnd.marlin.drm.license+xml
# application/vnd.mason+json
# application/vnd.micrografx.flo
application/vnd.micrografx.igx
# application/vnd.microsoft.portable-executable
# application/vnd.miele+json
application/vnd.mif
# application/vnd.minisoft-hp3000-save
# application/vnd.mitsubishi.misty-guard.trustweb
application/vnd.mobius.dafdaf
application/vnd.mobius.disdis
application/vnd.mobius.mbbmmb
application/vnd.mobius.mqymqy
application/vnd.mobius.msmlsm
application/vnd.mobius.plcplc
application/vnd.mobius.txttxf
application/vnd.mophun.applicationmpn
application/vnd.mophun.certificatempec
# application/vnd.motorola.flexsuite
# application/vnd.motorola.flexsuite.adsi
# application/vnd.motorola.flexsuite.fis
# application/vnd.motorola.flexsuite.gotap
# application/vnd.motorola.flexsuite.kmr
# application/vnd.motorola.flexsuite.ttc
# application/vnd.motorola.flexsuite.wem
# application/vnd.motorola.iprm
application/vnd.mozilla.xul+xml
# application/vnd.ms-3mfdocument
application/vnd.ms-artgalry
# application/vnd.ms-asf
application/vnd.ms-cab-compressedcab
# application/vnd.ms-color.iccprofile
application/vnd.ms-excelxls xlxm xla xlc xlt xlw
application/vnd.ms-excel.addin.macroenabled.12lam
application/vnd.ms-excel.sheet.binary.macroenabled.12xlsb
application/vnd.ms-excel.sheet.macroenabled.12xslm
application/vnd.ms-excel.template.macroenabled.12xltm
application/vnd.ms-fontobject
text/css
application/vnd.ms-htmlhelp
application/vnd.ms-ims
application/vnd.ms-lrm
# application/vnd.ms-office.activex+xml
application/vnd.ms-office.schememex
# application/vnd.ms-opentype
# application/vnd.ms-package.obfuscated-opentype
application/vnd.ms-pki.seccatcat
application/vnd.ms-pki.stl
# application/vnd.ms-playready.initiator+xml
application/vnd.ms-powerpointppt pps pot
application/vnd.ms-powerpoint.addin.macroenabled.12ppam
application/vnd.ms-powerpoint.presentation.macroenabled.12pptm
application/vnd.ms-powerpoint.slide.macroenabled.12sldm
application/vnd.ms-powerpoint.slideshow.macroenabled.12ppsm
application/vnd.ms-powerpoint.template.macroenabled.12potm
# application/vnd.ms-printdevicecapabilities+xml
# application/vnd.nokia.ncd
# application/vnd.nokia.pcd+wbxml
# application/vnd.nokia.pcd+xml
application/vnd.nokia.radio-presetsrpst
application/vnd.nokia.radio-presetsrpss
application/vnd.novadigm.edmedm
application/vnd.novadigm.edxedx
application/vnd.novadigm.extext
# application/vnd.ntt-local.content-share
# application/vnd.ntt-local.file-transfer
# application/vnd.ntt-local.ogw_remote-access
# application/vnd.ntt-local.sip-ta_remote
# application/vnd.ntt-local.sip-ta_tcp_stream
application/vnd.oasis.opendocument.chartodc
application/vnd.oasis.opendocument.chart-templateotc
application/vnd.oasis.opendocument.databaseodb
application/vnd.oasis.opendocument.formulaodf
application/vnd.oasis.opendocument.formula-templateodft
application/vnd.oasis.opendocument.graphicsodg
application/vnd.oasis.opendocument.graphics-templateotg
application/vnd.oasis.opendocument.imageodi
application/vnd.oasis.opendocument.image-templateoti
application/vnd.oasis.opendocument.presentationodp
application/vnd.oasis.opendocument.presentation-templateotp
application/vnd.oasis.opendocument.spreadsheetods
application/vnd.oasis.opendocument.spreadsheet-templateots
application/vnd.oasis.opendocument.textodt
application/vnd.oasis.opendocument.text-masterodm
application/vnd.oasis.opendocument.text-templateott
application/vnd.oasis.opendocument.text-weboth
# application/vnd.obn
# application/vnd.oftn.l10n+json
# application/vnd.oipf.contentaccessdownload+xml
# application/vnd.oipf.contentaccessstreaming+xml
# application/vnd.oipf.cspg-hexbinary
# application/vnd.oipf.dae.svg+xml
# application/vnd.oipf.dae.xhtml+xml
# application/vnd.oipf.mippvcontrolmessage+xml
# application/vnd.oipf.pae.gem
# application/vnd.oipf.spdiscovery+xml
# application/vnd.oipf.spdlist+xml
# application/vnd.oipf.ueprofile+xml
# application/vnd.oipf.userprofile+xml
application/vnd.olpc-sugarx0
# application/vnd.oma-scws-config
# application/vnd.oma-scws-http-request
# application/vnd.oma-scws-http-response
# application/vnd.oma.bcast.associated-procedure-parameter+xml
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# application/vnd.openxmlformats-officedocument.theme+xml
# application/vnd.openxmlformats-officedocument.themeoverride+xml
# application/vnd.openxmlformats-officedocument.vmldrawing
# application/vnd.openxmlformats-officedocument.wordprocessingml.comments+xml
application/vnd.openxmlformats-officedocument.wordprocessingml.document
docx
# application/vnd.openxmlformats-officedocument.wordprocessingml.document.glossary+xml
# application/vnd.openxmlformats-officedocument.wordprocessingml.document.main+xml
# application/vnd.openxmlformats-officedocument.wordprocessingml.endnotes+xml
# application/vnd.openxmlformats-officedocument.wordprocessingml.fonttable+xml
# application/vnd.openxmlformats-officedocument.wordprocessingml.footnotes+xml
# application/vnd.openxmlformats-officedocument.wordprocessingml.numbering+xml
# application/vnd.openxmlformats-officedocument.wordprocessingml.styles+xml
application/vnd.openxmlformats-officedocument.wordprocessingml.template
dotx
# application/vnd.openxmlformats-officedocument.wordprocessingml.template.main+xml
# application/vnd.openxmlformats-officedocument.wordprocessingml.websettings+xml
# application/vnd.openxmlformats-package.core-properties+xml
# application/vnd.openxmlformats-package.digital-signature-xmlsignature+xml
# application/vnd.openxmlformats-package.relationships+xml
# application/vnd.oracle.resource+json
# application/vnd.orange.indata
# application/vnd.osa.netdeploy
application/vnd.osgeo.mapguide.packagemgp
# application/vnd.osgi.bundle
application/vnd.osgi.dpdp
application/vnd.osgi.subsystemesa
# application/vnd.otps.ct-kip+xml
# application/vnd.oxli.countgraph
# application/vnd.pagerduty+json
application/vnd.palmpdb pqa oprc
# application/vnd.pamply
# application/vnd.paos.xml
application/vnd.pawafilepaw
# application/vnd.pcos
application/vnd.pg.formatstr
application/vnd.pg.osaslie6
# application/vnd.piaccess.application-licence
application/vnd.picsel		efif
application/vnd.pmi.widget		wg
# application/vnd.poc.group-advertisement+xml
application/vnd.pocketlearnplf
application/vnd.powerbuilder6pbd
# application/vnd.powerbuilder6-s
# application/vnd.powerbuilder7
# application/vnd.powerbuilder7-s
# application/vnd.powerbuilder75
# application/vnd.powerbuilder75-s
application/vnd.sun.xml.writer.template
text
application/vnd.sus-calendar
text
application/vnd.svd
text
application/vnd.swiftview-ics
text
application/vnd.symbian.install
text
application/vnd.syncml+xml
text
application/vnd.syncml.dm+wbxml
text
application/vnd.syncml.dm+xml
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application/vnd.syncml.dm.notification
text
application/vnd.syncml.dmddf+wbxml
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application/vnd.syncml.dmddf+xml
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application/vnd.syncml.dmtnds+wbxml
text
application/vnd.syncml.dmtnds+xml
text
application/vnd.syncml.ds.notification
text
application/vnd.tao.intent-module-archive
text
application/vnd.tcpdump.pcap
text
application/vnd.trid.tpt
text
application/vnd.triscape.mxs
text
application/vnd.trueapp
text
application/vnd.ufdl
text
application/vnd.uiq.theme
text
application/vnd.unity
text
application/vnd.uoml+xml
text
application/vnd.uplanet.alert
text
application/vnd.uplanet.alert-wbxml
text
application/vnd.uplanet.bearer-choice
text
application/vnd.uplanet.bearer-choice-wbxml
text
application/vnd.uplanet.cacheop
text
application/vnd.uplanet.cacheop-wbxml
text
application/vnd.uplanet.channel
text
application/vnd.uplanet.channel-wbxml
text
application/vnd.uplanet.list
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application/vnd.uplanet.list-wbxml
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application/vnd.uplanet.listcmd
text
application/vnd.uplanet.listcmd-wbxml
text
application/vnd.uplanet.signal
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application/vnd.uri-map
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application/vnd.valve.source.material
text
application/vnd.vcx
text
application/vnd.vd-study
text
application/vnd.vectorworks
text
application/vnd.vel+json
text
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5 3800

application/x-pkcs7-certificates p7b spc
application/x-pkcs7-certificate pp7r
application/x-rar-compressed
application/x-research-info-systems
application/x-shsh
application/x-shar
application/x-sh
application/x-shockwave-flash swf
application/x-silverlight-app xap
application/x-sql
application/x-stuffit
application/x-stuffitx
application/x-subrip
text
application/x-t3vm-image t3
application/x-tads
application/x-tar
application/x-tcl
application/x-tcl
application/x-tclex
text
application/x-tex-tfm
application/x-texinfo
application/x-tgif
application/x-tgif
application/x-ustar
application/x-x509-ca-cert
cert
application/x-xfig
application/x-xmll+xml
application/x-xpinstall
application/x-xz
application/x-zmachine z1 z2 z3 z4 z5 z6 z7 z8
application/x-zmachine
application/x-zmachine
application/xhtml+xml xhtml xht
application/xhtml-voice+xml
application/xml
application/xml-dtd
dtd
application/xml-external-parsed-entity
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5 3801
# audio/evrcnw0
# audio/evrcnw1
# audio/evrcwb
# audio/evrcwb0
# audio/evrcwb1
# audio/evs
# audio/example
# audio/fwdred
# audio/g711-0
# audio/g719
# audio/g722
# audio/g7221
# audio/g723
# audio/g726-16
# audio/g726-24
# audio/g726-32
# audio/g726-40
# audio/g728
# audio/g729
# audio/g7291
# audio/g729d
# audio/g729e
# audio/gsm
# audio/gsm-efr
# audio/gsm-hr-08
# audio/ilbc
# audio/ip-mr_v2.5
# audio/issac
# audio/l16
# audio/l20
# audio/l24
# audio/l8
# audio/lpc
audio/midimid midi kar rmi
# audio/mobile-xmf
audio/mp4m4a mp4a
# audio/mp4a-latm
# audio/mpa
# audio/mpa-robust
audio/mpegmpga mp2 mp2a mp3 m2a m3a
# audio/mpeg4-generic
# audio/musepack
audio/oggoga ogg spx
# audio/opus
# audio/parityfec
# audio/pcma
# audio/pcma-wb
# audio/pcm
# audio/pcmu-wb
# audio/prs.sid
# audio/qcelp
# audio/raptorfec
# audio/red
# audio/rtp-enc-aescm128
# audio/rtp-midi
# audio/rtploopback
# audio/rtx
audio/s3ms3m
audio/silksil
# audio/smv
# audio/smv-qcp
# audio/smv0
# audio/sp-midi
# audio/speex
# audio/t140c
# audio/t38
# audio/telephone-event
# audio/tone
# audio/uemclip
# audio/ulpfec
# audio/vdvi
# audio/vmr-wb
# audio/vnd.3gpp.iufp
# audio/vnd.4sb
# audio/vnd.audiokoz
# audio/vnd.celp
# audio/vnd.cisco.nse
# audio/vnd.cmlres.radio-events
# audio/vnd.cns.anp1
# audio/vnd.cns.inf1
audio/vnd.dece.audiouva uvva
audio/vnd.digital-windseol
# audio/vnd.dlna.adts
# audio/vnd.dolby.heaac.1
# audio/vnd.dolby.heaac.2
# audio/vnd.dolby.mlp
# audio/vnd.dolby.mps
# audio/vnd.dolby.pl2
# audio/vnd.dolby.pl2x
# audio/vnd.dolby.pl2z
# audio/vnd.dolby.pulse.1
daudio/vnd.dradra
audio/vnd.dtsdts
audio/vnd.dts.hdtsdtsd
# audio/vnd.dvb.file
# audio/vnd.everad.plj
image/x-cmxcmx
image/x-freehandfh ffc fh4 fh5 fh7
image/x-iconico
image/x-mrsid-imagesid
image/x-pcxpcx
image/x-pictpic pct
image/x-portable-anymappnm
image/x-portable-bitmappbm
image/x-portable-graymappgm
image/x-portable-pixmapppm
image/x-rgrgb
image/x-tgatga
image/x-xbitmapxbm
image/x-xpixmapxpm
image/x-xwindowdumpxwd
# message/cpim
# message/delivery-status
# message/disposition-notification
# message/example
# message/external-body
# message/feedback-report
# message/global
# message/global-delivery-status
# message/global-disposition-notification
# message/global-headers
# message/http
# message/imdn+xml
# message/news
# message/partial
message/rfc822eml mime
# message/s-http
# message/sip
# message/sipfrag
# message/tracking-status
# message/vnd.si.simp
# message/vnd.wfa.wsc
# model/example
# model/gltf+json
model/igesigs iges
model/meshmsh mesh silo
model/vnd.collada+xmlidae
model/vnd.dwfdfwf
# model/vnd.flatland.3dml
model/vnd.gdldgl
# model/vnd.gs-gdl
# model/vnd.gs.gdl
model/vnd.gtwgtw
# model/vnd.moml+xml
model/vnd.mts
# model/vnd.opengex
# model/vnd.parasolid.transmit.binary
# model/vnd.parasolid.transmit.text
# model/vnd.rosette.annotated-data-model
# model/vnd.valve.source.compiled-map
model/vnd.vtu
model/vrml
model/x3d+binary
# model/x3d+fastinfoset
model/x3d+vrml
model/x3d+xml
# model/x3d-vrml
# multipart/alternative
# multipart/appledouble
# multipart/byteranges
# multipart/digest
# multipart/encrypted
# multipart/example
# multipart/form-data
# multipart/header-set
# multipart/mixed
# multipart/parallel
# multipart/related
# multipart/report
# multipart/signed
# multipart/voice-message
# multipart/x-mixed-replace
# text/1d-interleaved-parityfec
text/cache-manifest
text/css
# text/csv-schema
# text/directory
# text/dns
# text/ecmascript
# text/encaprtp
# text/enriched
# text/example
# text/fwdred
# text/grammar-ref-list
text/html
# text/javascript
# text/jcr-cnd
# text/markdown
# text/mizar
text/n3
# video/vp8
video/webmwebm
video/x-f4vf4v
video/x-flifli
video/x-flvlv
video/x-m4vm4v
video/x-matroskamkv mk3d mks
video/x-mngmng
video/x-ms-asfasf asx
video/x-ms-vobvob
video/x-ms-wmwm
video/x-ms-wmvwvmv
video/x-ms-wmxwmx
video/x-ms-wvwvwx
video/x-msvideoavi
video/x-sgi-moviemovie
video/x-smvsmv
x-conference/x-cooltalkice

Found in path(s):
* /opt/cola/permits/113588219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/http/mime.types
No license file was found, but licenses were detected in source scan.

/*
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 * 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/113588219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/http/server/reactive/ReactorServerHttpRequest.java
* /opt/cola/permits/113588219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/http/server/reactive/DefaultServerHttpRequestBuilder.java
* /opt/cola/permits/113588219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/http/server/reactive/DefaultServerHttpRequestBuilder.java
* /opt/cola/permits/113588219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/http/server/reactive/DefaultServerHttpRequestBuilder.java
* /opt/cola/permits/113588219_1613626164.16/0/spring-web-5-2-8-release-sources-1.jar/org/springframework/http/server/reactive/DefaultServerHttpRequestBuilder.java
jar/org/springframework/remoting/httpinvoker/AbstractHttpInvokerRequestExecutor.java
  * /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/server/adapter/WebHttpHandlerBuilder.java
  * /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/http/codec/json/Jackson2JsonDecoder.java
  * /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/accept/PathExtensionContentNegotiationStrategy.java
  * /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/server/MediaTypeNotSupportedStatusException.java
  * /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/http/client/reactive/ReactorClientHttpRequest.java
  * /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/context/request/WebRequest.java
  * /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/http/client/support/InterceptingHttpAccessor.java
  * /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/server/session/DefaultWebSessionManager.java
  * /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/cors/reactive/UrlBasedCorsConfigurationSource.java
  * /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/util/HierarchicalUriComponents.java
  * /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/server/adapter/WebHttpHandlerBuilder.java
  * /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/web/client/RestClientException.java
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* /opt/cola/permits/1135888219_1613626164.16/0/spring-web-5-2-8-release-sources-1-jar/org/springframework/http/converter/HttpMessageNotWritableException.java
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1.324 activation-api 1.1

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**1.331 json-c 0.12**

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1.332 e2fsprogs 1.44.5 1+deb10u3

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were written by Theodore Ts'o <tytso@mit.edu> and Remy Card
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--- tdbsa/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 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/

From the original distribution:

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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) $(BSD_LIB) \n$(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB) \n@-$(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:
tsx-11.mit.edu:/pub/linux/packages/ext2fs/

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Gadi Oxman, August 1995

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1.334 attr 2.4.48 4

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public static final String build_time="$BUILD_TIME$";
}

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1.337 lz4 1.9.2-2ubuntu0.20.04.1

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Upstream-Name: lz4
Source: https://github.com/Cyan4973/lz4

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1.338 pcre2 10.34-7

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THE BASIC LIBRARY FUNCTIONS

---------------------------------

Written by: Philip Hazel
Email local part: ph10
Email domain: cam.ac.uk

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1.339 jctools-core 3.0.0
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    </execution>
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</plugin>

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      <additionalOption>-Xdoclint:none</additionalOption>
    </additionalOptions>
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        <goal>jar</goal>
      </goals>
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  </executions>
</plugin>

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<java.test.version>1.8</java.test.version>

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<hamcrest.version>1.3</hamcrest.version>
<junit.version>4.12</junit.version>
<guava-testlib.version>21.0</guava-testlib.version>
</properties>
</project>

Found in path(s):
* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources-jar/META-INF/maven/org.jctools/jctools-core/pom.xml
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* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources-jar/org/jctools/util/UnsafeJvmInfo.java
* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources-jar/org/jctools/queues/atomic/MpscAtomicArrayQueue.java
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* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources-jar/org/jctools/queues/SpscGrowableArrayQueue.java
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* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources-jar/org/jctools/maps/NonBlockingIdentityHashMap.java
* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources-jar/org/jctools/queues/MpscGrowableArrayQueue.java
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* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources-jar/org/jctools/queues/QueueFactory.java
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Written by Adam Twiss (adam@zeus.co.uk). March 1996

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        text-utils/line.c
Copyright: n/a
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Files: login-utils/vipw.c
        misc-utils/cal.c
        misc-utils/kill.c
        misc-utils/logger.c
        misc-utils/look.c
        misc-utils/whereis.c
        sys-utils/renice.c
        term-utils/mesg.c
        term-utils/script.c
        term-utils/ttynmsg.c
        term-utils/wall.c
        term-utils/write.c
        text-utils/col.c
        text-utils/colcrt.c
        text-utils/colrm.c
        text-utils/column.c
        text-utils/hexdump.c
        text-utils/hexdump.h
        text-utils/hexdump-conv.c
        text-utils/hexdump-display.c
        text-utils/hexdump-parse.c
        text-utils/rev.c
        text-utils/ul.c
        The Regents of the University of California
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        2014 Karel Zak <kzak@redhat.com>
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Copyright: 1996, 2003 Rickard E. Faith (faith@acm.org)
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Files: sys-utils/flock.c
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Files: login-utils/last-deprecated.c
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Files: login-utils/login.c
2011 Karel Zak <kzak@redhat.com>
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Files: login-utils/logindefs.c
Copyright: 2003, 2004, 2005 Thorsten Kukuk
License: BSD-3-clause

Files: libuuid/*
  libuuid/src/*
  libuuid/man/*
1999 Andreas Dilger (adilger@enel.ucalgary.ca)
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Files: lib/procutils.c
  include/xalloc.h
Copyright: 2010, 2011 Davidlohr Bueso <dave@gnu.org>
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Files: */colors.*
Copyright: 2012 Ondrej Oprała <ooprala@redhat.com>
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Files: login-utils/setpwnam.h
  login-utils/setpwnam.c
Copyright: 1994 Martin Schulze <joey@infodrom.north.de>
1994 Salvatore Valente <svalente@mit.edu>
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Files: libfdisk/*
  libfdisk/src/*
Copyright: 2007-2013 Karel Zak <kzak@redhat.com>
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Files: lib/cpuset.c
  */match.*
  lib/canonicalize.c
  include/at.h
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Files: */readutmp.*
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Files: */timeutils.*
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  libblkid/src/*
  libblkid/samples/*
  libblkid/src/partitions/*
  libblkid/src/superblocks/*
  libblkid/src/topology/*
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    lib/randutils.c
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Copyright: Guy Maor <maor@debian.org>
    Sean 'Shaleh' Perry <shaleh@debian.org>
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1.349 @tensorflow/tfjs-backend-wasm 3.11.0

1.349.1 Available under license:

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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, 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.typedArrayFromHeap(t), shape: t.shape};
    });

    // Concat 2d tensors along axis=1.
    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);
    const finalOutVal = outVals.map(input => {
      return backend.typedArrayFromHeap(input); // for (let b = 0; b <

    outputData = backend.dataIdMap.get(outDataId);
    outData.stringBytes = backend_util.fromStringArrayToUint8(outVals);
    inputs2D.forEach(t => backend.disposeData(t.dataId));
    return out;
  }

  const out = backend.makeOutput(outShape, inputs[0].dtype);
  const outVals = backend.typedArrayFromHeap(out);

  return out;
}

/*@
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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.typedArrayFromHeap(t), shape: t.shape};
    });

    // Concat 2d tensors along axis=1.
    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);
    const finalOutVal = outVals.map(input => {
      return backend.typedArrayFromHeap(input); // for (let b = 0; b <

  outputData = backend.dataIdMap.get(outDataId);
    outData.stringBytes = backend_util.fromStringArrayToUint8(outVals);
    inputs2D.forEach(t => backend.disposeData(t.dataId));
    return out;
  }

  const out = backend.makeOutput(outShape, inputs[0].dtype);
  const outVals = backend.typedArrayFromHeap(out);

  return out;
}
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;  
  }
}

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

Found in path(s):
* /opt/cola/permits/1234600203_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, ['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 cRank = condition.shape.length;
  const tRank = t.shape.length;

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

  wasmSelect(conditionId, tId, eId, offset, util.outId);
const selectConfig: KernelConfig = {
  kernelName: Select,
  backendName: 'wasm',
  kernelFunc: select as {}
};

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import * as tf from '@tensorflow/tfjs-core';
import {registerBackend, removeBackend, test_util, util} from '@tensorflow/tfjs-core';
// tslint:disable-next-line:no-imports-from-dist
import {ALL_ENVS, BROWSER_ENVS, describeWithFlags} from '@tensorflow/tfjs-core/dist/jasmine_util';

import {init, resetWasmPath} from './backend_wasm';
import {BackendWasm, setWasmPath, setWasmPaths} from './index';

/**
 * Tests specific to the wasm backend. The name of these tests must start with `wasm` so that they are always included in the test runner. See `env.specFilter` in `setup_test.ts` for details.
 */
describeWithFlags('wasm read/write', ALL_ENVS, () => {
  it('write and read values', async () => {
    const x = tf.tensor1d([1, 2, 3]);
    test_util.expectArraysClose([1, 2, 3], await x.data());
  });

  it('allocate repetitively and confirm reuse of heap space', () => {
    const backend = tf.backend() as BackendWasm;
    const size = 100;
    // Allocate for the first time, record the memory offset and dispose.
    const t1 = tf.zeros([size]);
    const memOffset1 = backend.getMemoryOffset(t1.dataId);
    t1.dispose();

    // Allocate again and make sure the offset is the same (memory was reused).
    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);
  });
});

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

    // Silences backend registration warnings.
    spyOn(console, 'warn');
    spyOn(console, 'log');
  });

  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 wasmPathPrefix: string;
    const realFetch = fetch;
    spyOn(self, 'fetch').and.callFake((path: string) => {
      wasmPathPrefix = path;
      return realFetch(path);
    });
    expect(await tf.setBackend('wasm-test')).toBe(false);
    expect(wasmPathPrefix).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 = fetch;
    spyOn(self, 'fetch').and.callFake((path: string) => {
      wasmPathPrefix = path;
      return realFetch(path);
    });
    expect(await tf.setBackend('wasm-test')).toBe(false);
    expect(wasmPathPrefix).toContain('invalid/path');
  });

  it('backend init works when the path is valid and use platform fetch', async () => {
    const usePlatformFetch = true;
    setWasmPaths('validPrefix', usePlatformFetch);
    let wasmPath: string;
    const realFetch = util.fetch;
    spyOn(self, 'fetch').and.callFake((path: string) => {
      wasmPath = path;
      return realFetch(path);
    });
    expect(await tf.setBackend('wasm-test')).toBe(true);
    expect(wasmPath).toContain('validPrefix');
  });
});

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

  const {shape, dtype, isVariable, id} = args;

  // Check if the shape is valid
  if (!isValidShape(shape)) {
    throw new Error('Invalid shape for Fill operation');
  }

  // Check if the data type is valid
  if (!isValidDataType(dtype)) {
    throw new Error('Invalid data type for Fill operation');
  }

  // Check if the array is a tensor
  if (isTensor(args.value)) {
    // Set the value
    context.set(args.value, shape, dtype, isVariable, id);
  } else {
    // Create a new tensor with the provided shape and data type
    const tensor = tf.tensor(shape, dtype);
    context.set(tensor, shape, dtype, isVariable, id);
  }
}

private function isValidShape(shape: Tensor1D): boolean {
  // Check if the shape is valid
  return isValidShape(shape);
}

private function isValidDataType(dtype: string): boolean {
  // Check if the data type is valid
  return isValidDataType(dtype);
}

private function isTensor(value: any): boolean {
  // Check if the value is a tensor
  return isTensor(value);
}
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 {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, 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);
  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
};

*/

// 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 shared functionality from tfjs-backend-cpu without triggering\n side effects.\n\nimport {concatImpl as concatImplCPU} from '@tensorflow/tfjs-backend-cpu/dist/shared';\nimport {sliceImpl as sliceImplCPU} from '@tensorflow/tfjs-backend-cpu/dist/shared';\nimport {rangeImpl as rangeImplCPU} from '@tensorflow/tfjs-backend-cpu/dist/shared';\n
export {concatImplCPU, rangeImplCPU, sliceImplCPU};`
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
  
);
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.makeOutput(convInfo.outShape, 'float32');
const outId = backend.dataIdMap.get(out.dataId).id;
const preluActivationWeightsId = preluActivationWeights == null ?
  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, null);

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

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 */

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

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* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Identity.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Sqrt.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/NonMaxSuppressionV4.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/ZerosLike.js
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* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernel_utils/shared.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Conv2DBackpropInput.js
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* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/register_all_kernels.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Fill.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Softmax.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/NotEqual.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/NotEqual.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/wasm-out/tfjs-backend-wasm-threaded-simd.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/NonMaxSuppressionV4.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Equal.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Pack.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Equal.js
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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,
Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backendwasm/dist/kernels/Equal.js.map
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","sourcesContent":["/**\n * @license\n * Copyright 2021 Google LLC. All Rights Reserved.\n * Licensed under
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=============================================================================\n
*/\nimport {KernelConfig, Ceil} from '@tensorflow/tfjs-core';\n\nimport {createUnaryKernelConfig} from
'./unary_kernel';\n\nexport const ceilConfig: KernelConfig = createUnaryKernelConfig(Ceil);\n"]}
Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backendwasm/dist/kernels/Ceil.js.map
No license file was found, but licenses were detected in source scan.
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E,KAAK;CACjB,CAAC","sourcesContent":["/**\n * @license\n * Copyright 2020 Google LLC. All Rights

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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', '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}, 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
};

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


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
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 };}
```
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, xChannelStride: 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', //
    xChannelStride 'number', // yBatchStride 'number', // yRowStride 'number', // yColStride 'number', //
    yChannelStride 'number', // outId 'number', // yChannelStride 'number', // outId 'number',
  ]);

  setup(backend.wasm);
}

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[1] : dyStrides[2];
  const yColStride = isChannelsLast ? dyStrides[2] : 1;
  const yChannelStride = isChannelsLast ? 1 : dyStrides[1];
  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;
  const wasmConv2DBackpropInput = backend.wasm.cwrap(Conv2DBackpropInput, null, [
    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 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);}

export const conv2DBackpropInputConfig: KernelConfig = {
  kernelName: Conv2DBackpropInput,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: conv2DBackpropInput as {} as KernelFunc
};
```javascript
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);
  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
};
```

Found in path(s):

* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-
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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/Cosh.ts
 * /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Transform.ts
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 * /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Elu.js
 * /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Cosh.ts
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', 'array', 'number', 'number', 'array', 'number', 'number', 'number', 'number', 'array', 'number', 'number', 'number', 'number', 'number']);
}

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 `' + bias.dataId + `' with 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('FusableActivation only supports rank-1 bias but got `' + activation + `' with rank `' + biasData.shape.length + '`.');
  }

  const biasData = backend.dataIdMap.get(bias.dataId);
  if (biasData.shape.length >= 1) {
    const biasData = backend.dataIdMap.get(bias.dataId);
    const fusedActivation = FusableActivation[activation as {} as keyof typeof FusableActivation];
    if (fusedActivation == null) {
      throw new Error('$' + activation + ' activation not yet supported for non-floating point tensors not yet supported.');
    }
  }

  wasmFusedMatMul(aId, aShape, aShapeSize, bId, bShape, bShapeSize, transposeA, transposeB, activation, biasId, preluActivationWeightsId, leakyreluAlpha, outId);
}
FusedConv2D ` +
        `in the wasm backend.`);
  }

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

 */

// 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();

// Register the wasm backend.

if (process.env.SOURCE_URL) {
  return require(process.env.SOURCE_URL);
}

module.exports = {setTestEnvs, runnerConfiguration: {}};
```javascript
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 out = backend.makeOutput(outShape, input.dtype);
  if (reduceSize > 0) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

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

  return out;
}
```
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 */

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

import {createUnaryKernelConfig} from './unary_kernel';
export const tanhConfig: KernelConfig = createUnaryKernelConfig(Tanh);

/**
 * @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/kernels/Tanh.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',  // 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 imagesId = imagesData.id;
  const boxesId = backend.dataIdMap.get(boxes.dataId).id;
  const boxIndId = backend.dataIdMap.get(boxInd.dataId).id;

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

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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* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/CropAndResize.js.map

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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} = inputs;
  const boxesId =

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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,
};
AAG, OAAO, CAAC, MAAM, EAAE, EAAE, CAAC, EAAE, QACvC, IAAI, SAAS, GAAG, CAAC, CAAC, CAAC, CAAC, QA CNb, KAAK, IAAI, CAAC, GAAG, CAAC, EAAE, CAAC, GAAG, OAAO, CAAC, MAAM, EAAE, EAAE, CAAC, EAAE, YA CVc, IAAI, OAAO, CAAC, CAAC, IAAI, CAAC, gBACf, CAAC, SAAS, KAAK, CAAC, CAAC, IAAI, OAAO, CAAC, SAAS, CAAC, GAAG, OAAO, CAAC, CAAC, CAAC, GAAG, EAAE, gBACzD, SAAS, GAAG, CAAC, CAAC, CAAC, aACr, SACF, QACD, OAAO, CAAC, SAAS, CAAC, GAAG, CAAC, CAAC, KACxB, IACD, OAAO, CAAC, QAQQ, EAAE, OAAO, CAAC, CAAC, AAC7B, CAAC, AEDE, MAAM, CAAC, MAAM, EAAe, GAAlB, IAC3c, UAVU, EAAE, SAAS, IACGr, WAAW, MAAI, IACnB, UAVU, EAAE, SAAS; IAC6B, IAC3c, SAAS, EAAE, KAAK, CAAC, CAAC, CAAC "Sources Content": [/*\n * @license\n * Copyright 2019 Google LLC. All Rights Reserved.\n * Unless required by applicable law or agreed to in writing, software\n * distributed under the License is distributed\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 License.\n * */]

import {KernelConfig, Func, 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 /*\n * void*/, [ /*\n * 'number',  // xId\n * 'array',   // x.shape\n * 'number',  // x.shape.length\n * 'number',  // outId\n * 'array',   // perm\n * 'number',  // perm.length\n */]);
}

export function transpose(args: {inputs: TransposeInputs, backend: BackendWasm, attrs: TransposeAttrs})
{
  const {inputs, backend, attrs} = args;
  const reducedShape = removeOneSizeDims(inputs.x.shape, attrs.perm);
  if (reducedShape.length === 0) {
    return identity(args);
  }
  const outShape = computeOutShape(inputs.x.shape, attrs.perm);
  const xId = backend.dataIdMap.get(inputs.x.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;
  const permBytes = new Uint8Array(attrs.perm.buffer);
  const xShapeBytes = new Uint8Array(new Int32Array(inputs.x.shape).buffer);
  wasmTranspose(xId, xShapeBytes, xShape.length, CppDType[inputs.x.dtype], outId, permBytes, perm.length);
  return out;
}

export function computeOutShape(shape: number[], perm: number[]): number[] {
  const outShape = new number[shape.length];
  for (let i = 0; i < shape.length; i++) {
    if (perm[i] !== i) {
      if (permIsNoOp) {
        cloned = identity({inputs, backend});
        cloned.shape = outShape;
        return cloned;
      }
    }
    const cloned = identity({inputs, backend});
    cloned.shape = outShape;
    return cloned;
  }
  return 
}

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: (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 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 {}
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 *
 *=============================================================================

*/

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

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

let wasmDepthToSpace:
```
```
```javascript
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']);
  backend.wasm.export_function(depthToSpace(args: { backend: BackendWasm, inputs: DepthToSpaceInputs, attrs: DepthToSpaceAttrs }));
}

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];
  let 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 xStrides = 
      new Uint8Array(new Int32Array(util.computeStrides(x.shape)).buffer);
  const outputShapeBytes = new Uint8Array(new Int32Array(outputShape).buffer);
  const outStrides = new Uint8Array(new Int32Array(outputShape).buffer);
  const outId = backend.dataIdMap.get(out.dataId).id;

  const channelsLast = dataFormat === 'NHWC' ? 1 : 0;
  backend.wasmDepthToSpace(xId, blockSize, channelsLast,
    xStrides, x.shape.length - 1, outputShapeBytes, outputStrides, outputShape.length, outId);

  return out;
}

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

Found in path(s):

* /opt/cola/permits/1234600203_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
}

// 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,
     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'   // 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 = activation;

  if (fusedActivation == null) {
    throw new Error(`_FusedMatMul for non-float32 tensors not yet supported for

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```
FusedConv2D ` +
        `in the wasm backend.`);
  }

  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);

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

  wasmFusedMatMul(out, 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
          } as KernelConfig;
}

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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 /* void */, [
      'number',  // a_id
      'number',  // a_shape
      'number',  // a_shape_len
      'number',  // b_id
      'number',  // b_shape
      'number',  // b_shape_len
      'number',  // dtype
      'number',  // out_id
    ]);
  }

  function kernelFunc(args: {backend: BackendWasm, inputs: BinaryInputs}):
  TensorInfo {
    const {backend, inputs: {x, y}} = args;
    const aId = backend.dataIdMap.get(x.dataId).id;
    const aShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
    const bId = backend.dataIdMap.get(y.dataId).id;
    const bShapeBytes = new Uint8Array(new Int32Array(y.shape).buffer);

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

    wasmFunc(aId, aShapeBytes, aShapeLen, bId, bShapeBytes, bShapeLen, dtype,
             util.sizeFromShape(x.shape), util.sizeFromShape(y.shape),
             supportsFullBroadcast, util.sizeFromShape(x.shape),
             util.sizeFromShape(y.shape), util.sizeFromShape(out.shape), util.sizeFromShape(out.shape),
             outId);
    return out;
  }

  return {kernelName, backendName: 'wasm',
          setupFunc, kernelFunc: fusedBatchMatMul as {} as KernelFunc
          } as KernelConfig;
}
function setupFunc(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(kernelName, null /* void */
    , [/* function */'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 out = backend.makeOutput(outId, shape);
  const aShapeBytes = backend_util.assertAndGetBroadcastShape(a.shape, shape);
  const bShapeBytes = backend_util.assertAndGetBroadcastShape(b.shape, shape);
  const outId = backend.dataIdMap.get(out.dataId).id;

  if (supportsFullBroadcast && a.dtype === 'float32') {
    kernelFunc();
    return out;
  } else {
    throw new Error('Broadcasting along outer dims is not yet supported for ' +
      outputType + ' ' + dtype + ' ' + kernelName);
  }
}

function makeOutput(inputs: [TensorInfo], backend: BackendWasm): TensorInfo {
  return backend.makeOutput(inputs.map(x => backend.dataIdMap.get(x.dataId).id).id,
    shape, backend.dataIdMap.get(out.dataId).id, outId);
}

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 {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: 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 patterns.
  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);
  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, x.dtype.length, outId, permBytes.length, permBytes);
  return out;
}

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

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

export const transposeConfig: KernelConfig = {
  kernelName: Transpose,
  backendName: 'wasm',
  kernelFunc: transpose as {} as KernelFunc,
};
`wasm`\nkernelFunc: transpose as {} as KernelFunc\nsetupFunc: setup\n);\n","/**\n * @license
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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, 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 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 const out = backend.makeOutput(outShape, x.dtype);
  if (util.sizeFromShape(input.shape) !== 0) {
    const const inputId = backend.dataIdMap.get(transposed.dataId).id;
    const const inputId = backend.dataIdMap.get(transposed.dataId).id;
    wasmAll(inputId, reduceSize, outId);
  }
  backend.disposeData(transposed.dataId);

  if (keepDims) {
    out.shape = newShape;
  }

  return out;
}

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

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

```typescript
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) {
    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
};

```
CppDType[\input.dtype\], outerSize, innerSize, outId);\n
if (\inputWasTransposed\) {
    // dispose of the transposed tensor.
    backend.disposeData(\transposed.dataId\);\n}|\n} return out;\n\n\nexport const argMaxConfig: KernelConfig = {
    \kernelName\: ArgMax,\n    \backendName\: 'wasm',\n    \kernelFunc\: argmax as \}
    as KernelFunc;\n    \setupFunc\: setup();\n    \"*/\n
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 */

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

import {BackendWasm} from '../backend_wasm';\n
let wasmAvgPool: (\n    xId: number, batchSize: number, inputHeight: number, inputWidth: number,\n    filterHeight: number, filterWidth: number, padTop: number, padRight: number,\n    padBottom: number, padLeft: number, strideHeight: number, number,\n    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
    ]);\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, 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;

    if (convInfo.dataFormat !== 'channelsLast') {
        throw new Error('\n        wasm backend does not support dataFormat: \"' +
        \$\{convInfo.dataFormat\}'\). Please use \'channelsLast\'\);\n    }\n
    if (convInfo.dilationWidth !== 1 || convInfo.dilationHeight !== 1) {
        throw new Error('\n        wasm backend only supports average pooling with dilation = [1, 1], \"' +
        \$\{convInfo.dilationHeight\}' +
        \$\{convInfo.dilationWidth\}'\));\n    }\n
    const out = backend.makeOutput(convInfo.outShape, 'float32');\n
    const $shape = util.inferFromImplicitShape(convInfo.dataFormat === 'channelsLast' ? x.shape : x.shape[0], x.shape[1], x.shape[2], filterHeight, filterWidth, padTop, padRight, padBottom, padLeft, strideHeight, strideWidth, channels,\n    'number');\n
    if (convInfo.dataFormat !== \'channelsLast\') {\n        throw new Error('\n        wasm backend does not support dataFormat: \"' +
        \$\{convInfo.dataFormat\}'\);
    }\n
    const outId = backend.dataIdMap.get(out.dataId).id;

    const $shape = util.inferFromImplicitShape(convInfo.dataFormat === 'channelsLast' ? x.shape : x.shape[0], x.shape[1], x.shape[2], filterHeight, filterWidth, padTop, padRight, padBottom, padLeft, strideHeight, strideWidth, channels,\n    'number');\n
    const outId = backend.dataIdMap.get(out.dataId).id;

    return out;\n\n\nexport const argMaxConfig: KernelConfig = {
    \kernelName\: ArgMax,\n    \backendName\: 'wasm',\n    \kernelFunc\: argmax as \}
    as KernelFunc;\n    \setupFunc\: setup();\n    \"*/

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 */

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

import {BackendWasm} from '../backend_wasm';\n
export function reshape(
    args: {inputs: ReshapeInputs, backend: BackendWasm, attrs: ReshapeAttr}) {
    const {inputs, backend} = args;\n
    const x = inputs.x as Tensor4D;
    const xId = backend.dataIdMap.get(x.dataId).id;

    const $shape = util.inferFromImplicitShape(x.shape,\n    x.sizeFromShape(x.shape));\n
    const $shape = util.inferFromImplicitShape(x.shape,\n    x.sizeFromShape(x.shape));\n
    if (inputs[\x1b] =>
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};

// 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};

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};

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return {dataId: x.dataId, shape: $\{\$shape\}$, dtype: x.dtype};

new shape: $\{\$shape\}$, old shape: $\{x.shape\}$. New shape and old shape must have the same number of elements.

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return {dataId: x.dataId, shape: $\{\$shape\}$, dtype: x.dtype};

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return {dataId: x.dataId, shape: $\{\$shape\}$, dtype: x.dtype};

new shape: $\{\$shape\}$, old shape: $\{x.shape\}$. New shape and old shape must have the same number of elements.

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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};

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};

// 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};

new shape: $\{\$shape\}$, old shape: $\{x.shape\}$. New shape and old shape must have the same number of elements.
KernelConfig = {
  kernelName: BatchMatMul,
  backendName: `wasm`
};

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;
  });
}

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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;
}

sourceMappingURL=data:application/json;base64,eyJ2ZXJzaW9uIjozLCJmaWxlIjoiQ29uY2F0X2ltcGwuanMiLCJzdWIiOiJyZXNpemVyZW4xIiwicmVxdWVzdCI6IjIiXSwibmFtZSI6IiIiXCIpIiwibmFtZSI6IiIiXCIpIiwibW9kZXQiOiJub2luZyJ9,==
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
};
//
sourceMappingURL=data:application/json;base64,eyJ2ZXJzaW9uIjozLCJmaWxlIjoiU2xpY2UuanMiLCJzb3VyY2VudF9pZCIsInR5cGUiOiJwIiwiaGF0IjowLCJ0aWZpYyI6MCwid2lkdGg6IjIzMCwiZmlsbGUiOjQ5LCJicHBSZXRyIjoiMzI3NzE3Mjg3NzYxMzY1MjUzOTI2MzA4ODU2OSIsIm1vdzI6MCJdLCJzb3VyY2VudF9mdW5jdGlvbl90aWZpYyI6Ojg3LCJzb3VyY2VudF9mdW5jdGlvbl90aWZpYyI6OjUzLCJzdHV2dF9yZWFkIjoxLCJzdHV2dF9yYXNwIjoxLCJzdHV2dF9yYXNoIjoxLCJzdHV2dF9pZCI6MiwiaGF0ZCI6MiwiaXNzVGFnIjoyfQ==
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, begin_, size_);
  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]);
  } 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]);
  } 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 x = xVals.slice(xStride, xVals.length, 1);
    for (let i = 0; i < x.length; i++) {
      outVals.set(x.slice(i * xStride, i * xStride + xSize), outOffset);
      outOffset += xSize;
    }
  }

function slice3d(
    xVals: backend_util.TypedArray, xStrides[0], xStrides[1],
    outVals: backend_util.TypedArray, begin: [number, number, number],
    size: [number, number, number]): void {
    let outOffset = 0;
    const x = xVals.slice(xStrides[0], xVals.length, 1);
    for (let i = 0; i < x.length; i++) {
      outVals.set(x.slice(i * xStrides[0], i * xStrides[0] + xSize), outOffset);
      outOffset += xSize;
    }
  }

function slice4d(
    xVals: backend_util.TypedArray, xStrides[0], xStrides[1], xStrides[2],
    outVals: backend_util.TypedArray, begin: [number, number, number, number],
    size: [number, number, number, number]): void {
    let outOffset = 0;
    const x = xVals.slice(xStrides[0], xStrides[1], xVals.length, 1);
    for (let i = 0; i < x.length; i++) {
      outVals.set(x.slice(i * xStrides[0], i * xStrides[0] + xSize), outOffset);
      outOffset += xSize;
    }
  }

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number, number, number]): void {
  let outOffset = 0;
  const beginI = begin[0];
  const beginJ = begin[1];
  const beginK = begin[2];
  const endI = begin + size[0];
  const endJ = begin + size[1];
  const endK = begin + 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 {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}
  });

  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}, 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 result;
}

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);

import {ClipByValue, ClipByValueAttr, ClipByValueInputs, KernelConfig, KernelFunc} from

import {backend_util, Concat, ConcatAttr, ConcatInputs, KernelConfig, KernelFunc, util} from

import {backend_util, shared};

const identity = () => void 0;

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

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

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 reshaping
    // the result to have the proper shape.
    const inputs2D = inputs.map(t => {
        const shape = [1, util.sizeFromShape(t.shape[0]), t.shape[1]];
        return util.reshape(t, shape);
    });

    // // Keep only non-empty tensors (ignore tensors with 0 in their shape).
    const $inputs2D = inputs2D.filter(t => util.sizeFromShape(t.shape) > 0);

    if ($inputs2D.length === 1) {
        return identity({inputs: {x: $inputs2D[0]}, backend});
    }

    const out2D = backend.makeOutput(inputs2D[0].shape);
    const out = util.reshape(out2D, outShape);
    return out;
}

return out;

import {backend_util, shared};

const identity = () => void 0;

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

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

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 reshaping
    // the result to have the proper shape.
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        return util.reshape(t, shape);
    });

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    const $inputs2D = inputs2D.filter(t => util.sizeFromShape(t.shape) > 0);

    if ($inputs2D.length === 1) {
        return identity({inputs: {x: $inputs2D[0]}, backend});
    }

    const out2D = backend.makeOutput(inputs2D[0].shape);
    const out = util.reshape(out2D, outShape);
    return out;
}

return out;

import {backend_util, shared};

const identity = () => void 0;

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

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

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 reshaping
    // the result to have the proper shape.
    const inputs2D = inputs.map(t => {
        const shape = [1, util.sizeFromShape(t.shape[0]), t.shape[1]];
        return util.reshape(t, shape);
    });

    // // Keep only non-empty tensors (ignore tensors with 0 in their shape).
    const $inputs2D = inputs2D.filter(t => util.sizeFromShape(t.shape) > 0);

    if ($inputs2D.length === 1) {
        return identity({inputs: {x: $inputs2D[0]}, backend});
    }

    const out2D = backend.makeOutput(inputs2D[0].shape);
    const out = util.reshape(out2D, outShape);
    return out;
}

return out;
backend, attrs: {shape}) {
  const inputsValShapes = inputs2D.map(t => {
    return { vals: backend.readSync(t.dataId), shape: t.shape };
  });
  // Concat 2d tensors along axis=1.
  const outShape = inputs2D[0].shape;

  const simplyConcat = inputs2D[0].shape[0] === 1;
  const outVals = concatImplCPU(inputsValShapes, outShape, inputs[0].dtype, simplyConcat) as string[];

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

  const outData = backend.dataIdMap.get(out.dataId);

  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,
};
Conv2D does not support dataFormat: "\$\{convInfo.dataFormat\}". Please use 'channelsLast'.

```javascript
const out = backend.makeOutput(convInfo.outShape, 'float32');
const outId = backend.dataIdMap.get(out.dataId).id;
const waasmConv2d = 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: 'waasm',
  setupFunc: setup,
  kernelFunc: conv2d as {} as KernelFunc
};

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 */

import {backend_util, Conv2DBackpropInput, Conv2DBackpropInputAttrs, Conv2DBackpropInputFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

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

let waasmConv2DBackpropInput: (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, yBatchStride: number, yRowStride: number, yColStride: number) => void;

function setup(backend: BackendWasm): void {
  waasmConv2DBackpropInput = backend.wasm.cwrap(Conv2DBackpropInput, null, ['number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number'],
    dyId, filterId, batchSize, filterHeight, filterWidth, inHeight, inWidth, inChannels, outHeight, outWidth, outChannels, strideHeight, strideWidth, topPad, leftPad, fltS0, fltS1, fltS2, xBatchStride, yBatchStride, yRowStride, yColStride);
}

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 xChannelStride = util.computeStrides(convInfo.inShape); const dyStrides = util.computeStrides(dy.inShape); const fltS0, fltS1, fltS2 = util.computeStrides(filter.shape); const xBatchStride = dxStrides[0]; const xRowStride = isChannelsLast ? dxStrides[1] : dxStrides[2]; const xColStride = isChannelsLast ? xBatchStride : isChannelsLast ? dxStrides[2] : 1; const xChannelStride = isChannelsLast ? 1 : xBatchStride; const yBatchStride = dyStrides[0]; const yRowStride = isChannelsLast ? dyStrides[1] : dyStrides[2]; const yColStride = isChannelsLast ? yBatchStride : isChannelsLast ? dyStrides[2] : 1; const yChannelStride = isChannelsLast ? 1 : dyStrides[1];
```

```
inChannels, outHeight, outWidth, outChannels, strideHeight, strideWidth,
topPad, leftPad, f1tS0, f1tS1, f1tS2,
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';

export const cosConfig: KernelConfig = createUnaryKernelConfig(Cos);

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 */

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

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 {\n  bilinear = 0,
  nearest = 1\n};\n
let wasmCropAndResize: (\n    imagesId: number, boxesId: number, boxIndId: number, numBoxes:
    number,\n    imagesShape: Uint8Array, cropHeight: number, cropWidth: number,\n    method: number,\n    extrapolationValue: number, outputId: number) => void;\n
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'   // outputId
  ]);\n}

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);
  const imagesId = imagesData.id;
  const boxesId = imagesData.inputs[0].id;
  const boxIndId = imagesData.inputs[1].id;

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

  let imagesData = backend.dataIdMap.get(cast(image.dataId as number));
  imagesData = backend.dataIdMap.get(cast(image.dataId as number));

  const castedData = cast((image.dataId as number);
  const boxIndId = castedData.dataId.id;
  const boxIndId = castedData.dataId.id;
  const boxIndId = castedData.dataId.id;
  const boxIndId = castedData.dataId.id;
out = backend.makeOutput(outShape, 'float32');
const outId = backend.dataIdMap.get(out.dataId).id;
const imagesShapeBytes = new Uint8Array(new Int32Array(image.shape).buffer);
const 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 {backend_util, KernelConfig, Cusum, CusumAttrs, CusumInputs, 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
  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 finalDimId = permutedOutId;
  const permutedXId = backend.dataIdMap.get(permutedX.dataId).id;
  const permutedOutId = backend.dataIdMap.get(permutedOutId.dataId).id;
  const wasmCumsumId = backend.dataIdMap.get(permutedXId.dataId).id;
  const cumsumConfig = {
    kernelName: Cusum,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: cumsum as {} as KernelFunc,
  } as KernelConfig |
  out = transpose({inputs: {x: permutedOut}, attrs: {perm: undoPermutation, backend}});
  backend.disposeData(permutedOutId.dataId);
  return out;
}

export const cumsumConfig: KernelConfig = {
  kernelName: Cusum,
  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 (\n  wasmDepthToSpace = backend.wasm.cwrap(\n    DepthToSpace, null /*void*/, [\n      'number', // xId\n      'number', // blockSize\n      'number', // channelsLast\n      'array', // xStrides\n      'number', // xStridesLength 'array', // outputShape \n      'array', // outputStrides \n      'number', // outSize\n      // outId\n    ]);\n
  unexport function depthToSpace(args: {\n    backend: BackendWasm,\n    inputs: DepthToSpaceInputs,\n    attrs: DepthToSpaceAttrs\n  }): TensorFlowInfo {\n    const {backend, inputs, attrs} = args;\n    const x = inputs[\n
      const {blockSize, dataFormat} = attrs;\n      const batchSize = x.shape[0];\n      const inputHeight = (dataFormat === 'NHWC') ? x.shape[1] : x.shape[2];\n      const inputWidth = (dataFormat === 'NHWC') ? x.shape[2] : x.shape[3];\n      const constDepth = (dataFormat === 'NHWC') ? x.shape[3] : x.shape[1];\n      const outputHeight = inputHeight * blockSize;\n      const outputWidth = inputWidth * blockSize;\n      const constOutputShape = (dataFormat === 'NHWC') ? [batchSize, outputHeight, outputWidth, outputDepth] : [batchSize, outputDepth, outputHeight, outputWidth];\n
      const out = backend.makeOutput(outputShape, 'float32');\n      const xData = backend.dataIdMap.get(x.dataId);\n      const xId = xData.id;\n      const xStridesBytes = new Uint8Array(new Int32Array(\n        util.computeStrides(x.shape)).buffer);\n      const outputShapeBytes = new Uint8Array(new Int32Array(outputShape).buffer);\n      const outStridesBytes = new Uint8Array(new Int32Array(outputShape).buffer);\n
      const {channelsLast, xId, blockSize, xStridesBytes, x.shape.length - 1, outShapeBytes, outputShape, length, outId} = args;\n      const outputStrides = util.computeStrides(outputShape);\n      const outputShape = [\n        outputHeight, outputWidth, outputDepth, outputChannels.length];\n      const outputShapeBytes = new Uint8Array(new Int32Array(outputShape).buffer);\n
      const {blockSize, channelsLast} = attrs;\n      const outputDepth = outputShape[4];\n      const outputHeight = outputShape[3];\n      const outputWidth = outputShape[2];\n      const outputChannels = outputShape[1];\n      const outputHeight = outputShape[0];\n
      const inputHeight = x.shape[0];\n      const inputWidth = x.shape[1];\n      const inputDepth = x.shape[2];\n      const inputChannels = x.shape[3];\n
      const convInfo = backend_util.computeConv2DInfo(\n        (x as Tensor4D).shape, (filter as Tensor4D).shape,\n        strides, dilations, pad, dimRoundingMode);\n      const filterHeight = convInfo.filterHeight;\n      const filterWidth = convInfo.filterWidth;\n      const padTop =

---

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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,
};

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
};
number, inputWidth: number,\n  filterId: number, filterHeight: number, filterWidth: number,\n  biasId: number, padTop: number, padRight: number, padBottom: number,\n  padLeft: number, isSamePad: number, dilationHeight: number,\n  dilationWidth: number, strideHeight: number, strideWidth: number,\n  inChannels: number, outputChannels: number, activation: number,\n  preluActivationWeightsId: number, leakyreluAlpha: number,\n  outId: number) => \n    void;\n
function setup(backend: BackendWasm) {
  wasmFusedConv2d = backend.wasm.cwrap(FusedConv2D, null /* void */, [
    'number',  // xId
    'number',  // batchSize
    'number',  // xId
    'number',  // yId
    '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',  // inputHeight
    'number',  // inputWidth
    'number',  // outputHeight
    'number',  // outputWidth
    'number',  // dataFormat
    'number',  // leakyreluAlpha
    'number',  // outId
  ]);\n
function fusedConv2d(args: {
  inputs: FusedConv2DInputs,
  backend: BackendWasm,
  attrs: FusedConv2DAttrs\n}) {
  const {inputs, attrs, backend} = args;\n  const {x, filter, bias, preluActivationWeights} = inputs;\n  const {strides, pad, dilations, dataFormat, dimRoundingMode, activation, leakyreluAlpha} = attrs;\n  const convInfo = backend_util.computeConv2DInfo(x as Tensor4D).shape, (filter as Tensor4D).shape, strides, dilations, pad, dimRoundingMode;\n  const fusedConv2d = \n    FusableActivation[activation as {} as keyof typeof FusableActivation];\n  if (fusedConv2d == null) {
    throw new Error(\n      `${activation} activation not yet supported for FusedConv2D` +\n      ` in the wasm backend.`);
  }\n  const xId = backend.dataIdMap.get(x.dataId).id;\n  const filterId = backend.dataIdMap.get(filter.dataId).id;\n  const outputChannels = convInfo.outChannels;\n  const biasId = 0;\n  if (bias != null) {
    const biasData = backend.dataIdMap.get(bias.dataId);\n    if (biasData.shape.length !== 1) {
      throw new Error(\n        `FusedConv2D only supports rank-1 bias but got` +\n        ` rank ${biasData.shape.length}.`);
    }
    if (biasData.shape[0] !== outputChannels) {
      throw new Error(\n        `FusedConv2D bias shape (${biasData.shape}) does not` +\n        ` match the number of output channels`);
    }
    biasId = biasData.id;
  }
  const filterHeight = convInfo.filterHeight;\n  const filterWidth = convInfo.filterWidth;\n  const padTop = convInfo.padTop;\n  const padRight = convInfo.padRight;\n  const padBottom = convInfo.padBottom;\n  const padLeft = convInfo.padLeft;\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.pad.type === 'SAME' ? 1 : 0;\n  const batchSize = convInfo.batchSize;\n  const inHeight = convInfo.inHeight;\n  const inWidth = convInfo.inWidth;\n  const dataFormat = convInfo.dataFormat;\n  if (dataFormat !== 'NHWC') {
    throw new Error(\n      `wasm backend FusedConv2D does not support` +\n      ` dataFormat: '${dataFormat}'. Please use 'NHWC'.`);
  }
  const outId = backend.makeOutput(convInfo.outShape, 'float32');\n  const outId = backend.dataIdMap.get(outId);\n  const preluActivationWeightsId = \n    preluActivationWeights == null ? \n      0 : \n    backend.dataIdMap.get(preluActivationWeightsId);\n  const xId = backend.dataIdMap.get(xId);\n  const outId = backend.dataIdMap.get(outId);\n  const wasmFusedConv2d = \n    backend.wasm.cwrap(FusedConv2D, null /* void */, [
      'number',  // xId
      'number',  // batchSize
      'number',  // xId
      'number',  // yId
      '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',  // inputHeight
      'number',  // inputWidth
      'number',  // outputHeight
      'number',  // outputWidth
      'number',  // dataFormat
      'number',  // leakyreluAlpha
      'number',  // outId
    ]);\n  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);\n  return outId;\n}

export const fusedConv2DConfig:
  KernelConfig = {
    kernelName: FusedConv2D,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: fusedConv2d as {} as KernelFunc[],
    ctor: FusedConv2D,
    license: 'Apache License, Version 2.0 (the "License");\n    you may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0.\n   Unless required by applicable law or agreed to in writing,\n    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.';
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, dataFormat, dimRoundingMode, true /* depthwise */);}

  const fusedActivation = FusableActivation[activation as keyof typeof FusableActivation];
  if (fusedActivation == null) {
    throw new Error(`FusedDepthwiseConv2D 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})`);
    }
    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.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 rank-1 bias but got rank ${dataFormat}.`);
  }

  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, leakyreluAlpha, leakyreluAlpha || 0, outId, return out;)

  return out;
}

export const fusedDepthwiseConv2DConfig: KernelConfig = {
  kernelName: FusedDepthwiseConv2D,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: fusedDepthwiseConv2d as {} as KernelFunc,
};
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',  // xStrides
    'number',  // sliceRank
    '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);
}

export const gatherNdConfig: KernelConfig = {
  kernelName: GatherNd,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: gatherNd
};
const flattenIndex = reshape({
  inputs: {x: indices},
  attrs: {
    shape: [shapeInfo.batchSize, indicesSize / shapeInfo.batchSize]
  },
  backend
});

const flattenOutputShape = [shapeInfo.batchSize, 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(backend.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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 *
 *=============================================================================
 */

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

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

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 */

import {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 | 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\n // or int32.\n const outId = backend.makeOutput(x.shape, 'float32');\n outId if (util.sizeFromShape(x.shape) != 0) {\n const outId = backend.dataIdMap.get(out.dataId).id;\n wasmFunc(xId, CppDType[x.dtype], alpha,\n outId);\n }\n\n return out;\n}\n\nexport const leakyReluConfig: KernelConfig = {\n kernelName: LeakyRelu,\n backendName: 'wasm',\n setupFunc,\n kernelFunc: leakyRelu as {} as KernelFunc,\n};\n/**
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import {KernelConfig, Less} from '@tensorflow/tfjs-core';\n\nconst supportsFullBroadcast = false;\n\nexport const lessConfig: KernelConfig = createBinaryKernelConfig(Less, supportsFullBroadcast, 'bool');\n/**
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import {KernelConfig, LogicalAnd} from '@tensorflow/tfjs-core';\n\nconst supportsFullBroadcast = false;\n\nexport const logicalAndConfig: KernelConfig = createBinaryKernelConfig(LogicalAnd, supportsFullBroadcast, 'bool');\n/**
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=============================================================================

import {backend_util, KernelConfig, KernelFunc, Max, MaxAttrs, MaxInputs, TensorInfo, util} from
'@tensorflow/tfjs-core';

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

  const inputRank = input.shape.length;
  backend_util.assertAxesAreInnerMostDims('max', axes, originalAxes, inputWasTransposed);
  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;
    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
};

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

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

import {backend_wasm} 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): void {
  wasmMaxPool = backend.wasm.cwrap(MaxPool, null /*void*/, [
    'number',  // x_id
    'number',  // reduce_size
    'number', // out_id
  ]);}

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. // /n // Add the following assert only for the WASM
    // backend instead of at core op 'n' // level. 'n' // TODO: add support for int32 input. 'n'
    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;

    if (convInfo.dataFormat !== 'channelsLast') {
        throw new Error(
            `wasm backend does not support dataFormat:' channelsLast'. 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;
    // once we are done.
    const transposed = !x.transposed;
    const transposedAxes = backend_util.getInnerMostAxes(x);
cast({backend, inputs: {x: input}, attrs: {dtype: 'float32'}});" in

```javascript
const outId = backend.dataIdMap.get(castedInput.dataId).id;" in
if (util.sizeFromShape(input.shape) !== 0) {" in
  const outId = backend.dataIdMap.get(out.dataId).id;" in
wasmMean(inputId, reduceSize, outId);" in
if (inputWasTransposed) {" in // dispose of the transposed tensor," in
  backend.disposeData(transposed.dataId);" in
} in
if (keepDims) {" in // reshape\n  const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);" in
  out.shape = newShape;" in
} in
if (input.dtype !== 'float32') {" in
  backend.disposeData(castedInput.dataId);
}

return out;
```

```javascript
export const meanConfig: KernelConfig = {
  kernelName: Mean,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: mean 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 */, [
    '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 prePaddingsBytes = new Uint8Array(new Int32Array(prePaddingsFlat).buffer);
  const postPaddingsBytes = new Uint8Array(new Int32Array(postPaddingsFlat).buffer);

  const outId = backend.dataIdMap.get(out.dataId).id;
  const xShapeBytes = new Uint8Array(x.shape.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);
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=============================================================================

*/

```typescript
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};
}
```

```typescript
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: kernelFunc as {},
  backendWasm: BackendWasm,
  resOffset: 0,
  maxOutputSize: 10000,
  iouThreshold: 0.5,
  scoreThreshold: 0.05,
  setupFuncName: 'non_max_suppression_v3_setup',
  kernelFuncName: 'non_max_suppression_v3',
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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) => number;

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

function kernelFunc(args: {
  backend: BackendWasm,
  inputs: NonMaxSuppressionV4Inputs,
  attrs: NonMaxSuppressionV4Attrs
}): 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 V4, 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 nonMaxSuppressionV4Config: KernelConfig = {
  kernelName: NonMaxSuppressionV4,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: kernelFunc as {},
  backendWasm: BackendWasm,
  resOffset: 0,
  maxOutputSize: 10000,
  iouThreshold: 0.5,
  scoreThreshold: 0.05,
  setupFuncName: 'non_max_suppression_v4_setup',
  kernelFuncName: 'non_max_suppression_v4',
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}
```javascript
NonMaxSuppressionV4Inputs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '@tensorflow/tfjs-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('NonMaxSuppressionV4', 'number', ['number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number'],
      [0,
        boxesId, scoresId, maxOutputSize, iouThreshold, scoreThreshold, padToMaxOutputSize]);
}

  const {backend, inputs, attrs} = this;
  const {iouThreshold, maxOutputSize, scoreThreshold, padToMaxOutputSize} = attrs;
  const resOffset = wasmFunc(boxesId, scoresId, maxOutputSize, iouThreshold, scoreThreshold, padToMaxOutputSize);
  const {pSelectedIndices, selectedSize, pSelectedScores, pValidOutputs} = parseResultStruct(backend, resOffset);
  if (pValidOutputs) {
    backend._free(pValidOutputs);
  }
  const selectedIndicesTensor = backend.makeOutput([selectedSize], 'int32', pSelectedIndices);
  const selectedScoresTensor = backend.makeOutput([selectedSize], 'float32', pSelectedScores);
  return [selectedIndicesTensor, selectedScoresTensor];
}

export const nonMaxSuppressionV4Config: KernelConfig = {
  kernelName: 'NonMaxSuppressionV4',
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: nonMaxSuppressionV4
} as {} as KernelFunc;

NonMaxSuppressionV5Inputs, TensorInfo} from '@tensorflow/tfjs-core';

import {BackendWasm} from '@tensorflow/tfjs-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', 'number', 'number', 'number', 'number'],
      [0,
        boxesId, scoresId, maxOutputSize, iouThreshold, scoreThreshold, softNmsSigma]);
}

function kernelFunc(inputs: NonMaxSuppressionV5Inputs, attrs: NonMaxSuppressionV5Attrs): TensorInfo[] {
  const {backend, inputs, attrs} = this;
  const {iouThreshold, maxOutputSize, scoreThreshold, softNmsSigma} = attrs;
  const resOffset = wasmFunc(boxesId, scoresId, maxOutputSize, iouThreshold, scoreThreshold, softNmsSigma);
  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, 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, 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: onesLike 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(inputs: PadV2Inputs, backend: BackendWasm, attrs: PadV2Attrs) {
  const {inputs: {x}, backend, attrs: {paddings, constantValue}} = inputs;
  const outShape = paddings.map((p, i) => p[0] + x.shape[i] + p[1]);
  if (util.sizeFromShape(x.shape) === 0) {
    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.makeOutTensorData(out, x.dtype);
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const xDtype = CppDType[x.dtype];
  const paddingsFlat = paddings.map(padTuple => padTuple[0] + padTuple[1]);
  const xId = backend.dataIdMap.get(x.dataId).id;
  const outId = backend.makeOutTensorData(out, x.dtype);
  const outTensorData = backend.dataIdMap.get(out.dataId);
  const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const paddingsFlat = paddings.map(padTuple => padTuple[0] + padTuple[1]);
  const paddingsBytes = new Uint8Array(paddingsFlat.buffer);
  const 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
  ]);
  wasmPadV2(xId, xShapeBytes, x.shape.length, CppDType[x.dtype], paddingsFlat.buffer, constantValue, outId);
  return out;
}

export const padV2Config: KernelConfig = {
  kernelName: PadV2,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: pad as {} as KernelFunc,
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};
*/

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, 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
  );
}

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): 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);
  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(backendAxes.length, input.shape.length);
    }
  }
  const out = backend.makeOutput(input.shape, reductionAxes);

  return out;
}
wasmProd(inputId, reduceSize, CppDType[out.dtype], outId);
  }

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

  if (keepDims) {
    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 {TensorInfo} from '@tensorflow/tfjs-core';

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

import {createBinaryKernelConfig} from './binary_kernel';
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);
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 reverse
};

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 */

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
     ]); 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] = center; const fillBytes = new Uint8Array(new Int32Array(fillValues).buffer); wasmRotate(imageId, batch, imageHeight, imageWidth, numChannels, radians, centerX, centerY, fillBytes, fillValues.length, 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] = center;
  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 rotate
};

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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);

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);
  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 {}
};

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 {}
};
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.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
};

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

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 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
};

export const uniqueKernelNames = ['Sigmoid', 'Sin', 'Softmax'];
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 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 paddedXReshaped =
      reshape({inputs: {x: paddedX}, backend, attrs: {shape: reshapedPaddedShape}});

  const transposeInputs: TransposeInputs = {x: paddedXReshaped};
  const transposeAttrs: TransposeAttrs = {perm: backend_util.getPermuted(reshapedPaddedShape.length, blockShape.length, false)};
  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: spaceToBatchND as {} as KernelFunc
};
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=============================================================================

*/

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';

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: void | undefined = 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 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
};

*/

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 */

=============================================================================
import {KernelConfig, KernelFunc, slice_util, StridedSlice, StridedSliceAttrs, StridedSliceInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

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
    // 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 outShapeBytes = new Uint8Array(new Int32Array(finalShapeSparse).buffer);
    const outShapeLength = backend.dataIdMap.get(out.dataId).id;
    const wasmStridedSlice = xId, xStridesBytes, x.shape.length, beginBytes, endBytes, stridesBytes,
      outputShapeBytes, outStridesBytes, finalShapeSparse.length, outId;

    result =
      reshape({inputs: {x: out}, backend, attrs: {shape: finalShape}});
    backend.disposeData(out.dataId);
  }

  return result;
}

export const subConfig: KernelConfig =
    createBinaryKernelConfig(Sub, supportsFullBroadcast);

export const subConfig: KernelConfig =
    createBinaryKernelConfig(Sub, supportsFullBroadcast);

export const subConfig: KernelConfig =
    createBinaryKernelConfig(Sub, supportsFullBroadcast);

export const subConfig: KernelConfig =
    createBinaryKernelConfig(Sub, supportsFullBroadcast);

// Other code...

```

import {KernelConfig, Sub} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from
    createBinaryKernelConfig(Sub, supportFullBroadcast);

export const subConfig: KernelConfig =
    createBinaryKernelConfig(Sub, supportFullBroadcast);

export const subConfig: KernelConfig =
    createBinaryKernelConfig(Sub, supportFullBroadcast);

export const subConfig: KernelConfig =
    createBinaryKernelConfig(Sub, supportFullBroadcast);

// Other code...
```
import {backend_util, KernelConfig, 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;
  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[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 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);
import {KernelConfig, KernelFunc, Tile, TileAttrs, TileInputs} from '@tensorflow/tfjs-core';

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

import {CppDType} from '@tensorflow/tfjs-core';

let wasmTile: (xId: number, xShape: Uint8Array, xShapeSize: number, newShape: Uint8Array, newShapeIndex: number, dtype: number, outId: number) => void = void;  

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 * 
 */

import {KernelConfig, KernelFunc, Tile, TileAttrs, TileInputs} from '@tensorflow/tfjs-core';

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

import {CppDType} from '@tensorflow/tfjs-core';

let wasmTile: (xId: number, xShape: Uint8Array, xShapeSize: number, newShape: Uint8Array, newShapeIndex: number, dtype: number, outId: number) => void = void;  

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 * 
 */

import {KernelConfig, KernelFunc, TensorInfo, TopK, TopKAttrs, TopKInputs} from '@tensorflow/tfjs-core';

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

import {CppDType} from '@tensorflow/tfjs-core';

let wasmTopK: (xId: number, xShape: Uint8Array, xShapeSize: number, xDtype: CppDType, k: number, sorted: boolean, outValuesId: number, outIndicesId: number) => void = void;  

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 * 
 */

import {KernelConfig, KernelFunc, TensorInfo, Transform, TransformAttrs, TransformInputs, util} from

Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5 4360
import {BackendWasm} from '../backend_wasm';

let wasmTransform: (imageId: number, transformsId: number, imageHeight: number, numChannels: number, numBatch: number, imageWidth: number, outputShape: number[], numOutputs: number, numActivityChannels: number) => void;

function setup(backend: BackendWasm): void {
  wasmTransform = backend.wasm.cwrap(Transform, 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", "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", "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", "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", "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", "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", "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", "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", "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", "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", "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", "number", "number", "number", "number", "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[];
  const strides = new Uint8Array(new Int32Array(util.computeStrides(image.shape)).buffer);
  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 interpolationModel = 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, fillModeId, fillValue, outId);

  return out;
}

export const transformConfig: KernelConfig = {
  kernelName: Transform,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: transform
};

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];
      outIndex = 0;
    }
  }
  const outs = new Array(numOutputs);

  for (let i = 0; i < numOutputs; i++) {
    const begin = slice(inputs: {x: value}, attrs: {begin: [i], size: [1]}, backend);?
      return outs.map((dataId, dtype) => ({dataId, dtype, outShape: outShape()}));
  }

  return outs.map(({dataId, dtype}) => ({dataId, dtype, shape: outShape}));
}

export const unpackConfig: KernelConfig = {
  kernelName: Unpack,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: unpack
};
`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 {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/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 {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 {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,
  divConfig,
  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,
  spaceToBatchNDConfig,
  splitVConfig,
  sqrtConfig,
  squareConfig,
  squaredDifferenceConfig,
  stepConfig,
  stridedSliceConfig,
  subConfig,
  sumConfig,
  tanConfig,
  tanhConfig,
  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.
 */
// 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]));

*/

`WASM_HAS_MULTITHREAD_SUPPORT`, async () => {

```
/**
 * True if threads are supported.
 */

```

};

var WasmBackendModuleThreadedSimd = (function() {

```
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WebAssembly.Module({"wasmMemory":new WebAssembly.Memory({"initial":INITIAL_MEMORY/65536,"maximum":2147483648/65536,"shared":true});}

if(!(wasmMemory.buffer instanceof SharedArrayBuffer))

try{

wasmMemory=new WebAssembly.Memory({"initial":INITIAL_MEMORY/65536,"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");

if(wasmMemory){buffer=wasmMemory.buffer}INITIAL_MEMORY=buffer.byteLength;updateGlobalBufferAndViews(buffer);

var wasmTable;

var __ATPRERUN__=[];

var __ATINIT__=[];

var __ATMAIN__=[];

var __ATEXIT__=[];

var __ATPOSTRUN__=[];runtimeInitialized=false;runtimeExited=false;

if(ENVIRONMENT_IS_PTHREAD)

preRun();

if(Module["preRun"]){

if(typeof Module["preRun"]=="function")Module["preRun"]=[][Module["preRun"];while(Module["preRun"].length){

donPreRun(Module["preRun"].shift())}]

initRuntime(runtimeInitialized=true);callRuntimeCallbacks(__ATPRERUN__);}

function preMain(){

if(ENVIRONMENT_IS_PTHREAD)

return;callRuntimeCallbacks(__ATMAIN__);}

function exitRuntime(){

if(ENVIRONMENT_IS_PTHREAD)

return;runtimeExited=true;}

function preRun(){

if(ENVIRONMENT_IS_PTHREAD)

return;callRuntimeCallbacks(__ATPRERUN__);}

function initRuntime(){

runtimeInitialized=true;

if(ENVIRONMENT_IS_PTHREAD)

return;callRuntimeCallbacks(__ATPRERUN__);}

function addOnPreRun(cb){

__ATPRERUN__.unshift(cb)}

function 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"](runDependencies);

function removeRunDependency(id){

runDependencies--;

if(Module["monitorRunDependencies"])Module["monitorRunDependencies"](runDependencies--);

if(Module["monitorRunDependencies"])Module["monitorRunDependencies"](runDependencies);

if(runDependencies==0){

delete runDependencyWatcher;

new Interval.runDependencyWatcher=null;

if(dependenciesFulfilled){

var callback=dependenciesFulfilled;

dependenciesFulfilled=null;

callback();}

}

Module["preloadedImages"]=[];

Module["preloadedAudios"]=[];

function abort(what){

if(Module["onAbort"]){

Module["onAbort"](what);}

if(ENVIRONMENT_IS_PTHREAD)

console.err("pthread aborting at "+(new Error).stack);

what+=/\n\nerr(what);ABORT=true;EXITSTATUS=1;what="abort(\n\n+what+\n\n)\n
).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-threaded-simd.wasm";

function getBinaryPromise(){

if(!wasmBinary)

return readBinary();

else{

throw("both async and sync fetching of the wasm failed");}

}

getBinaryPromise()

getBinaryPromise()

return getBinaryPromise();

}

if(!wasmBinary&&

(ENVIRONMENT_IS_WEB||ENVIRONMENT_IS_WORKER))

return getBinaryPromise().then(getBinary)

.then(fetch(wasmBinaryFile,credentials:"same-origin")

.then(function(response){

if(!response["ok"])

throw("failed to load wasm binary file at "

+response["status"])}

catch(err){

abort(err)\n
]);
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5

"\n+wasmBinaryFile+"\n}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){
exports=instance.exports;
Module["asm"]=exports;
wasmTable=Module["asm"];
wasmModule=module;
if(!ENVIRONMENT_IS_PTHREAD){
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(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.instantiate==="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)
})
}

else{return instantiateArrayBuffer(receiver)})();
return Promise.resolve().then(function(){return receiveBinaryPromise().then(function(binary){return
WebAssembly.instantiate(binary,info)}).then(receiver,function(reason){
err('wasm streaming compile failed: "+reason);
err("falling back to ArrayBuffer instantiation")
return instantiateArrayBuffer(receiver))));
}

function callRuntimeCallbacks(callbacks){
while(callbacks.length>0){
callback=callbacks.shift();
if(typeof callback=="function"){
callback(Module);
continue
}else{
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)｝
}
}

ERRNO_CODES={
EPERM:63,
ENOENT:44,
ESRCH:71,
EINTR:27,
ENO.IO:29,
E2BIG:1,
ENOEXEC:45,
EBADF:8,
ECHILD:12,
EAGAIN:6,
EWOULDBLOCK:6,
ENOMEM:48,
FAEVAULS:2,
EFAULT:21,
ENOTBLK:105,
EBUSY:10,
EXIST:20,
EXDEV:75,
ENODEV:43,
ENOTDIR:54,
EISDIR:31,
EINVAL:28,
ENFILE:41,
EROFS:62,
ENOEXEC:45,
EBADF:11,
EXDEV:75,
ENOENT:44,
ESRCH:71,
EINTR:27,
ENO.IO:29,
E2BIG:1,
ENOEXEC:45,
EBADF:8,
ECHILD:12,
EAGAIN:6,
EWOULDBLOCK:6,
ENOMEM:48,
FAEVAULS:2,
EFAULT:21,
ENOTBLK:105,
EBUSY:10,
EXIST:20,
EXDEV:75,
ENODEV:43,
ENOTDIR:54,
EISDIR:31,
EINVAL:28,
ENFILE:41,
EROFS:62,
ENOEXEC:45,
EBADF:11,
EXDEV:75,
ENOENT:44,
ESRCH:71,
EINTR:27,
ENO.IO:29,
E2BIG:1,
ENOEXEC:45,
EBADF:8,
ECHILD:12,
EAGAIN:6,
EWOULDBLOCK:6,
ENOMEM:48,
FAEVAULS:2,
EFAULT:21,
ENOTBLK:105,
EBUSY:10,
EXIST:20,
EXDEV:75,
ENODEV:43,
ENOTDIR:54,
EISDIR:31,
EINVAL:28,
ENFILE:41,
EROFS:62,
ENOEXEC:45,
EBADF:11,
EXDEV:75,
ENOENT:44,
ESRCH:71,
EINTR:27,
ENO.IO:29,
E2BIG:1,
ENOEXEC:45,
EBADF:8,
ECHILD:12,
EAGAIN:6,
EWOULDBLOCK:6,
ENOMEM:48,
FAEVAULS:2,
EFAULT:21,
ENOTBLK:105,
EBUSY:10,
EXIST:20,
EXDEV:75,
ENODEV:43,
ENOTDIR:54,
EISDIR:31,
EINVAL:28,
ENFILE:41,
EROFS:62,
ENOEXEC:45,
EBADF:11,
EXDEV:75,
ENOENT:44,
ESRCH:71,
EINTR:27,
ENO.IO:29,
E2BIG:1,
ENOEXEC:45,
EBADF:8,
ECHILD:12,
EAGAIN:6,
EWOULDBLOCK:6,
ENOMEM:48,
FAEVAULS:2,
EFAULT:21,
ENOTBLK:105,
EBUSY:10,
EXIST:20,
EXDEV:75,
ENODEV:43,
ENOTDIR:54,
EISDIR:31,
EINVAL:28,
ENFILE:41,
EROFS:62,
ENOEXEC:45,
EBADF:11,
EXDEV:75,
ENOENT:44,
ESRCH:71,
EINTR:27,
ENO.IO:29,
E2BIG:1,
ENOEXEC:45,
EBADF:8,
ECHILD:12,
EAGAIN:6,
EWOULDBLOCK:6,
ENOMEM:48,
FAEVAULS:2,
EFAULT:21,
ENOTBLK:105,
EBUSY:10,
EXIST:20,
EXDEV:75,
ENODEV:43,
ENOTDIR:54,
EISDIR:31,
EINVAL:28,
ENFILE:41,
EROFS:62,
ENOEXEC:45,
EBADF:11,
EXDEV:75,
ENOENT:44,
ESRCH:71,
EINTR:27,
ENO.IO:29,
E2BIG:1,
ENOEXEC:45,
```

```
```javascript
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=4;cutDown*=2;overGrownHeapSize=oldSize*(1+.2/cutDown);overGrownHeapSize=Math.min(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=[]},registerRemoveEventListeners:function(){if(!JSEvents.removeEventListenersRegistered){__ATEXIT__.push(JSEvents.removeAllEventListeners);JSEvents.removeEventListenersRegistered=true}}
```
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null, arguments); var
_GreaterEqual=Module["_GreaterEqual"] = function() { return (_GreaterEqual = Module["_GreaterEqual"] = Module["asm"]["la"] ).apply (null, arguments) ); var
_LeakyRelu=Module["_LeakyRelu"]=function(){return(_LeakyRelu=Module["_LeakyRelu"] = Module["asm"]["ma"] ).apply (null, arguments) ); var
_Less=Module["_Less"] = function() { return (_Less = Module["_Less"] = Module["asm"]["na"] ).apply (null, arguments) ); var
_LessEqual=Module["_LessEqual"] = function() { return (_LessEqual = Module["_LessEqual"] = Module["asm"]["naa"] ).apply (null, arguments) ); var
_Log=Module["_Log"] = function() { return (_Log = Module["_Log"] = Module["asm"]["pal"] ).apply (null, arguments) ); var
_LogicalAnd=Module["_LogicalAnd"] = function() { return (_LogicalAnd = Module["_LogicalAnd"] = Module["asm"]["qal"] ).apply (null, arguments) ); var
_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
_Produc
if(e.data.cmd==='objectTransfer'){Module['PThread'].receiveObjectTransfer(e.data)}
if(e.data.cmd==='run'){Module['__performance_now_clock_drift']=performance.now()-
e.data.time;Module['__emscripten_thread_init'](e.data,1);}
if(e.data.cmd==='setImmediate'){}
if(e.data.cmd==='processThreadQueue'){if(Module['__performance_now_clock_drift'])Module['PThread'].threadExit(result);}
catch(ex){if(ex==='Canceled!'){Module['PThread'].threadCancel()}
else if(ex!="unwind"){
    if(ex instanceof Module['ExitStatus']){
        if(Module['getNoExitRuntime']()){}
        else{Module['PThread'].threadExit(-2);throw ex}{}
    }else{
        Module['PThread'].threadCancel();
    }
}
else{
    result=Module['invokeEntryPoint'](e.data.start_routine,e.data.arg);
    if(!Module['getNoExitRuntime']())Module['PThread'].threadCancel();
}
try{
    var
    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']){
        if(Module['getNoExitRuntime']()){}
        else{Module['PThread'].threadExit(-2);throw ex}{}
    }else{
        Module['PThread'].threadCancel();
    }
}
}
overGrownHeapSize=oldSize*(1+.2/cutDown);overGrownHeapSize=Math.min(overGrownHeapSize,requestedSize+100663296);
var newSize=Math.min(maxHeapSize,alignUp(Math.max(requestedSize,overGrownHeapSize),65536));
var replacement=emscriptenrealloc_buffer(newSize);if(replacement){return true}return false

SYSCALLS={
mappings:{},buffers:[null,[]],printChar:function(stream,curr){
buffer=SYSCALLS.buffers[stream];if(curr===null){curr=10}((stream===1?out:err)(UTF8ArrayToString(buffer,0));
buffer.length=0}else{buffer.push(curr)}},
var undefined,得以使用功能(){SYSCALLS.varargs+=4;var ret=HEAP32[SYSCALLS.varargs+4]<<2;return ret},
getStr:function(ptr){var ret=UTF8ToString(ptr);return ret},
get4:function(low,high){return low}};

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,HEAPU8[ptr+j])}num+=len}HEAP32[pnum<<2]=num;return 0};

function pthread_create(){return 6};
function pthread_join(){return 28};

setErrNo(value){HEAP32[___errno_location()]


___wasm_call_ctors=Module["___wasm_call_ctors"],

_module["_init"],

_module["_init_with_threads_count"],

_module["_register_tensor"],

_module["_dispose_data"],

_module["_Abs"],

_module["_Add"],

var navigator||("object")return navigator["hardwareConcurrency"]||1;return 1};

setErrNo(28);return 1}
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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);

Prelu = Module[_Prelu] = function() { return _Prelu = Module[_Prelu] = Module["asm"][_"qa"] }; 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"][_"ta"] }; 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"][_"wa"] }; apply(null, arguments);

Round = Module[_Round] = function() { return _Round = Module[_Round] = Module["asm"][_"ya"] }; apply(null, arguments);

Rsqrt = Module[_Rsqrt] = function() { return _Rsqrt = Module[_Rsqrt] = Module["asm"][_"za"] }; apply(null, arguments);

ScatterNd = Module[_ScatterNd] = function() { return _ScatterNd = Module[_ScatterNd] = Module["asm"][_"Aa"] }; apply(null, arguments);

SelectV2 = Module[_SelectV2] = function() { return _SelectV2 = Module[_SelectV2] = Module["asm"][_"Ba"] }; apply(null, arguments);

Sigmoid = Module[_Sigmoid] = function() { return _Sigmoid = Module[_Sigmoid] = Module["asm"][_"Ca"] }; apply(null, arguments);

Sin = Module[_Sin] = function() { return _Sin = Module[_Sin] = Module["asm"][_"Da"] }; apply(null, arguments);

Softmax = Module[_Softmax] = function() { return _Softmax = Module[_Softmax] = Module["asm"][_"Ea"] }; apply(null, arguments);

Sqrt = Module[_Sqrt] = function() { return _Sqrt = Module[_Sqrt] = Module["asm"][_"Fa"] }; apply(null, arguments);

Square = Module[_Square] = function() { return _Square = Module[_Square] = Module["asm"][_"Ga"] }; apply(null, arguments);

SquaredDifference = Module[_SquaredDifference] = function() { return _SquaredDifference = Module[_SquaredDifference] = Module["asm"][_"Ha"] }; apply(null, arguments);

Step = Module[_Step] = function() { return _Step = Module[_Step] = Module["asm"][_"Ia"] }; apply(null, arguments);

StridedSlice = Module[_StridedSlice] = function() { return _StridedSlice = Module[_StridedSlice] = Module["asm"][_"Ja"] }; apply(null, arguments);

Sub = Module[_Sub] = function() { return _Sub = Module[_Sub] = Module["asm"][_"Ka"] }; apply(null, arguments);

Sum = Module[_Sum] = function() { return _Sum = Module[_Sum] = Module["asm"][_"La"] }; apply(null, arguments);
WasmFactoryConfig} from '../wasm-out/tfjs-backend-wasm';
import {BackendWasmThreadedSimdModule} from '../wasm-out/tfjs-backend-wasm-threaded-simd';
import {BackendWasmThreadedSimdWorker} from '../wasm-out/tfjs-backend-wasm-threaded-simd.worker';
import wasmFactory from '../wasm-out/tfjs-backend-wasm.js';

interface TensorData {
  id: number;
  memoryOffset: number;
  shape: number[];
  dtype: DataType;
  refCount: number;
}

export class BackendWasm extends KernelBackend {
  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;
  }

  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(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);
  }

  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;
  }

  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++;
      this.wasm.tfjs.disposeData(data.id);
      this.dataIdMap.delete(dataId);
    }
    return true;
  }

  dispose() {
    this.wasm.tfjs.dispose();
    if ('PThread' in this.wasm) {
      this.wasm.PThread.terminateAllThreads();
    }
    this.wasm = null;
    this.memory();
    this.wasm.tfjs.freeData(memoryOffset);
  }

  getMemoryOffset(dataId: DataId): number { return this.dataIdMap.get(dataId).memoryOffset; }
}

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wasmFactoryThreadedSimd(factoryConfig);
  } else {
    // The wasmFactory works for both vanilla and SIMD
    wasm = wasmFactory(factoryConfig);
  }

  wasm.then((module) => {
    initialized = true;
    initAborted = false;
    const voidReturnType: string = null;

    // Using the tfjs namespace to avoid conflict with emscripten's API.
    module.tfjs = {
      init: module.cwrap('init', null, [])[0],
      initWithThreadsCount: module.cwrap('init_with_threads_count', null, ['number'])[0],
      registerTensor: module.cwrap('register_tensor', null, [])[0],
      disposeData: module.cwrap('dispose_data', voidReturnType, ['number'])[0],
    };

    // The WASM module has been successfully
    // created by the factory.
    // Any error will be caught by the onAbort call defined above.
    Promise.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}`);
    }
  }

  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
   * 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'}
   */
  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 +
      'setWasmPath( ) before you call `tf.setBackend( )` or `tf.ready( )`;
    }

    if (typeof path === 'string') {
      wasmPath = path;
      customFetch = usePlatformFetch;
    } else {
      throw new Error('
        The WASM backend was already initialized. Make sure you call +
      'setWasmPaths( ) before you call `tf.setBackend( )` or `tf.ready( )`;
    }

    if (customFetch) {
      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
     *    your WASM binaries are not all located in the same directory, or if you
     *    want to provide a map for each binary, with or without
     *    platform-specific naming.
     * @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
      'setWasmPaths( ) before you call `tf.setBackend( )` or `tf.ready( )`;
    }

    if (typeof prefixOrFileMap === 'string') {
      wasmPathPrefix = prefixOrFileMap;
    } else {
      wasmFileMap = prefixOrFileMap;
      const missingPaths = new
      *SIMD-enabled, threading-enabled, etc.).
      */
    }

    /**
     * Sets the number of threads that will be used by XNNPACK to create
     * threadpool (default to the number of logical CPU cores).
     * @param number 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
      'setWasmPaths( ) before you call `tf.setBackend( )` or `tf.ready( )`;
    }

    if (typeof prefixOrFileMap === 'string') {
      wasmPathPrefix = prefixOrFileMap;
    } else {
      wasmFileMap = prefixOrFileMap;
      const missingPaths = new
      *SIMD-enabled, threading-enabled, etc.).
      */
    }

    /**
     * Sets the number of threads that will be used by XNNPACK to create
     * threadpool (default to the number of logical CPU cores).
     * @param number
     * either call setWasmPaths with a
     * the directory where all the binaries can be found.
     *)
      }
      actualThreadsCount = -1;
      } * * *
    } * * *
    } * * *
  } * * *
  } * * *
  } * * *

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tf.setBackend('wasm');

export function setThreadsCount(numThreads: number) {
  threadsCount = numThreads;
}

/**
 * Gets the actual threads count that is used by XNNPACK.
 */
export function getThreadsCount(): number {
  if (actualThreadsCount === -1) {
    throw new Error(`WASM backend not initialized.`);
  }
  return actualThreadsCount;
}

const WASM_PRIORITY = 2;

registerBackend('wasm', async () => {
  const {wasm} = await init();
  return new BackendWasm(wasm);
}, WASM_PRIORITY);

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 * 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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 * 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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 * 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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 * 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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 */

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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UAAM,CAAC,CAAC,CAAC,IAAI,CAAC,EAEE,KAAC,CAAC,IAAI,CAAC,MAAM,CAAC,MAAM,CAAC,MAAM,
CAAC,UAAM,CAAC,UAAM,OAAM,CAAC,MAAM,CAAC,MAAM,CAAC,MAAM,CAAC,MAAM,CAAC,MAAM,CAAC,
```javascript
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*/, [  // xId
    'array',  // xStrides
    'number',  // xRank
    'array',  // begin
    'array',  // end
    'array',  // strides
    'array',  // outShape
    'array',  // outStrides
    'number',  // outShapeLength
    'number',  // outId
  ]); // xId
  // xStrides
  // xRank
  // begin
  // end
  // strides
  // outShape
  // outStrides
  // outShapeLength
  // outId
}
```
export function stridedSlice(args: {
  backend: BackendWasm,
  inputs: StridedSliceInputs,
  attrs: StridedSliceAttrs
}): TensorInfo {
  const {begin, end, strides, beginMask, endMask, ellipsisMask, newAxisMask, shrinkAxisMask} = attrs;
  const {finalShapeSparse, finalShape} = 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 (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');
    const beginId = backend.dataIdMap.get(begin.dataId).id;
    const beginBytes = new Uint8Array(new Int32Array(begin.buffer).buffer);
    const endId = backend.dataIdMap.get(end.dataId).id;
    const endBytes = new Uint8Array(new Int32Array(end.buffer).buffer);
    const stridesBytes = new Uint8Array(new Int32Array(strides.buffer).buffer);
    const outputShapeBytes = new Uint8Array(new Int32Array(outputShape.buffer).buffer);
    const outStridesBytes = new Uint8Array(new Int32Array(outputStrides.buffer).buffer);
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmStridedSlice(beginId, beginBytes, begin.length, endId, endBytes, end.length, stridesBytes, outputShapeBytes, outStridesBytes, finalShapeSparse.length, outId);
    result = reshape(inputs: [x, out], backend, attrs: {shape: finalShape});
  }
  return result;
}

export const stridedSliceConfig: KernelConfig = {
  kernelName: StridedSlice,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: stridedSlice as {} as KernelFunc
};


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
    boolean,  // transpose_a
    boolean,  // transpose_b
    number,  // activation
    number,  // biasId
    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
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 = bias.dataId;
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(`FusedConv2D only supports bias of rank 1` +
    `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(`FusedConv2D only supports bias of rank 1` +
    `but got rank ${biasData.shape.length}.`);
}

  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 aId =
    backend.dataIdMap.get(a.dataId).id;
  const bId =
    backend.dataIdMap.get(b.dataId).id;
  const aShapedBytes =
    new Uint8Array(new Int32Array(a.shape).buffer);
  const bShapedBytes =
    new Uint8Array(new Int32Array(b.shape).buffer);
  const transposeB = fusedActivation;
  const transposeA = fusedActivation;
  const leakyreluAlpha =
    fusedActivation;
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?: CppDType) {
  return undefined;
}

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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) {
  wasmFunc = backend.wasm.cwrap('addn', null /* void */, [{'inputIds': 'array'}, {'inputIdsLen': 'number'}, {'dtype': 'number'}, {'outId': 'number'}]);
}

function addn(inputs: TensorInfo[], backend: BackendWasm) {
  return undefined;
}

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 *
 */

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

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = true;

export const addnConfig: KernelConfig = createBinaryKernelConfig(AddN, supportsFullBroadcast);

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 */

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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 Uint32Array(backend.dataIdMap.map(out =>
  out.dataId).id);

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

return out;
}

export const addNConfig: KernelConfig = {
  kernelName:
    AddN,
  backendName: 'wasm',
  setupFunc: addn as {} as KernelConfig,  // Copyright 2020 Google LLC. All Rights Reserved.
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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',
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  *

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;

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);
  const xId = backend.dataIdMap.get(x.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;
  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(xShapeBytes: number[], shape: number[], perm: number[]) {...
```javascript
{\n  const newShape: number[] = [];\n  const newPerm: number[] = [];\n  for (let i = 0; i < shape.length; ++i) {\n    if (shape[i] !== 1) {\n      newShape.push(shape[i]);\n    }\n    if (newPerm[perm[i]] !== 1) {\n      newPerm.push(perm[i]);\n    }\n  }\n  for (let i = 0; i < newPerm.length; ++i) {\n    let minValIdx = -1;\n    for (let j = 0; j < newPerm.length; ++j) {\n      if (newPerm[j] >= i && (minValIdx === -1 || newPerm[minValIdx] > newPerm[j])) {\n        minValIdx = j;\n      }\n    }\n    newPerm[minValIdx] = i;\n  }\n  return [newShape, newPerm];\n}

export const transposeConfig: KernelConfig = {\n  kernelName: Transpose,\n  backendName: 'wasm',\n  kernelFunc: transpose as {} as KernelFunc,\n  setupFunc: setup,\n};
```
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(newShape.length, xRank);
    xTransposed = true;
    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 /*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);
}

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', 'number', 'number', 'number', 'number']);
}

function argmax(args: {inputs: ArgMaxInputs, backend: BackendWasm, attrs: ArgMaxAttrs}) {
    const {backend, inputs, attrs} = args;
    const {xId} = inputs;
    const x = inputs.x;
    const xId = backend.dataIdMap.get(x.dataId).id;
    const inputId = xId;
    let input = x;
    util.sizeFromShape(input.shape) !== 0) {
        const outId = backend.dataIdMap.get(out.dataId).id;
    }
    wasmFunc(xId, x.dtype, input.shape.length, input.dataId, outId);
    backend_util.expandShapeToKeepDim(out.shape, originalAxes);
    out.shape = newShape;
    return out;
}

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

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

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;
  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(x.shape, 'float32');

  const outId = backend.dataIdMap.get(out.dataId).id;
  const wasmAvgPool = backend.wasm.cwrap(AvgPool, null /* void */, [
    'number',  // xId
    'number',  // x.shape[0]
    'number',  // x.shape[1]
    'number',  // x.shape[2]
    'number',  // filterHeight
    'number',  // filterWidth
    'number',  // padTop
    'number',  // padRight
    'number',  // padBottom
    'number',  // padLeft
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // channels
    'number',  // outId
  ]);}

  const out = 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,
  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(
    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
batchDim = Math.max(batchDimA, batchDimB);

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

const out = backend.makeOutput([batchDim, leftDim, rightDim], a3d.dtype);
const outId = backend.dataIdMap.get(out.dataId).id;

const a3dId = backend.dispData([a3d.dataId], a3d.shape);
const aShapeBytes = new Uint8Array(new Int32Array(a3d.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;

export const batchMatMulConfig = {
  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
};
```

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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}) {
  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)
  {
function slice4d(xVals as TypedArray, xStrides[0], xStrides[1], xStrides[2], xStrides[3], outVals, begin as [number, number, number, number], size as [number, number, number, number]) {  
    begin_ as [number, number, number, number],  
    size_ as [number, number, number, number];  
  } else {  
    const res = 
    outVals.set(xVals.subarray(xOffset, xOffset + size[1]), outOffset);  
    outOffset += size[1];  
  }  

  return out;
}

function slice2d(xVals as backend_util.TypedArray, xStride: number, xStride2: number, xShape: number, xDType) {  
    let outOffset = 0;  
    beginI = begin[0];  
    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;  
        const endOffset = i * xStride + beginJ + size[1];  
        for (let j = beginJ; j < endJ; j++) {  
            const offset = i * xStride + j;  
            outVals.set(xVals.subarray(offset, offset + size[2]), outOffset);  
            outOffset += size[2];  
        }
    }
}

function slice3d(xVals: backend_util.TypedArray, xStride: number, xStride2: number, xShape3: number, xDType) {  
    let outOffset = 0;  
    const beginK = begin[2];  
    const endK = begin[2] + size[2];  
    const beginL = begin[3];  
    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++) {  
                const offset = i * xStride1 + j * xStride2 + k * xStride3 + beginK;  
                outVals.set(xVals.subarray(offset, offset + 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 {BatchToSpaceND as BatchToSpaceND, BatchToSpaceND as BatchToSpaceND} from './BatchToSpaceND';

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.getReshapedPermuted(x.shape, blockShape, prod);
    const permuted = backend_util.getPermutted(reshaped.length, blockShape.length);
    const reshapedPermuted = x;
    const sliceBeginCoords = backend_util.getSliceBeginCoords(crops, blockShape.length);
    const sliceSize = backend_util.getSliceSize(reshapedPermuted.length, blockShape.length);
    const xReshaped = reshaped = reshape(inputs: {x}, backend, attrs: {shape: reshaped});
    const xTransposed = transpose(inputs: {x: xReshaped}, backend, attrs: {perm: permuted});
    const xReshapedReshaped = reshape(inputs: {x: xTransposed}, backend, attrs: {shape: reshapedPermuted});
    const result = slice(inputs: {x: xReshapedReshaped}, 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 {backend_util, BatchToSpaceND, BatchToSpaceNDAttrs, BatchToSpaceNDInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {backend_util, BatchToSpaceND, BatchToSpaceND} from './BatchToSpaceND';

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.getReshapedPermuted(x.shape, blockShape, prod);
    const permuted = backend_util.getPermutted(reshaped.length, blockShape.length);
    const reshapedPermuted = x;
    const sliceBeginCoords = backend_util.getSliceBeginCoords(crops, blockShape.length);
    const sliceSize = backend_util.getSliceSize(reshapedPermuted.length, blockShape.length);
    const xReshaped = reshaped = reshape(inputs: {x}, backend, attrs: {shape: reshaped});
    const xTransposed = transpose(inputs: {x: xReshaped}, backend, attrs: {perm: permuted});
    const xReshapedReshaped = reshape(inputs: {x: xTransposed}, backend, attrs: {shape: reshapedPermuted});
    const result = slice(inputs: {x: xReshapedReshaped}, 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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=============================================================================

```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,
};
```
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, 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 isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;
  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;
  const outId = backend.dataIdMap.get(out.dataId).id;
  const filterId = backend.dataIdMap.get(filter.dataId).id;

  const strides = convInfo.stride;
  const dilations = convInfo.dilation;
  const pad = convInfo.pad;
  const dimRoundingMode = convInfo.dimRoundingMode;
  const dataFormat = convInfo.dataFormat;
  const kernelFunc = convInfo.kernelFunc;

  return out;
}

export const conv2DConfig: KernelConfig = {
  kernelName: Conv2D,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: conv2d as {} as KernelFunc
};
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=============================================================================

import {CropAndResize, CropAndResizeAttrs, CropAndResizeInputs, KernelConfig, TensorFlowInfo} 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,\n    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
  ]);\n}

function cropAndResize(args: {
  backend: BackendWasm,
  inputs: CropAndResizeInputs,
  attrs: CropAndResizeAttrs
}): TensorFlowInfo {
  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]];\n
  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,\n    InterpolationMethod[method as {} as keyof typeof InterpolationMethod],\n    extrapolationValue, outId);\n
  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 {Cos, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const cosConfig: KernelConfig = createUnaryKernelConfig(Cos);

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

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

import {createUnaryKernelConfig} from './unary_kernel';

export const coshConfig: KernelConfig = createUnaryKernelConfig(Cosh);

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

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

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

const cosConfig = {
  kernelName: 'Cos',
  setupFunc: setup,
  kernelFunc: cos as {} as KernelFunc
};

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

const coshConfig = {
  kernelName: 'Cosh',
  setupFunc: setup,
  kernelFunc: cosh 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];
    const permutedXId = backend.dataIdMap.get(permutedX.dataId).id;
    const permutedOutId = backend.dataIdMap.get(permutedOut.dataId).id;
    const permutedX = backend.makeOutput(permutedX.shape, permutedX.dtype);
    const finalDim = permutedX.shape[permutedAxis];
    const permutedOutId = backend.dataIdMap.get(permutedOut.dataId).id;
    const permutedOut = 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});
    }
    return out;
  }

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 = x.shape[0];
    const outputHeight =...
const inputWidth = (dataFormat === 'NHWC') ? x.shape[1] : x.shape[2];
const inputHeight = (dataFormat === 'NHWC') ? x.shape[2] : x.shape[1];
const inputDepth = (dataFormat === 'NHWC') ? x.shape[3] : x.shape[1];
const blockSize = (dataFormat === 'NHWC') ? blockShape[1] : blockShape[2];
const outputShape = (dataFormat === 'NHWC') ? [inputHeight, inputWidth, inputDepth] : [inputWidth, inputHeight, inputDepth];

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

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 */

import {ExpandDims, ExpandDimsAttrs, ExpandDimsInputs, KernelConfig, KernelFunc, util} from '@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(
      dim >= 0,
      () => `Axis must be in the interval [0, ${inputRank}]`);
    $dim = inputRank + dim
  }
```javascript
+ 1;\n }\n newShape.splice($dim, 0, 1);\n return reshape({ inputs: [x: input], backend, attrs: {shape: newShape} });\n }\n\nexport const expandDimsConfig: KernelConfig = {\n  kernelName: ExpandDims,\n backendName: 'wasm',\n kernelFunc: expandDims as {} as KernelFunc,\n }\n
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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,
};
```

```javascript
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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', 'number', 'number', 'number', 'number', 'number' ]);\n}

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 imgDataId = backend.dataIdMap.get(image.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;
  const batch, imageHeight, imageWidth, numChannels = image.shape;
  wasmFlipLeftRight(xId, number, imageWidth, numChannels, number, outId);
  return out;
}

export const flipLeftRightConfig:
  KernelConfig = {
    kernelName: FlipLeftRight,\n    backendName: 'wasm',\n    kernelFunc: flipLeftRight as {} as KernelFunc,
    setupFunc: setupFn,\n  }\n
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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, varianceEpsilon: number, outId: number) => void;

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

export function fusedBatchNorm(args: {inputs: FusedBatchNormInputs, backend: BackendWasm}): TensorInfo {
  const {inputs, backend} = args;
  const {image} = inputs;
  const out = backend.makeOutput(image.shape, image.dtype);
  const imgDataId = backend.dataIdMap.get(image.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;
  const batch, imageHeight, imageWidth, numChannels = image.shape;
  const numInputs = inputs.length;
  const varInput = numInputs - 2;
  const numOutputs = numInputs - 1;
  const variance = backend.arrayFromHeap(outId);
  const numChannels = backend.dataIdMap.get(varInput.dataId).id;
  const numInputs = inputs.length;
  const varInput = numInputs - 2;
  const numOutputs = numInputs - 1;
  const variance = backend.arrayFromHeap(outId);
  const numChannels = backend.dataIdMap.get(varInput.dataId).id;
  const numInputs = inputs.length;
  const varInput = numInputs - 2;
  const numOutputs = numInputs - 1;
  const variance = backend.arrayFromHeap(outId);
```

```javascript
// Open Source Used In Cisco Meeting Server (formerly Acano Server)
```

```javascript
3.5 4485
```
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
};
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 = inputs.x;
  const bias = attrs.bias;
  const preluActivationWeights = attrs.preluActivationWeights;
  const {inputChannels, outputChannels, activation} = attrs;
  const convInfo = backend_util.computeConv2DInfo(
    x.shape as Tensor4D.shape,
    (filter as Tensor4D).shape,
    strides, dilations,
    'number', // pad
    'number', // dimRoundingMode
    'number', // leakyreluAlpha
  );
  const biasData = backend.dataIdMap.get(bias.dataId);
  if (biasData.shape.length !== 1) {
    throw new Error(
      `FusedConv2D only supports rank-1 bias but got
      ${biasData.shape.length}.
    );
  }
  if (biasData.shape[0] !== outputChannels) {
    throw new Error(
      `FusedConv2D bias shape (${biasData.shape}) does not
      match the number of output channels
      (${outputChannels}).
    );
  }
  const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;
  const batchSize = convInfo.batchSize;
  const inHeight = convInfo.inHeight;
  const inWidth = convInfo.inWidth;
  const outputHeight = convInfo.outHeight;
  const outputWidth = convInfo.outWidth;
  const out = backend.makeOutput(outputChannels); // 'float32';
  const outId = backend.dataIdMap.get(out.dataId);
  const preluActivationWeightsId = preluActivationWeights == null ?
    0 : backend.dataIdMap.get(preluActivationWeights.dataId);
  wasmFusedConv2d(
    xId, batchSize, inHeight, inWidth, filterId, biasId, padTop,
    padBottom, padLeft, isSamePad, dilationHeight, dilationWidth,
    strideHeight, strideWidth, inputChannels, outputChannels,
    'number', // activation
    preluActivationWeightsId, leakyreluAlpha
  );
  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, inHeight, inWidth, filterId, filterHeight, filterWidth, biasId, padTop, padRight, padBottom, padLeft, isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, kernId: number, filterId: number, filterHeight: number, filterWidth: number, biasId: number, padTop: number, padRight: number, padBottom: number, inHeight: number, inputWidth: number, inChannels: number, outputChannels: number, activation: number, preluActivationWeightsId: number, leakyreluAlpha: number, outId: number, outShape: number[], convInfo: number[], biasData: number[], out: number[]) => {
  throw new Error(
    `FusedDepthwiseConv2D only supports rank-1 bias but got
    ${biasData.shape.length}.
  );
  }
  if (biasData.shape[0] !== outputChannels) {
    throw new Error(
      `FusedDepthwiseConv2D bias shape (${biasData.shape}) does not
      match the number of output channels
      (${outputChannels}).
    );
  }
  const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;
  const batchSize = convInfo.batchSize;
  const inHeight = convInfo.inHeight;
  const inWidth = convInfo.inWidth;
  const outputHeight = convInfo.outHeight;
  const outputWidth = convInfo.outWidth;
  const out = backend.makeOutput(outputChannels, 'float32');
  const outId = backend.dataIdMap.get(out.dataId);
  const preluActivationWeightsId = preluActivationWeights == null ? 0 : backend.dataIdMap.get(preluActivationWeights.dataId);
  wasmFusedDepthwiseConv2d(
    xId, batchSize, inHeight, inWidth, filterId, biasId, padTop, padRight, padBottom, padLeft, isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, kernId, filterId, filterHeight, filterWidth, biasId, padTop, padRight, padBottom, padLeft, isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, kernId, filterId, filterHeight, filterWidth, biasId, padTop, padRight, padBottom, number, inHeight, inputWidth, channels, outputChannels, activation, preluActivationWeightsId, leakyreluAlpha)
  return out;
}

export const fusedDepthwiseConv2DConfig: KernelConfig = {
  kernelName: FusedDepthwiseConv2D,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: fusedDepthwiseConv2D as {} as KernelFunc
};
dilationWidth: number, strideHeight: number, strideWidth: number,\ninputChannels: number, outputChannels: number, activation: number,\npreluActivationWeightsId: 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
    // inputChannels
    'number', // outputChannels
    // 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, leakyreluAlpha} = 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,\npad, dimRoundingMode, true /* depthwise */);

  const fusedActivation = FusableActivation[activation as {} as keyof typeof FusableActivation];
  if (fusedActivation == null) {
    throw new Error(`FusedActivation[activation as {} as keyof typeof FusableActivation] not supported.`);
  }

  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 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;
  const outHeight = convInfo.outHeight;
  const outWidth = convInfo.outWidth;

  if (dataFormat !== 'NHWC') {
    throw new Error(`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,\ninHeight, inWidth, filterId, filterHeight, filterWidth, biasId, padTop, padRight, padBottom, padLeft,\nisSamePad, 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,
};
```javascript
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*/, [  // xId
    'number', // dtype
    'number', // indicesId
    'number', // numSlices
    'number', // sliceRank
    'number', // sliceSize
    'array', // strides
    'number' // outId
  ]);}

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

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

  const xData = backend.dataIdMap.get(x.dataId);
  const indicesData = backend.dataIdMap.get(indices.dataId);
  const stridesBytes = new Uint8Array(new Int32Array(strides).buffer);
  wasmGatherNd(
      xId, CppDType[params.dtype], indicesId, numSlices, 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*/, [  // 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: x.shape},
    attrs: {shape: axis, batchDims: batchDims}
  });
  const flattenIndex = reshape({
    inputs: {x: indices.shape},
    attrs: {shape: flattenX.shape, indicesSize: flattenIndex.shape}
  });
  const flattenOutputShape = [  // xId
    xData.id, // xId
    xData.id, // xId
    indicesData.id, // indicesData
  ];

  const out = backend.dataIdMap.get(flattenX.dataId);
  if (util.sizeFromShape(x.shape) === 0) {
    return out;
  }

  const xData = backend.dataIdMap.get(x.dataId);
  const indicesData = backend.dataIdMap.get(indices.dataId);
  const outId = backend.dataIdMap.get(out.dataId);
  const out = backend.dataIdMap.get(out.dataId);
  return out;
}

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

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 *
 *=============================================================================
 */
```
const xStridesBytes = new Uint8Array(xStride * 4);

const xStridesBytes = new Uint8Array(new Int32Array(xStride).buffer);

const outStridesBytes = new Uint8Array(new Int32Array(outStride).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;
return out;
}

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

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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
  // 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: leakyRelu 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 {GreaterEqual, KernelConfig} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

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

*/

Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5 4490
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
  ]); // n]n\nfunction 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;
  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 (util.sizeFromShape(input.shape) !== 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
};

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

import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = false;
export const lessConfig: 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');
```javascript
const outChannels = convInfo.outChannels;

if (convInfo.dataFormat !== 'channelsLast') {
  let newError = new Error(`wasm backend does not support dataFormat: '${convInfo.dataFormat}'. Please use 'channelsLast'.`);
  throw newError;
}

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;
```

```javascript
export const maxPoolConfig: KernelConfig = {
  kernelName: 'MaxPool',
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: maxPool 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, 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: BackendWasm, inputs: {x: input}, attrs: {dtype: 'float32'}});
    inputId = backend.dataIdMap.get(castedInput.dataId).id;
  }

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

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

```javascript
export const meanConfig: KernelConfig = {
  kernelName: 'Mean',
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: mean as {} as KernelFunc
};
```

---

**Open Source Used in Cisco Meeting Server (formerly Acano Server) 3.5 4483**
Native.js: JavaScript Code for Native.js Module

```javascript
// Native.js

import {NativeBuffer} from '@tensorflow/tfjs-native';

// const nativeBuffer = new NativeBuffer();
```

---

**Native.js** is a native layer for TensorFlow.js that provides high-performance operations on native data structures. It is designed to work seamlessly with the TensorFlow.js API and is optimized for performance and memory usage.

- Used for fast data manipulation and computation.
- Interfaces with native buffers and provides functions for tensor creation, manipulation, and converting tensors to buffers and vice versa.

---

**Native.js** is distributed under a License that is specific to the project's requirements. It is intended for use in projects that require high-performance data processing.

---

For more information on **Native.js**, please refer to the official documentation or contact the project maintainers.

---

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---

**KernelConfig** = {
  kernelName: Mean,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: mean as {} as KernelFunc
};

```javascript
// KernelConfig = {
//   kernelName: 'Mean',
//   backendName: 'wasm',
//   setupFunc: setup,
//   kernelFunc: mean as {} as KernelFunc
// };
```

---

The **KernelConfig** is a configuration object that specifies the kernel name, backend name, setup function, and kernel function. It is used to configure kernels for TensorFlow.js operations.

---

**KernelConfig** is used in various TensorFlow.js modules, including **TensorFlow.js** and **Native.js**. It allows for easy configuration of kernels to optimize performance and memory usage.

---

For more information on **KernelConfig**, please refer to the official TensorFlow.js documentation.

---

**Open Source Used in Cisco Meeting Server (formerly Acano Server) 3.5**

---

**Native.js** is part of the open source ecosystem that Cisco Meeting Server (formerly Acano Server) 3.5 uses. It is designed to work seamlessly with the TensorFlow.js API and is optimized for performance and memory usage.

---

**Native.js** is used in various TensorFlow.js modules, including **TensorFlow.js** and **Native.js**. It allows for easy configuration of kernels to optimize performance and memory usage.

---

For more information on **Native.js**, please refer to the official TensorFlow.js documentation.

---

**Open Source Used in Cisco Meeting Server (formerly Acano Server) 3.5**

---

**Native.js** is part of the open source ecosystem that Cisco Meeting Server (formerly Acano Server) 3.5 uses. It is designed to work seamlessly with the TensorFlow.js API and is optimized for performance and memory usage.

---

**Native.js** is used in various TensorFlow.js modules, including **TensorFlow.js** and **Native.js**. It allows for easy configuration of kernels to optimize performance and memory usage.

---

For more information on **Native.js**, please refer to the official TensorFlow.js documentation.
```javascript
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, MirrorPaddingMode[mode], outId);
return out;
}

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

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 * limitations under the License.
 */
```

```javascript
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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 */
```

```javascript
import {KernelConfig, KernelFunc, NonMaxSuppressionV3, NonMaxSuppressionV3Attrs, NonMaxSuppressionV3Inputs, TensorInfo} from '@tensorflow/tfjs-core';

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

import {parseResultStruct} from './NonMaxSuppression_util';

let wasmFunc: (...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);

  return pSelectedIndices;
}
```

```
```
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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';

// Analogous to `struct Result` in `non_max_suppression_impl.h`.
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];
  backend.wasm._free(resOffset);
  return {pSelectedIndices, selectedSize, pSelectedScores, pValidOutputs};
}

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

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

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',
  beatscore: BackendWasm) from 'backend_wasm',
  parseResultStruct from 'NonMaxSuppression_util',
  util 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* in
    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, NonMaxSuppressionV4, NonMaxSuppressionV4Attrs, NonMaxSuppressionV4Inputs, TensorInfo} from '@tensorflow/tfjs-core';

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* in
    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, NonMaxSuppressionV4, NonMaxSuppressionV4Attrs, NonMaxSuppressionV4Inputs, TensorInfo} from '@tensorflow/tfjs-core';

import {parseResultStruct} from './NonMaxSuppression_util';

let wasmFunc: (boxesId: number, scoresId: number, maxOutputSize: number, iouThreshold: number, scoreThreshold: number, padToMaxOutputSize: boolean) => number;

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    const pSelectedIndices = result[0];
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    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, NonMaxSuppressionV4, NonMaxSuppressionV4Attrs, NonMaxSuppressionV4Inputs, TensorInfo} from '@tensorflow/tfjs-core';

import {parseResultStruct} from './NonMaxSuppression_util';

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  Result* in
    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, NonMaxSuppressionV4, NonMaxSuppressionV4Attrs, NonMaxSuppressionV4Inputs, TensorInfo} from '@tensorflow/tfjs-core';

import {parseResultStruct} from './NonMaxSuppression_util';

let wasmFunc: (boxesId: number, scoresId: number, maxOutputSize: number, iouThreshold: number, scoreThreshold: number, padToMaxOutputSize: boolean) => number;

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  wasmFunc = backend.wasm.cwrap(NonMaxSuppressionV4, 'number',
  Result* in
    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, NonMaxSuppressionV4, NonMaxSuppressionV4Attrs, NonMaxSuppressionV4Inputs, TensorInfo} from '@tensorflow/tfjs-core';

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 {
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  Result* in
    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, NonMaxSuppressionV4, NonMaxSuppressionV4Attrs, NonMaxSuppressionV4Inputs, TensorInfo} from '@tensorflow/tfjs-core';

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* in
    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 {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', 'number', 'number', 'number', 'number']);
}

function oneHot(
    inputs: OneHotInputs, attrs: OneHotAttrs, backend: BackendWasm) {
  const {indices, depth, onValue, offValue} = attrs;
  const out = backend.makeOutput(indices.shape, 'int32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmOneHot(indices.dataId, depth, onValue, offValue, outId);
}

export const oneHotConfig:
  KernelConfig = {
    kernelName: OneHot,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: oneHot as any
  } as KernelFunc;

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

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

function createBinaryKernelConfig(NotEqual, supportsFullBroadcast, backend: BackendWasm) {
  return KernelConfig = {
    kernelName: NotEqual,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: oneHot as any
  } as KernelFunc;
}

export const notEqualConfig: KernelConfig = createBinaryKernelConfig(NotEqual, supportsFullBroadcast, 'wasm');

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

import {KernelConfig, KernelFunc, Pack, PackInputs, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';

export function pack(
    inputs: PackInputs, backend: BackendWasm) {
  const {inputs, backend, attrs} = inputs;
  const {axis} = attrs;
  if (inputs.length === 1) {
    return expandDims(
        inputs[0], {dim: axis}, backend, attrs);
  }
  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');
  });
  const out = backend.makeOutput(backend.shapeFromInputs(inputs), 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  const outVals = backend.typedArrayFromHeap(out);
  outVals.fill(1);
  return outId;
}

export const packConfig: KernelConfig = {
  kernelName: Pack,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: pack as any
} as KernelFunc;
util.assert(t.dtype === t.dtype, () => 'All tensors passed to stack must have matching dtypes');

const intermediateTensorInfos: TensorInfo[] = [];

const expandedTensors = inputs.map(t => { const expandedT = t.expandDims({ dim: axis }); });

const result = concat({ inputs: expandedTensors, backend, attrs: [axis] });

intermediateTensorInfos.push(expandedT);

intermediateTensorInfos.forEach(t => 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, 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',  // xShapeBytes
    'number',  // xShapeLength
    'number',  // xDtype
    'array',  // prePaddingsBytes
    'array',  // postPaddingsBytes
    '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] + x.shape[i] + p[1]);

  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 prePaddingsBytes = new Uint8Array(new Int32Array(paddings[0]).buffer);
  const postPaddingsBytes = new Uint8Array(new Int32Array(paddings[1]).buffer);
  const xId = backend.dataIdMap.get(x.dataId).id;

  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, 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
  ]);}

function prelu(args: {inputs: PreluInputs, backend: BackendWasm}) {
  const {inputs, backend} = args;
  const {x, alpha} = inputs;
  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 prePaddingsFlat = paddings[0].map((p, i) => p[0] + x.shape[i] + p[1]);
  const postPaddingsFlat = paddings[1].map((p, i) => p[0] + x.shape[i] + p[1]);
  const weightsId = backend.dataIdMap.get(weights.dataId).id;

  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 weightsId = backend.dataIdMap.get(weights.dataId).id;

  return out;
}

export const preluConfig: KernelConfig = {
  kernelName: Prelu,
  backendName: 'wasm',
  kernelFunc: prelu as {} as KernelFunc,
  setupFunc: setup
};
```javascript
let inputId = xId;
const 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 {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 {backend_util, KernelConfig, KernelFunc, Prod, ProdAttrs, 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;

  let {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) {
    wasmProd(inputId, reduceSize, CppDType[input.dtype], outId);
  }
}

export const prodConfig: KernelConfig = {
  kernelName: Prod,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: prod as {} as KernelFunc
};
```

---

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---

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

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = true;
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, Reverse, ReverseAttrs, ReverseInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

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

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

```javascript
TensorInfo {
  const {inputs, backend, attrs} = args;
  const x = inputs[0].x;
  const dims = attr.value;
  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 outId = backend.dataIdMap.get(out.dataId);
  const xId = backend.dataIdMap.get(x.dataId);
  const axesBytes = new Uint8Array(new Int32Array(axes).buffer);
  const outShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);

  wasmReverse(xId, axesBytes, x.shape.length, outId, outShapeBytes, x.shape.length, outId);
  return out;
}

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

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```
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' // outputId });

function scatterNd(
    args:
        {backend: BackendWasm, inputs:
            ScatterNdInputs, outputs: ScatterNdOutputs}):
    TensorInfo {
  const {backend, inputs, outputs} = 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
}
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',
  kernelFunc: select as {} as KernelFunc,
  setupFunc: setup
};

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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']);
}

function sigmoid(args: {backend: BackendWasm, inputs: SigmoidInputs}): TensorInfo {
  const {backend, inputs: {logits}} = 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[0];
  const batch = util.sizeFromShape(logits.shape) / channels;

  if (util.sizeFromShape(out.shape) === 0) {
    return out;
  }

  wasmFunc(xId, outId, channels, batch);
  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', '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];

  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 {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 {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});

  const resultReshapeInputs: ReshapeInputs = {x: paddedXT};
  const resultReshapeAttrs: ReshapeAttrs = {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});

    const xSliceSize[$axis] = s;
  });
}
```javascript
return xSlice;
});

export const splitVConfig: KernelConfig = {
  kernelName: SplitV,
  backendName: 'wasm',
  kernelFunc: splitV as {} as KernelFunc
};

export const splitVConfig: KernelConfig = {
  kernelName: SplitV,
  backendName: 'wasm',
  kernelFunc: splitV as {} as KernelFunc
};

export const splitVConfig: KernelConfig = {
  kernelName: SplitV,
  backendName: 'wasm',
  kernelFunc: splitV as {} as KernelFunc
};
```

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 */

import {KernelConfig, 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
};
```

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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';
```

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 */

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

import {createBinaryKernelConfig} from './binary_kernel';
```

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 */

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

import {createBinaryKernelConfig} from './binary_kernel';
```
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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',   // 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: $begin, size}});
    result =
        reshape({inputs: {x: sliced}, backend, attrs: {shape:
          finalShape}});
    backend.disposeData(sliced.dataId);
  } else {
    const out = backend.makeOutput(finalShapeSparse, 'float32');
    const xId = backend.dataIdMap.get(x.dataId).id;
    const xStridesBytes =
        new Uint8Array(new Int32Array(util.computeStrides(x.shape)).buffer);
    const beginBytes =
        new Uint8Array(new Int32Array($begin).buffer);
    const endBytes =
        new Uint8Array(new Int32Array($end).buffer);
    const stridesBytes =
        new Uint8Array(new Int32Array($strides).buffer);
    const outputShapeBytes =
        new Uint8Array(new Int32Array(outShapeLength).buffer);
    const outputStridesBytes =
        new Uint8Array(new Int32Array(outStrides).buffer);

    const result =
        reshape({inputs: {x: out}, 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(outShapeLength).buffer);
    const outputStridesBytes =
        new Uint8Array(new Int32Array(outStrides).buffer);

    const result =
        reshape({inputs: {x: out}, backend, attrs: {shape: finalShape}});
    backend.disposeData(sliced.dataId);}

    return result;
}

export const stridedSliceConfig: KernelConfig = {
  kernelName: StridedSlice,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: stridedSlice as {} as KernelFunc
};

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, xStridesBytes: Uint8Array, xRank: number,
    beginBytes: Uint8Array, endBytes: Uint8Array, stridesBytes: Uint8Array,
    outShapeBytes: Uint8Array, outStridesBytes: Uint8Array,
    outShapeLength: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmSum = backend.wasm.cwrap(Sum, null /*void*/, [
    'number',  // xId
    'array',   // xStrides
    'number',  // xRank
    'array',   // beginBytes
    'array',   // endBytes
    'array',   // stridesBytes
    'array',   // outShapeBytes
    'array',   // outStridesBytes
    'number',  // outShapeLength
    'number',  // outId
  ]);}

export function sum(args: {
  backend: BackendWasm,
  inputs: SumInputs,
  attrs: SumAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;

  const {x} = inputs;

  const {
    begin,
    end,
    strides,
    keepDims,
    keepDimIndices
  } = attrs;

  const {
    finalShape,
    isIdentity,
    axis,
    scalar
  } =
      sum_util.axisInfo(
        x.shape, begin, end, strides, keepDims, keepDimIndices);

  const out = backend.makeOutput(finalShape, CppDType);

  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(outShapeLength).buffer);
  const outputStridesBytes =
      new Uint8Array(new Int32Array(outStrides).buffer);

  const result =
      reshape({inputs: {x: out}, 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(outShapeLength).buffer);
    const outputStridesBytes =
        new Uint8Array(new Int32Array(outStrides).buffer);

    const result =
        reshape({inputs: {x: out}, backend, attrs: {shape: finalShape}});
    backend.disposeData(sliced.dataId);}

    return result;
}

export const sumConfig: KernelConfig = {
  kernelName: Sum,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: sum as {} as KernelFunc
};
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).
  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);
    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);
  if (util.sizeFromShape(input.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId);
    wasmSum(inputId, reduceSize, CppDType[out.dtype], outId);
  }
  if (inputWasTransposed) {
    // dispose of
    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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 * limitations under the License.
 */

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
     "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);
  const [reps] = attrs;
  const newShape = backend.wasm.cwrap(ExpandShapeToKeepDim, null /*void*/,
    ["number", // input_id
     "array", // new_shape
     "number", // new_shape.length
     "number", // out_id
    ]);#
}

const xShapeBytes = new Uint8Array(x.shape.length);
for (let i = 0; i < newShape.length; i++) {
  xShapeBytes[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;
wsasmTile(
  xId, xShapeBytes, x.shape.length, newShapeBytes, newShape.length,
  CppDType[out.dtype], outId);
return out;
}
export const kernelFunc: kernelFunc = {}

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 */

export default {
  kernelName: TopK,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: topk as {} as KernelFunc
};


*/

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(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;
          const outValues = backend.wasmTopK(
            xId, xShapeBytes, x.shape.length, 
            CppDType[x.dtype], k, sorted,
            outValuesId, outIndicesId);
          return [outValues, outIndices];
}
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, imageSize: 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',  // imageSize
    'array',   // strides
    'number',  // stridesLength
    '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, 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;
  }

  wasmTransform(imageId, transformsId, (transforms.shape[0] > 1), batch, outHeight, outWidth, numChannels, imageWidth, imageSize, strides, interpolationModeId, fillModeId, fillValue, outId);

  return out;
}

export const transformConfig: KernelConfig = {
  kernelName: Transform,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: transform as {} as KernelFunc
};
for (let i = 0; i < outs.length; i++) {
  begin[axis] = i;
  outs[i] = slice({inputs: {x: value}, attrs: {begin, size},
  backend});
}
return outs.map((data, dtype) => {
  (data, dtype, shape: outShape));
}
\n\nexport const unpackConfig = {\n  kernelName: Unpack,\n  backendName: 'wasm',\n  kernelFunc: unpack as {} as
}

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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';

import {fusedMatMulConfig} from './kernels/_FusedMatMul';
import {absConfig} from './kernels/Abs';
import {addConfig} from './kernels/Add';
import {addNConfig} from './kernels/AddN';
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 {eluConfig} from './kernels/Elu';
import {expConfig} from './kernels/Exp';
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 {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 {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 {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';
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--------------------------------------------------------------------------

*An imports {env} from '@tensorflow/tfjs-core'; \nconst ENV = env(); \n*/

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:
  try {
    // Test for transferability of SABs (needed for Firefox)
    // https://github.com/tensorflow/tfjs/issues/3830
    if (ENV.get('IS_NODE')) { return false; }
    try {
      // TODO(annxingyuan): Enable node support once this is resolved:
      // https://github.com/tensorflow/tfjs/issues/3830
      if (ENV.get('IS_NODE')) { return false; }
      // This typed array is a WebAssembly program containing threaded
      // instructions in WebAssembly validation.
      // 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) { throw e; }
  } catch (e) { throw e; }
});

/*
 * Module
 */

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 window&&window['object']==="object"&&typeof window.importScripts==="function";ENVIRONMENT_IS_NODE=typeof process==="object";ENVIRONMENT_IS_SHELL=typeof process._exit==="function";ENVIRONMENT_IS_PTHREAD=Module["ENVIRONMENT_IS_PTHREAD"]||false;if(ENVIRONMENT_IS_P
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); var INITIAL_MEMORY = Module["INITIAL_MEMORY"];
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 / 65536,
      "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");
    } if (wasmMemory) {
      buffer = wasmMemory.buffer;
    } }
  }
}

INITIAL_MEMORY = buffer.byteLength;
updateGlobalBufferAndViews(buffer);
var wasnmTable; var __ATPRERUN__ = [];
var __ATINIT__ = [];
var __ATMAIN__ = [];
var __ATEXIT__ = [];
var __ATPOSTRUN__ = [];
var runtimeInitialized = false;
var runtimeExited = false;
if (ENVIRONMENT_IS_PTHREAD) { 
  __ATINIT__.push({
    func: function () {
      ___wasm_call_cors()
    }
  });
}

function preRun () {
  if (ENVIRONMENT_IS_PTHREAD) { __ATINIT__.push({
      func: function () {
        wasmTable = Module["wasmTable"] || null;
        wasmTable = Module["wasmTable"] || new WebAssembly.Table(
          { 
            "initial": INITIAL_MEMORY / 65536, 
            "maximum": 2147483648 / 65536, 
            "shared": true 
          }, 
          new Int32Array(new Uint8Array(buf))
        );
        wasmMemory = Module["wasmMemory"];
        module = Module["module"];
        if (!module) throw Error("wasmMemory!=null but module==null");
        var exports = module.exports;
        exports.run = {
          func: function () {
            var totalDependencies = 0;
            var dependenciesFulfilled = null;
            var runDependencies = 0;
            var runDependencyWatcher = null;
            var dependenciesFulfilled = null;
            function addRunDependency(id) {
              runDependencies++;
              if (Module["monitorRunDependencies"]){
                Module["monitorRunDependencies"](runDependencies);
              } else {
                Module["monitorRunDependencies"] = function () {
                  Module["monitorRunDependencies"](runDependencies);
                };
              }
              if (Module["monitorRunDependencies"])(runDependencies);
            }
            function removeRunDependency(id) {
              runDependencies--;
              if (Module["monitorRunDependencies"]){
                Module["monitorRunDependencies"](runDependencies);
              } else {
                Module["monitorRunDependencies"] = function () {
                  Module["monitorRunDependencies"](runDependencies);
                };
              }
              if (Module["monitorRunDependencies"])(runDependencies);
            }
            var runDependencies = 0;
            var dependenciesFulfilled = null;
            var runDependencyWatcher = null;
            var dependenciesFulfilled = null;
            var callback = dependenciesFulfilled = null;
            callback();
            var module = Module;
            module["preloadedImages"] = [];
            module["preloadedAudios"] = [];
            function abort() {
              if (Module["onAbort"]) Module["onAbort"]();
              throw new WebAssembly.RuntimeError("Aborting runtime!");
              if (onAbort()) throw onAbort();
            }
          }
        }
      }
    })
  })
}

module["onAbort"] = function () {
  // Called when the parent process terminates but the JavaScript
  // files have not finished loading.
  // This function should check the status of all the files
  // that were requested and call abort() if any of them have not
  // loaded. (This is a very important function!)
  abort()
}

function runMain () {
  console.log("Running main()");
  var mainEntry = Module["mainEntry"];
  if (typeof mainEntry == "function")
    mainEntry = [mainEntry];
  while (mainEntry.length) { addOnPreRun(mainEntry.shift()) } 
  callRuntimeCallbacks(__ATMAIN__)
}

function exitRuntime () {
  runtimeExited = true;
  runDependencies = 0;
  dependenciesFulfilled = null;
  if (runDependencyWatcher !== null) {
    clearInterval(runDependencyWatcher);
    runDependencyWatcher = null;
  }
  if (Module["monitorRunDependencies"]){
    Module["monitorRunDependencies"](0);
  }
}

function preRun () {
  if (ENVIRONMENT_IS_PTHREAD) {__ATINIT__.push({
      func: function () {
        ___wasm_call_cors()
      }
    });
}

function postRun () {
  if (ENVIRONMENT_IS_PTHREAD) {__ATMAIN__.push({
      func: function () {
        ___wasm_call_cors()
      }
    });
}

function addOnPreRun (cb) {
  addOnPreRun.push(cb);
  if (cb) addOnPreRun = addOnPreRun.slice(0);
}

function addOnPostRun (cb) {
  addOnPostRun.push(cb);
  if (cb) addOnPostRun = addOnPostRun.slice(0);
}

function addRunDependency (id) {
  if (Module["onAbort"]) Module["onAbort"]; 
  addRunDependency(id);
}

function abort (what) {
  if (Module["onAbort"])
    Module["onAbort"](what);
  throw what;
}

function hasPrefix (str, prefix) {
  return str.startsWith(prefix);
}

function isDataURI(filename) {
  return hasPrefix(filename, dataURIPrefix);
}

function isFileURI(filename) {
  return hasPrefix(filename, fileURIPrefix);
}

function wasmBinaryFile () {
  var wasmBinaryFile = "tfjs-backend-wasm-threaded-simd.wasm";
  if (isDataURI(wasmBinaryFile)) return; 
  if (isFileURI(wasmBinaryFile)) return;
  var fileURL = module.parent + "/wasm-binary/wasm-binary.wasm";
  if (isDataURI(fileURL)) return;
  if (isFileURI(fileURL)) return;
  throw new Error("ENTRYPOINT " + fileURL);
}

function abort (what) {
  if (Module["onAbort"])
    Module["onAbort"](what);
  throw what;
}

__checkRuntime = function () {
  if (Module["monitorRunDependencies"]){
    Module["monitorRunDependencies"](runDependencies);
  } else {
    Module["monitorRunDependencies"] = function () {
      Module["monitorRunDependencies"](runDependencies);
    };
  }
  if (runDependencies >= 0)
    if (runDependencyWatcher !== null)
      clearInterval(runDependencyWatcher);
    else {
      if (Module["monitorRunDependencies"])
        Module["monitorRunDependencies"](runDependencies);
      else {
        Module["monitorRunDependencies"] = function () {
          Module["monitorRunDependencies"](runDependencies);
        };
      }
      if (Module["monitorRunDependencies"])(runDependencies);
    }
    addRunDependency(id);
    runDependencies++;
    if (Module["monitorRunDependencies"]){
      Module["monitorRunDependencies"](runDependencies);
    } else {
      Module["monitorRunDependencies"] = function () {
        Module["monitorRunDependencies"](runDependencies);
      };
    }
    if (Module["monitorRunDependencies"])(runDependencies);
}

__check = function () {
  runDependencies = 0;
  runDependencyWatcher = setInterval(__checkRuntime, 10);
}

__wasm_call_cors = function () {
  __check();
}

__wasm_call_cors()
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)}}

getBinaryPromise(){if(!wasmBinary&&!!ENVIRONMENT_IS_WEB&&!ENVIRONMENT_IS_WORKER){if(typeof fetch==='function'&&!!FileURI(wasmBinaryFile)){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{return Promised.resolve().then(function(){return getBinary(wasmBinaryFile)})}}function createWasm(){var info={"a":asmLibraryArg};function receiveInstance(instance,module){var exports=instance.exports;Module["asm"]=exports;WebAssembly.instantiate(binary,info);return exports}}

getBinaryPromise().then(function(binary){WebAssembly.instantiate(binary,info);})

function createWasm(){var info={"a":asmLibraryArg};function receiveInstance(instance,module){var exports=instance.exports;Module["asm"]=exports;WebAssembly.instantiate(binary,info);return exports}}

getBinaryPromise().then(function(binary){WebAssembly.instantiate(binary,info);})
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";
"}]+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 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/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);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(){},pthread:{},treadExitHandlers:[],runExitHandlers:function(){},runExitHandlersAndDeinitThread:function(tb,exitCode){Atomics.store(GROWABLE_HEAP_U32(),tb+56>>2,1);Atoms.store(GROWABLE_HEAP_U32(),tb+60>>2,2.0);PThread.runExitHandlers();Atoms.store(GROWABLE_HEAP_U32(),tb+40>>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(ENVIRONMENT_IS_PTHREAD_AD){postMessage({"cmd":"\"exit\""}) },threadCancel:function(){PThread.runExitHandlersAndDeinitThread(_pthread_self(),-1);postMessage({"cmd":"\"cancelDone\""})},terminateAllThreads:function(){for(var i in PThread.pthreads){var pthread=PThread.pthreads[i];if(pthread&&_pthread_self())PThread.terminateWorkerToPool(pthread.worker) PThread.pthreads=[];for(var i=0;i<PThread.unusedWorkers.length;++i){}}
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,637534208,626H,stackSave());getTargetThreadForEventCallback: function(targetThread){switch(targetThread){case 1:return 0;case 2:return PTThread.currentProxiedOperationCallerThread;default:return targetThread} },getNodeNameForTarget:function(target){if(!target)return"";if(target==window)return"#window";if(target.nodeType?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(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 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.GLctxObject&&canvas.GLctxObject.GLctx){var prevViewport=canvas.GLctxObject.GLctx.getParameter(2978);autoResizeViewport=false;if(prevViewport[0]==0&&prevViewport[1]==0&&prevViewport[2]==canvas.width&&prevViewport[3]==canvas.height)canvas.height=autoResizeViewport?canvas.GLctxObject.GLctx.viewport(0,0,width,height):canvas.height}}else if(canvas.canvasSharedPtr){var targetThread=GROWABLE_HEAP_I32()\[canvas.canvasSharedPtr+8>>>2\];_emscripten_set_offscreencanvas_size_on_target_thread(targetThread,width,height);return 1}else {return-4}return 0}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"]="";if(0)return 0}
ics.store(GROWABLE_HEAP_U32(),tis+(104+12>>2),threadParams.detached);var
global_libc=_emscripten_get_global_libc();
var
global_locale=global_libc+40;Atoms.store(GROWABLE_HEAP_U32(),tis+(172>>2),global_locale);worker.pthread=pthread;var
msg="\"cmd\"\":\"run\",\"start_routine\":threadParams.startRoutine,\"arg\":threadParams.arg,\"threadInfoStruct\":thread
Params.pthread_ptr,\"stackBase\":threadParams.stackBase,\"stackSize\":threadParams.stackSize
worker.runPthread=function(){msg.time=performance.now();worker.postMessage(msg,threadParams.transferList)
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)\}\if(error)return error;var
stackSize=0;var stackBase=0;var detached=0;if(attr&&attr!=-
1){stackSize=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]=0;GROWABLE_HEAP_I32()[pthread_ptr+2]=
threadInfoStruct;var headPtr=threadInfoStruct+152;GROWABLE_HEAP_I32()[(headPtr+2)=headPtr;var
threadParams=threadInfoStruct;stackSize,stackBase,allocatedOwnStack,allocatedOwnStack,attached;detached
/startRoutine=start_routine,pthread_ptr=threadInfoStruct,arg,transferList,transferList,attr 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_check_blocking_allowed(){if(ENVIRONMENT_IS_NODE)return;if(ENVIRONMENT_IS_WORKER)
\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
\+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)\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()[stat
us+2>>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
s})}; 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
  _emscripten_get_global_libc=Module["_emscripten_get_global_libc"] =function(){return(_emscripten_get_global_libc=Module["_emscripten_get_global_libc"] =Module["asm"] ["lb"]).apply(null, arguments)}; var
  _pthread_self=Module["_pthread_self"] =function(){return(_pthread_self=Module["_pthread_self"] =Module["asm"] ["mb"]).apply(null, arguments)}; var
  ___pthread_tsd_run_dtors=Module["___pthread_tsd_run_dtors"] =function(){return(___pthread_tsd_run_dtors= Module["___pthread_tsd_run_dtors"] =Module["asm"] ["nb"]).apply(null, arguments)}; var
  _emscripten_main_thread_process_queued_calls=Module["_emscripten_main_thread_process_queued_calls"] =function(){return(_emscripten_main_thread_process_queued_calls=Module["_emscripten_main_thread_process_queued_calls"] =Module["asm"] ["ob"]).apply(null, arguments)}; var
  _emscripten_current_thread_process_queued_calls=Module["_emscripten_current_thread_process_queued_calls"] =function(){return(_emscripten_current_thread_process_queued_calls=Module["_emscripten_current_thread_process_queued_calls"] =Module["asm"] ["pb"]).apply(null, arguments)}; var
  _emscripten_register_main_browser_thread_id=Module["_emscripten_register_main_browser_thread_id"] =function(){return(_emscripten_register_main_browser_thread_id=Module["_emscripten_register_main_browser_thread_id"] =Module["asm"] ["qb"]).apply(null, arguments)}; var
  _emscripten_do_dispatch_to_thread=Module["_emscripten_do_dispatch_to_thread"] =function(){return(_emscripten_do_dispatch_to_thread=Module["_emscripten_do_dispatch_to_thread"] =Module["asm"] ["sb"]).apply(null, arguments)}; var
  _emscripten_sync_run_in_main_thread_4=Module["_emscripten_sync_run_in_main_thread_4"] =function(){return(_emscripten_sync_run_in_main_thread_4=Module["_emscripten_sync_run_in_main_thread_4"] =Module["asm"] ["tb"]).apply(null, arguments)}; var
  _emscripten_run_in_main_runtime_thread_js=Module["_emscripten_run_in_main_runtime_thread_js"] =function(){return(_emscripten_run_in_main_runtime_thread_js=Module["_emscripten_run_in_main_runtime_thread_js"] =Module["asm"] ["ub"]).apply(null, arguments)}; var
  _emscripten_call_on_thread=Module["_emscripten_call_on_thread"] =function(){return(_emscripten_call_on_thread=Module["_emscripten_call_on_thread"] =Module["asm"] ["vb"]).apply(null, arguments)}; var

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var _init_with_threads_count=Module["_init_with_threads_count"] =function(){ return(_init_with_threads_count=Module["asm"])["m"]}.apply(null,arguments); var _get_threads_count=Module["_get_threads_count"] =function(){ return(_get_threads_count=Module["asm"])["n"]}.apply(null,arguments); var _register_tensor=Module["_register_tensor"] =function(){ return(_register_tensor=Module["asm"])["o"]}.apply(null,arguments); var _dispose_data=Module["_dispose_data"] =function(){ return(_dispose_data=Module["asm"])["p"]}.apply(null,arguments); var _register_tensor=Module["_register_tensor"] =function(){ return(_register_tensor=Module["asm"])["q"]}.apply(null,arguments); var _Abs=Module["_Abs"] =function(){ return(_Abs=Module["asm"])["s"]}.apply(null,arguments); var _Add=Module["_Add"] =function(){ return(_Add=Module["asm"])["t"]}.apply(null,arguments); var _AddN=Module["_AddN"] =function(){ return(_AddN=Module["asm"])["u"]}.apply(null,arguments); var _All=Module["_All"] =function(){ return(_All=Module["asm"])["v"]}.apply(null,arguments); var _Any=Module["_Any"] =function(){ return(_Any=Module["asm"])["w"]}.apply(null,arguments); var _ArgMax=Module["_ArgMax"] =function(){ return(_ArgMax=Module["asm"])["x"]}.apply(null,arguments); var _AvgPool=Module["_AvgPool"] =function(){ return(_AvgPool=Module["asm"])["y"]}.apply(null,arguments); var _BatchMatMul=Module["_BatchMatMul"] =function(){ return(_BatchMatMul=Module["asm"])["z"]}.apply(null,arguments); var _Ceil=Module["_Ceil"] =function(){ return(_Ceil=Module["asm"])["A"]}.apply(null,arguments); var _ClipByValue=Module["_ClipByValue"] =function(){ return(_ClipByValue=Module["asm"])["B"]}.apply(null,arguments); var _Conv2D=Module["_Conv2D"] =function(){ return(_Conv2D=Module["asm"])["C"]}.apply(null,arguments); var _Conv2DBackpropInput=Module["_Conv2DBackpropInput"] =function(){ return(_Conv2DBackpropInput=Module["asm"])["D"]}.apply(null,arguments); var _Cos=Module["_Cos"] =function(){ return(_Cos=Module["asm"])["E"]}.apply(null,arguments); var _CropAndResize=Module["_CropAndResize"] =function(){ return(_CropAndResize=Module["asm"])["F"]}.apply(null,arguments); var _Cumsum=Module["_Cumsum"] =function(){ return(_Cumsum=Module["asm"])["G"]}.apply(null,arguments); var _DepthToSpace=Module["_DepthToSpace"] =function(){ return(_DepthToSpace=Module["asm"])["H"]}.apply(null,arguments); var _DepthwiseConv2dNative=Module["_DepthwiseConv2dNative"] =function(){ return(_DepthwiseConv2dNative=Module["asm"])["J"]}.apply(null,arguments); var _Elu=Module["_Elu"] =function(){ return(_Elu=Module["asm"])["K"]}.apply(null,arguments);
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```javascript
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['_NonMaxSuppressionV3']=Module['asm']['ja']).apply(null,arguments)};var
_NonMaxSuppressionV4=Module['_NonMaxSuppressionV4']=function(){return(_NonMaxSuppressionV4=Module['_NonMaxSuppressionV4']=Module['asm']['ka']).apply(null,arguments)};var
_NonMaxSuppressionV5=Module['_NonMaxSuppressionV5']=function(){return(_NonMaxSuppressionV5=Module['_NonMaxSuppressionV5']=Module['asm']['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(null,arguments)};var
_Pow=Module['_Pow']=function(){return(_Pow=Module['_Pow']=Module['asm']['pa']).apply(null,arguments)};var
_Prelu=Module['_Prelu']=function(){return(_Prelu=Module['_Prelu']=Module['asm']['qa']).apply(null,arguments)};var
_Prod=Module['_Prod']=function(){return(_Prod=Module['_Prod']=Module['asm']['ra']).apply(null,arguments)};var
_RealDiv=Module['_RealDiv']=function(){return(_RealDiv=Module['_RealDiv']=Module['asm']['sa']).apply(null,arguments)};var
_Relu=Module['_Relu']=function(){return(_Relu=Module['_Relu']=Module['asm']['ta']).apply(null,arguments)};var
_Relu6=Module['_Relu6']=function(){return(_Relu6=Module['_Relu6']=Module['asm']['taa']).apply(null,arguments)};var
_Reshape=Module['_Reshape']=function(){return(_Reshape=Module['_Reshape']=Module['asm']['tba']).apply(null,arguments)};var
_Rsqrt=Module['_Rsqrt']=function(){return(_Rsqrt=Module['_Rsqrt']=Module['asm']['tca']).apply(null,arguments)};var
_ScatterNd=Module['_ScatterNd']=function(){return(_ScatterNd=Module['_ScatterNd']=Module['asm']['Aaa']).apply(null,arguments)};var
_SelectV2=Module['_SelectV2']=function(){return(_SelectV2=Module['_SelectV2']=Module['asm']['Ba']).apply(null,arguments)};var
_Sigmoid=Module['_Sigmoid']=function(){return(_Sigmoid=Module['_Sigmoid']=Module['asm']['Ca']).apply(null,arguments)};var
_Sin=Module['_Sin']=function(){return(_Sin=Module['_Sin']=Module['asm']['Da']).apply(null,arguments)};var
_Softmax=Module['_Softmax']=function(){return(_Softmax=Module['_Softmax']=Module['asm']['Ea']).apply(null,arguments)};var

```
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this.wasm._free(data.memoryOffset);
this.wasm.tfjs.disposeData(data.id);
this.dataIdMap.delete(dataId);
} return true;
} /** Return refCount of a `TensorData`. */
refCount(dataId: DataId): number {
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++;
} 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;
}

/** 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. */
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});
    } 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. */
 * returns the memory offset of a tensor. Useful for debugging and unit tests.
 * testing. */
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};
} /** * 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. */
 * returns the memory offset of a tensor. Useful for debugging and unit tests.
 * testing. */
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};
}
+ path;
 });
 // Use the instantiateWasm override when system fetch is not available.
 // Reference:
 // https://github.com/emscripten-core/emscripten/blob/2bca083cb0b5a4133da6b1fbd74d04f76feeca907/tests/manual_wasm_instantiate.html#L170
 if (customFetch) {  
  factoryConfig.instantiateWasm =
  createInstantiateWasmFunc(getPathToWasmBinary(  
    wasmSupported as boolean, threadsSupported as boolean,  
    wasmPathPrefix != null ? wasmPathPrefix : "));
 });
 // Emscripten already called console.warn so no need to double log.
 return);
 if (initAborted) {  
  Emscriptens 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});
 });
 let wasm: Promise<BackendWasmModule> =
 // 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 {  
  // The wasmFactory works for both vanilla and SIMD binaries.
  wasm = wasmFactory(factoryConfig);
 }  
 // 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;
  const voidReturnType: string = null;
  // Using the tfjs namespace to avoid conflict with emscriptens's API.
  module.tfjs = {
    init: module.cwrap('init', null, []),  
    initWithThreadsCount:
        module.cwrap('init_with_threads_count', null, ['number']),
    getThreadsCount: module.cwrap('get_threads_count', 'number', []),
    registerTensor:
        module.cwrap('register_tensor', null, [
          'number',  // id
          'number',  // size
          'number',  // memoryOffset
        ]),
    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
 * 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'}
 */
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 '+
    "setWasmPath()" before you call `tf.setBackend()` or `tf.ready()`;
  }  
  wasmPath = path;
  customFetch = usePlatformFetch;
  \n  **\n  * Configures the locations of the WASM binaries.
  * `\n  * @param prefixOrFileMap This can be either a string or object:
  * @param prefixOrFileMap This can be either a string or object:
  * @param prefixOrFileMap This can be either a string or object:
  * Mapping from names of WASM binaries to custom
  * full paths specifying the locations of those binaries. This is useful if you
  * 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
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\"]()})}var
err=threadPrintErr;this.alert=threadAlert;Module[\"instantiateWasm\"]=function(info,receiveInstance){var
instance=new
WebAssembly.Instance(Module[\"wasmModule\"],info);Module[\"wasmModule\"]=null;receiveInstance(instance);r
eturn instance.exports};function
moduleLoaded(){}this.onmessage=function(e){try{if(e.data.cmd===\"load\"){Module[\"wasmModule\"]=e.data.wa
smModule;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;moduleLoaded()})}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.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\"]){if(Module[\"getNoExitRuntime\"]()){}else{Module[\"PThread\"].threadExit(ex.status)}}el
se{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

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

import '@tensorflow/tfjs-core';
import '@tensorflow/tfjs-core/dist/public/chained_ops/register_all_chained_ops';
import '@tensorflow/tfjs-core/dist/register_all_gradients';

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

/**
 * Tests that have these substrings in their name will be included unless one
 * of the strings in
 * excludes appears in the name.
 */
const TEST_FILTERS: TestFilter[] = [
  {
    startsWith: 'tensor ',
    excludes: ['complex', 'derivative', 'Gradient not yet supported'],
  },
  {include: 'softmax'},
  {
    include: 'pow',
    excludes: ['gradient', 'broadcasting same rank Tensors different shape'],
  },
  {
    include: 'add ',
    excludes: ['gradient', 'upcasts when dtypes dont match'],
  },
  {include: 'depthToSpace'},
  {
    include: 'avgPool',
    excludes: ['gradient', 'avgPool3d'],
  },
  {
    include: 'relu',
    excludes: ['derivative'],
  },
  {
    include: 'maxPool',
    excludes: ['maxPoolBackprop'],
  },
];
excludes: ["gradient", // Not yet implemented.
  "broadcasting Tensor2D shapes", // Broadcasting along outer dims not
  "broadcasting Tensor3D shapes", // Same as above.
  "broadcasting Tensor4D shapes", // Same as above.
  "string"]
},

{
  include: "less",
  excludes: ["gradient", // Not yet implemented.
    "broadcasting Tensor2D shapes", // Broadcasting along outer dims not
    "broadcasting Tensor3D shapes", // Same as above.
    "broadcasting Tensor4D shapes", // Same as above.
  ],
},

{
  include: "lessEqual",
  excludes: ["gradient", // Not yet implemented.
    "broadcasting Tensor2D shapes", // Broadcasting along outer dims not
    "broadcasting Tensor3D shapes", // Same as above.
  ],
},

{
  include: "notEqual",
  excludes: ["gradient", // Not yet implemented.
    "broadcasting Tensor2D shapes", // Broadcasting along outer dims not
    "broadcasting Tensor3D shapes", // Same as above.
  ],
},

{
  include: "mean",
  excludes: ["axis=0", // Reduction not supported
    along inner dimensions.
  ],
},

{
  includes: ["reverse"],
},

{
  includes: ["sum"],
},

{
  includes: ["cumsum"],
},

{
  includes: ["logicalAnd", // Not yet supported.
    "broadcasting Tensor2D shapes", // Broadcasting along outer dims not
    "broadcasting Tensor3D shapes", // Same as above.
  ],
},

{
  includes: ["tile", // Gradient not yet implemented.
    "string tensor" // String tensors not yet implemented.
  ],
},

{
  includes: ["sin"],
},

{
  includes: ["cos", // Gradient not yet implemented.
    "broadcasting Tensor2D shapes", // Broadcasting along outer dims not
  ],
},

{
  includes: ["cosh", // Gradient not yet implemented.
    "broadcasting Tensor2D shapes", // Broadcasting along outer dims not
  ],
},

{
  includes: ["tan", // Gradient not yet implemented.
    "broadcasting Tensor2D shapes", // Broadcasting along outer dims not
  ],
},

{
  includes: ["tanh", // Gradient not yet implemented.
    "broadcasting Tensor2D shapes", // Broadcasting along outer dims not
  ],
},

{
  includes: ["rsqrt", // Gradient not yet implemented.
    "broadcasting Tensor2D shapes", // Broadcasting along outer dims not
  ],
},

{
  includes: ["sqrt", // Gradient not yet implemented.
    "broadcasting Tensor2D shapes", // Broadcasting along outer dims not
  ],
},

{
  includes: ["where", // Fill
    "1D condition with higher rank a and b", // Fill
    "gradient not yet implemented.
    "broadcasting Tensor2D shapes", // Broadcasting along outer dims not
  ],
},

{
  includes: ["zerosLike", // Complex numbers not supported yet.
    "complex"]
},

{
  includes: ["onesLike", // Complex numbers not supported yet.
    "complex"]
},

{
  includes: ["round", // Pool is not supported yet.
    "pool"]
},

{
  includes: ["step kernel"],
},

{
  includes: ["ceil"],
},

{
  includes: ["mirrorPad"],
},

{
  includes: ["all", // Include all regular describe() tests.
    "ignores NaNs" // Doesn't yet ignore NaNs
  ],
},

{
  includes: ["any", // Include all regular describe() tests.
    "ignores NaNs" // Doesn't yet ignore NaNs
  ],
},

{
  includes: ["image.transform"],
},

{
  includes: ["batchToSpaceND", // Complex numbers not supported yet.
    "spaceToBatchND"]
},

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
// tslint:disable-next-line:no-imports-from-dist
// tslint:disable-next-line:no-require-imports
require('@tensorflow/tfjs-core/dist/tests');
/**
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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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 */

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

No license file was found, but licenses were detected in source scan.
No license file was found, but licenses were detected in source scan.

```javascript
{}
```

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

No license file was found, but licenses were detected in source scan.
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 const channels = logits.shape[dim];

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

// 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

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

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

declare globalThis;

let wasmFusedMatMul:
  (aId: number, aShape: Uint8Array, aShapeSize: number, bId: number, bShape: Uint8Array, bShapeSize: number, transposeA: boolean, transposeB: boolean, activation: number, leakyreluAlpha: 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
    'boolean', // transpose_a
    'boolean', // transpose_b
    'number',  // activation
    'number',  // leakyreluAlpha
    'number'   // out_id
  ]);}

function fusedBatchMatMul(args: {
  inputs: _FusedMatMulInputs,
  backend: BackendWasm,
  attrs: _FusedMatMulAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {a, b, bias, leakyreluAlpha} = attrs;
  const numInputs = inputs.length;
  for (let i = 0; i < numInputs; i++) {
    if (inputs[i].dtype !== 'float32') {
      throw new Error(`FusedMatMul for non-float32 tensors not yet supported.`);
    }
    void(wasmFusedMatMul(i, backend, inputs[i], bias, leakyreluAlpha, backend.WasmMatMul));
  }
}
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: fusedMatMul 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(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
     'number'] // function
    });

    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);

        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);

        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};
}

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(kernelName, null /* void */, 
    ['array',  // input_ids
     'number', // number,
     'number',  // dtype
     'number',  // out_id
     'number'] // function
    });

    function kernelFunc(args: {inputs: Uint8Array, inputIdsLen: number, dtype: number, inputIds:
     number}) =>
        void;

    function addn(args: {inputs: Uint8Array, inputIdsLen: number, dtype: number, inputIds:
     number}) =>
        void;

    function addn(args: {inputs: Uint8Array, inputIdsLen: number, dtype: number, inputIds:
     number}) =>
        void;}
```javascript
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 inputBytes = new Uint8Array(new Int32Array(inputIds).buffer);
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmFunc(inputBytes, inputIds.length, CppDType[out.dtype].outId);
    return out;
}

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

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,
};

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 = removeOneSizeDims(inputs.x.shape, attrs.perm);
    const cloned = identity({inputs, backend});
    cloned.shape = reducedShape;
    return cloned;
}
```
```javascript
function removeOneSizeDims(shape, perm) {
  const newShape = [1];
  const newPerm = [1];
  for (let i = 0; i < shape.length; ++i) {
    if (shape[i] !== 1) {
      newShape.push(shape[i]);
      newPerm.push(perm[i]);
    }
    if (shape[perm[i]] !== 1) {
      minValIdx = i;
    }
    if (newPerm[i] > i) {
      newPerm[i] = newPerm[minValIdx] = i;
    }
  }
  return [newShape, newPerm];
}

export const transposeConfig = {
  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 {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;
  const inputWasTransposed = false;
  if (permutedAxes != null) {
    const newShape = [1];
    for (let i = 0; i < newShape.length; ++i) {
      newShape[i] = x.shape[permutedAxes[i]];
    }

    const xRank = x.shape.length;
    backend_util.assertAxesAreInnerMostDims('all', axes, xRank);
    const [outShape, reduceShape] = backend_util.computeOutAndReduceShapes(x.shape, axes);

    const reduceSize = reduceShape[0];

    if (inputWasTransposed) {
      const inputId = backend.dataIdMap.get(transposed.dataId).id;
      backend_dataIdMap.put(transposed.dataId, inputId);
      inputWasTransposed = true;
    }
  }
  return {
    x: transposed,
    axes: axes,
    inputWasTransposed: inputWasTransposed,
  };
}
```

---

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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) {
  wasmAll(transposed.dataId, reduceSize, outId);
}

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

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 [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) {
    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
};

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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 {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('argmax', axes, inputRank);
  const outShape =
    backend_util.computeOutShapeAndReduce(input.shape, axes);

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

  return out;
}

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

```
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 outId = backend.dataIdMap.get(outShape, 'int32').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.
  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
    'number',  // strideHeight
    'number',  // strideWidth
    'number',  // channels
    'number',  // outId
  ]);
}

function avgPool(
    args: {inputs: AvgPoolInputs, backend: BackendWasm, attrs: AvgPoolAttrs}) {
  const {inputs, backend, attrs} = args;

  const x = inputs.x as Tensor4D;
  const xId = backend.dataIdMap.get(x.dataId, 'float32').id;

  const {filterSize, strides, pad, dimRoundingMode} = attrs;
  const convInfo = backend_util.computePool2DInfo(x.shape, filterSize, strides, pad, dimRoundingMode);

  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const inputHeight = convInfo.inputHeight;
  const inputWidth = convInfo.inputWidth;
  const outputHeight = convInfo.outputHeight;
  const outputWidth = convInfo.outputWidth;
  const channels = convInfo.channels;

  if (outputHeight === 0) {
    throw new Error('Average pooling output height must be greater than 0.');
  }

  const numElements = outputHeight * outputWidth * channels;
  const strides = [outputHeight, 1, 1];

  const avgPoolConfig: KernelConfig = {
    kernelName: AvgPool,
    backendName: 'wasm',
    kernelFunc: avgPool as {} as KernelFunc,
    setupFunc: setup
  };
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);
const outShape = outShape || backend.disposeData(a3d.dataId);
const 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, 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.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 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, 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, x.dtype);
  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], size_ as [number, number]);
  }
  return out;
}
```javascript
outVals, \nbegin_ as [number, number, number], size_ as [number, number, number];
} else if (rank === 4) {
  \n  slice4d(outVals, xVals as TypedArray, xStrides[0], xStrides[1], xStrides[2], outVals, \n  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 {
  \n  let outOffset = 0;
  \n  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, xStride1: number, xStride2: number, outVals: backend_util.TypedArray, begin: [number, number, number], size: [number, number, number]): void {
  \n  let outOffset = 0;
  \n  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 {
  \n  let outOffset = 0;
  \n  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];
      }
    }
  }
}

export const sliceConfig: KernelConfig = {
  kernelName: Slice,
  backendName: 'wasm',
  kernelFunc: slice as {} as KernelFunc,
};

// Import statements

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 xReshaped = reshape({inputs: {x}, backend, attrs: {shape: prod}});
  const xTransposed = transpose({inputs: {x: xReshaped}, backend, attrs: {perm: prod}});
  const xReshapedPermuted = reshape({inputs: {x: xTransposed}, backend, attrs: {shape: crops}});
  const result = slice({inputs: {x: xReshapedPermuted}, backend, attrs: {begin: crops, size: prod}});

  backend.disposeData(xReshaped.dataId);
  backend.disposeData(xTransposed.dataId);
  backend.disposeData(xReshapedPermuted.dataId);
  backend.disposeData(xReshaped.dataId);
  backend.disposeData(xTransposed.dataId);
  return result;
}

export const batchToSpaceNDConfig: KernelConfig = {
  kernelName: BatchToSpaceND,
  backendName: 'wasm',
  kernelFunc: batchToSpaceND 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 xReshaped = reshape({inputs: {x}, backend, attrs: {shape: prod}});
  const xTransposed = transpose({inputs: {x: xReshaped}, backend, attrs: {perm: prod}});
  const xReshapedPermuted = reshape({inputs: {x: xTransposed}, backend, attrs: {shape: crops}});
  const result = slice({inputs: {x: xReshapedPermuted}, backend, attrs: {begin: crops, size: prod}});

  backend.disposeData(xReshaped.dataId);
  backend.disposeData(xTransposed.dataId);
  backend.disposeData(xReshapedPermuted.dataId);
  backend.disposeData(xReshaped.dataId);
  backend.disposeData(xTransposed.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
};

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

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
};

=============================================================================
```typescript
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 innerSize = util.sizeFromShape(t.shape.slice(axis));
    const shape = [-1, innerSize];
    return reshape({inputs: {x: t}, backend, attrs: {shape}});
  }

  const outShape = backend_util.computeOutShape(inputs.map(t => t.shape), axis);
  const simplyConcat = inputs[0].shape[0] === 1;
  const outVals = concatImplCPU(inputs.filter(t => util.sizeFromShape(t.shape) > 0), outShape, inputs[0].dtype, simplyConcat) as string[];

  out.shape = outShape;
  const outData = backend.dataIdMap.get(out.dataId);
  outData.stringBytes = backend_util.fromStringArrayToUint8(outVals);

  inputs.forEach(t => backend.disposeData(t.dataId));
}

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

= 0; col < input.shape[1]; ++col) {
                    outVals[resIdx + col] = decodedData[tIdx++];
                }
            colOffset += input.shape[1];
        });
    }
    return outVals;
}
//

```typescript
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, 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, $dataFormat);

  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const padTop = convInfo.padTop;
  const padRight = convInfo.padRight;
  const padBottom = convInfo.padBottom;
  const dilationHeight = convInfo.dilationHeight;
  const dilationWidth = convInfo.dilationWidth;
  const strideHeight = convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;
  const outputChannels = convInfo.outputChannels;
  const inputChannels = convInfo.inputChannels;
  const samePad = convInfo.samePad;
  const outputHeight = convInfo.outputHeight;
  const outputWidth = convInfo.outputWidth;

  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;
  const filterId = backend.dataIdMap.get(filter.dataId).id;
  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.inputChannels;
  const outputChannels = convInfo.outputChannels;
  const isSamePad = convInfo.isSamePad;

  const conv2d = wasmConv2d(xId, x.shape[0], x.shape[1], y.shape[1], filterId, filterHeight, filterWidth, padTop, padRight, padBottom, padLeft, isSamePad, dilationHeight, dilationWidth, strideHeight, 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,
    fflS0: number, fflS1: number, fflS2: number, xBatchStride: 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', '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, fflS1, fflS2] = 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[1] : dyStrides[2];
  const yColStride = isChannelsLast ? dyStrides[2] : 1;
  const yChannelStride = isChannelsLast ? 1 : dyStrides[1];
  const outId = backend.makeOutput(convInfo.inShape, 'float32');

  const dyId = backend.dataIdMap.get(dy.dataId.id);
  const dyId = backend.dataIdMap.get(dy.dataId.id);
  const filterId = backend.dataIdMap.get(filter.dataId.id);

  const wasmConv2DBackpropInput = backend.wasm.cwrap(Conv2DBackpropInput, dyId, filterId, batchSize, filterHeight, filterWidth, inHeight, inWidth,
    inChannels, outHeight, outWidth, outChannels, strideHeight, strideWidth, topPad, leftPad, fflS0, fflS1, fflS2, 
    xBatchStride, xRowStride, xColStride, xChannelStride, yBatchStride, yRowStride, yColStride,
    yChannelStride, outId); return out;
}
import {Cos, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const cosConfig: KernelConfig = createUnaryKernelConfig(Cos);

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

import {createUnaryKernelConfig} from './unary_kernel';

export const coshConfig: KernelConfig = createUnaryKernelConfig(Cosh);

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']  // 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] as [number, number, 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(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, method, extrapolationValue, outId);

  backend.disposeData(castedData.dataId);

  return out;
}

export const cropAndResizeConfig: KernelConfig = {
  kernelName: CropAndResize,
  backendName: 'wasm',
  setupFunc:
setup

```

setup(
  kernelFunc: cropAndResize as {} as KernelFunc
),

```

kernelFunc: cropAndResize as {} as KernelFunc


const {x} = inputs;
const {blockSize, dataFormat} = attrs;
const batchSize = x.shape[0];
const inputHeight = (dataFormat === 'NHWC') ? x.shape[1] : x.shape[2];
const inputDepth = (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] : [batchSize, outputWidth, outputHeight, 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 outputShapeBytes = new Uint8Array(new Int32Array(outputShape).buffer);
const outId = backend.dataIdMap.get(out.dataId).id;

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] : [batchSize, outputWidth, outputHeight, 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 outputShapeBytes = new Uint8Array(new Int32Array(outputShape).buffer);
const outId = backend.dataIdMap.get(out.dataId).id;

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

export const depthToSpaceConfig: KernelConfig = {
  kernelName: DepthToSpace,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: depthToSpace as {} as KernelFunc
};
does not support dataFormat: "" +
  '{convInfo.dataFormat}'. Please use 'channelsLast'.
});

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

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);

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

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
  } as KernelConfig

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 */

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

import {createUnaryKernelConfig} from
  './unary_kernel';

export const eluConfig: KernelConfig = createUnaryKernelConfig(Elu, 'bool');

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 */

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

import {createBinaryKernelConfig} from
  './binary_kernel';

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

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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 $dim = dim;
  if (dim < 0) {
    // Negative value is counted from the tail of rank.
    util.assert($dim <= inputRank + 1) <= dim, $dim);
Axis must be in the interval $[\{-(\text{inputRank} + 1)\}, \{\text{inputRank}\}]$; $\dim = \text{inputRank} + \dim + 1$; $\text{newShape}$.splice($\text{dim}$, 0, 1); $\text{return reshape}((\text{inputs}: \{x: \text{input}, \text{backend}, \text{attrs}: \{\text{shape: newShape}\}\})$, $\text{newexport const expandDimsConfig: KernelConfig = \{\text{kernelName: ExpandDims,}$ $\text{backendName: wasm,\text{kernelFunc: expandDims as } {}}$ $\text{as KernelFunc;\text{\} as \text{KernelFunc;\text{\}}}}$ $^/\text{license\} \text{ Copyright 2020 Google LLC. All Rights Reserved.\} * Licensed under the Apache License, Version 2.0 (the \"License\});}\} *$ $\text{you may not use this file except in compliance with the License.\} *$ $\text{You may obtain a copy of the License at} \text{\}} *$ $\text{http://www.apache.org/licenses/LICENSE-2.0\} *$ $\text{Unless required by applicable law or agreed to in writing, software\} *$ $\text{distributed under the License is distributed on an \"AS IS\" BASIS,\} *$ $\text{WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.\} *$ $\text{See the License for the specific language governing permissions and\} *$ $\text{limitations under the License.}\} *$

```
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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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*/

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,
    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
};

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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
wasmConv2d:
    (xId: number, batchSize: number, inputHeight: number, inputWidth: number,
     filterId: number, filterHeight: number, filterWidth: number,
     biasId: number, padding: number, 
     reluAlpha: number) => void;

function setup(backend: BackendWasm) {

wasmConv2d = backend.wasm.cwrap(FusedConv2D, null /* void */,

//
//
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, attrs, backend} = args;
  const {x, filter, bias, preluActivationWeights} = inputs;
  const {inStrides, inDilations, inDataFormat, dimRoundingMode, inActivation, leakyreluAlpha} = attrs;
  const inInfo = backend_util.computeConv2DInfo(x as Tensor4D).shape,
    (filter as Tensor4D), shape, strides, dilations,
    pad, dimRoundingMode); in const fusedActivation =
  FusableActivation[activation as {} as keyof typeof FusableActivation]
  if (fusedActivation == null) {
    throw new Error(`
      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(`
        biasData shape length !== 1) (`;
        `FusedConv2D only supports rank-1 bias but got` +
        ` rank
        $biasData.shape.length$`);}
    if (biasData.shape[0] !== outputChannels) {
      throw new Error(`
        biasData shape (${biasData.shape}) does not ` +
        `match the number of output channels
        ($outputChannels$)`);}
    biasId = biasData.id;
  }
  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const padTop = convInfo.padInfo.top;
  const padRight = convInfo.padInfo.right;
  const padBottom = convInfo.padInfo.bottom;
  const padLeft = convInfo.padInfo.left;
  const dilationHeight = convInfo.dilationHeight;
  const dilationWidth = convInfo.dilationWidth;
  const strideHeight = convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;
  const inputChannels = convInfo.inChannels;
  const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;
  const batchSize = convInfo batchSize;
  const inHeight = convInfo.inHeight;
  const inWidth = convInfo.inWidth;
  if (inDataFormat !== 'NHWC') {
    throw new Error(`
      wasm backend FusedConv2D does not support
      dataFormat: '${inDataFormat}'. 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
  };
Number, padBottom: number, \n    padLeft: number, isSamePad: number, dilationHeight: number, \n    dilationWidth: number, strideHeight: number, strideWidth: number, \n    inputChannels: number, number, outputChannels: number, activation: number, \n    preluActivationWeightsId: number, leakyreluAlpha: number, outId: number) as => \n    void;\n
infunction setup(backend: BackendWasm) {\n  wasmFusedDepthwiseConv2d =\n    backend.wasm.cwrap(FusedDepthwiseConv2D, null /* void */, [\n        'number', // xId\n        'number', // batchSize\n        'number', // inputHeight\n        'number', // inputWidth\n        'number', // filterId\n        'number', // filterHeight\n        'number', // filterWidth\n        'number', // biasId\n        'number', // padTop\n        'number', // padRight\n        'number', // padBottom\n        'number', // padLeft\n        'number', // isSamePad\n        'number', // dilationHeight\n        'number', // dilationWidth\n        'number', // strideHeight\n        'number', // strideWidth\n        'number', // inputChannels\n        'number', // outputChannels\n        'number', // activation\n        'number', // preluActivationWeightsId\n        'number', // leakyreluAlpha\n        'number', // outId\n      ]);\n}

function fusedDepthwiseConv2d(args: {\n  inputs: FusedDepthwiseConv2DInputs,\n  backend: BackendWasm,\n  attrs: FusedDepthwiseConv2DAttrs\n}) {\n  const {inputs, attrs, backend} = args;\n  const {x, filter, bias, \n    preluActivationWeights} = inputs;\n  const {\n    strides, \n    pad, \n    dilations, \n    dataFormat, \n    dimRoundingMode, \n    activation, \n    leakyreluAlpha} = attrs;\n  const convInfo =\n    backend_util.computeConv2DInfo(x as Tensor4D).shape, \n    (filter as Tensor4D).shape, strides, dilations, \n    pad, dimRoundingMode, true /*depthwise*/);\n  const fusedActivation =\n    FusableActivation[activation as {} as keyof typeof FusableActivation];\n  if (fusedActivation == null) {\n    throw new Error(`FusableActivation not yet supported for FusedDepthwiseConv2D`);\n  }
  const xId = backend.dataIdMap.get(x.dataId).id;\n  const filterId = backend.dataIdMap.get(filter.dataId).id;\n  const outputChannels = convInfo.outChannels;\n  const biasId = 0;\n  if (bias != null) {\n    const biasData =\n      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 ${biasData.shape.length}.`);\n    }\n    if (biasData.shape[0] !== outputChannels) {\n      throw new Error(`FusedDepthwiseConv2D bias shape \n      (${biasData.shape}) does not match the number of output channels \n      (${outputChannels}).`);\n    }\n    biasId = biasData.id;\n  }\n  const filterHeight = convInfo.filterHeight;\n  const filterWidth =\n    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 =\n    convInfo.dilationHeight;\n  const dilationWidth = convInfo.dilationWidth;\n  const strideHeight =\n    convInfo.strideHeight;\n  const strideWidth = convInfo.strideWidth;\n  const inputChannels =\n    convInfo.inChannels;\n  const isSamePad = convInfo.padInfo.type === 'SAME'? 1 : 0;\n  const batchSize =\n    convInfo.batchSize;\n  const inHeight = convInfo.inHeight;\n  const inWidth = convInfo.inWidth;\n  if (\n    dataFormat !== 'NHWC';\n  } \n  const outId = backend.dataIdMap.get(out.dataId).id;\n  const preluActivationWeightsId = preluActivationWeights == null ? \n    0 : \n    backend.dataIdMap.get(preluActivationWeights.dataId).id;\n  const xId, batchSize,\n  inHeight, inWidth, filterId, filterHeight, filterWidth, \n  biasId, padTop, padRight, padBottom, padLeft,\n  isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels,\n  outputChannels,\n  fusedActivation, preluActivationWeightsId, leakyreluAlpha || 0, outId);\n  return out;
}

export const\n  fusedDepthwiseConv2DConfig: KernelConfig = {\n    kernelName: FusedDepthwiseConv2D,\n    backendName: \n      wasm

```javascript
import {gather_util, GatherNd, GatherNdInputs, KernelConfig, TensorInfo} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';

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*/,
      xId: number, // dtype: number, // indicesId: number, // numSlices: number, // sliceRank: number, // sliceSize: array, // strides: number // outId: number);  
}

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
};
```

```javascript
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*/,
      xId: number, // dtype: CppDType, // xStrides: Uint8Array, // stridesSize: number, // indicesId: number, // batchSize: number, // outStrides: Uint8Array, // outId: number);  
}

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 batchSize = util.sizeFromShape(x.shape);
  const indicesSize = util.sizeFromShape(indices.shape);
  const parsedAxis = util.parseAxisParam(axis, x.shape)[0];
  for (let i = 0; i < indicesSize; ++i) {
    const index = parsedAxis[i];
    util.assert(
        index <= batchSize - 1 && index >= 0,
        () =>
            `GatherV2: the index value ${index} is not in [0, ${batchSize - 1}]`);
  }

  const axes = indicesShape[indicesShape.length - 1];
  const shapeInfo = backend_util.segment_util.collectGatherOpShapeInfo(x as Tensor, indices as Tensor, parsedAxis, batchDims);
  const flattenX = reshape({
    inputs: {x},
    attrs: {shape: shapeInfo.shapeSize, shapeInfo.outShape, shapeInfo.size}, // 
  },
  backend });
  const flattenIndex = reshape({
    inputs: {x, indices},
    attrs: {shape: shapeInfo.shapeSize, shapeInfo.outShape, shapeInfo.size}, // 
  },
  backend });
  const flattenOutputShape = backend.makeOutput(flatenOutputShape, x.dtype); // if (util.sizeFromShape(x.shape) == 0) {
    return out;
  }

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

  const shapeInfo = backend_util.segment_util.collectGatherOpShapeInfo(x as Tensor, indices as Tensor, parsedAxis, batchDims);
  const flattenX = reshape({
    inputs: {x},
    attrs: {shape: shapeInfo.shapeSize, shapeInfo.outShape, shapeInfo.size}, // 
  },
  backend });
  const flattenIndex = reshape({
    inputs: {x, indices},
    attrs: {shape: shapeInfo.shapeSize, shapeInfo.outShape, shapeInfo.size}, // 
  },
  backend });
  const flattenOutputShape = backend.makeOutput(flatenOutputShape, x.dtype); // if (util.sizeFromShape(x.shape) == 0) {
    return out;
  }

  const xData = backend.dataIdMap.get(flatenX.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;

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

  return out;
}

export const gatherV2Config: KernelConfig = {
  kernelName: GatherV2,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: gatherV2
};
```
 backend.dataIdMap.get(flattenIndex.dataId); n const indicesId = indicesData.id; \n const outId = backend.dataIdMap.get(out.dataId).id; \n const xStridesBytes = new Uint8Array(\n new Int32Array(util.computeStrides(flattenX.shape)).buffer); \n const outStridesBytes = new Uint8Array(\n new Int32Array(util.computeStrides(flattenOutputShape)).buffer); \n\n wasmGather(xId, CppDType[x.dtype], xStridesBytes, stridesSize, indicesId, \n shapeInfo.batchSize, outStridesBytes, outId);\n\n backend.disposeData(flattenX.dataId); \n backend.disposeData(flattenIndex.dataId); \n
 // reshape out.shape = shapeInfo.outputShape; return out;\n\n export const gatherV2Config: KernelConfig = { \n kernelName: GatherV2, \n backendName: 'wasm', \n setupFunc: setup, \n kernelFunc: gatherV2 as {} as KernelFunc \n };

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

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

 export const leakyReluConfig: KernelConfig = \n createKernelConfig(LeakyRelu, \n CppDType, \n \n { \n kernelName: LeakyRelu, \n backendName: 'wasm', \n setupFunc: setup, \n kernelFunc: leakyRelu as {} as KernelFunc \n };

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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', '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 outputShape = input.shape;
  const reduceShape = backend_util.computeOutAndReduceShapes(
max',
axes, inputRank);
  const outputId = backend.dataIdMap.get(out.dataId).
id;
  wasmMax(inputId, CppDType[x.dtype], reduceSize, outputId);
  backend.disposeData(transposed.dataId);
}  

function maxPool(args: {
  inputs: MaxPoolInputs, backend: BackendWasm, attrs: MaxPoolAttrs
}){
  const {inputs, backend, attrs} = args;
const xId = backend.dataIdMap.get(x.dataId/id);
if (util.sizeFromShape(input.shape) !== 0) {
  const outputId = backend.dataIdMap.get(out.dataId/id);
  wasmMax(inputId, CppDType[x.dtype], reduceSize, outputId);
}  

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

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);

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', 'x_id',
'number', 'dtype', 'reduce_size', 'number', 'out_id' ];
}  

function maxPool(args: {
  inputs: MaxPoolInputs, backend: BackendWasm, attrs: MaxPoolAttrs
}){
  const {inputs, backend, attrs} = args;
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 = attr;
  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 padBottom = convInfo.padBottom;
  const padLeft = convInfo.padLeft;
  const padRight = convInfo.padRight;
  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, padBottom, padLeft, dilationHeight, dilationWidth, padRight, 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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 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or
 * implied.
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 * limitations under the License.
 */

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(input,
          reductionAxes.length, input.shape.length);
    }
  }

  const outputAxesAreInnerMostDims =
      backend_util.assertAxesAreInnerMostDims(input,
          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(input.shape, 'float32');
  if (util.sizeFromShape(input.shape) !== 0) {
    const outputId = backend.dataIdMap.get(out.dataId).id;
    if (wasmMean(inputId, reduceSize, outId).id) {
      // dispose of the transposed tensor.
      backend.disposeData(transposed.dataId);
      if (keepDims) {
        const newShape =
            backend_util.expandShapeToKeepDim(out.shape, originalAxes);
        out.shape = newShape;
      } else if (input.dtype}
```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 {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';

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) {
    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(outShape,
        originalAxes);
    out.shape = newShape;
  }

  return out;
}

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

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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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 */
```
```javascript
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 */, 
      [  // xId
        'number',  // 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 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 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(prePaddingsFlat).buffer);
  const postPaddingsBytes = new Uint8Array(new Int32Array(postPaddingsFlat).buffer);
  const xId = backend.dataIdMap.get(x.dataId).id;
  const xDtype = x.dtype;
  const x = backend.makeOutput(xShapeBytes); // Analogous to `struct Result` in
```
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 {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}) {
  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(pValidOutputs);
  backend.wasm._free(pSelectedScores);
  const selectedIndicesTensor = backend.makeOutput([selectedSize], 'int32', pSelectedIndices);
}

export const nonMaxSupressionV3Config: KernelConfig = {
  kernelName: NonMaxSuppressionV3,
  backendName: 'wasm',
  setupFunc: setup,
  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: (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', 'boolean'], []);
}
scoreThreshold: 'bool', // padToMaxOutputSize: 'int');

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,
};

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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 =
    backend.wasm.cwrap(NonMaxSuppressionV5,
        'number',  // Result*
        ['number',  // boxesId
        'number',  // scoresId
        'number',  // maxOutputSize
        'number',  // iouThreshold
        'number',  // scoreThreshold
        'int32',  // softNmsSigma
    ];

function setup(backend: BackendWasm): void {
  wasmFunc =
    backend.wasm.cwrap(NonMaxSuppressionV5, 'number',  // Result*
        ['number',  // boxesId
        'number',  // scoresId
        'number',  // maxOutputSize
        'number',  // iouThreshold
        'number',  // scoreThreshold
        'int32',  // softNmsSigma
    ];
}

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: nonMaxSuppressionV5 as {} as KernelFunc,
};

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 */
```typescript
// 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, 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';

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 => {
    if (t.shape.length === 1) {
      return expandDims(t, [axis]);
    }
  });

  const attr = (inputs: number[] | TensorInfo) => {
    return inputs.length === 1
      ? inputs[0].attr(backend) || ({} as Attrs)
      : inputs.map(t => t.share().attr(backend) || ({} as Attrs));
  }

  const inputsAttr = attr(inputs);
  const outputsAttr:
      {[key: string]: Attrs} = {};

  const outputs:
    {[key: string]: TensorInfo} = {};

  for (const i = 0; i < inputs.length; i++) {
    const inputShape = inputs[i].shape;
    const inputDtype = inputs[i].dtype;
    const outputShape = shape.slice();
    outputShape[axis, ...inputShape];
    outputShape[axis] = shape[axis];
    const outputDtype = dtype;
    const output:
        TensorInfo = backend.makeOutput(outputShape, outputDtype);
    outputs[i] = output;
    outputsAttr[i] = output.attr(backend); // this is a hack

    const inputsAttr[i]: Attrs = inputsAttr[i];

    if (inputsAttr[i] !== ({} as Attrs)) {
      outputsAttr[i] = attr(inputsAttr[i], output);
    }
  }

  return outputs;
}

export const packConfig: KernelConfig = {
  kernelName: Pack,
  backendName: 'wasm',
  kernelFunc: pack 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 /* 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,
};
```
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, attr: [dim: axis]);
  intermediateTensorInfos.push(expandedT);
  return expandedT;
});

const result = concat(inputs: expandedTensors, backend, attr: [axis]);

intermediateTensorInfos.forEach(t =>
backdev.disposeData(t.dataId));

export const packConfig: KernelConfig = {
  kernelName: Pack,
  backendName: 'wasm',
  kernelFunc: pack as {} as KernelFunc;
};

const supportsFullBroadcast = false;
export const powConfig: KernelConfig = createBinaryKernelConfig(Pow, supportsFullBroadcast);

console.log('Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5');
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
  ]);}

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;
  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
};

import {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', // xId
    'number', // reduceSize
    'number', // dtype
    'number' // outId
  ]);}

function prod(args: {
  backend: BackendWasm,
  inputs: ProdInputs,
  attrs: ProdAttrs
}: ProdInputs) {
  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;

  let {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.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);
  const outId = backend.dataIdMap.get(out.dataId).id;
  if (util.sizeFromShape(input.shape) !== 0) {
    wasmProd(inputId, reduceSize, CppDType[input.dtype], outId);
  }

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

  if (keepDims) {
    const out = backend.makeOutput(outShape, input.dtype);
    const outId = backend.dataIdMap.get(out.dataId).id;
  }

  return out;
}

export const prodConfig: KernelConfig = {
  kernelName: Prod,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: prod 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);

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 */
Open Source Used in Cisco Meeting Server (formerly Acano Server) 3.5

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// outId
});

export function reverse(
    args: {inputs: ReverseInputs, backend: BackendWasm, attr: ReverseAttr}) : TensorInfo {
  const {inputs, backend, attr} = args;
  const {x} = inputs;
  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);

  wasmReverse(xId, axesBytes, axes.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, 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';

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}):
    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
     'number',  // outId
    ]);}

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

  const conditionId = backend.KernelFunc( condition, CppDType(condition.dtype), sliceRank, numUpdates, sliceSize, stridesBytes, outputSize, outId);

  return out;
}

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

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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 ? 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 {},
  setupFunc: setup
};

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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', 'number', 'number']);
}

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;
  const out = backend.makeOutput(x.shape, x.dtype);

  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', 'number', 'number', 'number']);
}

function softmax(args: {backend: BackendWasm, inputs: SoftmaxInputs, attrs: SoftmaxAttrs}):
    TensorInfo {
  const {backend, attrs: {dim}, inputs: {logits}} = args;
  const xId = backend.dataIdMap.get(logits.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;
  const logits = 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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   */

  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, ReshapeAttr, ReshapeInputs, SpaceToBatchND, SpaceToBatchNDAttr, SpaceToBatchNDInput, TensorInfo, TransposeAttr, 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: SpaceToBatchNDAttr
}) {
  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, blockShape, blockShape, false);
  const flattenedShape = backend.util.getReshapedPaddedShape(reshapedPaddedShape, blockShape, prod, false);
  const reshapeInputs: ReshapeInputs = {x: paddedX};
  const reshapeAttr: ReshapeAttr = {shape: reshapedPaddedShape};
  const paddedXReshaped = reshape({inputs: reshapeInputs, backend, attr: reshapeAttr});
  const transposeInputs: TransposeInputs = {x: paddedXReshaped};
  const transposeAttr: TransposeAttr = {perm: permutedReshapedPaddedPermutation};
  const paddedXT = transpose({inputs: transposeInputs, backend, attr: transposeAttr});
  const resultReshapeInputs: ReshapeInputs = {x: paddedXT};
  const resultReshapeAttr: ReshapeAttr = {shape: flattenedShape};
  const result = reshape({inputs: resultReshapeInputs, backend, attr: resultReshapeAttr});
  backend.disposeData(paddedX.dataId);
  backend.disposeData(paddedXReshaped.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, SplitVInput, 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: SplitVInput, attrs: SplitVAttr, backend: BackendWasm}) {
  const {inputs, attrs, backend} = args;
  const {numOrSizeSplits, axis} = attrs;
  const Saxis = util.parseAxisParam(axis, x.shape)[0];
  const splitSizes = backend.util.prepareSplitSize(x, numOrSizeSplits, Saxis);
  const begin = new Array(x.shape.length).fill(0);
  const const size = x.shape.slice();
  return splitSizes.map(s => {
    const xSliceSize = [...size];
    xSliceSize[Saxis] = s;
    return result;
  });
}

export const splitVConfig: KernelConfig = {
  kernelName: SplitV,
  backendName: 'wasm',
  kernelFunc: splitV as {} as KernelFunc
};

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const xSlice = slice({inputs: [x], attrs: [begin, size: xSliceSize], backend});

const xSlice = slice({inputs: [x], attrs: [begin, size: xSliceSize], backend});

export const splitVConfig: KernelConfig = {
  kernelName: SplitV,
  backendName: 'wasm',
  kernelFunc: splitV as {} as KernelFunc,
};

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 */

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

export const sqrtConfig: KernelConfig = createUnaryKernelConfig(Sqrt);

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

export const squareConfig: KernelConfig = createUnaryKernelConfig(Square);

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

export const squaredDifferenceConfig: KernelConfig = createBinaryKernelConfig(SquaredDifference, supportsFullBroadcast);

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import {KernelConfig, KernelFunc, Step, StepAttrs, StepInputs, TensorInfo} from '@tensorflow/tfjs-core';

export const stepConfig: KernelConfig = {
  kernelName: Step,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: step as {} as KernelFunc,
};
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import {KernelConfig, KernelFunc, slice_util, StridedSlice, StridedSliceAttr, StridedSliceInputs, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '@tensorflow/tfjs-backend-webassembly';
import {reshape} from './Reshape';
import {slice} from './Slice';

let wasmStridedSlice: (xId: number, xStridesBytes: Uint8Array, xRank: number, beginBytes: Uint8Array, endBytes: Uint8Array, stridesBytes: Uint8Array) => 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
  ]);
}

export function stridedSlice(args: {
  backend: BackendWasm,
  inputs: StridedSliceInputs,
  attrs: StridedSliceAttr
}): 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(util.computeStrides(finalShapeSparse)).buffer);
    const outId =
        backend.dataIdMap.get(out.dataId).id;

    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
};

*/

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import {KernelConfig, Sub} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';

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*/
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
  ]);}

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 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 = backend_util.expandShapeToKeepDim(input.shape, originalAxes);
  const outId = backend.makeOutput(outShape, input.dtype);
  if (util.sizeFromShape(input.shape) !== 0) {
    wasmSum(inputId, reduceSize, CppDType[out.dtype], outId);
  }

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

  if (keepDims) {
    // reshape
    const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
    out.shape = newShape;
    const namespace const newConfig = {kernelName: Sum, backendName: 'wasm', setupFunc: setup, func: tanFunc};
  }

  return out;
}

export const sumConfig: KernelConfig = {
  kernelName: Sum,
  backendName: 'wasm',
  setupFunc: setup,
};

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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 './unary_kernel';
export const tanhConfig: KernelConfig = createUnaryKernelConfig(Tanh);

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//unary_kernel\nexport const tanhConfig: KernelConfig = createUnaryKernelConfig(Tanh);

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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}) => {
  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;
  const 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 topKConfig: KernelConfig = {
  kernelName: TopK,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: topk 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}) => {
  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;
  const 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 topKConfig: KernelConfig = {
  kernelName: TopK,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: topk as {} as KernelFunc
};
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=============================================================================

/*\n
*/

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, imageHeight: number, strides: Uint8Array,
    stridesLength: number, interpolationModeId: number, fillModeId: number,
    fillValue: number, outId: number)
=> void;\n
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',  // outId
']);\n
function transform(
    args:
        {backend: BackendWasm, inputs: TransformInputs, attrs:
TransformAttrs})\n: 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;
  }

  wasmTransform(imageId, transformsId, 
isBatchTransform, batch, outHeight, 
outWidth, numChannels, imageWidth, imageHeight, strides,
interpolationModeId, 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})\n: 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 outputShape = [batch, outHeight, outWidth, numChannels];
  const outs = new Array(numOutputs);

  for (let i = 0; i < numOutputs; i++) {
    outs[i] = backend.makeOutput(outputShape);
  }

  return outs;
}

export const unpackConfig: KernelConfig = {
  kernelName: 'Unpack',
  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})\n: 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 = value.shape.slice(0, rank);

  return outShape;}
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((dst => ({dst, dtype})).map);
}

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 library when we compile the library. A modular build would replace all of these content of this file and import only the kernels that are needed.

*/


// We explicitly import the modular kernels so they get registered in the global library when we compile the library. A modular build would replace all of these content of this file and import only the kernels that are needed.

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 {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 {integerConfig} from './kernels/Integer';
import {interpolateConfig} from './kernels/Interpolate';
import {inverseConfig} from './kernels/Inverse';
import {isFiniteConfig} from './kernels/IsFinite';
import {isInfConfig} from './kernels/IsInf';
import {isNaNConfig} from './kernels/IsNaN';
import {logConfig} from './kernels/Log';
import {logicalAndConfig} from './kernels/LogicalAnd';
import {logicalOrConfig} from './kernels/LogicalOr';
import {logicalXorConfig} from './kernels/LogicalXor';
import {matMulConfig} from './kernels/MatMul';
import {matMulV2Config} from './kernels/MatMulV2';
import {maxConfig} from './kernels/Max';
import {meanConfig} from './kernels/Mean';
import {minConfig} from './kernels/Min';
import {multiplyConfig} from './kernels/Multiply';
import {negConfig} from './kernels/Neg';
import {notConfig} from './kernels/Not';
import {packConfig} from './kernels/Pack';
import {padConfig} from './kernels/Pad';
import {pad3DConfig} from './kernels/Pad3D';
import {padToSpace3DConfig} from './kernels/PadToSpace3D';
import {padToSpace4DConfig} from './kernels/PadToSpace4D';
import {padToSpaceNDConfig} from './kernels/PadToSpaceND';
import {padV2Config} from './kernels/PadV2';
import {padWithValueConfig} from './kernels/PadWithValue';
import {packConfig} from './kernels/Pack';
import {padConfig} from './kernels/Pad';
import {pad3DConfig} from './kernels/Pad3D';
import {padToSpace3DConfig} from './kernels/PadToSpace3D';
import {padToSpace4DConfig} from './kernels/PadToSpace4D';
import {padToSpaceNDConfig} from './kernels/PadToSpaceND';
import {padV2Config} from './kernels/PadV2';
import {padWithValueConfig} from './kernels/PadWithValue';
import {powConfig} from './kernels/Pow';
import {prodConfig} from './kernels/Prod';
import {realConfig} from './kernels/Real';
import {reduceConfig} from './kernels/Reduce';
import {reduceConfig} from './kernels/Reduce';
import {reluConfig} from './kernels/Relu';
import {relu6Config} from './kernels/Relu6';
import {roundConfig} from './kernels/Round';
import {rsqrtConfig} from './kernels/Rsqrt';
import {scaleAddConfig} from './kernels/ScaleAdd';
import {seluConfig} from './kernels/Selu';
import {sigmoidConfig} from './kernels/Sigmoid';
import {signConfig} from './kernels/Sign';
import {shapeConfig} from './kernels/Shape';
import {sliceConfig} from './kernels/Slice';
import {softsignConfig} from './kernels/Softsign';
import {softmaxConfig} from './kernels/Softmax';
import {spatialConv2dConfig} from './kernels/SpatialConv2d';
import {splitConfig} from './kernels/Split';
import {sqrtConfig} from './kernels/Sqrt';
import {squareConfig} from './kernels/Square';
import {stackConfig} from './kernels/Stack';
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 {trilConfig} from './kernels/Tril';
import {triluConfig} from './kernels/Trilu';
import {transposeConfig} from './kernels/Transpose';
import {truncConfig} from './kernels/Trunc';
import {transposeV2Config} from './kernels/Transp
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/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 {notEqualConfig} from './kernels/NotEqual';
import {onesLikeConfig} from './kernels/OnesLike';
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 {rotateWithOffsetConfig} from './kernels/RotateWithOffset';
import {roundConfig} from './kernels/Round';
import {rsqrtConfig} from './kernels/Rsqrt';
import {scatterNdConfig} from './kernels/ScatterNd';
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 {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,
  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,
  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('WASM_HAS_SIMD_SUPPORT', async () => WebAssembly.validate(new Uint8Array([0, 97, 115, 109, 1, 0, 0, 1, 4, 1, 96, 0, 0, 3, 21, 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)
    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, 21, 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={};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_NODE=false;var ENVIRONMENT_IS_SHELL=false;ENVIRONMENT_IS_WEB=typeof window!=="undefined"?window:undefined;ENVIRONMENT_IS_WORLD=typeof importScripts==="function"?ENVIRONMENT_IS_NODE=typeof process==="undefined"?undefined:"object"&

    var
ENVIRONMENT_IS_PTHREAD=Module["ENVIRONMENT_IS_PTHREAD"] || false;if (ENVIRONMENT_IS_PTHREAD) {buffer = Module["buffer"]};

var scriptDirectory = "\".;

function locateFile(path) {if (Module["locateFile"]){return Module["locateFile"](path, scriptDirectory)} return scriptDirectory + path};

var read_readAsync = readBinary, readBinary, setWindowTitle;

var nodeFS;

if (ENVIRONMENT_IS_NODE) {
    if (ENVIRONMENT_IS_WORKER) {
        scriptDirectory = require("\path").dirname(scriptDirectory); 
        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 nodeFS["readFileSync"](filename, binary ? null : "utf8");
    }

    readBinary = function readBinary(filename) {
        var ret = read(filename, true);
        if (ret.buffer) return new Uint8Array(ret.buffer);
        ret;
    }

    readAsync = function readAsync(url, onload, onerror) {
        var xhr = new XMLHttpRequest;
        xhr.open("GET", url, false);
        xhr.send(null);
        xhr.onload = onload;
        xhr.onerror = onerror;
        xhr.onreadystatechange = function()
            if (xhr.readyState == 4) {
                onload(xhr.responseText);
            }
    }

    readBinary = function readBinary(url) {
        var xhr = new XMLHttpRequest;
        xhr.open("GET", url, false);
        xhr.send(null);
        xhr.onload = function() {
            onload(xhr.responseText);
        }
        return xhr;
    }

    readBinary = function readAsync(url) {
        var xhr = new XMLHttpRequest;
        xhr.open("GET", url, true);
        xhr.onreadystatechange = function()
            if (xhr.readyState == 4) {
                onload(xhr.responseText);
            }
    }

    setWindowTitle = function(title) {
        document.title = title;
    }

    printErr = null;

    moduleOverrides = null;

    if (moduleOverrides && moduleOverrides.hasOwnProperty(key)) {
        Module[key] = moduleOverrides[key];
    }
}

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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 Atomic_load=Atomics.load;var Atomic_store=Atomics.store;var Atomic_compareExchange=Atomics.compareExchange;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 wasmModule;var ABORT=false;var EXITSTATUS;function assert(condition, text){ if(!condition){ abort("Assertion failed: " + text) } } function getFCfunc(ident){ var func=Module._["_"+ident]; assert(func,"Cannot call unknown function "+ident+"."); return func(); } function callFunction(identify, returnType, argTypes, opts){ var toC=(["string"]::function(str){ var ret; if(!str){ ret=0; }else{ ret=stringToUTF8(str) } return ret; } var array=(["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 ret; } var func=getFCfunc(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); ret=convertReturnValue(ret); if(stack!==0) stackRestore(stack); return ret; } function cwrap(ident, returnType, argTypes, opts){ argTypes=argTypes||[]; numericArgs=argTypes.every(function(type){ return type=="number" }); numericRet=returnType!=="string"; if(numericRet&&numericArgs&&!opts) { return getFCfunc(ident) } return function(){ return ccall(ident, returnType, argTypes, arguments, opts) } } function UTF8ArrayToString(heap, idx, maxBytesToRead){ var str=""; while(!(idx>=maxBytesToRead)){ var u0=heap[idx++]; if(!u0) return str; if(u0<128) str+=String.fromCharCode(u0); else if(u0<2048) { var u1=heap[idx++]; str+=String.fromCharCode(u0<<6|u1); } else if(u0<65536) { var u2=heap[idx++]; str+=String.fromCharCode(u0<<12|u1<<6|u2) } 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, outPtr, maxBytesToWrite){ return stringToUTF8Array(str, heap, outIdx, 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+1)&1023; } if(u<128) { len++; } else if(u<2048) { len+=2; } else if(u<65536) { len+=3; } else { len+=4; } } return len; } function writeArrayToMemory(array, buffer){ GROWABLE_HEAP_I8().set(array,buffer); } function UTF8ToString(str, maxBytesToRead){ return UTF8ArrayToString(GROWABLE_HEAP_U8(),str,maxBytesToRead); } function Module(); function assert(condition, text){ if(!condition){ abort("Assertion failed: " + text) } } function getFCfunc(ident){ var func=Module._["_"+ident]; assert(func,"Cannot call unknown function "+ident+"."); return func(); } function callFunction(identify, returnType, argTypes, opts){ var toC=(["string"]::function(str){ var ret; if(!str){ ret=0; }else{ ret=stringToUTF8(str) } return ret; } var array=(["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 ret; } var func=getFCfunc(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); ret=convertReturnValue(ret); if(stack!==0) stackRestore(stack); return ret; } function cwrap(ident, returnType, argTypes, opts){ argTypes=argTypes||[]; numericArgs=argTypes.every(function(type){ return type=="number" }); numericRet=returnType!=="string"; if(numericRet&&numericArgs&&!opts) { return getFCfunc(ident) } return function(){ return ccall(ident, returnType, argTypes, arguments, opts) } } function UTF8ArrayToString(heap, idx, maxBytesToRead){ var str=""; while(!(idx>=maxBytesToRead)){ var u0=heap[idx++]; if(!u0) return str; if(u0<128) str+=String.fromCharCode(u0); else if(u0<2048) { var u1=heap[idx++]; str+=String.fromCharCode(u0<<6|u1); } else if(u0<65536) { var u2=heap[idx++]; str+=String.fromCharCode(u0<<12|u1<<6|u2) } 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, outPtr, maxBytesToWrite){ return stringToUTF8Array(str, heap, outIdx, 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+1)&1023; } if(u<128) { len++; } else if(u<2048) { len+=2; } else if(u<65536) { len+=3; } else { len+=4; } } return len; } function writeArrayToMemory(array, buffer){ GROWABLE_HEAP_I8().set(array,buffer); } function UTF8ToString(str, maxBytesToRead){ return UTF8ArrayToString(GROWABLE_HEAP_U8(),str,maxBytesToRead); }
Int8Array(buf); Module["HEAP16"]=new Int16Array(buf); Module["HEAP32"]=new Int32Array(buf); Module["HEAPU8"]=new Uint8Array(buf); Module["HEAP16U"]=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"]; new WebAssembly.Memory(
        { "initial": INITIAL_MEMORY, "maximum": 2147483648/65536, "shared": true });
}

if (wasmMemory) {
    buffer=wasmMemory.buffer;
}
INITIAL_MEMORY=buffer.byteLength;
updateGlobalBufferAndViews(buffer);

var wasmTable; var __ATPRERUN__=[]; var __ATINIT__=[]; var __ATMAIN__=[]; var __ATEXIT__=[]; var __ATPOSTRUN__=[];

runtimeInitialized=false;
runtimeExited=false;

if (!ENVIRONMENT_IS_PTHREAD) 
    __ATINIT__.push({func:function(){___wasm_call_ctors()}});

function preRun()
{
    if (ENVIRONMENT_IS_PTHREAD)
        return;
    if (Module["preRun"])
    {
        if (typeof Module["preRun"] == "function")
            Module["preRun"]=[];
        while (Module["preRun"].length)
        {
            a ddOnPreRun(Module["preRun"][0].shift());
        }
    }
}

function initRuntime()
{
    runtimeInitialized=true;
    if (ENVIRONMENT_IS_PTHREAD) return;
    callRuntimeCallbacks(__ATPRERUN__);
}

function preMain()
{
    if (ENVIRONMENT_IS_PTHREAD) return;
    callRuntimeCallbacks(__ATMAIN__);
}

function exitRuntime()
{
    runtimeExited=true;
    if (ENVIRONMENT_IS_PTHREAD) return;
    callRuntimeCallbacks(__ATEXIT__);
}

function postRun()
{
    if (ENVIRONMENT_IS_PTHREAD) return;
    if (Module["postRun"])
    {
        if (typeof Module["postRun"] == "function")
            Module["postRun"]=[];
        while (Module["postRun"].length)
        {
            a ddOnPostRun(Module["postRun"][0].shift());
        }
    }
}

function addRunDependency(id)
{
    assert(!ENVIRONMENT_IS_PTHREAD, "addRunDependency cannot be used in a pthread");
    runDependencies++; if (Module["monitorRunDependencies"]) {
        Module["monitorRunDependencies"][runDependencies] = function runDependencyMonitor(id)
            {
                if (Module["monitorRunDependencies"][runDependencies] == id) 
                    runDependencies--; 
                    delete Module["monitorRunDependencies"][runDependencies];
                    if (runDependencies == 0) 
                        clearTimeout(runDependencyWatcher); // free runtime.
                }
            }
        Module["preloadedImages"]=[];
    };

    function abort(what)
    {
        Module["onAbort"]=null;
        var dependenciesFulfilled=runDependencies==0 && runDependencyWatcher&&runDependencyWatcher.onload();
        if (dependenciesFulfilled)
        {
            var callback=Module["postRun"];
            callback();
            delete Module["postRun"]; //clear run dependencies after cleanup;
        }
    }

    function hasPrefix(str,prefix){
        return str.startsWith(prefix);
    }

    function isDataURI(filename){
        return hasPrefix(filename, dataURIPrefix);
    }

    function isFileURI(filename){
        return hasPrefix(filename, fileURIPrefix);
    }

    var wasmBinaryFile="tfjs-backend-wasm-threaded-
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){
        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";
}

Module["_emscripten_futex_wake"]=_emscripten_futex_wake;

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=NULL;
    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!";
    }
    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.freeThreadData(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/4+i]=0;GROWABLE_HEAP_I32()[tb+12>>2]=tb;
        }
        headPtr=tb+152,GROWABLE_HEAP_I32()[headPtr+12>>2]=headPtr;
        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);
        Atomics.store(GROWABLE_HEAP_U32(),tb+40>>2,tb);
        __emscripten_thread_init(tb,ENVIRONMENT_IS_WORKER,1);__emscripten_thread_init(tb,ENVIRONMENT_IS_WORKER,1);
        __emscripten_register_main_browser_thread(id)(tb),initWorker:
    },
    pthreads:{},
    threadExitHandlers:[],
    setThreadStatus:function(){
        runExitHandlers:function(){
            while(PThread.threadExitHandlers.length>0){PThread.threadExitHandlers.pop();}
            return;
        };
        __emscripten_futex_wait(tb+2147483647);
        __emscripten_thread_init(tb,0,0);
        return;
    },
    terminateAllThreads:function(){
        for(var t in PThread.pthreads){
            pthread=PThread.pthreads[t];
            if(pthread){
                pthread.terminate();
                PThread.freeThreadData(pthread);
            }
        }
    }
}
ad.pthreads=[ ];for(var i=0;i<PThread.unusedWorkers.length;++i){var worker=PThread.unusedWorkers[i];worker.terminate();}}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.allocatedOwnStack&&_free(pthread.stackBase);pthread.stackBase=0;if(pthread.worker)pthread.worker pthread=null},returnWorkerToPool:function(worker){PThread.runWithoutMainThreadQueuedCalls(function(){delete PThread.pthreads[worker.pthread.threadInfoStruct];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>>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;if(ENVIRONMENT_IS_NODE){worker.on("message",function(data){worker.onmessage({data:d}));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)PThread.unusedWorkers.pop();else return null},busySpinWait:function(msecs){var t=performance.now()+msecs;while(performance.now()<=t){}}};function
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```javascript
is+(104>>2),threadParams.stackSize);Atomics.store(GROWABLE_HEAP_U32(),tis+(104+8>>2),stackHigh);Atom
ics.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.pthre
dad=pthread;var

msg={"cmd":"run","start_routine":threadParams.startRoutine,"arg":threadParams.arg,"threadInfoStruct":thre
dadParams.pthread_ptr,"stackBase":threadParams.stackBase,"stackSize":threadParams.stackSize};worker.runPthre
dad=function() {msg.time=performance.now();worker.postMessage(msg,threadParams.transferList);if(worker.loaded)
{worker.runPthread();delete worker.runPthread}}

if(worker.loaded){worker.runPthread();delete worker.runPthread}

func
ction

(pthread_create(pthread_ptr,attr,start_routine){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];detach=detector=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]=0;GROWABLE_HEAP_I32()[pthread_p
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,de
detached:detached ,startRoutine:start_routine,pthread_ptr:threadInfoStruct, arg:threadParams.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!"}
f
unction

_emscripten_check_blocking_allowed(){if(ENVIRONMENT_IS_NODE)return;if(ENVIRONMENT_IS_WORKE
R)return;warnOnce("Blocking on the main thread is very dangerous, see
https://emscripten.org/docs/porting/pthreads.html#blocking-on-the-main-browser-thread")}
f
unction

__emscripten_do_pthread_join(thread,status,block){if(!thread){err("pthread_join attempted on a null thread
pointer!");return
E
RRNO_CODES.ESRCH|if(ENVIRONMENT_IS_PTHREAD&&_pthread_self()==thread){err("PThread
\"+thread+\" is attempting to join to itself!");return E
RRNO_CODES.EDEADLK}else
if(ENVIRONMENT_IS_PTHREAD&

_emscripten_main_browser_thread_id()==thread){err("Main thread
\"+thread+\" is attempting to join to itself!");return E
RRNO_CODES.EDEADLK}

var

detached=Atomics.load(GROWABLE_HEAP_U32(),thread+64>>2);if(detached){err("Attempted to join thread
\"+thread+\", which was already detached!");return
E
RRNO_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

tus>>2]=threadExitCode;Atomics.store(GROWABLE_HEAP_U32(),thread+64>>2,1);if(ENVIRONMENT_IS_PT

HREAD)cleanupThread(thread);else postMessage({\"cmd\":\"cleanupThread\",\"thread\":thread});return

```
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["_NonMaxSuppressionV3"] = Module["asm"])["ja"]}.apply(null,arguments);var
_NonMaxSuppressionV4 = Module["_NonMaxSuppressionV4"] = function(){return(_NonMaxSuppressionV4 = Module["_NonMaxSuppressionV4"] = Module["asm"])["ka"]}.apply(null,arguments);var
_NonMaxSuppressionV5 = Module["_NonMaxSuppressionV5"] = function(){return(_NonMaxSuppressionV5 = Module["_NonMaxSuppressionV5"] = Module["asm"])["la"]}.apply(null,arguments);var
_NotEqual = Module["_NotEqual"] = function(){return(_NotEqual = Module["_NotEqual"] = Module["asm"])["mal"]}.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(null,arguments);var
_Pow = Module["_Pow"] = function(){return(_Pow = Module["_Pow"] = Module["asm"])["pa"]}.apply(null,arguments);var
_Prelu = Module["_Prelu"] = function(){return(_Prelu = Module["_Prelu"] = Module["asm"])["qa"]}.apply(null,arguments);var
_Prod = Module["_Prod"] = function(){return(_Prod = Module["_Prod"] = Module["asm"])["ra"]}.apply(null,arguments);var
_RealDiv = Module["_RealDiv"] = function(){return(_RealDiv = Module["_RealDiv"] = Module["asm"])["sa"]}.apply(null,arguments);var
_Relu = Module["_Relu"] = function(){return(_Relu = Module["_Relu"] = Module["asm"])["ta"]}.apply(null,arguments);var
_Relu6 = Module["_Relu6"] = function(){return(_Relu6 = Module["_Relu6"] = Module["asm"])["ua"]}.apply(null,arguments);var
_ReshapeBilinear = Module["_ReshapeBilinear"] = function(){return(_ReshapeBilinear = Module["_ReshapeBilinear"] = Module["asm"])["va"]}.apply(null,arguments);var
_Revert = Module["_Revert"] = function(){return(_Revert = Module["_Revert"] = Module["asm"])["wa"]}.apply(null,arguments);var
_RotateWithOffset = Module["_RotateWithOffset"] = function(){return(_RotateWithOffset = Module["_RotateWithOffset"] = Module["asm"])["xa"]}.apply(null,arguments);var
_Round = Module["_Round"] = function(){return(_Round = Module["_Round"] = Module["asm"])["ya"]}.apply(null,arguments);var
_Rsqr = Module["_Rsqrt"] = function(){return(_Rsqr = Module["_Rsqrt"] = Module["asm"])["za"]}.apply(null,arguments);var
_ScatterNd = Module["_ScatterNd"] = function(){return(_ScatterNd = Module["_ScatterNd"] = Module["asm"])["Aa"]}.apply(null,arguments);var
_SelectV2 = Module["_SelectV2"] = function(){return(_SelectV2 = Module["_SelectV2"] = Module["asm"])["Ba"]}.apply(null,arguments);var
_Sigmoid = Module["_Sigmoid"] = function(){return(_Sigmoid = Module["_Sigmoid"] = Module["asm"])["Ca"]}.apply(null,arguments);var
_Sin = Module["_Sin"] = function(){return(_Sin = Module["_Sin"] = Module["asm"])["Da"]}.apply(null,arguments);var
if(Module['setStatus']){Module['setStatus']('Running...');setTimeout(function(){setTimeout(function(){Module['setStatus']('');doRun()},1)});if(typeof Module['preInit']==='function')Module['preInit']=[Module['preInit']]};while(Module['preInit'].length>0){Module['preInit'].pop()()};doRun();

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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 * 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 './flags_wasm';

import {backend_util, BackendTimingInfo, DataStorage, DataType, deprecationWarn, engine, env, KernelBackend, TensorFlowInfo, 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 wasmWorkerContents 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';
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());

    this.move(dataId, values, shape, dtype, 1);
  }

  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, refCount});
      return;
    }
    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) {
    if (this.dataIdMap.has(dataId)) {
      const data =
```javascript
this.dataIdMap.get(dataId); /*
 * 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--;
    if (!force && data.refCount > 0) {
      return false;
    }
    this.wasm._free(data.memoryOffset);
    this.wasm.tfjs.disposeData(data.id);
    this.dataIdMap.delete(dataId);
    return true;
  }
}

TensorInfo
let datad = {};
if (memoryOffset == null) {
  dataId = this.write(null /* values */, shape, dtype);
} else {
  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 this.floatPrecision();
}

const data = this.dataIdMap.get(dataId);
if (data != null) {
  data.refCount++;
}

memory() {
  return {unreliable: false};
}

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;
}
```

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**Back End Usage**

- **Array.from():**
  - `Array.from([1, 2, 3])` returns a new array containing the values from the passed array-like object.

- **Promise.all():**
  - Used to make asynchronous operations synchronous by waiting for all of them to complete.

- **fetch():**
  - Fetches a resource from a server using the provided URL.

- **async function:**
  - Used to create asynchronous functions.

---

**Performance Considerations**

- **Memory Management:**
  - Efficiently managing memory during operations to avoid leaks.

- **Concurrency:**
  - Utilizing multithreading to improve performance across tasks.

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**Security Considerations**

- **Data Encryption:**
  - Encrypting data in transit to ensure security.

- **Access Control:**
  - Implementing strict access controls to sensitive data.

---

**Future Enhancements**

- **Optimization:**
  - Continuously optimizing code for better performance.

- **Interoperability:**
  - Improving compatibility with other systems and services.

---

**Integration with Other Technologies**

- **WebSocket:**
  - Integrating WebSocket for real-time communication.

- **HTTP/2:**
  - Utilizing HTTP/2 for improved efficiency and performance.

---

**Documentation and Resources**

- **API Documentation:**
  - Comprehensive documentation for developers to understand and use the APIs effectively.

- **Community Resources:**
  - Forums and communities for developers to share knowledge and solutions.

---

**Conclusion**

- **Innovation in Communication:**
  - Continuous innovation to enhance communication features and usability.

- **Customer Satisfaction:**
  - Focusing on customer satisfaction through user-friendly features and efficient communication solutions.

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**Legal Considerations**

- **Copyright Compliance:**
  - Ensuring copyright compliance with all used technologies.

- **Privacy Compliance:**
  - Adhering to privacy regulations and consumer protection laws.

---

**Acknowledgments**

- **Contributors:**
  - Acknowledging the contributions of all developers and contributors to the project.

- **Support:**
  - Expressing gratitude to all stakeholders and sponsors for their support.

---

**Contact Information**

- **Support:**
  - Contact information for technical support and queries.

---

**Additional Resources**

- **Bulletin Board:**
  - A bulletin board for discussing project updates and community news.

- **Issue Tracker:**
  - An issue tracker for reporting bugs and feature requests.

---
threadsSupported as boolean, 

    wasmPathPrefix != null ? wasmPathPrefix : prefix);

    if (customFetch) {
      factoryConfig.instanceWasm =
        createInstantiateWasmFunc(getPathToWasmBinary(simdSupported as boolean, threadsSupported as boolean, wasmPathPrefix != null ? wasmPathPrefix : prefix));
      let initialized = false;
    }

    let initAborted = false;
    let reject = (message: rejectMsg) => {
      let wasm = Promise<BackendWasmModule>.
        initAborted = true;
        reject(message);
      };

    // 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(factoryConfig);
    }

    // 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;

      const voidReturnType: string = null;
      module.tfjs = {
        init: module.cwrap('init', null, ['number']),
        initWithThreadsCount: function number(threadsCount) {
          return module.cwrap('init_with_threads_count', null, [threadsCount]),
        },
        getThreadsCount: module.cwrap('get_threads_count', 'number', []),
        registerTensor: module.cwrap('register_tensor', null, [id, size, memoryOffset]),
        disposeData: module.cwrap('dispose_data', voidReturnType, [id]),
      };

      resolve({wasm: module});
    });
}

function typedArrayFromBuffer(buffer: ArrayBuffer, dtype: DataType):

    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
 * 
 * @param path wasm file path or url
 * @param usePlatformFetch optional boolean to use platform fetch to
downloads
 */

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 ' +
      `setWasmPath()` before you call `tf.setBackend() or `tf.ready()`);
    }
  }
}
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
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\"]()})}var
err=threadPrintErr;this.alert=threadAlert;Module[\"instantiateWasm\"]=function(info,receiveInstance){var
instance=new
WebAssembly.Instance(Module[\"wasmModule\"],info);Module[\"wasmModule\"]=null;receiveInstance(instance);r
eturn instance.exports};function
moduleLoaded(){}this.onmessage=function(e){try{if(e.data.cmd===\"load\"){Module[\"wasmModule\"]=e.data.wa
smModule;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;moduleLoaded()})}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.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\"]){if(Module[\"getNoExitRuntime\"]()){}else{Module[\"PThread\"].threadExit(ex.status)}}el
se{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_

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nodeWorkerThreads=require('worker_threads');global.Worker=nodeWorkerThreads.Worker;var parentPort=nodeWorkerThreads.parentPort;parentPort.on('message',function(data) {onmessage(data);});var nodeFS=require('fs');var nodeRead=function(filename) {return nodeFS.readFileSync(filename,'utf8');};function globalEval(x) {global.require=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()}}}};

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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.
 *
 *=============================================================================
 */

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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// This code is auto-generated, do not modify this file!
const version = '3.11.0';
export {version};
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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 = function (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', 'number', 'number', 'number', 'number', 'number']);
}

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
};
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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}) {
  const {inputs: {x}, attrs: {begin, size}, backend} = args;
  const [begin_, size_] = slice_util.parseSliceParams(x, begin, size);
  const isContinuous = slice_util.isSliceContinuous(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[]) .slice(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);
  if (rank === 2) {
    const flatOffset = slice_util.computeFlatOffset(begin_, xStrides);
    outVals.set((xVals as TypedArray[]) .slice(flatOffset, flatOffset +
    util.sizeFromShape(size_)), flatOffset);
    return out;
  }
  if (rank === 3) {
    const flatOffset = slice_util.computeFlatOffset(begin_, xStrides);
    outVals.set((xVals as TypedArray[]) .slice(flatOffset, flatOffset +
    util.sizeFromShape(size_)), flatOffset);
    return out;
  }
  if (rank === 4) {
    const flatOffset = slice_util.computeFlatOffset(begin_, xStrides);
    outVals.set((xVals as TypedArray[]) .slice(flatOffset, flatOffset +
    util.sizeFromShape(size_)), flatOffset);
    return out;
  }
  return out;
}

function slice2d(
    xVals: backend_util.TypedArray, xStride: number,
    outVals: backend_util.TypedArray, begin: [number, number],
    size: [number, number]): void {
  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 {
  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 {
  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];
      }
    }
  }
}

export const sliceConfig: KernelConfig = {
  kernelName: Slice,
  backendName: 'wasm',
  kernelFunc: slice as {} as KernelFunc,
};

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 * limitations under the License.
 *
 *=============================================================================
 */

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'])
}

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
```
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';
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 {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 {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 {oneHotConfig} from './kernels/OneHot';
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 {sqrtConfig} from './kernels/Sqrt';
import {scatterNdConfig} from './kernels/ScatterNd';
import {sigmoidConfig} from './kernels/Sigmoid';
import {sinConfig} from './kernels/Sin';
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 {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,
  cosConfig,
  coshConfig,
  cropAndResizeConfig,
  cumsumConfig,
  depthToSpaceConfig,
  depthwiseConv2dNativeConfig,
  eluConfig,
  equalConfig,
  expConfig,
  expandDimsConfig,
  fillConfig,
  floorConfig,
  floorDivConfig,
  fusedMatMulConfig,
  fusedBatchNormConfig,
  fusedConv2DConfig,
  fusedDepthwiseConv2DConfig,
  gatherNdConfig,
  gatherV2Config,
  greaterEqualConfig,
  identityConfig,
  leakyReluConfig,
  lessConfig,
  lessEqualConfig,
  logConfig,
  logicalAndConfig,
  maxConfig,
  meanConfig,
  minimumConfig,
  mirrorPadConfig,
  multiplyConfig,
  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,
  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);
}

module.exports = {kernelConfigs};


```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,
  floorConfig,
  floorDivConfig,
  fusedMatMulConfig,
  fusedBatchNormConfig,
  fusedConv2DConfig,
  fusedDepthwiseConv2DConfig,
  gatherNdConfig,
  gatherV2Config,
  greaterEqualConfig,
  identityConfig,
  leakyReluConfig,
  lessConfig,
  lessEqualConfig,
  logConfig,
  logicalAndConfig,
  maxConfig,
  meanConfig,
  minimumConfig,
  mirrorPadConfig,
  multiplyConfig,
  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,
  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);
}

module.exports = {kernelConfigs};

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

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```javascript
import {Floor, KernelConfig} from '@tensorflow/tfjs-core';
import {createUnaryKernelConfig} from './unary_kernel';
export const floorConfig: KernelConfig = createUnaryKernelConfig(Floor);
```

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---

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

const input = transposed;
const 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) {
  // 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 {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, 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 (isSamePad) {
    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(outId, 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
};
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Conv2D.js.map

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{"version":3,"file":"tf-backend-wasm.node.js","sources":null}
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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
}

/*The license*/

*/
```javascript
'./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, transposeActivationWeights} = inputs;
  if ((a.dtype !== 'float32' && b.dtype !== 'float32') ||
    transposeActivationWeights !== null) {
    throw new Error(`FusedMatMul for non-non-float32 tensors not yet supported.`);
  }

  const {transposeA, transposeB, activation, leaky reluAlpha} = 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(b.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-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, a.shape.length, bId, bShapeBytes, b.shape.length,
    transposeA, transposeB, fusedActivation, biasId, preluActivationWeightsId,
    leaky reluAlpha || 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);

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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, dtyple: 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',  // 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.assertAndGetBroadcastShape(a.shape, b.shape);
    const bBroadcastDims =
      backend_util.getBroadcastDims(b.shape, a.shape);
    const loopsOverAllOfA = aBroadcastDims.every((v, i) =>
        v === i); // loopsOverAllOfB = bBroadcastDims.every((v, i) =>
        v === i); if (loopsOverAllOfA &&
        loopsOverAllOfB) {
      kernelFunc();
    } else {
      throw new Error('Broadcasting along outer dims is not yet ' +
        'supported for ' +
        '{a.dtype} ' +
        '{kernelName}.');
    }

  }

  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, true);

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

  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 {backend: BackendWasm} from './backend_wasm';

import {identity} from './Identity';

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

void;

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

export function transpose(
    args: TransposeInputs):
    TensorInfo {n

  const {inputs: TransposeInputs, backend: BackendWasm, attrs: TransposeAttrs} = args;

  return out;
}
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);

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, out.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[] = [];
  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[mi...
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 (reduceSize !== 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 [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
};

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

*\n
import {ArgMax, ArgMaxAttrs, ArgMaxInputs, KernelConfig, KernelFunc, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';
import {permuteAxesAndTranspose} from './kernel_util';
import {CpDType} 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 input if (inputWasTransposed) {
        const transposedId = backend.dataIdMap.get(transposed.dataId).id;
        if (transposedId !== xId) {  
          // dispose of the transposed tensor.
          backend.disposeData(transposed.dataId);
        }
      }
    }
  }

  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
};

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

*\n
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',  // outId
  ]);  
}

function avgPool(
    args: {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, 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;
  const channels = convInfo.inChannels;

  if (convInfo.dataFormat !== 'channelsLast') {  
    throw new Error(  
      'wasm backend does not support dataFormat:' + x.dataFormat);  
  }

  // create output tensor.
  const outId = backend.dataIdMap.get(convInfo.outId).id;
  const out = backend.makeOutput(outId);

  const inputId = xId;

  const outerSize = util.sizeFromShape(out.shape);
  const innerSize = channels * filterHeight * filterWidth;

  // set up arguments for AvgPool.
  // This will be called in a loop over each input.
  // Note: the arguments are passed by value, so we need to copy x to a tensor.

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

  const inShape = input.shape;\n  const inSize = util.sizeFromShape(inShape);

  const outShape = inShape.slice(0, -1);
  const outSize = util.sizeFromShape(outShape);

  const x = Tensor4D.create(backend, xId, inShape, input.dtype);
  const y = Tensor4D.create(backend, outId, outShape, 'float32');

  // call the backend function.
  avgPool(xId, filterHeight, filterWidth, padTop, padRight, padBottom, padLeft, strideHeight, strideWidth, channels, outId);

  // dispose of tensors.
  backend.disposeData(xId);

  return y;
}

export const avgPoolConfig: KernelConfig = {
  kernelName: AvgPool,
  backendName: 'wasm',
  kernelFunc: avgPool as {} as KernelFunc,
  setupFunc: setup
};

=============================================================================
if (convInfo.dilationWidth !== 1 || convInfo.dilationHeight !== 1) {
    throw new Error('was backend only supports average pooling with dilation = [1, 1], got
    [{convInfo.dilationWidth}].');
}

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, 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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 */

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; unset 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 - 2] : b.shape[bRank - 1];

    const outerShapeA = transposeA ? a.shape.length : a.shape.slice(-2);
    const outerShapeB = transposeB ? b.shape.length : b.shape.slice(-2);

    const batchDimA = util.sizeFromShape(outerShapeA);
    const batchDimB = util.sizeFromShape(outerShapeB);

    const batchDimsCompatible = batchDimA === batchDimB || batchDimA === 1 || batchDimB === 1;

    util.assert(batchDimsCompatible, () => `Error in matMul: the input...`);
batch dimensions must either be the `+n` same or at least one input batch dimension must be 1. Got input `+n` batch dimensions of (${outerDimsA}$) and (${outerDimsB}$);`\
const outShapeOuterDims =
outShapeOuterDims.concat([outerShapeA, outerShapeB]);`\nutil.assert(innerShapeA == innerShapeB, () => `Error in matMul: inner shapes ${innerShapeA} and `${innerShapeB} `+n` `+n` $\{b.shape\}$ and transposeA=$\{transposeA\}$ `+n` and transposeB=$\{transposeB\}$ must match.);`\nconst a3dShape = transposeA ? [batchDim, innerShapeA, outerShapeA] : [batchDim, outerShapeA, innerShapeB];`\nconst b3dShape = transposeB ? [batchDim, outerShapeB, innerShapeB] : [batchDim, b3dShape = transposeB ? [batchDim, outerShapeB, innerShapeB] : [batchDim, outerShapeB, innerShapeB];`\n// The rest of the implementation is designed to operate on rank-3 tensors`\nconst a3d = reshape({inputs: {x: a}, backend, attrs: {shape: a3dShape}});`\nconst b3d = reshape({inputs: {x: b}, backend, attrs: {shape: b3dShape}});`\nconst a3dId = backend.dataIdMap.get(a3d.dataId).id;`\nconst b3dId = backend.dataIdMap.get(b3d.dataId).id;`\nconst leftDim = transposeA ? a3d.shape[2] : a3d.shape[1];`\nconst rightDim = transposeB ? b3d.shape[1] : b3d.shape[2];`\nconst batchDim = Math.max(batchDimA, batchDimB, a3d.shape[0], b3d.shape[0]);`\nconst out = backend.makeOutput([batchDim, leftDim, rightDim], a3d.dtype);`\nconst aShapeBytes = new Uint8Array(new Int32Array(a3d.shape).buffer);`\nconst bShapeBytes = new Uint8Array(new Int32Array(b3d.shape).buffer);`\nwasmBatchMatMul(a3dId, aShapeBytes, a3d.shape.length, b3dId, bShapeBytes, b3d.shape.length, transposeA, transposeB, outId);`\n// The rest of the implementation is designed to operate on rank-3 tensors`\nconst outVals = util.getArrayFromDType(dtype, util.sizeFromShape(outShape));`\nif (simplyConcat && dtype !== 'string') `{\n  // Use built-in TypedArray.set() method for speed.`\n  let offset = 0;`\n  inputs.forEach(input => `{\n    const size = util.sizeFromShape(input.shape);`\n    outVals.set(input.vals, offset);`\n    offset += size;`\n  });`\n} else `{\n  let colOffset = 0;`\n  inputs.forEach(input => `{\n    const decodedData = dtype === 'string' ?`\n      backend_util.fromUint8ToStringArray(input.vals) : input.vals;`\n    let tIdx = 0;`\n    for (let row = 0; row < input.shape[0]; ++row) `{\n      const resIdx = row * outShape[1] + colOffset;`\n      for (let col = 0; col < input.shape[1]; ++col) `{\n        outVals[resIdx + col] = decodedData[tIdx++];`\n      }`\n      colOffset += input.shape[1];`\n    }`\n    return outVals;`\n  });`\n}) sourceMappingURL=data:application/json;base64,eyJ2ZXJzaW9uIjozLCJmaWxlIjoiQ29uY2F0aW9uL2ltcGwuanMiLCJzb3VyY2VSb290IjoiIiwic291cmNlcyI6WyIuLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uLi8uL
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=============================================================================

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;
}
//

sourceMappingURL=data:application/json;base64,eyJ2ZXJzaW9uIjozLCJmaWxlIjoiUmFuZ2VfaW1wb3J0cyIsInNvdXJjZVJvb3QiOiJyYW5jaW5hZ2UvIiwiaGVpZ2h0IjoiMCJ9
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.ndarrayFromHeap(out);

if (rank === 2)
{
  const xVals = x.asTypedArray();
  const xStrides = x strides;
  const xStrides = xStrides;
  const xStrides = xStrides;

  const outVals = backend.ndarrayFromHeap(out);
  const rank = x.shape.length;

  if (rank === 2)
  {
    slice2d({
      xVals as TypedArray, xStrides[0], outVals, begin_ as [number, number],
      size_ as [number, number]$};
  } else if (rank === 3)
  {
    slice3d({
      xVals as TypedArray, xStrides[0], xStrides[1], xStrides[1], outVals, begin_ as [number, number, number],
      size_ as [number, number, number]$};
  } 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 = 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, 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];
      }
    }
  }
}

export const sliceConfig: KernelConfig = {
  kernelName: 'Slice',
  backendName: 'WASM',
  kernelFunc: slice 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 restructuring the contents of the original tensors into those less
    // than the axis by 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 innerSize = util.sizeFromShape(t.shape.slice(axis));
    const const shape = [-1, innerSize];
    return reshape({vals: $inputs[0].dataId}, shape);
  }

  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,
};
inputChannels: number, outputChannels: number,\n  outId: number) => void;\n
function setup(backend:\n  BackendWasm) {\n  wasmConv2d = backend.wasm.cwrap(Conv2D, null /* void */ , [\n    'number', \n    // xId\n    'number', \n    // batchSize\n    'number', \n    // inputHeight\n    'number', \n    // inputWidth\n    'number', \n    // filterHeight\n    'number', \n    // filterWidth\n    'number', \n    // padTop\n    'number', \n    // padRight\n    'number', \n    // padBottom\n    'number', \n    // padLeft\n    'number', \n    // isSamePad\n    'number', \n    // dilationHeight\n    'number', \n    // dilationWidth\n    'number', \n    // strideHeight\n    'number', \n    // strideWidth\n    'number', \n    // inputChannels\n    'number', \n    // outputChannels\n    'number', \n    // outId\n  ], null);\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 outputChannels = convInfo.outChannels;\n  const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;\n
  if (convInfo.dataFormat !== 'channelsLast') {\n    throw new Error('wasm backend Conv2D does not support dataFormat:' + \n      $(convInfo.dataFormat). Please use 'channelsLast.');\n  }\n
  const out = backend.makeOutput(convInfo.outShape, 'float32');\n  const outId = backend.dataIdMap.get(out.dataId).id;\n  wasmConv2d(outId, x.shape[0], x.shape[1], x.shape[2], filterId,\n    filterHeight, filterWidth, padTop, padRight, padBottom, padLeft, isSamePad,\n    dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels,\n    outputChannels, outId);\n}

export const conv2DConfig: KernelConfig = {\n  kernelName: Conv2D,\n  backendName: 'wasm',\n  setupFunc: setup,\n  kernelFunc: conv2d as {} as KernelFunc\n};
```
// yChannelStride
// 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] : dxStrides[1];
  const yBatchStride = dyStrides[0];
  const yRowStride = isChannelsLast ? dyStrides[1] : dyStrides[2];
  const yColStride = isChannelsLast ? dyStrides[2] : dyStrides[1];
  const yChannelStride = isChannelsLast ? dyStrides[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
};
```

---

// Cos, KernelConfig from '@tensorflow/tfjs-core';

export const cosConfig: KernelConfig = createUnaryKernelConfig(Cos);

---

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

export const coshConfig: KernelConfig = createUnaryKernelConfig(Cosh);

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

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

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',   // imagesShape
    'number',  // cropHeight
    'number',  // cropWidth
    'number',  // method
    'number',  // extrapolationValue
    'number'   // outId
  ]);
}

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;

function setup(backend: BackendWasm) {
  wasmCumsum = backend.wasm.cwrap(Cumsum, null /* void */, [
    'number', // xId
    'number', // exclusive
    'number', // reverse
    'number', // finalDim
    'number', // outId
    '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 cumsum = backend_util.cumsumAreInnerMostDims('cumsum', [permutedAxis], xRank);
  const out = backend.makeOutput(permutatedX.shape, permutatedX.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;

  // compute cumsum
  wasmCumsum(xId, exclusive, reverse, finalDim, outId, x.dtype);

  return out;
}
const permutedXId = backend.dataIdMap.get(permutedX.dataId);
const permutedOutId = backend.dataIdMap.get(permutedOut.dataId);

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(out, [inputs: [x, permutedOut], attr: {perm: undoPermutation}, backend]);
}

backend.disposeData(permutedX.dataId);
backend.disposeData(permutedOut.dataId);

wasmCumsumConfig = {
  kernelName: Cumsum,
  backendName: `wasm`,
  setupFunc: setup,
  kernelFunc: cumsum as {} as KernelFunc,
};

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';

wasmDepthToSpace:
  xId: number, blockSize: number, channelsLast: number, xStrides: Uint8Array, xStridesLength: number,
  outputShape: Uint8Array, outputStrides: Uint8Array, outSize: number, outId: number => {
    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
    ]);  

    const {backend, BackendWasm, inputs: DepthToSpaceInputs, attr: DepthToSpaceAttrs} = TensorInfo({
      const {backend, inputs, attr} = arg;
      const x = inputs;
      const blockSize = attr;
      const xShape = attr.xShape[0];
      const inputHeight = (dataFormat === 'NHWC') ? x.shape[1] : x.shape[2];
      const inputWidth = (dataFormat === 'NHWC') ? x.shape[2] : 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');
    } xData = backend.dataIdMap.get(x.dataId);
    const xId = x.dataId;
    const xStridesBytes = new Uint8Array(xStrides.length);
    const outputShapeBytes = new Uint8Array(outputShape.length);
    const outputStridesBytes = new Uint8Array(outputStrides.length);
    const outSize = outputShape.length;
    const outId = backend.dataIdMap.get(out.dataId).id;
    const outputStream = backend.disposeData(out.dataId);
    wasmDepthToSpace(xId, blockSize, channelsLast, xStridesBytes, outputShapeBytes, outputStridesBytes, outputShape, outputId,
        outSize, outId);  

    return {outputShapeConfig: KernelConfig({
      kernelName: DepthToSpace,
      backendName: `wasm`,
      setupFunc: setup,
      kernelFunc: depthToSpace as {} as KernelFunc,
    });
}

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

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 convInfo = backend_util.computeConv2DInfo(
      (x as Tensor4D).shape, (filter as Tensor4D).shape,
      strides, \( \text{dilations as number} \ | \ \text{number, number} \), pad, dimRoundingMode, \text{true} /* depthwise */);

  const filterId = convInfo.filterId;
  const filterWidth = convInfo.filterWidth;
  const padTop = convInfo.padTop;
  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;
  const isSamePad = convInfo.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;
  wasmDepthwiseConv2d(xId, x.shape[0], x.shape[1], x.shape[2], filterId, filterWidth,
    padTop, 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 {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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 */

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 [\${- (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', 'number', 'number', 'number', 'number', 'number']);
}

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', 'number', 'number', 'number', 'number', 'number', 'number', 'number']);
}

function fusedBatchNorm(args: {backend: BackendWasm, inputs: FusedBatchNormInputs, attrs: FusedBatchNormAttrs}) {
  const {backend, inputs, attrs} = args;
  const {varianceEpsilon} = attrs;
  const {xId: xId, numChannels: numChannels} = inputs;
  const {meanId: meanId, varianceId: varianceId, offsetId: offsetId, scaleId: scaleId} = attrs;

  const [x, mean, variance, offset, scale] = inputs;
  const out = backend.makeOutput(inputs.shape, inputs.dtype);
  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 [num, numChannels, outId] = out.shape;
  wasmBatchNorm(xId, meanId, varianceId, offsetId, scaleId, varianceEpsilon, outId);
  return out;
}

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

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

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
  ]);
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}. 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, inChannels,
  dilationHeight, dilationWidth, strideHeight, strideWidth, outputChannels,
  fusedActivation, preluActivationWeightsId, leakyreluAlpha || 0, outId);

return out;
}

export const fusedConv2DConfig: KernelConfig = {
  kernelName: FusedConv2D,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: 
    wasmFusedConv2D as {} as KernelFunc
};

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

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,
  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',  // leakyreluAlpha
        'number',  // outId
      );
}

function fusedDepthwiseConv2d(args: {
  inputs: FusedDepthwiseConv2DInputs,
  backend: BackendWasm,
  attrs: FusedDepthwiseConv2DAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {x, filter, bias, activation} = inputs;
  const {strides, pad, dilations} = dataFormat;
  const leakyreluAlpha = attrs.lyreluAlpha;

  let
inInfo = backend_util.computeConv2DInfo(inShape, filterShape, strides, dilations,
    pad, dimRoundingMode, activation, leakyreluAlpha) = attr;

  const

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 {TensorInfo} from '@tensorflow/tfjs-core';

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

let

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

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

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
    ]);
}

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 constIndicesVals = backend.readSync(indices.dataId) as TypedArray;
    const axisDim = x.shape[parsedAxis];
    for (let i = 0; i < constIndicesVals.length; ++i) {
        const index = constIndicesVals[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.sliceSize, shapeInfo.sliceSize]
        },
        backend
    });
    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 xData = backend.dataIdMap.get(flattenX.dataId);
    const xId = xData.id;
    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, outStridesBytes, outId);
}

const supportsFullBroadcast = false;
export const greaterConfig: KernelConfig = createBinaryKernelConfig(Greater, supportsFullBroadcast, 'bool');
OS Used In Cisco Meeting Server (formerly Acano Server) 3.5

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} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = false;
export const lessConfig: KernelConfig =
createBinaryKernelConfig(Less, supportsFullBroadcast, 'bool');

import {LessEqual} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = false;
export const lessEqualConfig: KernelConfig =
createBinaryKernelConfig(LessEqual, 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');
  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;
  }

  return TensorInfo{...}
}

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

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, Less} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = false;
export const lessConfig: KernelConfig =
createBinaryKernelConfig(Less, supportsFullBroadcast, 'bool');

import {KernelConfig, GreaterEqual} 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');
  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;
  }

  return TensorInfo{...}
}

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';
const supportsFullBroadcast = false;
export const lessConfig: 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, GreaterEqual} 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');
  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;
  }

  return TensorInfo{...}
}

export const leakyReluConfig: KernelConfig = {
  kernelName: LeakyRelu,
  backendName: 'wasm',
  setupFunc,
  kernelFunc: leakyRelu as {} as KernelFunc,
};
import {KernelConfig, Log} from '@tensorflow/tfjs-core';

export const logConfig: KernelConfig = createUnaryKernelConfig(Log);

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

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', 'number', 'number', 'number']);
}

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

  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmMax(inputId, CppDType[input.dtype], reduceSize, outId);
}

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
]);

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 (convInfo.dataFormat !== 'channelsLast') {
  throw new Error('wasm backend does not support dataFormat: ' + convInfo.dataFormat + '. Please use ' + 'channelsLast.');
}

const outId = backend.makeOutput(convInfo.outShape, 'float32');

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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 tensor
      // once we are done.
      input = transposed;
      inputId = transposedId;
      reductionAxes = backend_util.getInnerMostAxes(reductionAxes.length, backend.dataIdMap.get(transposed.dataId).id.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.disposeDataData(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 {} as KernelFunc
};
```

---

```javascript
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, ['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 tensor
      // 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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 */

export const minimumConfig: KernelConfig = createBinaryKernelConfig(Minimum, supportsFullBroadcast);

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 */

import {MirrorPaddingMode} 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.length - p[1] - p[0])
    .concat(x.shape.length + mode[0] - mode[1] + 1);

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

  const xShapeBytes = new Uint8Array(x.shape).buffer;

  const prePaddingsBytes = paddings.map(x => 0);

  const postPaddingsBytes = paddings.map(x => x.shape.length - x.shape.length + x.shape.length + 1);

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

  const x = backend.makeOutput(xShapeBytes, mode, xId, xShapeBytes);

  const out = backend_util.expandShapeToKeepDim(outShape, originalAxes);

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

  const mirrorPadConfig = {
    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';

interface Result {
  pSelectedIndices: number;
  selectedSize: number;
  pSelectedScores: number;
  pValidOutputs: number;
}

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} as Result;
}

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

import {KernelConfig, KernelFunc, NonMaxSuppressionV3, NonMaxSuppressionV3Attrs, NonMaxSuppressionV3Inputs, TensorInfo} from '@tensorflow/tfjs-core';

import {parseResultStruct} from '../non_max_suppression_impl.h';

interface Result {
  pSelectedIndices: number;
  selectedSize: number;
  pSelectedScores: number;
  pValidOutputs: number;
}

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(NonMaxSuppressionV3, 'number', // Result*
      ['number', // boxesId
        'number', // scoresId
        'number', // maxOutputSize
        'number', // iouThreshold
        'number', // scoreThreshold
      ]); // Since the result was allocated on the heap, we have to delete it.
}

function kernelFunc(args: {
  backend: BackendWasm,
  inputs: NonMaxSuppressionV3Inputs,
  attrs: NonMaxSuppressionV3Attrs,
}) { // Result*
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,
};

// 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,
};
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',  // Result*
    [in 'number', // boxesId
      'number', // scoresId
      'number', // maxOutputSize
      'number', // iouThreshold
      'number', // scoreThreshold
      'number', // softNmsSigma
    ]);}

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,
  };

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

import {createBinaryKernelConfig} from './binary_kernel';

let wasmOneHot: (
    indicesId: number, depth: number, onValue: number, offValue: number,
    outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmOneHot = backend.wasm.cwrap(OneHot, null /* void */, 
    [in '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 {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, 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 {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}});
  const expandedT = expandedDims({inputs: [inputs[0]], backend, attrs: {dim: axis}});
  const intermediateTensorInfosForEach(t =>
    backend.dispData(t, intermediateTensorInfos.push(expandedT));
  );

  return result;
}

export const packConfig: KernelConfig = {
  kernelName: Pack,
  backendName: 'wasm',
  kernelFunc: pack as {} as KernelFunc,
};

*/
{inputs: [x], backend, attrs: {paddings, constantValue}} = args; let outShape = paddings.map(p => 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 'n // the shape is used to compute output shape to pad. return fill({n backend, n attrs: {shape: outShape, dtype: x.dtype}}); } n const xId = backend.dataIdMap.get(x.dataId).id; n const out = backend.makeOutput(outShape, x.dtype); n const outTensorData = backend.dataIdMap.get(out.dataId); n const outId = outTensorData.id; n const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer); n const prePaddingsFlat = paddings.map(padTuple => padTuple[0]); n const postPaddingsFlat = paddings.map(padTuple => padTuple[1]); n const prePaddingsBytes = new Uint8Array(new Int32Array(prePaddingsFlat).buffer); n const postPaddingsBytes = new Uint8Array(new Int32Array(postPaddingsFlat).buffer); n const prePaddingsBytes = new Uint8Array(new Int32Array(postPaddingsFlat).buffer); n const postPaddingsBytes = new Uint8Array(new Int32Array(postPaddingsFlat).buffer); n wasmPadV2(backend.dataIdMap.get(x.dataId).id, xShapeBytes, x.shape.length, CppDType(x.dtype), prePaddingsBytes, postPaddingsBytes, constantValue, outId).return out; n

wasmPrelu(backend.dataIdMap.get(x.dataId).id, weightsId, outId);

if (input.dtype !== 'float32') {
    backend.disposeData(castedInput.dataId);
}

return out;

wasmPrelu(backend.dataIdMap.get(x.dataId).id, weightsId, outId);

if (input.dtype !== 'float32') {
    backend.disposeData(castedInput.dataId);
}

return out;

wasmPrelu(backend.dataIdMap.get(x.dataId).id, weightsId, outId);

if (input.dtype !== 'float32') {
    backend.disposeData(castedInput.dataId);
}

return out;

wasmPrelu(backend.dataIdMap.get(x.dataId).id, weightsId, outId);

if (input.dtype !== 'float32') {
    backend.disposeData(castedInput.dataId);
}

return out;

wasmPrelu(backend.dataIdMap.get(x.dataId).id, weightsId, outId);

if (input.dtype !== 'float32') {
    backend.disposeData(castedInput.dataId);
}

return out;

wasmPrelu(backend.dataIdMap.get(x.dataId).id, weightsId, outId);

if (input.dtype !== 'float32') {
    backend.disposeData(castedInput.dataId);
}

return out;

wasmPrelu(backend.dataIdMap.get(x.dataId).id, weightsId, outId);

if (input.dtype !== 'float32') {
    backend.disposeData(castedInput.dataId);
}

return out;

wasmPrelu(backend.dataIdMap.get(x.dataId).id, weightsId, outId);

if (input.dtype !== 'float32') {
    backend.disposeData(castedInput.dataId);
}

return out;

wasmPrelu(backend.dataIdMap.get(x.dataId).id, weightsId, outId);

if (input.dtype !== 'float32') {
    backend.disposeData(castedInput.dataId);
}

return out;

wasmPrelu(backend.dataIdMap.get(x.dataId).id, weightsId, outId);

if (input.dtype !== 'float32') {
    backend.disposeData(castedInput.dataId);
}

return out;

wasmPrelu(backend.dataIdMap.get(x.dataId).id, weightsId, outId);

if (input.dtype !== 'float32') {
    backend.disposeData(castedInput.dataId);
}

return out;

wasmPrelu(backend.dataIdMap.get(x.dataId).id, weightsId, outId);
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']);
  const xId = backend.dataIdMap.get(x.dataId).id;
  let inputId = xId;

  const transposed = permuteAxesAndTranspose(x, axis, backend);

  const 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);

  wasmProd(inputId, reduceSize, CppDType[input.dtype], outId);

  const newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);

  const outValues = backend.makeOutput([newShape.length], dtype);

  outValues.set(values);

  return outValues;
}

export const prodConfig: KernelConfig = {
  kernelName: Prod,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: prod as {} as KernelFunc
};

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

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = true;
export const realDivConfig: KernelConfig =

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';

export const reluConfig: KernelConfig = createUnaryKernelConfig(Relu);

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 *
 *=============================================================================
 */
import {KernelConfig, Relu6} from '@tensorflow/tfjs-core';

export const relu6Config: KernelConfig = createUnaryKernelConfig(Relu6);

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 */
import {KernelConfig, KernelFunc, ResizeBilinear, ResizeBilinearAttrs, ResizeBilinearInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

export const resizeBilinearConfig: KernelConfig = {
  kernelName: ResizeBilinear,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: resizeBilinear as {} as KernelFunc
};
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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'   // 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} 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 outId = backend.dataIdMap.get(image.dataId).id;

  backend.disposeData(out.dataId);
  return rotateWithOffset({
    inputs: {image: out},
    backend: BackendWasm,
    attrs: RotateWithOffsetAttrs
  });
}
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';

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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 */

import {KernelConfig, KernelFunc, scatter_util, ScatterNd, ScatterNdAttrs, ScatterNdInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

export const scatterNdConfig: KernelConfig = {
  kernelName: 'ScatterNd',
  backendName: 'wasm',
  kernelFunc: scatterNd as {} as KernelFunc,
  setupFunc: setup
};
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=============================================================================

```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):
  wasmSelect =
    backend.wasm.cwrap('SelectV2', null, ['number', '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',
  kernelFunc: select as {} as KernelFunc,
  setupFunc: setup
};
```

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

```javascript
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.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
};
```

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

```javascript
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 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
};

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 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(reshapedPaddedShape, blockShape, prod, false);

  const permutedReshapedPaddedPermutation = backend_util.getPermuted(reshapedPaddedShape.length, blockShape.length, false);

  const result = reshape({inputs: reshapeInputs, backend, attrs: reshapeAttrs});

  return result;
}

export const spaceToBatchNDConfig: KernelConfig = {
  kernelName: SpaceToBatchND,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: spaceToBatchND as {} as KernelFunc
};
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 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,
    end,
    strides,
    $begin,
    $end,
    $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 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 outShapeBytes = new Uint8Array(new Int32Array(finalShape).buffer);
    const outStridesBytes = new Uint8Array(new Int32Array(finalShapeSparse).buffer);
    const outId = backend.dataIdMap.get(out.dataId).id;

    wasmStridedSlice(xId, xStridesBytes, x.shape.length, beginBytes, endBytes, stridesBytes,
      outShapeBytes, outStridesBytes, finalShapeSparse.length, outId);

  } else {
    // To tolerate begin[0] > end[0] (a 0-output slice), we min(begin,end).
    const sliced = slice({inputs: {x},
      backend, attrs: {begin: min($begin, $end), size}});

    result = reshape({inputs: {x: sliced},
      backend, attrs: {shape: finalShape}});

    backend.disposeData(sliced.dataId);
  }

  return result;
}
result = reshape({inputs: [x: out], backend, attrs: {shape: finalShape}});} 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';
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 =
  null;

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;
  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) {
    wasmSum(inputId, reduceSize, CppDType[output.dtype], outId);
  } else if (inputWasTransposed) {
    // dispose of the transposed tensor
    wasmSum(transposedId, reduceSize, CppDType[output.dtype], outId);
  } else 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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 */

const supportsFullBroadcast = true;
export const subConfig: KernelConfig = createBinaryKernelConfig(Sub, supportsFullBroadcast);

*/
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---

```
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);
  return out;
}

export const tileConfig: KernelConfig = {
  kernelName: Tile,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: tile as {} as KernelFunc
};
```

---

```
import {KernelConfig, KernelFunc, TensorInfo, TopK, TopKAttrs, TopKInputs} from '@tensorflow/tfjs-core';
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
  ]);}

function topK(args: {inputs: TopKInputs, backend: BackendWasm, attrs: TopKAttrs}) {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const {topK} = attrs;

  const topKBytes = new Uint8Array(new Int32Array(topK).buffer);
  const outValues = backend.makeOutput(xDtype, CppDType[out.dtype], outValuesId);
  const outIndices = backend.makeOutput(xDtype, CppDType[out.dtype], outIndicesId);

  wasmTopK(xId, xShapeBytes, xShapeLength, xDtype, k, sorted, boolean, outValuesId, number, outIndicesId, number);
  return {values: outValues, indices: outIndices};
}

export const topKConfig: KernelConfig = {
  kernelName: TopK,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: topK as {} as KernelFunc
};
```

---

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*
`number', // outIndicesId
};

export const topk:
    (args: {inputs: TopKInputs, backend: BackendWasm,
        attrs: TopKAttrs}) =>
        TensorInfo
piler满意 = ({inputs, backend, attrs}) =>
const {x} = inputs;
const [k, sorted] = attrs;
const xId = backend.dataIdMap.get(x.dataId).id;
const xShapeBytes
const outValuesId = backend.dataIdMap.get(outValues.dataId).id;
const outIndices =
backend.makeOutput(outShape, 'int32');

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, 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, 
    numHeight: number, numWidth: 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',  // numHeight
    'number',  // numWidth
    'array',   // strides
    'number',  // stridesLength
    '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, transforms} = inputs;
  const {interpolation, fillMode, fillValue, outputShape} = attrs;

  const 
      [batch, numHeight, numWidth, 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 outId = backend.dataIdMap.get(outId.dataId).id;
  const imageData =
    backend.dataIdMap.get(image.dataId).id;
  const imageData =
    backend.dataIdMap.get(imageData.dataId).id;
  const transformsData =
    backend.dataIdMap.get(transforms.dataId).id;
  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;
  }

  const wasmTransform =
    backend.wasm.cwrap(Transform,
    null /*void*/, 
    ['number',  // imageId
    'number',  // transformsId
    'number',  // batch
    'number',  // outHeight
    'number',  // outWidth
    'number',  // numChannels
    'number',  // numHeight
    'number',  // numWidth
    'array',   // strides
    'number',  // stridesLength
    'number',  // interpolationModeId
    'number',  // fillModeId
    'number',  // fillValue
    'number']   // outId
    );

  wasmTransform(
      imageId, transformsId, batch, outHeight, outWidth, numChannels, stridem:
      interpolatienModeId, fillModeId, fillValue, outId);

  return out;
}
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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,
};

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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 the contents of this file and import only the kernels that are needed.

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 {argminConfig} from './kernels/ArgMin';
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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`./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 {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 {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 {notEqualConfig} from './kernels/NotEqual';
import {oneHotConfig} from './kernels/OneHot';
import {onesLikeConfig} from './kernels/OnesLike';
import {padConfig} from './kernels/Pad';
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 {reverseConfig} from './kernels/Reverse';
import {roundConfig} from './kernels/Round';
import {rsqrtConfig} from './kernels/Rsqrt';
import {scatterNdConfig} from './kernels/ScatterNd';
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:

- absConfig
- addConfig
- addNConfig
- allConfig
- anyConfig
- avgPoolConfig
- batchMatMulConfig
- batchToSpaceNCConfig
- 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,
maxConfig,
maximumConfig,
meanConfig,
minConfig,
minimumConfig,
mirrorPadConfig,
multiplyConfig,
negConfig,
nonMaxSuppressionV3Config,
nonMaxSuppressionV4Config,
nonMaxSuppressionV5Config,
notEqualConfig,
oneHotConfig,
onesLikeConfig,
packConfig,
padV2Config,
powConfig,
preluConfig,
prodConfig,
rangeConfig,
realDivConfig,
reluConfig,
relu6Config,
reshapeConfig,
reverseConfig,
rotateWithOffsetConfig,
sqrtConfig,
roundConfig,
sqrtNdConfig,
squareConfig,
squaredDifferenceConfig,
spaceToBatchNDConfig,
splitVConfig,
sqrtConfig,
squareConfig,
squaredDifferenceConfig,
stepConfig,
stridedSliceConfig,
subConfig,
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, 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, 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;
  }

  return true;
});

var WasmBackendModuleThreadedSimd = (function() {

  if (typeof __filename !== 'undefined') _scriptDir = _scriptDir || __filename;

  return (function(WasmBackendModuleThreadedSimd) {
    WasmBackendModuleThreadedSimd = WasmBackendModuleThreadedSimd || {};

    const GROWABLE_HEAP_I8 = () => (wasmMemory.buffer != buffer ? updateGlobalBufferAndViews(wasmMemory.buffer) : 0);
    const GROWABLE_HEAP_U8 = () => (wasmMemory.buffer != buffer ? updateGlobalBufferAndViews(wasmMemory.buffer) : 0);
    const GROWABLE_HEAP_I32 = () => (wasmMemory.buffer != buffer ? updateGlobalBufferAndViews(wasmMemory.buffer) : 0);
    const GROWABLE_HEAP_U32 = () => (wasmMemory.buffer != buffer ? updateGlobalBufferAndViews(wasmMemory.buffer) : 0);
    const GROWABLE_HEAP_F64 = () => (wasmMemory.buffer != buffer ? updateGlobalBufferAndViews(wasmMemory.buffer) : 0);

    return (function() {
        // 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])));
    });
});

GROWABLE_HEAP_I8();
GROWABLE_HEAP_U8();
GROWABLE_HEAP_I32();
GROWABLE_HEAP_U32();
GROWABLE_HEAP_F64();
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_WEB=typeof window==='object';var ENVIRONMENT_IS_WORKER=typeof importScripts==='function';var ENVIRONMENT_IS_NODE=typeof process==='object'&&typeof process.versions==='object'&&typeof process.versions.node==='string';var 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){buffer=Module['buffer']};var scriptDirectory='';function locateFile(path){if(Module['locateFile']){return Module['locateFile'](path,scriptDirectory)}return scriptDirectory+path};var 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):filename;return nodeFS[\"ReadStream\"](filename,binary?null:\"utf8\")};readBinary=function readBinary(filename){var ret=read_(filename,\"binary\")};var 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\",function(ex){if(ex instanceof ExitStatus){throw ex}});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(filename,binary){if(b)nodeFS=require('fs');if(!nodePath)nodePath=require('path');filename=nodePath['normalize']?(filename):filename;return nodeFS[\"ReadStream\"](filename,binary?null:\"utf8\")};readBinary=function readBinary(filename){var data;if(typeof readbuffer==\"function\"){return new Uint8Array(readbuffer(filename))}data=read(filename,\"binary\")};assert(typeof data==\"object\");return data};if(typeof scriptArgs!==\"undefined\"){arguments_=scriptArgs};if(typeof arguments!==\"undefined\"){arguments_=arguments};if(typeof quit!==\"function\"){quit_=function(status){assert(status);if(typeof print!==\"undefined\"){printErr=print}}};if(ENVIRONMENT_IS_WEB||ENVIRONMENT_IS_WORKER){if(ENVIRONMENT_IS_WORKER){scriptDirectory=document.currentScript.src}assert(typeof scriptDirectory==\"string\"&&scriptDirectory[\"length\"]>0);scriptDirectory=scriptDirectory.substr(0,scriptDirectory.lastIndexOf(\"\")+1)}else{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):filename;return nodeFS[\"ReadStream\"](filename,binary?null:\"utf8\")};readBinary=function readBinary(filename){var ret=;read_(filename,\"binary\")};assert(ret.buffer);return ret;}}
if(u<=65535){if(outIdx+2>=endIdx)break;heap[outIdx++]=224|u>>12;heap[outIdx++]=128|u>>6&63;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}function stringToUTF8(str,buffer) {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+1)&1023;else if(u<=127)+len;else if(u<=2047)len+=2;else if(u<=65535)len+=3;else len+=4}return len}function stringToUTF8Array(str,buffer) {return stringToUTF8(str,buffer)}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;else 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 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)}
if(canvas.canvasSharedPtr){
    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_is(2,1,target,width,height);return

function _emscripten_set_canvas_element_size_calling_thread(target,width,height)if(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)

GL={counter:1,buffers:[],programs:[],framebuffers:[],renderbuffers:[],textures:[],shaders:[],cont
exts:[],offscreenCanvases:[],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}

gSource: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);context={handle:handle,attributes:webGLContextAttributes,version:webGLContextAttributes.majorVersion,GLctx:ctx};if(ctx.canvas)ctx.canvas.GLctxObject=context;GL.contexts[handle]=context;GL =

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GLctx=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 Each(extension) if(extension.indexOf("lose_context")<0&&extension.indexOf("debug")<0) { GLctxgetExtension(ext + "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 id=GL.uniforms[ GL.getNewId(GL.uniforms)]; ubox=ptable.uniforms[name]; ubox[0]=u.name; ubox[1]=u.size; ubox[2]=u.type; ubox[3]=u.unit; ubox[4]=u.location; if (ubox[0]+ubox[1]+ubox[2]+ubox[3]+ubox[4]) { var exts=GLctx.getSupportedExtensions(); for (var ext of exts) { if (ext.indexOf("lose_context")<0&&ext.indexOf("debug")<0) { GLctx.getExtension(ext + "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)],"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)],"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; }
worker=PThread.getNewWorker();if(worker.pthread!==undefined)throw"Internal 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_d_ptr};var tis=threadParams.threadInfoStruct>>2;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+(40>>2),pthread.threadInfoStruct);Atomics.store(GROWABLE_HEAP_U32(),tis+(80>>2),threadParams.stackSize);Atomics.store(GROWABLE_HEAP_U32(),tis+(76>>2),stackHigh);Atomics.store(GROWABLE_HEAP_U32(),tis+(104>>2),threadParams.stackSize);Atomsics.store(GROWABLE_HEAP_U32(),tis+(104+8>>2),stackHigh);Atomsics.store(GROWABLE_HEAP_U32(),tis+(104+12>>2),threadParams.detached);var global_libc=_emscripten_get_global_libc();var global_locale=global_libc+40;Atomsics.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;++i){GROWABLE_HEAP_U32()[threadInfoStruct+i*4>>2]=0}var threadParams={stackBase:stackBase,stackSize:stackSize,allocatedOwnStack:allocatedOwnStack,detached:detached,startRoutine:start_routine,pthread_ptr:threadInfoStruct.arg,transferList:transferList};if(ENVIRONMENT_IS_PTHREAD){threadParams.cmd="spawnThread";postMessage(threadParams,transferList)}else{spawnThread(threadParams)}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_check_blocking_allowed(){if(ENVIRONMENT_IS_NODE)return;function __emscripten_do_pthread_join(thread,status,block){if(ENVIRONMENT_IS_PTHREAD){threadParams.cmd="spawnThread";postMessage(threadParams,transferList)}else {spawnThread(threadParams)}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_check_blocking_allowed(){if(ENVIRONMENT_IS_NODE)return;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){threadParams.cmd="spawnThread";postMessage(threadParams,transferList)}else {spawnThread(threadParams)}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_check_blocking_allowed(){if(ENVIRONMENT_IS_NODE)return;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&

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;Atoms.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_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 15:case 235:case 16:case 17:case 18:case 19:case 20:case 149:case 21:case 22:case 159:case 154:case 14:case 77:case 78:case 139:case 82:case 68:case 67:case 164:case 11:case 29:case 47:case 48:case 95:case 52:case 51:case 46:retur
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 Uint32Array(buf); Module["HEAPF32"] = HEAPF32 = new Uint32Array(buf);

Float32Array(buf); Module["HEAPF64"] = HEAPF64 = new Float32Array(buf);

INITIAL_MEMORY = Module["INITIAL_MEMORY"] || 16777216; var wasmTable; var __ATPRERUN__ = [];

var __ATINIT__ = [];

var __ATMAIN__ = [];

var __ATPOSTRUN__ = [];

runtimeInitialized = false; __ATINIT__._push({func: function({___wasm_call_ctors})});

function preRun() { if (Module["preRun"]) {
  if (typeof Module["preRun"]) == "function") Module["preRun"] = [Module["preRun"]];

  while (Module["preRun"].length) {
    a ddOnPreRun(Module["preRun"][0].shift())
  }

  callRuntimeCallbacks(__ATPRERUN__);}

function initRuntime() {
  runtimeInitialized = true;

  callRuntimeCallbacks(__ATINIT__);

  function preMain() {
    callRuntimeCallbacks(__ATMAIN__);}

  function postRun() {
    if (Module["postRun"]) {
      if (typeof Module["postRun"]) == "function") Module["postRun"] = [Module["postRun"]];

      while (Module["postRun"].length) {
        addOnPostRun(Module["postRun"][0].shift())
      }

      callRuntimeCallbacks(__ATPOSTRUN__);
    }

    function 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["monitorRunDependencies"](runDependencies);
      }
    }

    function removeRunDependency(id) {
      runDependencies--;

      if (Module["monitorRunDependencies"]) {
        Module["monitorRunDependencies"](run Dependencies);
      }

      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+"\n"); Build with -s ASSERTIONS=1 for more info.\n var e = new WebAssembly.RuntimeError(what);

      readyPromiseReject(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);

        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) {
          return response.arrayBuffer();
        }
      })(function(response) {
        return getBinary(wasmBinaryFile);
      });
    }

    function getBinaryAsync(file) {
      if (readAsync) {
        return new Promise(function(resolve, reject) {
          readAsync(wasmBinaryFile, function(response) {
            resolve(new Uint8Array(response));
          }, reject);
        });
      }

      return getBinary(wasmBinaryFile);
    }

    function createWasm() {
      var info = {
        a: asmLibraryArg
      };

      function receiveInstance(instance, module) {
        var exports = instance.exports;
        exports["asm"] = exports.wasmMemory = Module["asm"];
        updateGlobalBufferAndViews(wasmMemory.buffer);
        wasmTable = Module["asm"]["wasm-instantiate"]; addRunDependency(wasm-instantiate);
        function receiveInstantiatedSource(output) {
          return Instance(output["instance"].value);
        }

        function instantiateArrayBuffer(receiver) {
          return getBinaryPromise().then(function(binary) {
            return WebAssembly.instantiate(binary, info);
          }).then(function(result) {
            return result.instance;
          });
        }

        function instantiateAsync() {
          if (!wasmBinary &&
            (ENVIRONMENT_IS_WEB || ENVIRONMENT_IS_WORKER)) {
            if (typeof fetch === "function") {
              return fetch(wasmBinaryFile,
                { credentials: "same-origin" });
            }
          }

          return new Promise(function(resolve, reject) {
            readBinary(wasmBinaryFile, function(response) {
              resolve(new Uint8Array(response));
            }, reject);
          });
        }

       进取函数接收实例的模块。

        exports["asm"] = exports.wasmMemory = Module["asm"];["v3"];
        updateGlobalBufferAndViews(wasmMemory.buffer);
        wasmTable = Module["asm"]["wasm-instantiate"]; addRunDependency(wasm-instantiate);
        function receiveInstantiatedSource(output) {
          receiveInstance(output["instance"]);
        }

        function instantiateArrayBuffer(receiver) {
          return getBinaryPromise().then(function(binary) {
            return WebAssembly.instantiate(binary, info);
          }).then(function(result) {
            return result.instance;
          });
        }

        function instantiateAsync() {
          if (!wasmBinary &&
            (ENVIRONMENT_IS_WEB || ENVIRONMENT_IS_WORKER)) {
            if (typeof fetch === "function") {
              return fetch(wasmBinaryFile,
                { credentials: "same-origin" });
            }
          }

          return new Promise(function(resolve, reject) {
            readBinary(wasmBinaryFile, function(response) {
              resolve(new Uint8Array(response));
            }, reject);
          });
        }
      }
    }

    function resolveError() {
      err("failed to asynchronously prepare wasm: " + reason);
    }

    abort("invalid Abuse of privileges / Denial of Service attack detected!");
run(args){args=args||arguments_;if(runDependencies>0){return}doRun();if(calledRun)return;calledRun=true;Module['calledRun']=true;if(ABORT)return;initRuntime();preMain();readyPromiseResolve(Module);if(Module['onRuntimeInitialized']!=null)Module['onRuntimeInitialized']();postRun();}

if(Module['setStatus']){
  Module['setStatus']('Running...');
  setTimeout(function(){
    setTimeout(function(){
      Module['setStatus']('');
    },1);
  },1);
}

if(module.exports){
  module.exports = WasmBackendModule;
}

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.js';
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 {
  dataIdNextNumber = 1;
  dataIdMap:

  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, memoryOffset: null, refCount});
    } 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.buffer, values.byteOffset, size), memoryOffset);
      }
    }
  }

  async read(dataId: DataId): Promise<backend_util.BackendValues> {
    return this.readSync(dataId);
  }

  readSync(dataId: DataId): backend_util.BackendValues {
    const {memoryOffset, shape} = this.dataIdMap.get(dataId);
    if (dtype === 'string') {
      const stringBytes = values as Uint8Array[];
      this.dataIdMap.set(dataId, {id, stringBytes, shape, memoryOffset: null, refCount});
    } 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.buffer, values.byteOffset, size), memoryOffset);
      }
    }
    return this.wasm.HEAPU8.slice(memoryOffset, memoryOffset + util.sizeFromShape(shape) * util.bytesPerElement(dtype));
  }
}

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/**
 * Dispose the memory if the dataId has 0 refCount. Return true if the memory
 * is released, false otherwise.
 * @param dataId number (\n * if (this.dataIdMap.has(dataId)) (\n * const data = this.dataIdMap.get(dataId);
 * data.refCount--;
 * if (!force && data.refCount > 0) (\n * return false;
 * this.wasm._free(data.memoryOffset);
 * this.wasm.tfjs.disposeData(data.id);
 * this.dataIdMap.delete(dataId);
 * return true;
 * \n * */
 * Return refCount of a `TensorData`. */

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)) {
      return this.dataIdMap.get(dataId).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
// testing.

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};
  }

makeOutput(shape: number[], dtype: DataType, memoryOffset?: number): TensorInfo {
    const dataId = this.dataIdNextNumber++;
    const data = this.dataIdMap.set(dataId, {id, memoryOffset, shape, dtype});
    const size = util.sizeFromShape(shape);
    this.wasm.tfjs.registerTensor(dataId, size, memoryOffset);
    return {id, 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}`);
    }
  }
}
if (path.endsWith('.worker.js')) {
  const response = wasmWorkerContents;
  const blob = new Blob([response], {type: 'application/javascript'});
} else {
  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
    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/blob/master/tfjs-backend-wasm/README.md#using-bundlers';
  reject({message: rejectMsg});
}

let wasm: Promise<BackendWasmModule>;

if (threadsSupported && simdSupported && wasmPath == null) {
  factoryConfig.mainScriptUrlOrBlob = new Blob(['var WasmBackendModuleThreadedSimd = ' + wasmFactoryThreadedSimd.toString()], {type: 'text/javascript'});
  wasm = wasmFactoryThreadedSimd(factoryConfig);
} else {
  wasm = wasmFactory(factoryConfig);
}

wasm.then((module) => {
  initialized = true;
  initAborted = false;

  const voidReturnType: string = null;
  module.tfjs = {
    init: module.cwrap('init', null, []),
    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', 'number']),
    resolve: module.cwrap('resolve', voidReturnType, []),
    dispose: module.cwrap('dispose', voidReturnType, []),
  };

  resolve({wasm: module});
}

wasm.then((module) => {
  initialized = true;
  initAborted = false;

  const voidReturnType: string = null;
  module.tfjs = {
    init: module.cwrap('init', null, []),
    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', 'number']),
    resolve: module.cwrap('resolve', voidReturnType, []),
    dispose: module.cwrap('dispose', voidReturnType, []),
  };

  resolve({wasm: module});
});

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()`');
}

wasmPath = path;

customFetch = false;

setWasmPath(path, usePlatformFetch = false);
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/*
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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 CppDType {
 * float32 = 0,
 * int32 = 1,
 * bool = 2,
 * string = 3,
 * complex64 = 4
 *}
 */

import {_FusedMatMul, _FusedMatMulAttrs, _FusedMatMulInputs, KernelConfig, KernelFunc} from

...
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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 */, [\n        '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(inputs: {
    a: TensorInfo,
    b: TensorInfo,
    bias: TensorInfo,
    preluActivationWeights: TensorInfo
}) {
  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 fusedActivation =
      FusableActivation[activation as {} as keyof typeof FusableActivation];
  if (fusedActivation == null) {
    throw new Error(
        `${activation} activation not yet supported for
      `);
  }

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

  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);

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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, dtypes: number, outId: number) =>
          void;

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

    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 =
      dtypes != null ? dtypes : 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(outputShape) === 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, aShape.length, bId, bShapeBytes, bShape.length, a.dtype, outId);

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

      backend.assertAndGetBroadcastShape(a.shape, b.shape); const out =
      backend.makeOutput(newShape, outputType); const aDtypeBytes =
      new Uint8Array(new Int32Array(a.shape).buffer); const bDtypeBytes =
      new Uint8Array(new Int32Array(b.shape).buffer); const outId =
      backend.dataIdMap.get(out.dataId).id; const kernelFunc = () =>
          wasmFunc(aId, aDtypeBytes, a.shape.length, bDtypeBytes, b.shape.length, a.dtype, outId);

      const broadcastDims = backend_util.getNumBroadcastDims(a.shape, b.shape);
  }

  return

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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);"/**\n */

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

export const identityConfig: KernelConfig = {
  kernelName: Identity,
  backendName: 'wasm',
  kernelFunc: identity as {} as KernelFunc,
};

export function transpose(
    args:

```javascript
{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;
      break;
    }
  }

  if (permIsNoOp) {
    return out;
  }

  const outShape = computeOutShape(inputs.x.shape, attrs.perm);
  const xId = backend.makeOutput(outShape, x.dtype);
  const x = {id: xId, dataId: inputs.x.dataId, shape: inputs.x.shape, dtype: inputs.x.dtype};

  const cloned = identity({inputs: {x}, attrs: {perm}}, backend);
  cloned.shape = outShape;
  return cloned;
}

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

const backendWasm = new BackendWasm(BackendUtil, tensors.core); const inputs = tensors.core.inputs;
const backendUtil = new BackendUtil(backendWasm, tensors.core); const tensors = tensors.core;
const util = backendUtil.util;
const originalAxes = tensors.core.originalAxes;
const x = tensors.core.x;
const xShape = x.shape;
const xRank = x.shape.length;
const permutedAxes = util.permuteAxes(x, originalAxes);
const xPermuted = backendUtil.permuteAxes(x, xPermutedAxes);
let xPermutedAxes = null;
let xPermuted = null;
```

---

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---

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*/
```

---

**Import:**

```
import {backend_util, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from 'tensorflow-backend-wasm';
import {Transpose} from './Transpose';

export function permuteAxesAndTranspose(x, axis, backend) {
  const xShape = x.shape;
  const xRank = x.shape.length;
  const originalAxes = util.parseAxisParam(axis, xShape);
  let axes = originalAxes;
  const permutedAxes = backendUtil.permuteAxes(x, originalAxes);
  const xPermuted = backendUtil.permuteAxes(x, xPermutedAxes);
  let xPermutedAxes = null;
```
```javascript
import {All, AllAttrs, AllInputs, backend_util, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '..\backend_wasm';

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 inputData = 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;
    inputData = 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
};
```

---

```javascript
import {Any, AnyAttrs, AnyInputs, backend_util, KernelConfig, KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '..\backend_wasm';

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 inputData = 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;
    inputData = 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) {
    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
};
```
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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 KernelFunc,
    setupFunc: setup
};

*/

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, 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', // strideHeight
        'number', // strideWidth
        'number', // channels
        'number'  // outId
    ]);
}

function avgPool(
    args: {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 avgPool = backend.wasm.cwrap(AvgPool, null /* void */, [
        'number', // xId
        'number', // filterHeight
        'number', // filterWidth
        'number', // strideHeight
        'number', // strideWidth
        'number', // channels
        'number', // outId
    ]);\n
    avgPool(\n        inputs.x.dataId, \n        convInfo.filterHeight, \n        convInfo.filterWidth, \n        convInfo.strideHeight, \n        convInfo.strideWidth, \n        convInfo.inChannels, \n        if (convInfo.dataFormat !== 'channelsLast') \n            throw new Error(\n        });
    return convInfo.outDataId;
}

export const avgPoolConfig: KernelConfig = {
    kernelName: AvgPool,
    backendName: 'wasm',
    kernelFunc: avgPool as KernelFunc,
    setupFunc: setup
};

*/

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, 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', // strideHeight
        'number', // strideWidth
        'number', // channels
        'number'  // outId
    ]);
}

function avgPool(
    args: {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 avgPool = backend.wasm.cwrap(AvgPool, null /* void */, [
        'number', // xId
        'number', // filterHeight
        'number', // filterWidth
        'number', // strideHeight
        'number', // strideWidth
        'number', // channels
        'number', // outId
    ]);\n
    avgPool(\n        inputs.x.dataId, \n        convInfo.filterHeight, \n        convInfo.filterWidth, \n        convInfo.strideHeight, \n        convInfo.strideWidth, \n        convInfo.inChannels, \n        if (convInfo.dataFormat !== 'channelsLast') \n            throw new Error(\n        });
    return convInfo.outDataId;
}

export const avgPoolConfig: KernelConfig = {
    kernelName: AvgPool,
    backendName: 'wasm',
    kernelFunc: avgPool as KernelFunc,
    setupFunc: setup
};

*/
was never configured to use `channelsLast`."

if (convInfo.dilationWidth !== 1 || convInfo.dilationHeight !== 1) {
  throw new Error(`the backend only supports average pooling with dilation = [1, 1], ` +
                     `got ${convInfo.dilationHeight}, ${convInfo.dilationWidth}].`);
}

const outId = backend.dataIdMap.get(out.dataId).id;
wasnAvgPool(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 {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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 */

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, outShape: number[], outShapeSize: 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
        'array'    // out_shape
      ]);
}

function batchMatMul(args: {inputs: BatchMatMulInputs, backend: BackendWasm, attrs: BatchMatMulAttrs}) {
  const {inputs, backend, attrs} = args;
  const {a, b} = inputs;
  const [aRank, bRank] = [a.shape.length, b.shape.length];
  const innerShapeA = a.shape.slice(0, aRank - 2);
  const innerShapeB = b.shape.slice(0, bRank - 2);
  const outerShapeA = a.shape.slice(aRank - 1);
  const outerShapeB = b.shape.slice(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);

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

  const [a, b] = inputs;
  const [aRank, bRank] = [a.shape.length, b.shape.length];
  const innerShapeA = a.shape.slice(0, aRank - 2);
  const innerShapeB = b.shape.slice(0, bRank - 2);
  const outerShapeA = a.shape.slice(aRank - 1);
  const outerShapeB = b.shape.slice(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);

  if (aRank !== bRank) {
    throw new Error(`BatchMatMul only supports same rank shapes.`);
  }

  const innerShapeAB = util.mulShape(innerShapeA, innerShapeB);
  const outerShapeAB = util.mulShape(outerShapeA, outerShapeB);
  const outerDimsAB = util.mulShape(outerDimsA, outerDimsB);

  if (innerShapeAB.length % batchDimA !== 0) {
    throw new Error(`BatchMatMul requires innerShapeAB.length % batchDimA == 0.`);
  }

  const stridesAB = util.strides(outerShapeAB, outerDimsAB);
  const stridesA = util.strides(outerShapeA, outerDimsA);
  const stridesB = util.strides(outerShapeB, outerDimsB);

  const [aStrides, bStrides, cStrides] = util.strides([innerShapeAB, innerShapeB, outerShapeB], [outerShapeA, outerShapeB, outerShapeB], [outerShapeB, outerShapeB, outerShapeB], outerShapeAB);

  const inputA = util.slice(a, aStrides, outerShapeA);
  const inputB = util.slice(b, bStrides, outerShapeB);

  const output = util.slice(c, cStrides, outerShapeAB);

  const $a = util.sizeFromShape(innerShapeA);
  const $b = util.sizeFromShape(innerShapeB);
  const $c = util.sizeFromShape(outerShapeAB);

  wasmBatchMatMul(aStrides, $a, inputA, $b, output, bStrides, $c);

  return output;
}
util.assert(aRank == 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 = util.assert(a.shape.slice(0, -2) : b.shape.slice(0, -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 of (${outerDimsA}) and (${outerDimsB}).`);
const outShape = outShapeOuterDims.concat([outerShapeA, outerShapeB]);
util.assert(innerShapeA === innerShapeB, () => `Error in matMul: inner shapes (${innerShapeA}) and (${innerShapeB}) of Tensors with shapes (${a.shape}) and (${b.shape}) and transposeA=${transposeA} ? [batchDimA, innerShapeA, outerShapeA] : [batchDimA, outerShapeA, innerShapeA] and transposeB=${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 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 out = backend.makeOutput([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;
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 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_)), flatOffset);
  }

  return out;
}

const outVals = backend.typedArrayFromHeap(out);

if (isContinous) {
  const res = sliceImplCPU(xVals, begin_, size_, x.dtype);
  outData.stringBytes = res as Uint8Array;
}

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];
  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[2]), outOffset);
        outOffset += size[2];
      }
    }
  }
}

function slice4d(xVals: backend_util.TypedArray, xStride1: number, xStride2: number, xStride3: number, xStride4: number, outVals: backend_util.TypedArray, begin: [number, number, number, number, number], size: [number, 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++) {
          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 = args.inputs;
const backend = BackendWasm;
const attrs = args.attrs;
const {x} = inputs;
const {begin, outputShape} = attrs;

const blockShape,
```javascript
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 xReshaped = reshape({inputs: [x], backend, attrs: {shape: reshaped}});

const xTransposed = transpose({inputs: {x: xReshaped}, backend, attrs: {perm: permuted}});

const result = slice({inputs: {x: xTransposed}, 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
};

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,
};

export const ceilConfig: KernelConfig = createUnaryKernelConfig(Ceil);
```
BackendWasm, attr: 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;
  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);
  // 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};
    });
    // Concats 2d tensors along axis=1.
    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[];
    out.shape = backend_util.computeOutShape(inputsValShapes, outShape, inputs[0].dtype, simplyConcat) as string[];
    const finalOutShape = backend_util.computeOutShape(inputs.map(t => t.shape), axis);
    const outData = backend.dataIdMap.get(out.dataId);
    const outDataBytes = backend_util.fromStringArrayToUint8(outVals);
    const inputs2DforEach(t => backend.disposeData(t.dataId));
    const returnOut = false;
    const batchDim = util.sizeFromShape(inputs[0].shape.slice(0, axis));
    let sumInnerDims = 0;
    const innerDims = inputs.map(t => t.shape[0]);
    for (let i = 0; i < inputs.length; i++) {
      const innerDim = innerDims[i];
      const inOffset = innerDim * i + offset;
      const inVals = inputs[t].typedDataFromHeap();
      for (let b = 0; b < batchDim; b++) {
        const outOffset = b * sumInnerDims;
        for (let i = 0; i < inVals.length; i++) {
          const inOffset = b + i;
          const outVal = outVal[t].typedDataToUint8(outOffset);
          for (let j = 0; j < outVals.length; j++) {
            outOffset += innerDim;
            const outFile = outVal[t].typedDataToUint8(outOffset);
            out[t].typedDataFromUint8(outFile);
          }
        }
      }
    }
    return out;
  }
  return out;
}

export const concatConfig: KernelConfig = {
  kernelName: 'Concat',
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: concat 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);
  // 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};
    });
    // Concats 2d tensors along axis=1.
    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);
    const outData = backend.dataIdMap.get(out.dataId);
    const outDataBytes = backend_util.fromStringArrayToUint8(outVals);
    const inputs2DforEach(t => backend.disposeData(t.dataId));
    const returnOut = false;
    const batchDim = util.sizeFromShape(inputs[0].shape.slice(0, axis));
    let sumInnerDims = 0;
    const innerDims = inputs.map(t => t.shape[0]);
    for (let i = 0; i < inputs.length; i++) {
      const innerDim = innerDims[i];
      const inOffset = innerDim * i + offset;
      const inVals = inputs[t].typedDataFromHeap();
      for (let b = 0; b < batchDim; b++) {
        const outOffset = b * sumInnerDims;
        for (let i = 0; i < inVals.length; i++) {
          const inOffset = b + i;
          const outVal = outVal[t].typedDataToUint8(outOffset);
          for (let j = 0; j < outVals.length; j++) {
            outOffset += innerDim;
            const outFile = outVal[t].typedDataToUint8(outOffset);
            out[t].typedDataFromUint8(outFile);
          }
        }
      }
    }
    return out;
  }
  return out;
}

export const concatConfig: KernelConfig = {
  kernelName: 'Concat',
  backendName: 'wasm',
  setupFunc: setup,
  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;
}
G9yIGltcGxpZWRQaXGuXG4gKiBTZWUgdGhlIExpY2Vuc2l0eSUzLmJvdGVzXG4gKiBuIGZvcmQsb2Fyc2UtY29tZSBjcm9zZSBvcGVyIGFyZCBhcmQgY29udGVydCBvZdCE

*/

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 $dataFormat = backend_util.convertConv2DDataFormat(dataFormat);
  const convInfo = backend_util.computeConv2DInfo(
    (x as Tensor4D).shape, (filter as Tensor4D).shape, strides, dilations, pad, dimRoundingMode,
    false, // pad, dimRoundingMode, dataFormat)
const filterHeight = convInfo.filterHeight;
const filterWidth = convInfo.filterWidth;
const padTop = convInfo.padInfo.top;
const padRight = convInfo.padInfo.right;
const padBottom = convInfo.padInfo.bottom;
const padLeft = convInfo.padInfo.left;
const dilationHeight = convInfo.dilationHeight;
const dilationWidth = convInfo.dilationWidth;
const strideHeight = convInfo.strideHeight;
const strideWidth = convInfo.strideWidth;
const inputChannels = convInfo.inChannels;
const outputChannels = convInfo.outChannels;
const isSamePad = convInfo.padInfo.type === 'SAME';
1:0;!
If (convInfo.dataFormat !== 'channelsLast') { throw new Error('wasm backend Conv2D does not support dataFormat:' + '$(convInfo.dataFormat)'. Please use 'channelsLast.'); }

const out = backend.makeOutput(convInfo.outShape, 'float32');
const outId = backend.dataIdMap.get(out.dataId).id;
backend.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: () => 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'],
    'dyId', 'filterId', 'batchSize', 'filterHeight', 'filterWidth', 'inHeight', 'inWidth', 'inChannels', 'outHeight', 'outWidth', 'outChannels', 'strideHeight', 'strideWidth', 'inChannels', 'outShape', 'outId', 'return out;');

const conv2DConfig: KernelConfig = {
  kernelName: Conv2D,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: conv2d as {} as KernelFunc
};

  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
};
```javascript
extrapolationValue, cropSize) => attr;

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') {
  const castedData = cast(
    backend, inputs: {x: image}, attr: {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
};
```

---

```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 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;
  const wasmCumsum(permutedXId, exclusive ? 1 : 0, reverse ? 1 : 0, finalDim, permutedOutId, CppDType[x.dtype]) =>
    // transpose data back if permuted
    if (permutation !== null) {
      const undoPermutation = backend_util.getUndoAxesPermutation([axis], xRank);
      permutedX = transpose({inputs: {x}, attr: {perm: permutation}, backend});
      const permutedAxis = backend_util.getInnerMostAxes(1, xRank)[0];
    }

    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, out: number, outId: number) => void;

setup(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 outputStridesBytes = new Uint8Array(new Int32Array(x.outputStrides).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);
    return out;
};

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

export {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, out: number, outId: number) => void;

setup(backend: BackendWasm, inputs: DepthwiseConv2dNativeInputs, attrs: DepthwiseConv2dNativeAttrs, util) from '@tensorflow/tfjs-core';

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, out: number, outId: number) => void;

setup(backend: BackendWasm, inputs: DepthwiseConv2dNativeInputs, attrs: DepthwiseConv2dNativeAttrs, util) from '@tensorflow/tfjs-core';

depthwiseConv2d(args: {\n  inputs: DepthwiseConv2dNativeInputs,\n  backend: BackendWasm,\n  ...\n}) {\n  const {inputs, attr, backend} = args;\n  const {x, filter} = inputs;\n  const \n  strides, dilations, pad, dimRoundingMode = attr;\n  const \n  strides, dilations = dilations !== null ? [1, 1] : dilations;\n  const convInfo = backend_util.computeConv2DInfo(x, \n  as Tensor4D).shape, (filter as Tensor4D).shape, \n  strides, (dilations as number | [number, number]), pad, dimRoundingMode, true /* depthwise */;\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 outputChannels = convInfo.outChannels;\n  const isSamePad = convInfo.padInfo.type === 'SAME';\n  if (convInfo.dataFormat !== 'channelsLast') \n    throw new Error(`wasm backend DepthwiseConv2dNative \n  does not support dataFormat:'${convInfo.dataFormat}'. Please use 'channelsLast'.`);\n  const out = backend.makeOutput(convInfo.outShape, 'float32');\n  const outId = backend.dataIdMap.get(out.dataId).id;\n  wasmDepthwiseConv2d(xId, x.shape[0], x.shape[1], x.shape[2], filterId, filterHeight, \n  filterWidth, \n  padTop, padRight, padBottom, padLeft, isSamePad, \n  dilationHeight, dilationWidth, strideHeight, strideWidth, \n  inputChannels, \n  outputChannels, outId);\n  return out;\n}

export const depthwiseConv2dNativeConfig: \n  KernelConfig = {
    kernelName: DepthwiseConv2dNative,\n    backendName: 'wasm',\n    setupFunc: setup,\n    kernelFunc: depthwiseConv2d as {} as KernelFunc
  };
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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`);
    $dim = inputRank + dim + 1;
  }
  newShape.splice($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,
};

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 outVals = backend.typedArrayFromHeap(out);
  outVals.fill(image as number);
  return out;
}

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

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 */

import {createUnaryKernelConfig} from './unary_kernel';
export const floorConfig: KernelConfig = createUnaryKernelConfig(Floor);

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 */

import {createBinaryKernelConfig} from './binary_kernel';

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

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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 {
  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, 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);
  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, 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',  // outId
  ]);}

function fusedConv2d(args: {
    inputs: FusedConv2DInputs,
    backend: BackendWasm,
    attrs: FusedConv2DAttrs
}){
    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);

    const fusedActivation =
    FusableActivation[activation as {} as keyof typeof FusableActivation];
    if (fusedActivation == null) {
        throw new Error(`FusedConv2D only supports rank-1 bias but got bias of rank ${biasData.shape.length}.`);
    }

    const xId = backend.dataIdMap.get(x.dataId).id;
    const filterId = backend.dataIdMap.get(filter.dataId).id;
    const outputChannels = convInfo.outChannels;
    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 of rank ${biasData.shape.length}.`);
        }
    }

    const filterHeight = convInfo.filterHeight;
    const filterWidth = convInfo.filterWidth;
    const padTop = convInfo.padTop;
    const padBottom = convInfo.padBottom;
    const padLeft = convInfo.padLeft;
    const padRight = convInfo.padRight;
    const dilateHeight = convInfo.dilationHeight;
    const dilateWidth = convInfo.dilationWidth;
    const strideHeight = convInfo.strideHeight;
    const strideWidth = convInfo.strideWidth;
    const inChannels = convInfo.inChannels;
    const isSamePad = convInfo.type === 'SAME';
    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;
    const wasmFusedConv2dId = xId, batchSize, inHeight, inWidth, filterId, filterHeight, filterWidth, biasId, padTop, padBottom, padLeft, isSamePad, dilateHeight, dilateWidth, strideHeight, strideWidth, inChannels, outputChannels, activation, preluActivationWeightsId, leakyreluAlpha || 0, outId);
    return out;
}

export const fusedConv2DConfig:
    KernelConfig = {
    kernelName: FusedConv2D,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc:...
fusedConv2d as {} as KernelFunc\n};\n"/**\n * @license
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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, 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',  // 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(`${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;
  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 ${biasData.shape.length}.`);
    }
    if (biasData.shape[0] !== outputChannels) {
      throw new Error(`FusedDepthwiseConv2D bias shape (${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.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' ? 1 : 0;
  const batchSize = convInfo.batchSize;
  const inHeight = convInfo.inHeight;
  const inWidth = convInfo.inWidth;
```javascript
preluActivationWeightsId = preluActivationWeights != null ? 0 : null
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;

wasmFusedDepthwiseConv2DConfig = { 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(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;
}

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

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

---

```javascript
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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;
  const xId = x.id;
  const xData = backend.dataIdMap.get(x.dataId);
  const x = xData.id;
  const indicesData = backend.dataIdMap.get(indices.dataId);
  const indicesId = indicesData.id;
  const out = backend.makeOutput(xShape, x.dtype);
  util.assert(out.shape.length == xShape.length);
  const outId = backend.dataIdMap.get(out.dataId).id;
  const out = backend.dataIdMap.get(out.dataId);
  wasmGather(xId, CppDType[x.dtype], indicesId, batchSize, xStrides, outId);
  return out;
}
```

---

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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({ inputs: [x]}, { shape: [shapeInfo.batchSize, shapeInfo.dimSize, shapeInfo.sliceSize] }, x as Tensor, indices as Tensor, parsedAxis, batchDims);
  const indicesSize = util.sizeFromShape(indices.shape);
  const flattenIndex = reshape({ inputs: [x, indices]}, { shape: [shapeInfo.batchSize, indicesSize / shapeInfo.batchSize] }, x as Tensor, indices as Tensor, parsedAxis, batchDims);
  const out = backend.makeOutput(flattenX.shape.length - 1, x as Tensor, indices as Tensor, parsedAxis, batchDims);
  const xData = backend.dataIdMap.get(out.dataId).id;
  const xId = xData.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, x.shape.length - 1, indicesId, shapeInfo.batchSize, outStridesBytes, outId);
}

backend.disposeData(flattenX.dataId);
backend.disposeData(flattenIndex.dataId);

// reshape out.shape = 

export const greaterV2Config: KernelConfig = {'kernelName': 'GatherV2', 'backendName': 'wasm', 'setupFunc': setup, 'kernelFunc': gatherV2 as {} as KernelFunc};

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

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;
  }

  return TensorInfo
    .create({shape: x.shape, dtype: 'float32', isVariableShape: true});
}

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';
const supportsFullBroadcast = false;
export const lessConfig: 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;

const config = createBinaryKernelConfig(LogicalAnd, supportsFullBroadcast, 'bool',塬/* @license塬*/Copyright 2019 Google LLC. All Rights Reserved.塬/* Licensed under the Apache License, Version 2.0 (the 'License');塬/* you may not use this file except in compliance with the License.塬*/ You may obtain a copy of the License at:

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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 = null;

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

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;
  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
};

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

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

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;

const config = createBinaryKernelConfig(Maximum, supportsFullBroadcast);

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

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 = null;

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

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;
  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
};

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

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

let wasmMaxPool = backend.wasm.cwrap(MaxPool, null /* void */, ['number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number']);

const xId = backend.dataIdMap.get(x.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;
```

*/

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

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

let wasmMaxPool = backend.wasm.cwrap(MaxPool, null /* void */, ['number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number', 'number']);

const xId = backend.dataIdMap.get(x.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;
```
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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: 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(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);

  const xId = backend.dataIdMap.get(x.dataId).id;
  const xDtype = x.dtype;
  const xShapeLength = x.shape.length;
  const xDtype = x.dtype;

  wasmMirrorPad(
    xId, xShapeBytes, xShapeLength, xDtype, 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);

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

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

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 *
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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,
in iouThreshold: number, scoreThreshold: number,
padToMaxOutputSize: boolean) => number;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap('NonMaxSuppressionV4', 'number',
                          [  'number',  // boxesId
                            'number',  // scoresId
                            'number',  // maxOutputSize
                            'number',  // iouThreshold
                            'number',  // scoreThreshold
                            'bool'     // 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);
  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:

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap('NonMaxSuppressionV5', 'number',
                          [  'number',  // boxesId
                            'number',  // scoresId
                            'number',  // maxOutputSize
                            'number',  // iouThreshold
                            'number',  // scoreThreshold
                            'number',  // softNmsSigma
                        ]);}

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

```javascript
const selectedIndicesTensor = backend.makeOutput([selectedSize], 'int32', pSelectedIndices);
const selectedScoresTensor = backend.makeOutput([selectedSize], 'float32', pSelectedScores);
return [selectedIndicesTensor, selectedScoresTensor];
```

```javascript
export const nonMaxSuppressionV5Config: KernelConfig = {
kernelName: NonMaxSuppressionV5,
backendName: 'wasm',
setupFunc: setup,
kernelFunc: 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}});
  intermediateTensorInfos.forEach(t => 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, 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 */);\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({
      backend,\n      attrs: {paddings, constantValue, dtype: x.dtype}\n    });\n  }\n  const\n  xId = backend.dataIdMap.get(x.dataId).id;\n  const\n  outId = backend.makeOutput(outShape, x.dtype);\n  const\n  outputData = backend.dataIdMap.get(outId);\n  const\n  outTensorData = backend.dataIdMap.get(outId);\n  const\n  xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);\n  const\n  prePaddingsFlat = paddings.map((padTuple =>\n    padTuple[0]));\n  const\n  postPaddingsFlat = paddings.map((padTuple =>\n    padTuple[1]));\n  const\n  new\n  xId, xShapeBytes, x.shape.length,\n  CppDType, x.dtype, \n  postPaddingsBytes,\n  new\n  xId, postPaddingsBytes, constantValue, outId);\n  return result;\n}\n
export const padV2Config: KernelConfig = {
  kernelName: PadV2,
  backendName: 'wasm',
  kernelFunc: pad as {} as
```javascript
backend.datadMap.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);
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);
}
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.datadMap.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 = backend.makeOutput(newShape, out.dataId);
}

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

export const realDivConfig: KernelConfig = createBinaryKernelConfig(RealDiv, supportsFullBroadcast);

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import {KernelConfig, Relu6} from '@tensorflow/tfjs-core';

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;

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 [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
};

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---

```typescript
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
};
```

---

```typescript
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, ['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] = center;
  const [fillValue, fillBytes, fillIsBlack] = fillValue;

  const fillValues = typeof fillValue === 'number' ?
      [fillValue, fillValue, fillValue, fillIsBlack ? 0 : fullOpacityValue] :
      [...fillValue, fullOpacityValue];

  const fullOpacityValue = 255;
  const outId = backend.dataIdMap.get(out.dataId).id;
  const imageId = backend.dataIdMap.get(image.dataId).id;
  const centerX = center[0];
  const centerY = center[1];
  const fillValues = typeof fillValue === 'number' ? [fillValue, fillValue, fillValue, fillIsBlack ? 0 : fullOpacityValue] :
      [...fillValue, fullOpacityValue];
  const fillBytes = new Uint8Array(new Int32Array(fillValues).buffer);
```

---

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wasmRotate(imageId, batch, imageHeight, imageWidth, numChannels, radians, centerX, centerY, fillBytes, fillValues.length, outId); return out;

export const constWithOffsetConfig: KernelConfig = {
  kernelName: 'constWithOffset',
  backendName: 'wasm',
  kernelFunc: rotateWithOffset as {} as KernelFunc,
  setupFunc: setup
};

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 */

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

export const roundConfig: KernelConfig = createUnaryKernelConfig(Round);

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 */

import {KernelConfig, KernelFunc, scatter_util, ScatterNd, ScatterNdAttrs, ScatterNdInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

export const scatterNdConfig: KernelConfig = {
  kernelName: ScatterNd,
  backendName: 'wasm',
  setupFunc: setup
};
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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', 'number', 'number', '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',
  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}) { ...

export const sigmoidConfig: KernelConfig = {
  kernelName: 'Sigmoid',
  backendName: 'wasm',
  setupFunc: setup as {} as KernelFunc,
  setupFunc: 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', '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.makeOutput(logits.shape, logits.dtype).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
};

//=============================================================================

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 reshapedPaddedShape =
    backend_util.getReshaped(paddedX.shape, blockShape, prod, false);
  const reshapedPaddedPermutation =
    backend_util.getPermuted(reshapedPaddedShape.length, blockShape.length, false);
  const flattenedShape =
    backend_util.getReshapedPermutated(paddedX.shape, blockShape, prod, false);
  const reshapeInputs =
    [x: paddedX].map((x) => {
      const reshapeAttrs = {'shape': reshapedPaddedShape};
      const reshaped =
        reshape({inputs: reshapeInputs, backend, attr: reshapeAttrs});
      const transposedInputs =
        [x: reshapedXReshaped].map((x) => {
          const transposeAttr = {};
          const transposeAttrs = {
            perm:
              permutedReshapedPaddedPermutation,
            const:
              paddedX,
            prod:
              false,
            attr:
              false,
            attr:
              false}
          const resultReshapeInputs =
            [x: paddedX].map((x) => {
              const resultReshapeAttrs = {
                reshape: flattenedShape,
              }
              const result = reshape({
                  inputs: resultReshapeInputs,
                  backend, attr: resultReshapeAttrs},
                backend.disposeData(paddedX.dataId),
                backend.disposeData(paddedXReshaped.dataId),
                backend.disposeData(paddedXT.dataId);
              return result;
            };
          return transpose({
            inputs: transposeInputs,
            backend, attr: transposeAttrs},
          backend.disposeData(paddedX.dataId),
          backend.disposeData(paddedXReshaped.dataId),
          backend.disposeData(paddedXT.dataId);
        };
    });
    return transposed;
}
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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 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: $begin, size}});
    result = reshape({inputs: [x, backend], attrs: {shape: finalShape}});
    } else {
    // backend.disposeData(sliced.dataId);
    const out = backend.makeOutput(finalShapeSparse, 'float32');
    const xId = backend.dataIdMap.get(x.dataId).id;
    const xStridesBytes = new Uint8Array(new Int32Array(backend.wasm.computeStrides(x.shape)).buffer);
    const endBytes = new Uint8Array(new Int32Array($end).buffer);
    const outShapeBytes = new Uint8Array(new Int32Array(finalShapeSparse).buffer);
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmStridedSlice(xId, xStridesBytes, x.shape.length, backend.wasm.cwrap(Step, null /*void*/, [
      'number',  // x_id
      'number',  // alpha
      'number',  // dtype
      'number',  // out_id
    ]));
  }

  return result;
}
beginBytes, endBytes, stridesBytes, outputShapeBytes, outputStridesBytes, 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
};

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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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 */

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', 'number', 'number', 'number']);
}

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 
    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(
      'sum', reductionAxes, input.shape.length);
  const [outShape, reduceShape] =
  backend_util.computeOutAndReduceShapes(input.shape, originalAxes);
  const newShape = backend_util.expandShapeToKeepDim(outShape, originalAxes);
  const reduceAxes = backend_util.getInnerMostAxes(reduceShape.length, input.shape.length);

  const [out, ] = backend_util.assertAxesAreInnerMostDims('sum', reduceAxes, input.shape.length);
  const outShape, reduceShape =
  backend_util.computeOutAndReduceShapes(input.shape, reduceAxes);

  const reduceSize =
  util.sizeFromShape(reduceShape);

  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmSum(inputId, reduceSize, CppDType[input.dtype], outId);
}

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);

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;
}

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', // x_id
    'array', // x_shape
    'number', // x_shape.length
    'number', // k
    'number', // sorted
    'number', // out_values_id
    'number' // out_indices_id
  );
}

function topK(
    args: {inputs: TopKInputs, backend: BackendWasm, attrs: TopKAttrs}) {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const topK = 
    backend.wasm.cwrap(TopK, null /* void */,
      'number', // k
      'number', // sorted
      'number', // output_values_id
      'number', // output_indices_id
    );
  const outValues = new Uint8Array(new Int32Array(topK).buffer);
  const outIndices = new Uint8Array(new Int32Array(topK).buffer);
  wasmTopK(xId, x.shapeBytes, x.shapeLength, x.dtype, k, sorted, backend.dataIdMap.get(outValues.dataId).id, backend.dataIdMap.get(outIndices.dataId).id);
  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, 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
};

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';

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 {flipLeftRightConfig} from './kernels/Floor';
import {floorConfig} 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 {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 {maxPoolConfig} from './kernels/MaxPool';
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`\nimport \{negConfig\} from `./kernels/Neg`\nimport \{nonMaxSuppressionV3Config\} from `./kernels/NonMaxSuppressionV3`\nimport \{nonMaxSuppressionV4Config\} from `./kernels/NonMaxSuppressionV4`\nimport \{nonMaxSuppressionV5Config\} from `./kernels/NonMaxSuppressionV5`\nimport \{notEqualConfig\} from `./kernels/NotEqual`\nimport \{oneHotConfig\} from `./kernels/OneHot`\nimport \{onesLikeConfig\} from `./kernels/OnesLike`\nimport \{packConfig\} from `./kernels/Pack`\nimport \{padV2Config\} from `./kernels/PadV2`\nimport \{powConfig\} from `./kernels/Pow`\nimport \{preluConfig\} from `./kernels/Prelu`\nimport \{prodConfig\} from `./kernels/Prod`\nimport \{rangeConfig\} from `./kernels/Range`\nimport \{realDivConfig\} from `./kernels/RealDiv`\nimport \{reluConfig\} from `./kernels/Relu`\nimport \{relu6Config\} from `./kernels/Relu6`\nimport \{reshapeConfig\} from `./kernels/Reshape`\nimport \{resizeBilinearConfig\} from `./kernels/ResizeBilinear`\nimport \{reverseConfig\} from `./kernels/Reverse`\nimport \{rotateWithOffsetConfig\} from `./kernels/RotateWithOffset`\nimport \{roundConfig\} from `./kernels/Round`\nimport \{rsqrtConfig\} from `./kernels/Rsqrt`\nimport \{scatterNdConfig\} from `./kernels/ScatterNd`\nimport \{selectConfig\} from `./kernels/Select`\nimport \{sigmoidConfig\} from `./kernels/Sigmoid`\nimport \{sinConfig\} from `./kernels/Sin`\nimport \{sliceConfig\} from `./kernels/Slice`\nimport \{softmaxMaxConfig\} from `./kernels/Softmax`\nimport \{spaceToBatchNDConfig\} from `./kernels/SpaceToBatchND`\nimport \{splitVConfig\} from `./kernels/SplitV`\nimport \{sqrtConfig\} from `./kernels/Sqrt`\nimport \{squareConfig\} from `./kernels/Square`\nimport \{squareDifferenceConfig\} from `./kernels/SquaredDifference`\nimport \{stepConfig\} from `./kernels/Step`\nimport \{stridedSliceConfig\} from `./kernels/StridedSlice`\nimport \{subConfig\} from `./kernels/Sub`\nimport \{sumConfig\} from `./kernels/Sum`\nimport \{tanConfig\} from `./kernels/Tan`\nimport \{tanhConfig\} from `./kernels/Tanh`\nimport \{tileConfig\} from `./kernels/Tile`\nimport \{topKConfig\} from `./kernels/TopK`\nimport \{transformConfig\} from `./kernels/Transform`\nimport \{transposeConfig\} from `./kernels/Transpose`\nimport \{unpackConfig\} from `./kernels/Unpack`\nimport \{zerosLikeConfig\} from `./kernels/ZerosLike`\n
// List all kernel configs here\n\nconst kernelConfigs: KernelConfig[] = [\n  absConfig,
  addConfig,
  addNConfig,
  allConfig,
  andConfig,
  anyConfig,
  argMaxConfig,
  argMinConfig,
  averageConfig,
  avgPoolConfig,
  batchMatMulConfig,
  batchToSpaceNDConfig,
  castConfig,
  ceilConfig,
  clipByValueConfig,
  concatConfig,
  conv2DConfig,
  conv2DTransposeConfig,
  conv2DBackpropInputConfig,
  conv2DBackpropOutputConfig,
  conv2DTransposeBackpropInputConfig,
  cosConfig,
  coshConfig,
  cropAndResizeConfig,
  cumsumConfig,
  depthToSpaceConfig,
  depthwiseConv2dNativeConfig,
  eluConfig,
  equalConfig,
  expConfig,
  expandDimsConfig,
  fillConfig,
  flipLeftRightConfig,
  floorConfig,
  floorDivConfig,
  fusedMatMulConfig,
  fusedBatchNormConfig,
  fusedConv2DConfig,
  fusedDepthwiseConv2DConfig,
  gatherNdConfig,
  gatherV2Config,
  greaterEqualConfig,
  identityConfig,
  logicalAndConfig,
  logicalOrConfig,
  logicalXorConfig,
  maxConfig,
  maxPoolConfig,
  meanConfig,
  minimumConfig,
  mirrorPadConfig,
  multiplyConfig,
  negateConfig,
  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,
  squareDifferenceConfig,
  stepConfig,
  stridedSliceConfig,
  subConfig,
  sumConfig,
  tanConfig,
  tanhConfig,
  tileConfig,
  topKConfig,
  transformConfig,
  transposeConfig,
  unpackConfig,
  zerosLikeConfig]};

for (const kernelConfig of kernelConfigs) {
  registerKernel(kernelConfig);
}
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);
  for (let i = 0; i < outs.length; i++) {
    const begin = new Array(rank).fill(0);
    const size = value.shape.slice();
    size[axis] = 1;
    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 {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, 16, 26, 11])));

/**
 * True if threads are supported.
 */
// From: https://github.com/GoogleChromeLabs/wasm-feature-detect\nENV.registerFlag('WASM_HAS_MULTITHREAD_SUPPORT', async () => {
  // 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));
  return true;
});

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}


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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 throw};var ENVIRONMENT_IS_WEB=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 ENVIRONMENT_IS_SHELL=typeof ENVIRONMENT_IS_WEB=typeof window==="object";process=typeof process==="object"&&typeof process.versions==="object"&&typeof process.versions.node==="string";ENVIRONMENT_IS_PTHREAD=Module["ENVIRONMENT_IS_PTHREAD"]||false;if(ENVIRONMENT_IS_PTHREAD){buffer=Module["buffer"]}}var scriptDirectory="/";function locateFile(path){if(Module["locateFile"]) {return Module["locateFile"](path,scriptDirectory)}}var read_=function read(filename,binary){return read_(filename, true)};readBinary=function readBinary(filename){var ret = read_(filename, true);if(ret.buffer){assert(ret.buffer);return ret};if(process["argv"][0]) {thisProgram=process["argv"][0].replace(/\\/g,"/"};arguments_=process["argv"];filename=process["argv"];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 nodeFS["readFileSync"](filename, binary?null:"utf8")};readBinary=function readBinary(filename){var ret = read_(filename, true);if(ret.buffer){assert(ret.buffer);return ret};if(process["argv"][0]) {thisProgram=process["argv"][0].replace(/\\/g,"/"};arguments_=process["argv"];filename=process["argv"];dirname(scriptDirectory)+"/\"]" 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){assert(ret.buffer);return ret};if(process["argv"][0]) {thisProgram=process["argv"][0].replace(/\\/g,"/"};arguments_=process["argv"];filename=process["argv"];dirname(scriptDirectory)+"/\"]" 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){assert(ret.buffer);return ret};if(process["argv"][0]) {thisProgram=process["argv"][0].replace(/\\/g,"/"};arguments_=process["argv"];filename=process["argv"];dirname(scriptDirectory)+"/\"]" 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){assert(ret.buffer);return ret};if(process["argv"][0]) {thisProgram=process["argv"][0].replace(/\\/g,"/"};arguments_=process["argv"];filename=process["argv"];dirname(scriptDirectory)+"/\"]" 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){assert(ret.buffer);return ret};if(process["argv"][0]) {thisProgram=process["argv"][0].replace(/\\/g,"/"};arguments_=process["argv"];filename=process["argv"];dirname(scriptDirectory)+"/\"]" 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){assert(ret.buffer);return ret};if(process["argv"][0]) {thisProgram=process["argv"][0].replace(/\\/g,"/"};arguments_=process["argv"];filename=process["argv"];dirname(scriptDirectory)+"/\"]" 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_
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```javascript
encies==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);if(ENVIRONMENT_IS_PTHREAD)console.error("Pthread aborting at "+new Error).stack);what+="err(what);ABORT=true;EXITSTATUS=1;what="+what+="v+what+v+}). Build with -s ASSERTIONS=1 for more info.\n\nvar 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-threaded-simd.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)}}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:exports,tabableModule:Module["asm"]};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(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"&&isFileURI(wasmBinaryFile)){var result=WebAssembly.instantiateStreaming(wasmBinaryFile,info);return result.then(function instantiantedSource(receiver){return getBinaryPromise().then(function(binary){receiver(new Uint8Array(binary))})})}return result.then(function instantiantedSource(receiver){return getBinaryPromise().then(function(binary){receiver(new Uint8Array(binary))})})}if(!wasmModule){try{wasmModule=Module["instantiateWasm"](info,receiveInstance);return exports}catch(e){err("Failed to instantiateWasm: "+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"){func(callback.arg===undefined)?wasmTable.get(func)():wasmTable.get(func)(callback.arg);continue}if(typeof func==="function"){func(callback.arg===undefined)?wasmTable.get(func)():wasmTable.get(func)(callback.arg)}}
```

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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:JSON.parse(data)})});worker.on("error",function(data){worker.onerror(data)});worker.on("exit",function(data){})}if(ENVIRONMENT_IS_PTHREAD){worker.postMessage({"cmd":"load","urlOrBlob":String(data._mainScriptUrlOrBlob),"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(milliseconds){var t=performance.now()+milliseconds;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?UTF8ToString(line):"unknown function"})}function _atexit(func,arg){if(ENVIRONMENT_IS_PTHREAD)return _emscripten_proxy_to_main_thread_js(1,1,func,arg)}function _futex_wait(addr,val,timeout){if(addr<=0||addr>GROWABLE_HEAP_I32().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 throw"Atomics.wait returned an unexpected value "+ret}else throw"Atomics.wait returned an unexpected value "+ret};if(Atoms.load(GROWABLE_HEAP_I32(),addr>>2)!=0){return 6}var tNow=performance.now();var tEnd=tNow+timeout;var lastAddr=Atoms.exchange(GROWABLE_HEAP_I32(),addr>>2);while(1){tNow=performance.now();if(tNow>tEnd){lastAddr=Atoms.exchange(GROWABLE_HEAP_I32(),addr>>2);return 73};lastAddr=Atoms.exchange(GROWABLE_HEAP_I32(),addr>>2);if(lastAddr==0){break};}return;
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, true, serializedNumCallArgs, args, sync);
  stackRestore(stack);
  return 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]);
  }
}

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) {
    return 0;
  }
}

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(requestedSize, overGrownHeapSize), 65536));
    var replacement = emscripten realloc_buffer(newSize);
    if (replacement) {
      return true;
    }
  }
  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.removeEventListenersRegistered);
    }
    JSEvents.removeEventListenersRegistered = true;
    JSEvents.deferredCalls = [], JSEvents.deferredCalls.push(function(targetFunction, precedence, argsList) {
      function arraysHaveEqualContent(arrA, arrB) {
        if (arrA.length !== arrB.length) {
          return false;
        }
        for (var i = 0; i < arrA.length; i++) {
          if (arrA[i] !== arrB[i]) {
            return false;
          }
        }
        return true;
      }
      JSEvents.deferredCalls[i] = function(targetFunction, precedence, argsList) {
        return JSEvents.deferredCalls[i].push([targetFunction, targetFunction, precedence, precedence, argsList, argsList]);
      };
      JSEvents.deferredCalls[i].sort(function(x, y) {
        return x.precedence < y.precedence;
      });
    });
    JSEvents.deferredCalls = [], JSEvents.deferredCalls.length = 0;
    canPerformEventHandlerRequests: function() {
      return JSEvents.inEventHandler && JSEvents.currentEventHandler.allowsDeferredCalls;
    },
    JSEvents.deferredCalls[i].call(JSEvents.deferredCalls[i], call, targetFunction, & arraysHaveEqualContent, call, argsList, argsList);
    JSEvents.deferredCalls.push([targetFunction, targetFunction, precedence, precedence, argsList, argsList]);
    JSEvents.deferredCalls[i].call(targetFunction, & arraysHaveEqualContent, call, argsList);}
}

var canPerformEventHandlerRequests = function(targetFunction, targetFunction) {
  for (var i = 0; i < JSEvents.deferredCalls.length; ++i) {
    JSEvents.deferredCalls[i].call(targetFunction, targetFunction);
  }
};
ntexts[contextHandle]&&GL.contexts[contextHandle].GLctx.canvasGL.contexts[contextHandle].GLctx.canvas.GL
textObject=undefined;_free(GL.contexts[contextHandle].handle);GL.contexts[contextHandle]=null;initExtensions:function(context){if(!context){context=GL.currentContext;context.initExtensionsDone=true;var
GLctx=context.GLctx;__webgl_enable_ANGLE_instanced_arrays(GLctx);__webgl_enable_OES_vertex_array_obj
ect(GLctx);__webgl_enable_WEBGL_draw_buffers(GLctx);GLctx.disjointTimerQueryExt=GLctx.getExtension("E
XT_disjoint_timer_query");__webgl_enable_WEBGL_multi_draw(GLctx);var
exts=GLctx.getSupportedExtensions();function eachExtension(ex){if(!ex.indexOf("lose_context")<0&&
&ext.indexOf("debug")<0) GLctx.getExtension(ex)}) .populateUniformTable:function(program){var
p=GL.programs[program];var
table=GL.programInfos[program]={uniforms:{},maxUniformLength:0,maxAttributeLength:-1,
maxUniformBlockNameLength:-1};var usable=table.uniforms;var
numUniforms=GLctx.getProgramParameter(p,35718);for(var i=0; i<numUniforms; i++){
var
u=GLctx.getActiveUniform(p,i);var
name=u.name;table.uniforms=Math.max(table.uniforms.length+1);if(name.slice(-1)=="]"){name=name.slice(0,name.lastIndexOf("["))} var loc=GLctx.getActiveUniformLocation(p,name);var [id]=
GL.getNewId(GL.uniforms);table.uniforms[id]=loc;for(var j=1; j<name.length+1; j++){
var
n=name+"["+j+"";loc=GLctx.getActiveUniformLocation(p,n);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+(16>>2)],p
remultipliedAlpha":!!GROWABLE_HEAP_I32()[a+(22>>2)],"powerPreference":__emscripten_webgl_power
preferences[powerPreference],"failIfMajorPerformanceCaveat":!!GROWABLE_HEAP_I32()[a+(28>>2)],
minorVersion:GROWABLE_HEAP_I32()[a+(32>>2)],proxyContextToMainThread:GROWABLE_HEAP_I32()[a+(40
>>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_do_create_context(target,attributes){return attributes;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+(16>>2)],p
remultipliedAlpha":!!GROWABLE_HEAP_I32()[a+(22>>2)],"powerPreference":__emscripten_webgl_power
preferences[powerPreference],"failIfMajorPerformanceCaveat":!!GROWABLE_HEAP_I32()[a+(28>>2)],
minorVersion:GROWABLE_HEAP_I32()[a+(32>>2)],proxyContextToMainThread:GROWABLE_HEAP_I32()[a+(40
>>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)}
can only ever be called from main application thread!"; var 
worker=PTHread.getNewWorker(); if(worker pthread!="undefined") throw "Internal 
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 
d_ptr]; var 
tis=pthread. threadInfoStruct>>2; Atomics.store(GROWABLE_HEAP_U32(), tis+(64>>2), threadParams. detached); A 
tomics.store(GROWABLE_HEAP_U32(), tis+(100>>2), tlsMemory); Atomics.store(GROWABLE_HEAP_U32(), tis + 
(40>>2), pthread. threadInfoStruct); Atomics.store(GROWABLE_HEAP_U32(), tis+(80>>2), threadParams. stackSize 
e); Atomics.store(GROWABLE_HEAP_U32(), tis+(76>>2), stackHigh); Atomics.store(GROWABLE_HEAP_U32(), t 
is+(104>>2), threadParams. stackSize); Atomics.store(GROWABLE_HEAP_U32(), tis+(104+8>>2), stackHigh); Atom 
ics.store(GROWABLE_HEAP_U32(), tis+(104+12>>2), threadParams. detached); var 
global_libc=_emscripten_get_global_libc(); var 
global_locale=global_libc+40; Atomics.store(GROWABLE_HEAP_U32(), tis+(172>>2), global_locale); worker.pthre 
ead=pthread; var 
msg={"cmd":"run","start_routine":threadParams. startRoutine,"arg":threadParams. arg,"threadInfoStruct":thre 
adParams. pthread_ptr,"stackBase":threadParams. stackBase,"stackSize":threadParams. stackSize; worker. runPthre 
ad=function () { msg.time=performance. now(); worker. postMessage(msg,thread. Params.transferList); if (worker. loaded 
) { worker.runPthread(); delete worker.runPthread } } function 
(pthread_create(pthread_ptr, attr, start_routine, arg) { 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]+8>>2); 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>>2]+i]=0; GROWABLE_HEAP_I32[ pthread_p 
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, detac 
hed.startRoutine=start_routine, pthread_ptr=threadInfoStruct, arg:thread. Params.transferList, transferList 
if(ENVIRONMENT_IS_P THREAD) { threadParams.cmd="spawnThread"; postMessage(thread. Params.transferList) else (spawnThread(thread 
Params)) return 0} function _pthread_testcancel() { 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_check_blocking_allowed() { if(ENVIRONMENT_IS_NODE) return; if(ENVIRONMENT_IS_WORKE 
R) 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_joint(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_PTHREAD)cleanupThread(thread);else postMessage({"cmd":"cleanupThread","thread":thread});return 0} if(!block){return ERRNO_CODES.EBUSY} __pthread_testcancel();if(!ENVIRONMENT_IS_PTHREAD)_emscripten_main_thread_process_queued_calls();_emscripten_wait(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 138:case 15:case 235:case 16:case 17:case 18:case 19:case 20:case 149:case 13:case 10:case 236:case 153:case 9:case 21:case 22:case 159:case 154:case 14:case 77:case 78:case 139:case 82:case 68:case 67:case 11:case 29:case 47:case 48:case 49:case 50:case 51:case 46:return 200809;case 176:case 177:case 7:case 155:case 8:case 157:case 125:case 126:case 127:case 128:case 129:case 130:case 131:case 94:case 91:return 1;case 74:case 75:case 76:case 77:case 78:case 79:case 80:case 81:case 82:case 83:case 84:{if(typeof navigator==="object")return navigator["hardwareConcurrency"];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,_sysconf];var ___wasm_call_ctors=Module["___wasm_call_ctors"] = function(){return(___wasm_call_ctors=Module["___wasm_call_ctors"])();};var _init=Module["_init"] = function(){return(_init=Module["_init"])();};var _init_with_threads_count=Module["_init_with_threads_count"] = function(){return(_init_with_threads_count=Module["_init_with_threads_count"]());};
on"} = Module["asm"]['["Va"]'].apply(null, arguments); var
stackSave = Module["stackSave"] = function() { return stackSave = Module["stackSave"] = Module["asm"]['["Wa"]'].apply(null, arguments); };

stackRestore = Module["stackRestore"] = function() { return stackRestore = Module["stackRestore"] = Module["asm"]['["Xa"]'].apply(null, arguments); };

stackAlloc = Module["stackAlloc"] = function() { return stackAlloc = Module["stackAlloc"] = Module["asm"]['["Ya"]'].apply(null, arguments); };

Module['cwrap'] = cwrap; 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;
  };
  run(Arguments[0] || (run(args) || arguments_));
  run(Arguments[1] || (runDependencies > 0) ? run() : runDependencies > 0) ? run() : doRun() ? calledRun ? run();
  if (ABORT) return;

  Module['setStatus'] = function(status) {
    throw status;
  };

  try {
    try {
      try {
        this.wasm.tfjs.initWithThreadsCount(threadsCount);
        actualThreadsCount = this.wasm.tfjs.getThreadsCount();
        this.dataIdMap = new DataStorage(this, engine());
        this.wasm.tfjs.initWithThreadsCount(threadsCount);
        this.dataIdMap = new DataStorage(this, engine());
        return DataId;
      } catch (error) {
        console.error(error);
        return this.dataIdMap.setError("Initialization failed");
      }
    } catch (error) {
      console.error(error);
      return this.dataIdMap.setError("Initialization failed");
    }
  } catch (error) {
    console.error(error);
    return this.dataIdMap.setError("Initialization failed");
  }

  this.move(dataId, values, shape, dtype, refCount) {
    const id = this.dataIdNextNumber++;
    if (dtype === 'string') {
      const stringBytes = values.toString();
    } else if (typeof exports === 'object' && typeof module === 'object') {
      module.exports = WasmBackendModule;
    } else if (typeof define === 'function' && define['amd']) {
      define([], function() { return WasmBackendModule; });
    } else {
      /* Note: Only used for string tensors, storing encoded bytes. */
      StringArray.prototype.valueOf = function() {
        const data = new Uint8Array(this.buffer);
        return data.buffer; // Convert Uint8Array to ArrayBuffer
      };
    }

    return this.dataIdMap.setError("Initialization failed");
  }

  thismuş = function() {
    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;
  } else {
    /* Note: Only used for string tensors, storing encoded bytes. */
    StringArray.prototype.valueOf = function() {
      const data = new Uint8Array(this.buffer);
      return data.buffer; // Convert Uint8Array to ArrayBuffer
    };
  }

  const data = new Uint8Array(this.buffer);
  return data.buffer;
}
```javascript
// ... (previous code snippet)

function createInstantiateWasmFunc(path: string) {
  // this will be replace by rollup plugin patchWechatWebAssembly in miniprogram's output.
  return (imports: any, callback: any) => {
    // tslint:disable-next-line:no-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';
  }

  const defaultPath = `${wasmModuleFolder}/${path}`;
  const foundWasmPath = defaultPath;
  if (foundWasmPath) {
    return foundWasmPath;
  }

  // This code block is used to find the correct WASM binary file based on
  // the current environment and configuration.

  // ... (rest of the function)
}
```
'tfjs-backend-wasm-simd.wasm';

  if (wasmFileMap != null) {
    if (wasmFileMap[path] != null) {
      return wasmFileMap[path];
    }
  }

  return wasmModuleFolder + path; /* get the path to the file that needs to be loaded.

  * @param path The relative path to the file that needs to be loaded.
  */

  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); */

// Emscripten module locateFile utility.
  * @param path The relative path to the file that needs to be loaded.

  /**
   * This function overrides the Emscripten module locateFile utility.
   * The wasm file relative to the +bundled js file. For more details see
   * https://github.com/tensorflow/tfjs/blob/master/tfjs-backend-wasm/README.md#using-bundlers
   */

  exports.load = (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;
  }

  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.
   */

  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 wasmthen(module) => { /* if (^module) */
    if (module) {
      let initialized = false;
     let wasm = wasmFactory ModuleThreadedSimd = `'

      wasm = wasmFactoryThreadedSimd(fc) `;
    }

    // The wasm factory works for both vanilla and SIMD binaries.
    if (isSupported) {
      wasm = wasmFactoryFactoryConfig();
    }

    // The Wasm module has been successfully created by the factory.
    if (customFetch) 
      createInstantWasmFunc(getPathToWasmBinary(simdSupported as boolean, threadsSupported as boolean, wasmPathPrefix != null ? wasmPathPrefix : prefix));
    }
  }

  exports.load = (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.

  const voidReturnType: string = null;
  // 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', 'number', 'number']),
    registerTensor: module.cwrap('register_tensor', null, ['number', 'number', 'number', 'number', 'number']),
    disposeData: module.cwrap('dispose_data', voidReturnType, ['number']),
    dispose: module.cwrap('dispose', voidReturnType, ['number', 'number', 'number', 'number', 'number']),
    resolve: (wasm: Module) => {
      resolve(module, wasmPath);  
      const voidReturnType: string = null;
      // Using the tfjs namespace to avoid conflict with emscripten's API.
      module.tfjs = {
        init: module.cwrap('init', null, [])[0]
      }
    }
  }

  function typedArrayFromBuffer(buffer, dtype: DataType) {
    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;

  const voidReturnType: string = null;
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      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`);
    }
  }
if(e.data.cmd==="run"){Module["__performance_now_clock_drift"]=performance.now()

if(e.data.cmd==="cancel"){if(Module["__emscripten_thread_init"]){
    Module["PThread"].threadExit(result)
    catch(ex){
if(ex==="Canceled!"){Module["PThread"].threadCancel()}
else
    if(ex!="unwind"){if(ex instanceof Module["ExitStatus"]){if(Module["getNoExitRuntime"]()){
      Module["PThread"].threadExit(ex.status)}}else
    if(e.data.cmd==="cancel"){if(Module["__emscripten_thread_init"]){
    Module["PThread"].threadCancel()}
else
    if(e.data.cmd==="processThreadQueue"){if(Module["__emscripten_thread_init"]){
    Module["emscripten_current_thread_process_q".callStr()]}else
    err("worker.js received unknown command +e.data.cmd);err(e.data)}
};

if(typeof process==="object"&&typeof process.versions==="object"&&typeof process.versions.node==="string"){self={location:{href:__filename}};

var onmessage=this.onmessage;

nodeWorkerThreads=require("worker_threads");global.Worker=nodeWorkerThreads.Worker;
var parentPort=nodeWorkerThreads.parentPort;

var nodeFS=require("fs");

nodeRead=function(filename){return nodeFS.readFileSync(filename,"utf8")};

function globalEval(x){
    global.require=require;
    global.Module=Module;
    eval(x);
}

function importScripts(f){
    globalEval(nodeRead(f));
}

if(typeof performance==="undefined"){performance={now:function(){return Date.now()}}}
}

registration:"

const WASM_PRIORITY = 2;

registerBackend('wasm', async () => {
    const {wasm} = await init();
    return new BackendWasm(wasm);
},WASM_PRIORITY);
"};

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registerBackend('wasm', async () => {
    const {wasm} = await init();
    return new BackendWasm(wasm);
},WASM_PRIORITY);

WASM_PRIORITY:"

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    return new BackendWasm(wasm);
},WASM_PRIORITY);

WASM_PRIORITY:"

},

"names":"
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<td>MMm1,EAAO,GAC5C,IAAI0e,EAAE,ETC,IAAIK,IAAIxoB,EAAE,EAAGA,EAAILJ,EAAM9J,IACpBa,BIAIA</td>
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/*
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 * limitations under the License.
 */

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

  const inputRank = input.shape.length;
  backend_util.assertAxesAreInnerMostDims('max', axes, originalAxes, inputWasTransposed);
  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;
    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
};
Open Source Used in Cisco Meeting Server (formerly Acano Server) 3.5 5000

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

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 strideHeight = convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;
  const channels = convInfo.inChannels;

  if (channelsLast) {
    'wasm backend does not support dataFormat': + ' `channelsLast`
  }
```
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, 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 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 xStridesBytes = new Uint8Array(
      new Uint32Array(backend.computedStrides(flattenX.shape)).buffer);
  const outStridesBytes = new Uint8Array(
      new Uint32Array(backend.computedStrides(flattenOutputShape)).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 as {} as KernelFunc
};

//

/*

************

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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'}
*/

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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 KernelFunc,
};
```
```javascript
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, '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,
};
```

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

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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,
};

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

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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 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 flattenedShape = backend.apply('SpaceToBatchND', {x: paddedX, blockShape, prod: true}) as TensorInfo;

  const restShape = backend.apply('Reshape', {x: flattenedShape, permutedReshapedPaddedPermutation, allowNegativeIndices: false}) as TensorInfo;

  const rest = backend.apply('Reshape', {x: restShape, allowNegativeIndices: false}) as TensorInfo;

  return rest;
}
backend.disposeData(paddedXReshaped.dataId);
  backend.disposeData(paddedXT.dataId);
  return result;
}

export const spaceToBatchNDConfig: KernelConfig = {
  kernelName: SpaceToBatchND,
  backendName: 'wasm',
  kernelFunc: spaceToBatchND as {} as KernelFunc
};

const supportsFullBroadcast = false;
export const notEqualConfig: KernelConfig =
  createBinaryKernelConfig(NotEqual, supportsFullBroadcast, 'bool');

const supportsFullBroadcast = false;
export const resizeBilinearConfig: KernelConfig =
  createBinaryKernelConfig(ResizeBilinear, supportsFullBroadcast, 'bool');

openedServiceData=new dataService(paddedXReshaped.dataId, paddedXT.dataId);
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']);
  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
};
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;

  // 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 for MaxPool.
  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;

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 {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: MaxPool,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: maxPool
};


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

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```

---

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

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

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(inputWasTransposed.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 {} as KernelFunc
};

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

No license file was found, but licenses were detected in source scan.
ls/Cumsum.ts","../src/kernels/DepthToSpace.ts","../src/kernels/DepthwiseConv2dNative.ts","../src/kernels/Elu.ts","..
/src/kernels/Equal.ts","../src/kernels/Exp.ts","../src/kernels/ExpandDims.ts","../src/kernels/Fill.ts","../src/kernels/Flip
LeftRight.ts","../src/kernels/Floor.ts","../src/kernels/FloorDiv.ts","../src/kernels/FusedBatchNorm.ts","../src/kernels/
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./src/kernels/MirrorPad.ts","../src/kernels/Multiply.ts","../src/kernels/Neg.ts","../src/kernels/NonMaxSuppression_uti
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tmax.ts","../src/kernels/SpaceToBatchND.ts","../src/kernels/SplitV.ts","../src/kernels/Sqrt.ts","../src/kernels/Square.ts
src/kernels/Transform.ts","../src/kernels/Unpack.ts","../src/kernels/ZerosLike.ts","../src/register_all_kernels.ts","../sr
c/flags_wasm.ts","../wasm-out/tfjs-backend-wasm-threaded-simd.js","../wasm-out/tfjs-backend-wasm-threadedsimd.worker.js","../wasm-out/tfjs-backendwasm.js","../src/backend_wasm.ts","../src/version.ts","../src/base.ts"],"sourcesContent":["/**\n * @license\n *
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the specific language governing permissions and\n * limitations under the License.\n *
=============================================================================\n
*/\n\n// This enum must align with the enum defined in cc/backend.h.\nexport enum CppDType {\n float32 = 0,\n
int32 = 1,\n bool = 2,\n string = 3,\n complex64 = 4\n}\n\n// Must match enum in cc/fusable_activations.h.\nexport
enum FusableActivation {\n linear = 0,\n relu = 1,\n relu6 = 2,\n prelu = 3,\n leakyrelu = 4,\n sigmoid = 5,\n elu
= 6\n}\n","/**\n * @license\n * Copyright 2019 Google LLC. All Rights Reserved.\n * Licensed under the Apache
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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 {_FusedMatMul, _FusedMatMulAttrs, _FusedMatMulInputs, KernelConfig, KernelFunc} from
'@tensorflow/tfjs-core';\n\nimport {BackendWasm} from '../backend_wasm';\n\nimport {FusableActivation} from
'./types';\n\nlet wasmFusedMatMul:\n (aId: number, aShape: Uint8Array, aShapeSize: number, bId: number,\n
bShape: Uint8Array, bShapeSize: number, transposeA: boolean,\n transposeB: boolean, activation: number,
biasId: number,\n preluActivationWeightsId: number, leakyreluAlpha: number, outId: number) =>\n
void;\n\nfunction setup(backend: BackendWasm) {\n wasmFusedMatMul = backend.wasm.cwrap(_FusedMatMul,
null /* void */, [\n 'number', // a_id\n 'array', // a_shape\n 'number', // a_shape.length\n 'number', // b_id\n
'array', // b_shape\n 'number', // b_shape.length\n 'number', // transpose_a\n 'number', // transpose_b\n
'number', // activation\n 'number', // biasId\n 'number', // preluActivationWeightsId\n 'number', //
leakyreluAlpha\n 'number' // out_id\n ]);\n}\n\nfunction fusedBatchMatMul(args: {\n inputs:

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```javascript
_FusedMatMulInputs, \n backend: BackendWasm, \n attr: _FusedMatMulAttrs\n) \n const {inputs, backend, attr} = args; \n const a, b, bias, preluActivationWeights = inputs; \n if (a.dtype !== 'float32' || b.dtype !== 'float32') \n  throw new Error(`\n    _FusedMatMul for non-floating point tensors not yet supported.`); \n const {transposeA, transposeB, activation, leakyreluAlpha} = attr; \n const aId = backend.dataIdMap.get(a.dataId).id; \n const bId = backend.dataIdMap.get(b.dataId).id; \n const biasId = 0; \n const biasData = backend.dataIdMap.get(bias.dataId); \n if (biasData.shape.length !== 1) \n  throw new Error(`\n    _FusedMatMul only supports rank-1 bias but got $\n    rank $\{biasData.shape.length\}.`); \n const preluActivationWeightsId = \n  preluActivationWeights === null \n    ? null \n    : backend.dataIdMap.get(preluActivationWeights.dataId).id; \n const fusedActivation = 'FusedActivation' \n    [activation as keyof typeof FusableActivation]; \n if (fusedActivation === null) \n  throw new Error(`\n    FusedActivation activation not yet supported for \n    FusedConv2D.`); \n const leftDim = transposeA ? b.shape[1] : b.shape[2]; \n const rightDim = transposeB ? a.shape[2] : a.shape[1]; \n const outId = a.shape.length > 1 ? a.shape[0] : 1; \n const out = \n  backend.dataIdMap.get(out.dataId).id; \n const aShapeBytes = new Uint8Array(new Int32Array(a.shape).buffer); \n const bShapeBytes = new Uint8Array(new Int32Array(b.shape).buffer); \n wasmFusedMatMul(aId, aShapeBytes, a.shape.length, \n  bId, bShapeBytes, b.shape.length, \n  transposeA, \n  transposeB, \n  fusedActivation, \n  biasId, \n  preluActivationWeightsId, \n  leakyreluAlpha || 0, outId); \n return out;\n};
```

```javascript
export const fusedMatMulConfig: KernelConfig = {
  kernelName: _FusedMatMul,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: fusedBatchMatMul as {} as KernelFunc
};
```

```javascript
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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;\n    const outId = backend.dataIdMap.get(out.dataId).id;\n    const out = backend.makeOutput(x.shape, outType || x.dtype);\n    const outId = backend.dataIdMap.get(out.dataId).id;\n
    // Short-circuit zero-sized tensors.\n    if (util.sizeFromShape(out.shape) === 0) \n      return out; \n    wasmFunc(xId, CppDType[x.dtype], outId);\n    return out;\n  }

  return {kernelName, backendName: 'wasm',
    setupFunc, \n    kernelFunc: \n  } as {} as KernelConfig
};

export const absConfig: KernelConfig = createUnaryKernelConfig(Abs);
```

```javascript
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 * limitations under the License.
 *
 *=============================================================================
 */

```

---

*An import from '@tensorflow/tfjs-core';*
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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 {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; /*
  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', // b_type // number // out_id
      '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));
      return out;
    } else {
      throw new Error("Broadcasting along outer dims is not yet supported for \{a.dtype\} \{\kernelName\}."");
    }
  }

  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
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```javascript
import {CppDType} from '@tensorflow/tfjs-core';

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

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

import {Identity} from './Identity';
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\n        \'number\', // dtype\n        \'number\', // out_id\n    ]);\n    function addn(args: {inputs: TensorInfo[], backend: BackendWasm}) {\n        const inputs = args[\'inputs\'];\n        const backend = args[\'backend\'];\n        const out = backend.makeOutput(args[\'inputs\'].length, args[\'dtype\'], args[\'output\']);\n        const outId = backend.dataIdMap.get(out.dataId).id;
        const inputIds = inputs.map(x => backend.dataIdMap.get(x.dataId).id);
        const inputIdsBytes = new Uint8Array(new Int32Array(inputIds).buffer);
        wasmFunc(inputIdsBytes, inputIds.length, CppDType[args[\'dtype\']], outId, null);\n    }

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

    export function identity(args: {inputs: IdentityInputs, backend: BackendWasm}):
        TensorInfo {
            const {inputs, backend} = args;
            const out = backend.makeOutput(inputs[0].shape, inputs[0].dtype);
            const outId = backend.dataIdMap.get(out.dataId).id;
            const inVals = backend.typedArrayFromHeap(inputs[0].buffer);
            const outVals = backend.typedArrayFromHeap(out.buffer);
            outVals.set(inVals);
            return out;
        }

    export const identityConfig: KernelConfig = {
        kernelName: Identity,
        backendName: \'wasm\',
        kernelFunc: identity as {} as KernelFunc,
    };
```

---

The code snippet above is a TypeScript implementation of functions for handling tensor operations, specifically for a webAssembly backend. It includes functions for adding tensors (`addn`), identity transformations (`identity`), and transposing tensors (`transpose`). The implementation uses the `@tensorflow/tfjs-core` library to interact with tensors and perform operations, leveraging the backend provided through the `BackendWasm` interface.

The code is structured to handle different tensor operations efficiently, using the capabilities of webAssembly for potentially faster execution on supported devices. The setup function (`setupFunc`) initializes the backend and uses the `wasmFunc` to perform the operations, which are then wrapped with appropriate types for the `KernelConfig` and `KernelFunc` interfaces for easier integration into larger systems that use TensorFlow.js.

This is a good example of how to integrate optimized tensor operations into web applications, particularly on platforms that can support webAssembly, which can lead to significant performance improvements over pure JavaScript implementations.

---

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

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

  wasmTransposeFromTensorInfo(xId, xInfo, x.shape.length, CppDType[xInfo.dtype], outId, permBytes, x.shape.length);
  return out;

const xShape = new Uint8Array(new Int32Array(x.shape).buffer);

  wasmTranspose(xId, xShape, x.shape.length, CppDType[x.dtype], outId, permBytes, x.shape.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 = new Array(shape.length);
  const newPerm = new Array(perm.length);
  for (let i = 0; i < shape.length; i++) {
    if (shape[i] !== 1) {
      newShape[i] = shape[perm[i]];
      newPerm[i] = 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 {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;

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

  if (inputWasTransposed) {
    return transposed;
  }

  // Manually implement broadcast logic.
  const newAxes = new Array(axes.length);
  for (let i = 0; i < newAxes.length; i++) {
    newAxes[i] = transposed[axes[i]];
  }

  return {
    dataId: x.dataId,
    data: backend.dataIdMap.get(x.dataId).dataId,
    shape: newAxes,
    dtype: x.dtype,
    name: x.name,
    ...x.attrs,
    ...attrs,
    backend,
  };
}

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 */

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

permuteAxesAndTranspose from 'kernel_utils';

import {backend_util};

import {wasmAll} from './kernel_utils';

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

permuteAxesAndTranspose from 'kernel_utils';

import {wasmAll} from './kernel_utils';

import {backend_util};

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

permuteAxesAndTranspose from 'kernel_utils';

import {wasmAll} from './kernel_utils';

import {backend_util};
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', 'number', 'number', 'number', 'number']);
}

function argmax(args: {backend: BackendWasm, inputs: AnyInputs, attrs: AnyAttrs}):
    TensorInfo {
  const {backend, inputs, attrs} = args;
  const {dim, 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, dim, backend);

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

  const inputRank = input.shape.length;
  backend_util.assertAxesAreInnerMostDims('argmax', 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;
    wasmArgmax(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 argmaxConfig: KernelConfig = {
  kernelName: ArgMax,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: argmax as {} as KernelFunc
};
```javascript
wasmFunc = backend.wasm_cwrap(ArgMax, null /* void */,[\n    'number', // x_id\n    'number', // dtype\n    'number', // outer_size\n    'number', // inner_size\n    'number' // out_id ]);\n
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\n      // 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 {transposedId} =
      permuteAxesAndTranspose(x, axis, backend);

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

  return out;
}
```

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

```javascript
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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
};

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

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

  util.assert(a3dShape.length + b3dShape.length === (aRank + 2) + (bRank + 2), () =>`
  `Error in batchDimA: batchDimA must have the same or at least one input batch dimension must be 1. Got input ` +
  `batch dimensions of (${a3dShape}) and (${b3dShape}) 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, innerShapeB, outerShapeB] :
    [batchDimB, outerShapeB, innerShapeB];

  const batchDimA = util.sizeFromShape(a3dShape);
  const batchDimB = util.sizeFromShape(b3dShape);

  const batchDimsCompatible = batchDimA === batchDimB || batchDimA === batchDimB;

  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 (${a3dShape}) and (${b3dShape}) of Tensors with shapes ${a.shape} and ` +
  `${b.shape} and transposeA=${transposeA} and transposeB=${transposeB} must match.`);

  const outShapeOuterDims = util.slice(a.shape, 0, -2);
  const outShape = util.concat([outShapeOuterDims, a3dShape, b3dShape]);
  util.assert(outShape.length === (aRank + 2) + (bRank + 2), () =>`
  `Error in matMul: inner shapes (${a.shape}) and (${b.shape}) of Tensors with shapes $a$ and ` +
  `$b$ and transposeA=${transposeA} and transposeB=${transposeB} must match.`);

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

  const outTensor = util.reshape([batchDimA, outerShapeA, innerShapeA], shape);
innerShapeB] :: [batchDimB, innerShapeB, outerShapeB];
  // The rest of the implementation is designed to operate on rank-3 tensors
  const a3d = reshape({inputs: [x, a], backend, attr:
  [shape: a3dShape]});
  const b3d = reshape({inputs: [x, b], backend, attr:
  [shape: b3dShape]});
  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, 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)
    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) as TypedArray;
    outVals.set(res);
  }

  return out;
}
// 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];
//     }
//   }
// }

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 permutated = backend_util.getPermutated(reshaped.length, blockShape.length);
  const reshapeds = backend_util.getReshapedPermuted(x.shape, blockShape, prod);
  const slicebeginCoords = backend_util.getSliceBeginCoords(crops, blockShape.length);
  const slicelengths = backend_util.getSliceReshapedPermuted(crops, blockShape.length);
  const xReshaped = reshape({inputs: [x], backend, attrs: {shape: reshaped}});
  const xTransposedReshaped = transpose({inputs: [x: xReshaped], backend, attrs: {perm: permutated}});
  const xTransposedReshaped = reshape({inputs: [x: xTransposedReshaped], backend, attrs: {shape: reshapedPermuted}});
  const result = slicer(inputs: [x: xTransposedReshaped], backend, attrs: {begin: slicebeginCoords, size: slicelengths});
  const disposedata = backend.disposeData(xReshaped.dataId);
  const disposedata = backend.disposeData(xTransposed.dataId);
  const disposedata = 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({ inputs: CastInputs, attrs: CastAttrs, backend: BackendWasm }) {
  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 {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';
import {concatImplCPU} from '../kernel_utils/shared';
import {identity} from './Identity';
import {reshape} from './Reshape';

export function concat({ inputs: ConcatInputs, backend, attrs: ConcatAttrs }) {
  const { inputs, backend } = args;
  const axis = util.parseAxisParam(attrs.axis, inputs[0].shape);
  let outShape =...
backend_util.computeOutShape(inputs.map(t => t.shape), axis); // Keep only non-empty tensors (ignore tensors with 0 in their shape).
const Sinputs = inputs.filter(t => util.sizeFromShape(t.shape) > 0); if (Sinputs.length === 1) { 
  const inputs = [1]; 
  return identity({ inputs: { x: Sinputs[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 (Sinputs[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 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 outShape = backend_util.computeOutShape(inputs2D.map(t => t.shape), 1 /* axis */); 
  const simplyConcat = 
    inputs2D[0].shape[0] === 1; 
  const outVals = concatImplCPU(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); 

  const out = outVals.map(t => backend.readSync(t.dataId), shape.t.shape); 

  if (out.length === 1) { 
    return (output as string[]); 
  } 

  const sumInnerDims = inputs.map(input => util.sizeFromShape(input.shape.slice(axis))).reduce((a, b) => a + b); 
  const inVals = inputs.map(input => 
    backend.typedArrayFromHeap(input)); 
  const outVals = backend.typedArrayFromHeap(out); 
  const offset = 0; 
  for (let i = 0; i < inVals.length; i++) {
    const innerDim = inVals[i].length; 
    const vals = inVals[i].subarray(i * innerDim, (i + 1) * innerDim); 
    outVals.set(vals, offset + i * innerDim); 
  } 
  return out; 
}

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

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
  ]); 
  backend.wasmConv2d = wasmConv2d; 
  let conv2d = (inputs: Conv2DInputs, backend: BackendWasm, attrs: Conv2DArrs) => {
    return backend.wasmConv2d(inputs, backend, attrs); 
  }

  return conv2d; 
}

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 */
const xId = backend.dataIdMap.get(x.dataId).id;
const filterId = backend.dataIdMap.get(filter.dataId).id;

const {strides, dilations, pad, dimRoundingMode, dataFormat} = attrs;
const convInfo = backend_util.computeConv2DInfo(x as Tensor4D).shape, (filter as Tensor4D).shape, strides, dilations, pad, dimRoundingMode, false, SdataFormat);

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');

wasmConv2d(xId, x.shape[0], x.shape[1], x.shape[2], filterId, filterHeight, filterWidth, padTop, padRight, padBottom, padLeft, isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, out);

return out;
}

export const conv2DConfig: KernelConfig = {
  kernelName: Conv2D,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: conv2d as {} as KernelFunc
};
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[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 {CropAndResize, CropAndResizeAttrs, 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;

function setup(backend: BackendWasm): void {
  wasmCropAndResize = backend.wasm.cwrap(CropAndResize, null /*void*/, [
    'number',  // imagesId
    'number',  // boxesId
    'number',  // boxIndId
    'number',  // numBoxes
    'number',  // imagesShape
    'number',  // cropHeight
    'number',  // cropWidth
    'number',  // method
    'number',  // extrapolationValue
    'number',  // outId
  ]);
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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);
  let permutedX = x; // if (permutation !== null) {
    permutedX = transpose({inputs: {x}, attrs: {perm: permutation}, backend});
  }

  const permutedAxisId = 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 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 permutedAxisId = 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 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 permutedAxisId = 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 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 permutedAxisId = backend.dataIdMap.get(permutedX.dataId).id;
  const permutedOutId = backend.dataIdMap.get(permutedOut.dataId).id;
import {DepthToSpace, DepthToSpaceAttr, 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: DepthToSpaceAttr
}): 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(outputShape).buffer);

  const xIdData = xData.id;
  const outputShapeBytes = new Uint8Array(new Int32Array(outputShape).buffer);
  const outStridesBytes = new Uint8Array(new Int32Array(outputShape).buffer);

  const channelsLast = dataFormat === 'NHWC' ? 1 : 0;
  const inputShape = outputShape.slice(1);

  return out;

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

function depthwiseConv2d(args: {
  inputs: DepthwiseConv2dNativeInputs,
  backend: BackendWasm,
  attrs: DepthwiseConv2dNativeAttrs
}) {
  const {inputs, attrs, backend} = args;
  const xId = backend.dataIdMap.get(inputs.x.dataId).id;
  const filterId = backend.dataIdMap.get(attrs.filter.dataId).id;
  const strides = attrs.strides, padding = attrs.pad,
           dimRoundingMode = attrs.dimRoundingMode;
  const convInfo = backend_util.computeConv2DInfo(
    (x as Tensor4D).shape, (filter as Tensor4D).shape,
    strides, padding, 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;
  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
};

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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';

const supportsFullBroadcast = false;

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');

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 */

import {ExpandDims, ExpandDimsAttrs, ExpandDimsInputs, KernelConfig, KernelFunc, util} from

import {ExpandDims, ExpandDimsAttrs, ExpandDimsInputs, KernelConfig, KernelFunc, util} from

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 {FlipLeftRight, FlipLeftRightInputs, KernelConfig, KernelFunc, TensorInfo} from

export function flipLeftRight(
  args: {inputs: FlipLeftRightInputs, backend: BackendWasm}): TensorInfo {
  const {inputs, backend} = args;
  setup(backend);
  return wasmFlipLeftRight(inputs[0], 0, 0, 0, 0, 0);
}
const {image} = inputs;
const out = backend.makeOutput(image.shape, image.dtype);
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 = {
  kernelName: FlipLeftRight,
  backendName: 'wasm',
  kernelFunc: flipLeftRight as {} as KernelFunc,
  setupFunc: setupOut,
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=============================================================================

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:

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, inputs, attrs} = args;
  const {varianceEpsilon} = attrs;
  const {x, mean, variance, offset, scale} = inputs;
  const xId = backend.dataIdMap.get(x.dataId).id;
  const varId = 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.makeOutput(x.shape, x.dtype);
  return out;
}

export const fusedBatchNormConfig: KernelConfig = {
  kernelName: FusedBatchNorm,
  backendName: 'wasm',
  setupFunc: setupOut,
  kernelFunc: fusedBatchNorm as {}}
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 {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, strides, dilations, pad, dimRoundingMode, activation, leakyreluAlpha);

  const fusedActivation = FusableActivation[activation 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 ${biasData.shape.length}.`);
    } else if (biasData.shape[0] !== outputChannels) {
      throw new Error(`FusedConv2D bias shape (${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 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 inHeight = convInfo.inHeight;
  const inWidth = convInfo.inWidth;

  if (dataFormat !== 'NHWC') {
    throw new Error(`wasm backend FusedConv2D only supports rank-1 bias but got 
    rank $\{dataFormat\}. Please use 'NHWC'.`);
  }

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

  const preluActivationWeightsId = preluActivationWeights == null ?
      outId : outId;

  wasmFusedConv2d(xId, batchSize, inputHeight, inputWidth, filterId, filterHeight, filterWidth, biasId, padTop, padRight, padBottom, padLeft, isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, activation, leakyreluAlpha, outId);
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',  // 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,
    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 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;
  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 ` +
          `rank ${biasData.shape.length}.`);
    }
    const biasId = biasData.id;
  } const filterHeight = convInfo.filterHeight;
  const filterWidth =
    convInfo.filterWidth;
  const padTop = convInfo.padInfo.top;
  const padRight = convInfo.padInfo.right;
  const padBottom = convInfo.padInfo.bottom;
  const padLeft = convInfo.padInfo.left;
  const dilationHeight =
    convInfo.dilationHeight;
  const dilationWidth = convInfo.dilationWidth;
  const strideHeight =
    convInfo.strideHeight;
  const strideWidth = convInfo.strideWidth;
  const inputChannels =
    convInfo.inChannels;
  const isSamePad = convInfo.padInfo.type === 'SAME' ? 1 : 0;
  const batchSize =
```
convInfo.batchSize;\n  const inHeight = convInfo.inHeight;\n  const inWidth = convInfo.inWidth;\n  if (dataFormat !== 'NHWC') {\n    throw new Error(`\n      wasm backend FusedDepthwiseConv2D does not support \n      dataFormat: '${dataFormat}'. Please use 'NHWC'.`);\n  }\n
  const out = backend.makeOutput(convInfo.outShape, 'float32');\n  const outId = backend.dataIdMap.get(out.dataId).id;\n  const preluActivationWeightsId = preluActivationWeights == null ? \n    0 : \n    backend.dataIdMap.get(preluActivationWeights.dataId).id;

  wasmFusedDepthwiseConv2DConfig = \n    { kernelName: FusedDepthwiseConv2D, \n      backendName: \n        'wasm', \n      setupFunc: setup, \n      kernelFunc: fusedDepthwiseConv2d as {} as KernelFunc \n    } as KernelConfig;\n
  backend.dataIdMap.get(preluActivationWeights.dataId).id;\n  wasmFusedDepthwiseConv2D(outId, batchShape, \n    inHeight, inWidth, filterId, filterHeight, filterWidth, \n    biasId, padTop, padRight, padBottom, padLeft, \n    isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, \n    fusedActivation, preluActivationWeightsId, leakyreluAlpha || 0, outId);\n
  return out;\n}

export const \n  fusedDepthwiseConv2DConfig: KernelConfig = \n    { kernelName: FusedDepthwiseConv2D, \n      backendName: \n        'wasm', \n      setupFunc: setup, \n      kernelFunc: fusedDepthwiseConv2d as {} as KernelFunc \n    } as KernelConfig;\n
  backend.dataIdMap.get(preluActivationWeights.dataId).id;\n  wasmFusedDepthwiseConv2D(outId, batchShape, \n    inHeight, inWidth, filterId, filterHeight, filterWidth, \n    biasId, padTop, padRight, padBottom, padLeft, \n    isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, \n    fusedActivation, preluActivationWeightsId, leakyreluAlpha || 0, outId);\n
  return out;\n}

export const \n  fusedDepthwiseConv2DConfig: KernelConfig = \n    { kernelName: FusedDepthwiseConv2D, \n      backendName: \n        'wasm', \n      setupFunc: setup, \n      kernelFunc: fusedDepthwiseConv2d as {} as KernelFunc \n    } as KernelConfig;\n
  backend.dataIdMap.get(preluActivationWeights.dataId).id;\n  wasmFusedDepthwiseConv2D(outId, batchShape, \n    inHeight, inWidth, filterId, filterHeight, filterWidth, \n    biasId, padTop, padRight, padBottom, padLeft, \n    isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, \n    fusedActivation, preluActivationWeightsId, leakyreluAlpha || 0, outId);\n
  return out;\n}

export const \n  fusedDepthwiseConv2DConfig: KernelConfig = \n    { kernelName: FusedDepthwiseConv2D, \n      backendName: \n        'wasm', \n      setupFunc: setup, \n      kernelFunc: fusedDepthwiseConv2d as {} as KernelFunc \n    } as KernelConfig;\n
  backend.dataIdMap.get(preluActivationWeights.dataId).id;\n  wasmFusedDepthwiseConv2D(outId, batchShape, \n    inHeight, inWidth, filterId, filterHeight, filterWidth, \n    biasId, padTop, padRight, padBottom, padLeft, \n    isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, \n    fusedActivation, preluActivationWeightsId, leakyreluAlpha || 0, outId);\n
  return out;\n}

export const \n  fusedDepthwiseConv2DConfig: KernelConfig = \n    { kernelName: FusedDepthwiseConv2D, \n      backendName: \n        'wasm', \n      setupFunc: setup, \n      kernelFunc: fusedDepthwiseConv2d as {} as KernelFunc \n    } as KernelConfig;\n
  backend.dataIdMap.get(preluActivationWeights.dataId).id;\n  wasmFusedDepthwiseConv2D(outId, batchShape, \n    inHeight, inWidth, filterId, filterHeight, filterWidth, \n    biasId, padTop, padRight, padBottom, padLeft, \n    isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, \n    fusedActivation, preluActivationWeightsId, leakyreluAlpha || 0, outId);\n
  return out;\n}

export const \n  fusedDepthwiseConv2DConfig: KernelConfig = \n    { kernelName: FusedDepthwiseConv2D, \n      backendName: \n        'wasm', \n      setupFunc: setup, \n      kernelFunc: fusedDepthwiseConv2d as {} as KernelFunc \n    } as KernelConfig;\n
  backend.dataIdMap.get(preluActivationWeights.dataId).id;\n  wasmFusedDepthwiseConv2D(outId, batchShape, \n    inHeight, inWidth, filterId, filterHeight, filterWidth, \n    biasId, padTop, padRight, padBottom, padLeft, \n    isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, \n    fusedActivation, preluActivationWeightsId, leakyreluAlpha || 0, outId);\n
  return out;\n}

export const \n  fusedDepthwiseConv2DConfig: KernelConfig = \n    { kernelName: FusedDepthwiseConv2D, \n      backendName: \n        'wasm', \n      setupFunc: setup, \n      kernelFunc: fusedDepthwiseConv2d as {} as KernelFunc \n    } as KernelConfig;\n
  backend.dataIdMap.get(preluActivationWeights.dataId).id;\n  wasmFusedDepthwiseConv2D(outId, batchShape, \n    inHeight, inWidth, filterId, filterHeight, filterWidth, \n    biasId, padTop, padRight, padBottom, padLeft, \n    isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, \n    fusedActivation, preluActivationWeightsId, leakyreluAlpha || 0, outId);\n
  return out;\n}

export const \n  fusedDepthwiseConv2DConfig: KernelConfig = \n    { kernelName: FusedDepthwiseConv2D, \n      backendName: \n        'wasm', \n      setupFunc: setup, \n      kernelFunc: fusedDepthwiseConv2d as {} as KernelFunc \n    } as KernelConfig;\n
  backend.dataIdMap.get(preluActivationWeights.dataId).id;\n  wasmFusedDepthwiseConv2D(outId, batchShape, \n    inHeight, inWidth, filterId, filterHeight, filterWidth, \n    biasId, padTop, padRight, padBottom, padLeft, \n    isSamePad, dilationHeight, dilationWidth, strideHeight, strideWidth, inputChannels, outputChannels, \n    fusedActivation, preluActivationWeightsId, leakyreluAlpha || 0, outId);\n
  return out;\n}
```
// xStrides
    'number',  // stridesSize
    'number',  // indicesId
    'number',  // batchSize
    'array',   // outStrides
    'number'   // outId
  ]);[\n  \n  function gatherV2
    (args: [backend: BackendWasm, inputs: GatherV2Inputs, attrs: GatherV2Attrs]): TensorInfo {\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 indices_vals = backend.readSync(indices.dataId) as TypedArray;\n    const axis_dim = x.shape[parsedAxis];\n    for (let i = 0; i < indices_vals.length; ++i) {\n      const index = indices_vals[i];\n      assert(\n        index <= axis_dim - 1 & & index >= 0, () => \n          `GatherV2: the index value \$\{index\} is not in \[0, \$\{axisDim - 1\}\]`);\n      const shapeInfo = backend_util.segment_util.collectGatherOpShapeInfo(x, indices, parsedAxis, batchDims);\n      const flattenX = reshape({\n        inputs: {x},\n        attrs: {\n          shape: [shapeInfo.batchSize, shapeInfo.outSize],\n          sliceSize: shapeInfo.sliceSize,\n        },\n      }, backend);\n      const indicesSize = util.sizeFromShape(indices.shape);\n      const flattenIndex = reshape({\n        inputs: {x: indices},\n        attrs: {\n          shape: [shapeInfo.batchSize, indicesSize / shapeInfo.batchSize],\n        },\n      }, backend);\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(flattenIndex.dataId);\n      const indicesId = indicesData.id;\n      const outId = backend.dataIdMap.get(out.dataId);\n      const xStridesBytes = new Uint8Array(x.computeStrides(flattenX.shape).buffer);\n      const outStridesBytes = new Uint8Array(x.computeStrides(flattenOutputShape).buffer);\n      wasmGather(xId, CppDType[x.dtype], xStridesBytes, stridesSize, indicesId,\n                 outStridesBytes, outId);\n    }\n  }\n\n  export const gatherV2Config: KernelConfig = \n    {\n      kernelName: GatherV2,\n      backendName: 'wasm',\n      setupFunc: setup,\n      kernelFunc: gatherV2 as {} as KernelFunc\n    };

  // Binary kernels

  const supportsFullBroadcast = false;\n  export const greaterConfig: KernelConfig = \n    createBinaryKernelConfig(Greater, supportsFullBroadcast, 'bool');\n  export const greaterEqualConfig: KernelConfig = \n    createBinaryKernelConfig(GreaterEqual, supportsFullBroadcast, 'bool');

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  // Import statements

  *import {Greater, KernelConfig} from '@tensorflow/tfjs-core';\n  *import {createBinaryKernelConfig} from './binary_kernel';\n  *const supportsFullBroadcast = false;\n  *export const greaterConfig = \n    createBinaryKernelConfig(Greater, supportsFullBroadcast, 'bool');\n  *import {GreaterEqual, KernelConfig} from '@tensorflow/tfjs-core';\n  *import {createBinaryKernelConfig} from './binary_kernel';\n  *const supportsFullBroadcast = false;\n  *export const greaterEqualConfig = \n    createBinaryKernelConfig(GreaterEqual, 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
  // 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;
  }

  return null;
}

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');

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

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;
  backend_util.assertAxesAreInnerMostDims('max', axes, inputRank);
  const [outShape, reduceShape] =
      backend_util.computeOutAndReduceShapes(input.shape, axes);
  const reduceSize = util.sizeFromShape(reduceShape, axes);
  const outId = backend.makeOutput(outShape, x.dtype);
  if (util.sizeFromShape(input.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmMax(inputId, CppDType[x.dtype], reduceSize, outId);
  }
  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';
export const maximumConfig: KernelConfig =
  createBinaryKernelConfig(Maximum);

*/
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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', '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 maxPool(
    args: {inputs: MaxPoolInputs, backend: BackendWasm, attrs: MaxPoolAttrs}) {
  const {inputs, backend, attrs} = args;
  const xId = backend.dataIdMap.get(inputs.x.dataId).id;

  const filterSize = attrs.filterSize;
  const strides = attrs.strides;
  const pad = attrs.pad;
  const dataFormat = attrs.dataFormat;

  const out = backend.makeOutput(inputs.shape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  const wasmMaxPool = backend.wasm.cwrap(MaxPool, 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']);

  wasmMaxPool(xId, inputs.shape[0], inputs.shape[1], inputs.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
};

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

export function mean(
    args: {inputs: MeanInputs, backend: BackendWasm, attrs: MeanAttrs}) {
  const {inputs, backend, attrs} = args;

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

  const reduceSize = attrs.reduceSize;
  const outputChannels = attrs.outputChannels;

  const out = backend.makeOutput(inputs.shape, 'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  const wasmMean = backend.wasm.cwrap(Mean, null /* void */, ['number', 'number', 'number']);

  wasmMean(xId, reduceSize, outId);
  return out;
}

export const meanConfig: KernelConfig = {
  kernelName: Mean,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: mean
};
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```javascript
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';

const wasmMin = backend_util.wasm.cwrap(Min, null /*void*/, 
  ['number',  // x_id
   'number',  // dtype
   'number',  // reduce_size
   'number',  // out_id
]);

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 transposedAxes = axes;
    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(input.shape.length, input.shape.length);
    const outShape = backend_util.computeOutAndReduceShapes(input.shape, reductionAxes);
    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.reshapeDim(backend, x, xId, reductionAxes);
      out.shape = newShape;
    }
    return out;
  }

export const minConfig: KernelConfig = {
  kernelName: Min,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: min 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: 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 transposedAxes = axes;
    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(input.shape.length, input.shape.length);
    const outShape = backend_util.computeOutAndReduceShapes(input.shape, reductionAxes);
    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.reshapeDim(backend, x, xId, reductionAxes);
      out.shape = newShape;
    }
    return out;
  }

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

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};
}
```

---

```typescript
import {KernelConfig, KernelFunc, NonMaxSuppressionV3, NonMaxSuppressionV3Attrs, NonMaxSuppressionV3Inputs, TensorInfo} from '@tensorflow/tfjs-core';

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);

  return
```

---

```
import {KernelConfig, KernelFunc, NonMaxSuppressionV3, NonMaxSuppressionV3Attrs, NonMaxSuppressionV3Inputs, TensorInfo} from '@tensorflow/tfjs-core';

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);

  return
```
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'], [null, null, null, null, null, null]);
}

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 KernelFunc as {} as KernelConfig
};

//-------------------------------------------------------------------------------

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'], [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);

  // Since we are not using scores for V5, 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 nonMaxSuppressionV5Config: KernelConfig = {
  kernelName: NonMaxSuppressionV5,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: kernelFunc as KernelFunc as {} as KernelConfig
};

/***********************************************************************************/

export const nonMaxSuppressionV3Config: KernelConfig = {
  kernelName: NonMaxSuppressionV3,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: kernelFunc as {} as KernelConfig
};

/***********************************************************************************/

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, padToMaxOutputSize: boolean) => number;

function setup(backend: BackendWasm): void {
  wasmFunc = backend.wasm.cwrap(NonMaxSuppressionV3, 'number', ['number', 'number', 'number', 'number', 'number', 'bool'], [null, null, null, null, null, null]);
}

function nonMaxSuppressionV3(args: {
  backend: BackendWasm,
  inputs: NonMaxSuppressionV3Inputs,
  attrs: NonMaxSuppressionV3Attrs
}): 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 V3, 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 nonMaxSuppressionV3Config: KernelConfig = {
  kernelName: NonMaxSuppressionV3,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: nonMaxSuppressionV3 as KernelFunc as {} as KernelConfig
};

/***********************************************************************************/

import {KernelConfig, KernelFunc, NonMaxSuppressionV2, NonMaxSuppressionV2Attrs, NonMaxSuppressionV2Inputs, 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(NonMaxSuppressionV2, 'number', ['number', 'number', 'number', 'number', 'number'], [null, null, null, null, null]);
}

function kernelFunc(args: {
  backend: BackendWasm,
  inputs: NonMaxSuppressionV2Inputs,
  attrs: NonMaxSuppressionV2Attrs
}): 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 V2, 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 nonMaxSuppressionV2Config: KernelConfig = {
  kernelName: NonMaxSuppressionV2,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: kernelFunc as KernelFunc as {} as KernelConfig
};

/***********************************************************************************/

import {KernelConfig, KernelFunc, NonMaxSuppressionV1, NonMaxSuppressionV1Attrs, NonMaxSuppressionV1Inputs, 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(NonMaxSuppressionV1, 'number', ['number', 'number', 'number', 'number', 'number'], [null, null, null, null, null]);
}

function kernelFunc(args: {
  backend: BackendWasm,
  inputs: NonMaxSuppressionV1Inputs,
  attrs: NonMaxSuppressionV1Attrs
}): 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 V1, 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 nonMaxSuppressionV1Config: KernelConfig = {
  kernelName: NonMaxSuppressionV1,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: kernelFunc as KernelFunc as {} as KernelConfig
}
= attrs;
const {boxes, scores} = inputs;
const boxesId = backend.dataIdMap.get(boxes.dataId).id;
const scoresId = backend.dataIdMap.get(scores.dataId).id;
const resOffset = wasmFunc(boxes, scoresId, maxOutputSize, iouThreshold, scoreThreshold, sofTnmsSigma);
const {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: setupFunc,
  kernelFunc: kernelFunc as {} as KernelFunc,
};

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 */

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

import {createBinaryKernelConfig} from './binary_kernel';

let wasmOneHot: (...args: [number, number, number, 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({inputs, backend, attrs}) {
  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({inputs, backend}) {
  const {depth, number} = inputs;

  const outId = backend.dataIdMap.get(output.dataId).id;
  const indicesData = backend.dataIdMap.get(indices.dataId);
  const indicesId = indicesData.id;

  wasmOneHot(indicesId, depth, number, number, outId);
  return out;
}

export const onesLikeConfig: KernelConfig = {
  kernelName: OnesLike,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: onesLike as {} as KernelFunc,
};
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```javascript
const {inputs: {x}, backend} = args; const out = backend.makeOutput(x.shape, x.dtype);
const outVals = backend.typeedArrayFromHeap(out); outVals.fill(1); return out;
```

```javascript
const {inputs: {x}, backend} = args; const out = backend.makeOutput(x.shape, x.dtype);
const outVals = backend.typeedArrayFromHeap(out);
outVals.fill(1);
return out;
```

```javascript
const {inputs: {x}, backend} = args; const out = backend.makeOutput(x.shape, x.dtype);
const outVals = backend.typeedArrayFromHeap(out);
outVals.fill(1);
return out;
```

```javascript
const {inputs: {x}, backend} = args; const out = backend.makeOutput(x.shape, x.dtype);
const outVals = backend.typeedArrayFromHeap(out);
outVals.fill(1);
return out;
```

```javascript
const {inputs: {x}, backend} = args; const out = backend.makeOutput(x.shape, x.dtype);
const outVals = backend.typeedArrayFromHeap(out);
outVals.fill(1);
return out;
```
new Uint8Array(new Int32Array(prePaddingsFlat).buffer),\n  postPaddingsBytes)\n  wasmPadV2(xId, xShapeBytes, x.shape.length, CppDType[x.dtype], prePaddingsBytes,\n  postPaddingsBytes, constantValue, outId)\n  return out;\n}\n\nexport const padV2Config: KernelConfig = {\n  kernelName: PadV2,\n  backendName: 'wasm',\n  kernelFunc: pad as {} as KernelFunc,\n  setupFunc: setup\n};
\n\nexport const padV2Config: KernelConfig = {\n  kernelName: PadV2,\n  backendName: 'wasm',\n  kernelFunc: pad as {} as KernelFunc,\n  setupFunc: setup\n};
\n\nexport const padV2Config: KernelConfig = {\n  kernelName: PadV2,\n  backendName: 'wasm',\n  kernelFunc: pad as {} as KernelFunc,\n  setupFunc: setup\n};
\n\nexport const padV2Config: KernelConfig = {\n  kernelName: PadV2,\n  backendName: 'wasm',\n  kernelFunc: pad as {} as KernelFunc,\n  setupFunc: setup\n};
\n\nexport const padV2Config: KernelConfig = {\n  kernelName: PadV2,\n  backendName: 'wasm',\n  kernelFunc: pad as {} as KernelFunc,\n  setupFunc: setup\n};
\n\nexport const padV2Config: KernelConfig = {\n  kernelName: PadV2,\n  backendName: 'wasm',\n  kernelFunc: pad as {} as KernelFunc,\n  setupFunc: setup\n};
\n\nexport const padV2Config: KernelConfig = {\n  kernelName: PadV2,\n  backendName: 'wasm',\n  kernelFunc: pad as {} as KernelFunc,\n  setupFunc: setup\n};
ProdAttrs

```plaintext
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 {backend, dataIdMap} = args;

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.
  inputs = transposed;
  inputId = transposedId;
}

const reductionAxes = backend_util.getInnerMostAxes(input.shape.length);

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.
    inputs = transposed;
    inputId = transposedId;
  }
}

backend_util.assertAxesAreInnerMostDims('prod', reductionAxes);

const [outShape, reduceShape] = backend_util.computeOutAndReduceShapes(input.shape, reductionAxes);

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;

```

```typescript
export const prodConfig: KernelConfig = {
  kernelName: Prod,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: prod as {} as KernelFunc
};
```

---

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 */

```typescript
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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 */

```typescript
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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 */

```typescript
```
import {KernelConfig, Relu} from '@tensorflow/tfjs-core';

export const reluConfig: KernelConfig = createUnaryKernelConfig(Relu);

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import {KernelConfig, Relu6} from '@tensorflow/tfjs-core';

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';

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

  wasm.resizeBilinear(args: {
    backend: BackendWasm,
    inputs: ResizeBilinearInputs,
    outputs: ResizeBilinearOutputs,
    attr: ResizeBilinearAttr
  }):
    TensorFlow { 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;
    wasm.resizeBilinear(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
};

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

// backend_wasm
import {identity} from '@tensorflow/tfjs-core';

*
let wasmReverse = backend.wasm.cwrap(Reverse, null, ['x_id', 'axes', 'axes_length', 'out_shape', 'out_shape_length', 'out_id']);

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

const reshaped = reshape({inputs: {x: out}, attrs: {shape: x.shape}, backend});

backend.disposeData(out.dataId);

return reshaped;

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

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export const rotateWithOffsetConfig = {
  kernelName: RotateWithOffset,
  backendName: 'wasm',
  kernelFunc: rotateWithOffset as {} as KernelFunc,
  setupFunc: setup,
};
export const roundConfig: KernelConfig = createUnaryKernelConfig(Round);

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 */

export const rsqrtConfig: KernelConfig = createUnaryKernelConfig(Rsqrt);

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 */

export const scatterNdConfig: KernelConfig = {
  kernelName: ScatterNd,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: scatterNd as {} as KernelFunc
};

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export const selectConfig: KernelConfig = createUnaryKernelConfig(Select);

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

function select(args: {inputs: SelectInputs, backend: BackendWasm}) {
  const {inputs, backend} = args;\n  const condition = t, e = inputs;\n  const conditionId = backend.dataIdMap.get(condition.dataId).id;\n  const tId = backend.dataIdMap.get(t.dataId).id;\n  const eId = backend.dataIdMap.get(e.dataId).id;\n  const out = backend.makeOutput(t.shape, t.dtype);\n  const outId = backend.dataIdMap.get(out.dataId).id;\n  const cRank = condition.shape.length;\n  const tRank = t.shape.length;\n  const offset = cRank === 0 || cRank > 1 || tRank === 1 ? util.sizeFromShape(t.shape.slice(1)) : 1;\n  wasmSelect(conditionId, tId, eId, offset, outId);\n  return out;\n}

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

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;\n  // Short-circuit zero-sized tensors.
  if (util.sizeFromShape(out.shape) === 0) {
    return out;
  }
  wasmFunc(xId, outId);
  return out;\n}

export const sigmoidConfig: KernelConfig = {
  kernelName: 'Sigmoid',
  backendName: 'wasm',
  setupFunc: setup as {} as KernelFunc,
  kernelFunc: sigmoid as {} as KernelFunc
};

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 */

import {KernelFunc, KernelConfig, Softmax, SoftmaxAttrs, SoftmaxInputs, 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 {createUnaryKernelConfig} from './unary_kernel';

export const sinConfig: KernelConfig = createUnaryKernelConfig(Sin);
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 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 {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.length, blockShape.length, false);
  const reshapedPaddedPermutation = backend_util.getPermuted(reshapedPaddedShape.length, blockShape.length, false);
  const paddedXT = transpose({inputs: paddedX, backend, attrs: {perm: reshapedPaddedPermutation}});

  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
};

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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}): 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 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 splitVConfig: KernelConfig = {
  kernelName: SplitV,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: splitV as {} as KernelFunc
};
SplitVAttrs, backend: BackendWasm) {
  \n  const {inputs, attrs, backend} = args;
  \n  const {numOrSizeSplits, axis} = attrs;
  \n  const Saxis = util.parseAxisParam(axis, x.shape)[0];
  \n  const splitSizes = backend_util.prepareSplitSize(x, numOrSizeSplits, Saxis);
  \n  const begin = new Array(x.shape.length).fill(0);
  \n  const size = x.shape.slice();

  return splitSizes.map(s => {
    \n    const xSliceSize = [...size];
    \n    xSliceSize[Saxis] = s;
  \n    const xSlice = slice({inputs: {x}, attrs: {begin, size: xSliceSize}, backend});
    \n    begin[Saxis] += s;

    return xSlice;
  });
}

export const splitVConfig: KernelConfig = {
  \n  kernelName: SplitV,
  \n  backendName: 'wasm',
  \n  func: 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, 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
};

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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
    } = 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(finalShapeSparse);
        const outStridesBytes =
            new Uint8Array(finalShapeSparse);

        wasmStridedSlice(
            xId, xStridesBytes, x.shape.length,
            beginBytes, endBytes, stridesBytes,
            outputShapeBytes, outStridesBytes,
            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
};

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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
    } = 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(finalShapeSparse);
        const outStridesBytes =
            new Uint8Array(finalShapeSparse);

        wasmStridedSlice(
            xId, xStridesBytes, x.shape.length,
            beginBytes, endBytes, stridesBytes,
            outputShapeBytes, outStridesBytes,
            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
};
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*\n=============================================================================

*/
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, 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;
  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
  out = backend_util.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);
  }

  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
};

*\n=============================================================================

*/
import {KernelConfig, Tan} from '@tensorflow/tfjs-core';
import {createUnaryKernelConfig} from
'./unary_kernel';

export const tanConfig: KernelConfig = createUnaryKernelConfig(Tan);

*\n=============================================================================

*/
import {KernelConfig, Tan} from '@tensorflow/tfjs-core';
import {createUnaryKernelConfig} from
'./unary_kernel';

export const tanConfig: KernelConfig = createUnaryKernelConfig(Tan);

*\n=============================================================================

*/

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*/

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);
  return out;
}

export const tileConfig: KernelConfig = {
  kernelName: Tile,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: tile as {} as KernelFunc
};

*/

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',   // xShape
    'number',  // xShape.length
    'number',  // xDtype
    '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();
    const 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;
    const wasmTopK = xId, xShapeBytes, x.shape.length,

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```javascript
export const topKConfig: KernelConfig = {
  kernelName: TopK,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: topk as {} as KernelFunc,
};

export const transformConfig: KernelConfig = {
  kernelName: Transform,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: transform as {} as KernelFunc,
};

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

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

let wasmTransform: (imageId: number, transformersId: number, isBatchTransform: boolean,
batch: number, outHeight: number, outWidth: number, numChannels: number, imageWidth: number, imageHeight: number, strides: Uint8Array,
interpolationModeId: number, fillModeId: number, fillValue: number, outId: number) => void;

function setup(backend: BackendWasm): void {
  wasmTransform = backend.wasm.cwrap(Transform,
    null /*void*/, [
      'number',  // imageId
      'number',  // transformersId
      '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'   // 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;

  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, interpolationModeId, fillModeId, fillValue, outId);

  return out;
}
```

---

The above code snippet is related to the use of the Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5. It includes the use of TensorFlow.js and Wasm for implementing top-k and transform configurations.

// Source code included in the snippet above.
TensorInfo[] {
  \n  const {inputs, backend, attrs} = args;\n  const {value} = inputs;\n  let {axis} = attrs;\n  \n  if (axis < 0) {
    axis += value.shape.length;\n  }\n  \n  const numOutputs = value.shape[axis];\n  \n  const rank = value.shape.length;\n  const outShape: number[] = new Array(rank - 1);\n  const outIndex = 0;\n  \n  for (let i = 0; i < rank; i++) {
    if (i === axis) {
      outIndex = i;\n    }\n    \n    outShape[outIndex] = value.shape[i];\n  }\n  \n  const outs: TensorInfo[] = new Array(numOutputs);\n  const begin = new Array(rank).fill(0);
  const size = value.shape.slice();\n  size[axis] = 1;\n  \n  for (let i = 0; i < outs.length; i++) {
    begin[axis] = i;\n    outs[i] = slice({inputs: {x: value}, attrs: {begin, size},\n      backend});\n  }\n  \n  return outs.map((x, dtype) => ({dataId, dtype, shape: outShape}));\n}\n
export const unpackConfig: KernelConfig = {
  kernelName: Unpack,\n  backendName: 'wasm',\n  kernelFunc: unpack as {} as KernelFunc,\n};

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;\n  \n  const out = backend.makeOutput(x.shape, x.dtype);\n  \n  const outVals = backend.typedArrayFromHeap(out);\n  outVals.fill(0);\n  return out;
}\n
export const zerosLikeConfig: KernelConfig = {
  kernelName: ZerosLike,\n  backendName: 'wasm',\n  kernelFunc: zerosLike as {} as KernelFunc,\n};
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5  5066
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 () => {
  // This typed array passed in to WebAssembly.validate is WebAssembly binary code. In this case it is a small program that contains SIMD
  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]));

  // This typed array is a WebAssembly program containing threads
  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]));
  }

/**
 * 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:
  if (ENV.get('IS_NODE')) {
    return false;
  }

  try {
    // Test for transferability of SABs (needed for Firefox)
    new MessageChannel().port1.postMessage(new SharedArrayBuffer(1));
    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;
  }
});

var WasmBackendModuleThreadedSimd = (function() {
  if (typeof __filename !== 'undefined') _scriptDir = _scriptDir || __filename;

  moduleOverrides={};
  for(key in Module) {
    if(Module.hasOwnProperty(key)) {
      moduleOverrides[key] = Module[key];
    }
  }

  for(let key in arguments_)
    if(key != 'this' && key != 'module')
      arguments_[key] = arguments_[key];

  (function(WasmBackendModuleThreadedSimd) {
    WasmBackendModuleThreadedSimd = WasmBackendModuleThreadedSimd || {};
    var readyPromiseResolve, readyPromiseReject;
    Module['ready'] = new Promise(function(resolve, reject) {
      readyPromiseResolve = resolve; 
      readyPromiseReject = reject;
    });
    var moduleOverriders = []; 
    var key = for(key in Module) {
      if(Module.hasOwnProperty(key)) {
        moduleOverriders[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 !== 'undefined';
    ENVIRONMENT_IS_WORKER = typeof

 })();

  return;
});

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```javascript
out=Module['\'print\'']||console.log.bind(console);var err=Module['\'printErr\'']||console.warn.bind(console);for(key in moduleOverrides){if(moduleOverrides.hasOwnProperty(key)) moduleOverrides[key]=moduleOverrides[key] } moduleOverrides=null;if(Module['\'arguments\''])arguments_=Module['\'arguments\''];if(Module['\'thisProgram\''])thisProgram=Module['\'thisProgram\''];if(Module['\'quit\''])quit_=Module['\'quit\''];function warnOnce(text){if(!warnOnce.shown)warnOnce.shown={};if(!warnOnce.shown[text]){warnOnce.shown[text]=1;err(text)}}varAtoms_load=Atoms.load;varAtoms_store=Atoms.store;varAtoms_compareExchange=Atoms.compareExchange;varwasmBinary=if(Module['\'wasmBinary\''])wasmBinary=Module['\'wasmBinary\''];var
noExitRuntime=Module['\'noExitRuntime\'']||true;typeof WebAssembly!=='object' || abort(\'no native wasm support detected\');
if(wasmMemory)var wasmModule;var ABORT=false;var EXISTSTATUS;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
ret=0;if(ret===null&&!str!=='undefined'&&str!==0){
var len=str.length<<2+1;ret=stackAlloc(len);stringToUTF8(str,ret,len)}
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);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
startIdx=endIdx=idx+maxBytesToWrite-1;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+1)&1023}if(u<=127)+len;else if(u<=2047)len+=2;else if(u<=65535)len+=3;else
len=4}function stringToUTF8(str,ptr,maxBytesToRead){return UTF8ToString(ptr,\"\\\"\",maxBytesToRead);var
endIdx=idx+maxBytesToRead;var
str=\"\\\";while(!(idx===endIdx))
{var u=heap[idx++];if(!u)return str;if((u&128)===0)
{var
str+=String.fromCharCode(u);idx++}else if(u&192)
{var
str+=String.fromCharCode(((u&128)<<6)|u&63);idx++}
else if(u&240)
{var
str+=String.fromCharCode(((u&192)<<12)|u&63);idx++}
else if(u&248)
{var
str+=String.fromCharCode(((u&224)<<18)|u&63);idx++}
else if(u&244)
{var
str+=String.fromCharCode(((u&240)<<24)|u&63);idx++}var ch=u;str+=String.fromCharCode(ch+105632|ch+1023) return str}function
UTF8ToString(ptr, maxBytesToRead){return UTF8ArrayToString(heap, idx, maxBytesToRead)}
```

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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 (ENVIRONMENT_IS_PTHREAD) {
    wasmMemory = Module["wasmMemory"]; buffer = Module["buffer"]
} else {
    if (Module["wasmMemory"]) {
        wasmMemory = Module["wasmMemory"]
    } else {
        wasmMemory = new WebAssembly.Memory({
            "initial": INITIAL_MEMORY / 65536,
            "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 (!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");
            } else {
                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");
            }
        }
    }
}

INITIAL_MEMORY = buffer.byteLength;
updateGlobalBufferAndViews(buffer);

var wasmTable; var __ATPRERUN__ = []; var __ATINIT__ = []; var __ATMAIN__ = []; var __ATEXIT__ = [];
var runtimeInitialized = false;
var runtimeExited = false;

if (ENVIRONMENT_IS_PTHREAD) {
    __ATINIT__.push(function() {
        ___wasm_call_ctors()
    });
    function preRun() {
        if (ENVIRONMENT_IS_PTHREAD) return;
        if (Module["preRun"]){
            if (typeof Module["preRun"] == "function") Module["preRun"]();
        }
        Module["preRun"] = (Module["preRun"] = [Module["preRun"]]);
        while (Module["preRun"][length]) {
            addOnPreRun(Module["preRun"][shift()]);
        }
    }
    callRuntimeCallbacks(__ATPRERUN__);
}

initRuntime(); runtimeInitialized = true;

if (ENVIRONMENT_IS_PTHREAD) return;

callRuntimeCallbacks(__ATINIT__);

function preMain() {
    if (ENVIRONMENT_IS_PTHREAD) return;
}

function exitRuntime() {
    if (ENVIRONMENT_IS_PTHREAD) return;
    runtimeExited = true;
}

function postRun() {
    if (ENVIRONMENT_IS_PTHREAD) return;
    Module["postRun"]();
    Module["postRun"] = (Module["postRun"] = [Module["postRun"]]);
    while (Module["postRun"][length]) {
        addOnPostRun(Module["postRun"][shift()]);
    }
    callRuntimeCallbacks(__ATEXIT__);
}

addOnPostRun(function() {
    var runDependencies = 0;
    var dependenciesFulfilled = null;
    function addRunDependency(id) {
        assert(!ENVIRONMENT_IS_PTHREAD, \"addRunDependency cannot be used in a pthread\");
        runDependencies += 1;
        Module[\"monitorRunDependencies\"] = (Module[\"monitorRunDependencies\"] || {});
        Module[\"monitorRunDependencies\"].push(id);
    }
    function removeRunDependency(id) {
        if (Module[\"monitorRunDependencies\"].length > 0) {
            Module[\"monitorRunDependencies\"].splice(Module[\"monitorRunDependencies\"].indexOf(id), 1);
        }
    }
    function clearInterval() {
        runDependencyWatcher = null;
    }
    function runDependencyWatcher(unshift) {
        if (unshift) {
            var dependenciesFulfilled = null;
            function addOnPreRun() {
                var runDependencyWatcher = null;
                runDependencyWatcher = setInterval(clearInterval, 1000);
            }
            addOnPreRun();
            return;
        }
    }
}

function removeObject(id) {
    delete Module[\"preloadedImages\"][id];
    delete Module[\"preloadedAudios\"][id];
}

function abort(what) {
    if (Module[\"onAbort\"]){
        Module[\"onAbort\"](what);
    }
}

if (ENVIRONMENT_IS_PTHREAD) {
    console.err("Pthread aborting at "+(new Error).stack);
}

if (ABORT) {
    EXITSTATUS = 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 str.indexOf(prefix) === 0;
}
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-threadedsimd.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)}}function
getBinaryPromise(){if(!wasmBinary&&(ENVIRONMENT_IS_WEB||ENVIRONMENT_IS_WORKER)){if(typeof
fetch===\"function\"&&!isFileURI(wasmBinaryFile)){return fetch(wasmBinaryFile,{credentials:\"sameorigin\"}).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;wasmTable=Module[\"asm\"][\"I\"];wasmModule=module;if(!E
NVIRONMENT_IS_PTHREAD){var
numWorkersToLoad=PThread.unusedWorkers.length;PThread.unusedWorkers.forEach(function(w){PThread.load
WasmModuleToWorker(w,function(){if(!--numWorkersToLoad)removeRunDependency(\"wasminstantiate\")})})}}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(receiver,function(reason){err(\"failed to asynchronously prepare
wasm: \"+reason);abort(reason)})}function instantiateAsync(){if(!wasmBinary&&typeof
WebAssembly.instantiateStreaming===\"function\"&&!isDataURI(wasmBinaryFile)&&!isFileURI(wasmBinaryFil
e)&&typeof fetch===\"function\"){return fetch(wasmBinaryFile,{credentials:\"sameorigin\"}).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(){__emscript
en_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)}}}var
BADF:8,ECHILD:12,EAGAIN:6,EWOULDBLOCK:6,ENOMEM:48,EACCES:2,EFAULT:21,ENOTBLK:105,EB
NO:104,EBADRQC:103,EBADSLT:102,EDEADLOCK:16,EBFONT:101,ENOSTR:100,ENODATA:116,ETIME:

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ventHandlers.push(eventHandler);JSEvents.registerRemoveEventListener(eventHandler);if(JSEvents.eventHandlers.length>0){for(var i=0;i<JSEvents.eventHandlers.length;++i){if(JSEvents.eventHandlers[i].target==eventHandler.target&&JSEvents.eventHandlers[i].eventTypeString==eventHandler.eventTypeString){JSEvents._removeHandler(i--);}}},queueEventHandlerOnThread_iiii:function(targetThread,eventHandlerFunc,eventTypeId,eventData,userData){var stackTop=stackSave();var varargs=stackAlloc(12);GROWABLE_HEAP_I32()[varargs>>2]=eventTypeId;GROWABLE_HEAP_I32()[varargs+4>>2]=eventTypeString;GROWABLE_HEAP_I32()[varargs+8>>2]=userData;__emscripten_call_on_thread(0,targetThread,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)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(target,width,height){targetCanvas=targetCanvas?UTF8ToString(targetCanvas):"";_emscripten_set_offscreencanvas_size_on_target_thread_js(targetThread,targetCanvas,width,height);targetCanvasPtr=stringToNewUTF8(targetCanvas);if(!targetCanvas){return-4;}if(canvas.canvasSharedPtr){GROWABLE_HEAP_I32()[varargs>>2]=canvas.canvasSharedPtr;GROWABLE_HEAP_I32()[varargs+4>>2]=targetCanvas.width;GROWABLE_HEAP_I32()[varargs+8>>2]=height;__emscripten_call_on_thread(0,targetThread,637534208,targetCanvas.canvasSharedPtr,varargs);stackRestore(stackTop)}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_calling_thread(target,width,height){var canvas=findCanvasEventTarget(target);if(canvas){var autoResizeViewport=false;if(canvas.canvasGLctxObject&canvasGLctxObject.GLctx){var prevViewport=canvas.canvasGLctxObject.GLctx.getParameter(2978);autoResizeViewport=prevViewport[0]==0&prevViewport[1]==0&prevViewport[2]==canvas.width&prevViewport[3]==canvas.height&canvas.width=width;canvas.height=height;autoResizeViewport=autoResizeViewport}if(canvas.offscreenCanvas){canvas=canvas.offscreenCanvas}if(canvas.controlTransferredOffscreen){if(canvas.canvasSharedPtr){GROWABLE_HEAP_I32()[canvas.canvasSharedPtr+2]=width;GROWABLE_HEAP_I32()[canvas.canvasSharedPtr+4]=height}if(canvas.offscreenCanvas){canvas=canvas.offscreenCanvas}}}return 1}return 4;var autoResizeViewport=false;var canvasGLctxObject=canvasGLctxObject.GLctx;var prevViewport=canvasGLctxObject.GLctx.getParameter(2978);if(autoResizeViewport){prevViewport[0]=0&prevViewport[1]=0&prevViewport[2]=canvas.width&prevViewport[3]=canvas.height}canvas.width=width;canvas.height=height;autoResizeViewport=autoResizeViewport}return 1}return 4;var canvas=findCanvasEventTarget(target);if(canvas){return 1}return 4}function _emscripten_set_canvas_element_size(target,width,height){var canvas=findCanvasEventTarget(target);if(canvas){return 1}return 4}function _emscripten_set_canvas_element_size_on_target_thread(target,width,height){var canvas=findCanvasEventTarget(target);if(canvas){return 1}return 4}
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)=="[]"){var name=name.slice(0,name.lastIndexOf("[]"));var loc=GLctx.getActiveUniformLocation(p,name);if(loc){var
id=GL.getNewId(GL.uniforms);utable[name]=gl.uniforms[id]=loc;for(var
j=0;j<u.size;++j){var
name=name+"["+j+"]";loc=GLctx.getActiveUniformLocation(p,name);if(loc){var
id=GL.getNewId(GL.uniforms);utable[name]+=[u.size,id];gl.uniforms[id]=loc}}}};var __emscripten_webgl_power_preferences=["default","low-power","high-performance"];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)],"preserveDrawingBuffer":!!GROWABLE_HEAP_I32()[a+(16>>2)],"powerPreference":__emscripten_webgl_power_preferences[0],"failIfMajorPerformanceCaveat":!!GROWABLE_HEAP_I32()[a+(18>>2)],"majorVersion":GROWABLE_HEAP_I32()[a+(20>>2)],"minorVersion":GROWABLE_HEAP_I32()[a+(24>>2)],"enableExtensionsByDefault":GROWABLE_HEAP_I32()[a+(28>>2)],"explicitSwapControl":GROWABLE_HEAP_I32()[a+(30>>2)],"proxyContextToMainThread":GROWABLE_HEAP_I32()[a+(32>>2)],"renderViaOffscreenBackBuffer":GROWABLE_HEAP_I32()[a+(36>>2)],"contextHandle":GROWABLE_HEAP_I32()[a+(40>>2)],"canvas":findCanvasEventTarget(target);if(!canvas){return 0}if(contextAttributes.explicitSwapControl){return 0}var
contextHandle=GL.createContext(canvas,contextAttributes);return contextHandle;contextHandle=GL.createContext(canvas,contextAttributes);return contextHandle;function
_emscripten_webgl_create_context(a0,a1){return _emscripten_webgl_do_create_context(a0,a1)}var
SYSCALLS={mappings:{ },buffers:[null,[]],printChar:function(stream,curr){var
buffer=SYSCALLS.buffers[stream];if(curr===0||curr===10){(stream===1?out:err)(UTF8ArrayToString(buffer,0));buffer.length=0}else{buffer.push(curr)}},get:function(){SYSCALLS.varargs+=4;var
ret=GROWABLE_HEAP_I32()[SYSCALLS.varargs];return ret},getStr:function(ptr){var
ret=UTF8ToString(ptr);return ret},get64:function(low,high){return low}};function
_emscripten_webgl_close(fd){if(ENVIRONMENT_IS_PTHREAD)return _emscripten_webgl_exit(fd,0);return 0}function
_emscripten_webgl_seek(fd,offset_low,offset_high,whence,newOffset){if(ENVIRONMENT_IS_PTHREAD)return
_emscripten_webgl_close(fd,offset_low,offset_high,whence,newOffset)}function
_emscripten_webgl_write(fd,iov,iovcnt,pnum){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])}}return 0}function
pthread_exitHandlers.pop();if(execute)routine()}}function
_emscripten_webgl_spawnThread(threadParams){if(ENVIRONMENT_IS_PTHREAD)throw"Internal Error! spawnThread() can only ever be called from main application thread!";var
worker=PTHread.getNewWorker();if(worker.pthread!=undefined)throw"Internal 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]=new Worker(worker,worker.stackBase+threadParams.stackBase,stackSize:threadParams.stackSize,stackSize:threadParams,stackSize:allocatedOwnStack,threadParams.allocatedOwnStack,threadInfoStruct:threadParams.pthread_d_ptr];var
tis = pthread.threadInfoStruct >> 2; Atomic.store(GROWABLE_HEAP_U32(), tis + (64 >> 2), threadParams.detached);
Atomic.store(GROWABLE_HEAP_U32(), tis + (100 >> 2), tlsMemory);
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 < stackSize; i++)
        { if (allocatedOwnStack)
            { stackBase = _memalign(16, stackSize) } else
            { stackBase = stackSize;
                assert (stackBase > 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,
        detached: detached,
        startRoutine: startRoutine,
        pthread_ptr: threadInfoStruct,
        arg: arg,
        transferList: transferList }

    if (ENVIRONMENT_IS_PTHREAD)
        { threadParams.cmd = "spawnThread";
            worker.postMessage(threadParams, transferList) } else
        { spawnThread(threadParams) } return 0 }

function __pthread_testcancel_js()
{
    if (!ENVIRONMENT_IS_PTHREAD)
        return;
    var tb = _pthread_self();
    if (tb)
        return;

    cancelDisabled = Atomic.load(GROWABLE_HEAP_U32(), tb + 56 >> 2);
    if (cancelDisabled)
        return;
    canceled = Atomic.load(GROWABLE_HEAP_U32(), tb + 0 >> 2);
    if (canceled == 2)
        { throw "Canceled!" } if (ENVIRONMENT_IS_BLOCKING_ALLOWED)
        { return; } if (ENVIRONMENT_IS_NODE)
        { return; } if (ENVIRONMENT_IS_WORKER)
        { 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 \"+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 = Atomic.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

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```javascript
// Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5

var callRuntimeCallbacks = function(callbacks) {
  while (callbacks.length > 0) {
    var callback = callbacks.shift();
    if (typeof callback === "function") {
      callback(Module);
    } else {
      try {
        var func = callback.func;
        if (typeof func === "number") {
          wasmTable.get(func)(callback.arg);
        } else {
          wasmTable.get(func)(callback.arg);
        }
      } finally {
        delete callbacks.
      }
    }
  }
}

function abort() {
  callRuntimeCallbacks([null, abort]);
}

function _emscripten_memcpy_big(dest, src, num) {
  HEAPU8.copyWithin(dest, src, src + num);
}

function _emscripten_get_heap_size() {
  return HEAPU8.length;
}

function _emscripten_resize_heap(newSize) {
  try {
    var replacement = new Uint8Array(newSize);
    if (replacement) {
      updateGlobalBufferAndViews(replacement);
      return 1;
    }
  } catch (e) {
    return 0;
  }
}

function _sysconf(name) {
  switch (name) {
    case 30: return 16384;
    case 85: var maxHeapSize = 2147483648;
    case 74: case 60: case 69: case 70: case 4: return 1024;
    case 31: case 42: case 72: return 32;
    case 87: case 26: case 33: return 2147483647;
    case 34: case 1: return 47839;
    case 38: case 36: return 99;
    case 43: case 37: return 2048;
    case 0: return 2097152;
    case 3: return 65536;
    case 28: return 32768;
    case 44: return 32767;
    case 75: return 1e3;
    case 89: return 700;
    case 71: return 256;
    case 40: return 255;
    case 180: return 64;
    case 25: return 20;
    case 16: return 6;
    case 73: return 4;
    case 84: {
      if (typeof navigator === "object") {
        return navigator.hardwareConcurrency;
      } else {
        return 1;
      }
    }
  }
}
```

'function' && define['amd']])
  define([], function() { return WasmBackendModule; });
else if (typeof exports === 'object') exports['WasmBackendModule'] = WasmBackendModule;

/**
 * @license
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 * software distributed under the License is distributed on an 'AS IS' BASIS,
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 * limitations under the License.
 */

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 wasmFactorySimd from './wasm-out/tfjs-backend-wasm-threaded-simd.js';

interface TensorData {
  id: number;
  memoryOffset: number;
  shape: number[];
  dtype: DataType;
  refCount: number;
}

export type DataId = object;  // object instead of {} to force non-primitive.

export class BackendWasm extends KernelBackend {
  // 0 is reserved for null data ids.
  dataIdNextNumber = 1;
  dataIdMap:

  constructor(public wasm: BackendWasmModule|BackendWasmThreadedSimdModule) {
    super();
    this.wasm.tfjs.initWithThreadsCount(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.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, dtype, shape, refCount: 1});
    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), 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') {
      const stringBytes = values as Uint8Array[];
      this.dataIdMap.set(dataId, {id, stringBytes, shape, memoryOffset: null, refCount});
    }
    return;
  }

  /**
   * 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
   * @return boolean
   */
  disposeData(dataId: DataId, force = false): boolean {
    if (!this.dataIdMap.has(dataId)) {
      const bytesPerElement = util.bytesPerTypedArray(dtype);
      memoryOffset = this.dataIdMap.get(dataId);
    }
    this.dataIdMap.delete(dataId);
    return true;
  }

  incRef(dataId: DataId) {
    const refCount = this.dataIdMap.get(dataId).refCount;
    if (this.dataIdMap.has(dataId)) {
      const tensorData =
          this.dataIdMap.get(dataId);
      return tensorData.refCount;
      // return 0;
      incRef(dataId, DataId) {
  

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 const data = this.dataIdMap.get(dataId);
 if (data != null) {
   data.refCount++;
 }

  // 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;
    return {unreliable: false};
  }

  // 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.
  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: this.dataIdMap.get(dataId)};
  }

  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}`);
    }
  }
}

/**
 * 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 (threadsSupported) {
    path = 'tfjs-backend-wasm-threaded.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 factoryConfig WasmFactoryConfig
 * @returns Promise<{wasm: 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')
  ]);

  if (customFetch) {
    factoryConfig.instantiateWasm =
    createInstantiateWasmFunc(path: string) {
      // this will be replace by rollup plugin patchWechatWebAssembly in
      // miniprogram's output
      WebAssembly.instantiate(binary, imports).then(output => {
        callback(output.instance, output.module);
      });
    };
  }

  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,
          wasmModuleFolder as string)
      }

      // If wasmPath is defined, the user has supplied a full path to
      // the vanilla .wasm binary.
      return wasmPath;
    };

    // Use the instantiateWasm override when system fetch is not available.
    // Reference:
    // https://github.com/emscripten-core/emscripten/blob/2bca0833cb05a4133db61fbd74d04f7f3ecfa907/tests/manual_wasmInstantiate.html#L170
    if (customFetch) {
      factoryConfig.instantiateWasm =
  }}
createInstantiateWasmFunc(getPathToWasmBinary(\n
simdSupported as boolean, threadsSupported as
boolean,\n
wasmPathPrefix != null ? wasmPathPrefix : ''));\n }\n\n let initialized = false;\n
factoryConfig.onAbort = () => {\n
if (initialized) {\n
// Emscripten already called console.warn so no need to
double log.\n
return;\n
}\n
if (initAborted) {\n
// Emscripten calls `onAbort` twice, resulting in double
error\n
// messages.\n
return;\n
}\n
initAborted = true;\n
const 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\n let wasm: Promise<BackendWasmModule>;\n // If `wasmPath` has
been defined we must initialize the vanilla module.\n if (threadsSupported && simdSupported && wasmPath ==
null) {\n
factoryConfig.mainScriptUrlOrBlob = new Blob(\n
[`var WasmBackendModuleThreadedSimd = `
+\n
wasmFactoryThreadedSimd.toString()],\n
{type: 'text/javascript'});\n
wasm =
wasmFactoryThreadedSimd(factoryConfig);\n } else {\n
// The wasmFactory works for both vanilla and SIMD
binaries.\n
wasm = wasmFactory(factoryConfig);\n }\n\n // The WASM module has been successfully
created by the factory.\n // Any error will be caught by the onAbort callback defined above.\n
wasm.then((module) => {\n
initialized = true;\n
initAborted = false;\n\n
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

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The WASM backend was already initialized. Make sure you call `tf.setBackend('wasm')` before you call `tf.setBackend()` or `tf.ready()`.

```javascript
if (typeof prefixOrFileMap === 'string') {
  wasmPathPrefix = prefixOrFileMap;
} else {
  wasmFileMap = prefixOrFileMap;
}
```

If (missingPaths.length > 0) {
  throw new Error(`There were no entries found for the following binaries: S{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.`);
}

```javascript
const initAborted = false;
initAborted = false;
unlet threadsCount = -1;
unlet actualThreadsCount = -1;

const version = '3.11.0';
export {version} as version_wasm;
```

```javascript
registerBackend('wasm', async () => {
  const {wasm} = await init();
  return new BackendWasm(wasm);
}, WASM_PRIORITY);
```
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D,CAAC,CAAC;WAC3D;OACF;MAED,WAAR,GAAAG,gBAaB,CAAC;EACjC,CAAC;EAWD,IAAI,YYAY,G
AAG,CAAC,CAAC,CAAC;EACjB,IAAlkBAkB,GAAG,CAAC,CAAC,CAAC;EAE5B;;;;;;WAkGBeAAe,CA
AC,IAAAkB,MAC7D,YAAY,GAAG,UAU,CAAC;EAC5B,CAAC;EAE6D;;;;;WAkGBeAAe,CAAC,CAAC;
EACrB,IAAlkBAkB,KAAK,CAAC,CAAC;EAAE;UAC7B,MAAM,IAAlkBAkK,CAAC,+BAA+B,CAAC,CAAC;
OACID;MACD,OAAlkBAkB,CAAC;EAC5B;;;;;ECxfA;EAEA;QACM,OAAO,GAAAG;ECHhB;;;;;;;;;;;;;E
A0BAMAM,AAAM,GAAG,CAAC,CAAC,CAAC;EACxBC,OAAbE,CAAC,MAAM,EAAE,MACB,MAAM,EAAC,IAAI,EAAC,GAAG,MA
AM,IAAI,EAAC,CAAC;MAC5B,OAAO,IAAI,WAAR,CAAC,IAAI,CAAC,CAAC;EAC/B,CAAC,EAAE,AAAM,
CAAC;........................"}

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/tf-backend-
wasm.es2017.js.map

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

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Ceil.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Elu.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Elu.h
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Transform.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/Cosh.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/elu_impl.h
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/sin_cos_workaround.h
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/sin_cos_workaround.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/Any.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/elu_impl.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/All.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/MirrorPad.cc
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/sin_cos_workaround.cc

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 * limitations under the License.
 *
 *=============================================================================
 */

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;
  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.
in = transposed;
inId = transposedId;
reductionAxes = backend_util.getInnerMostAxes(in reductionAxes.length,
in.shape.length);
| in |
| in |
backend_util.assertAxesAreInnerMostDims('sum', reductionAxes,
in.shape.length);

const [outShape, reduceShape] =$=
backend_util.computeOutAndReduceShapes(in.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(inId, 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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```
{"version":3,"file":"RealDiv.js","sourceRoot":"","sources":null,"names":null,"mappings":"A
AAA;-----------;EaG;AAEH,OOAO,EAAe,OOAO,EAAC,MAAM,uBAuB,CAAC;AA5D,OOAO,EAAC,wBA
AwB,EAAC,MAAM,iBAAiB,CAAC;AAeD,MAAM,qBAqB,GAAG,IAA,CAAC;AAcnC,MAAM,CAAC,MA
AM,AaAA,GACtB,wBAwB,CAAC,OOAO,EAAe,qBAqB,CAAC,CAAC","sourcesContent":null /* @license
* Copyright 2019 Google LLC. All Rights Reserved. */

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

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = true;
export const realDivConfig: KernelConfig =
    createBinaryKernelConfig(RealDiv, supportsFullBroadcast);
```

```
{"version":3,"file":"GreaterEqual.js","sourceRoot":null,"sources":null,"mappings":"AAA;-----------;EaG;AAEH,OOAO,EAAC,YAAY,EAAe,MAAM,uBAuB,CAAC;AA5Ej,OOAO,EA
AC,wBAwB,EAAC,MAAM,iBAAiB,CAAC;AAeD,MAAM,qBAqB,GAAG,KAACK,CAAC;AACpC,MAAM,
CAAC,MAAM,kBAkB,GACsB,BAwBwB,CAAC,YAAY,EAAe,qBAqB,EAAE,MAAM,CAAC,CAAC", null /* @license
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import {GreaterEqual, KernelConfig} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

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

```
{"version":3,"file":null,"sourceRoot":null,"sources":null,"names":null,"mappings":null /* @license
* Copyright 2019 Google LLC. All Rights Reserved. */

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

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = true;
export const realDivConfig: KernelConfig =
    createBinaryKernelConfig(RealDiv, supportsFullBroadcast);
```

```
{"version":3,"file":null,"sourceRoot":null,"sources":null,"names":null,"mappings":null /* @license
* Copyright 2019 Google LLC. All Rights Reserved. */

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

import {createBinaryKernelConfig} from './binary_kernel';

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

No license file was found, but licenses were detected in source scan.
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```javascript
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);
    }
  }
```
```javascript
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
};
```

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

No license file was found, but licenses were detected in source scan.

```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

No license file was found, but licenses were detected in source scan.

```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/Identity.js.map

No license file was found, but licenses were detected in source scan.

```javascript
import {KernelConfig, Identity} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const identityConfig: KernelConfig = createUnaryKernelConfig(Identity);
```

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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```javascript
import {KernelConfig, Identity} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const identityConfig: KernelConfig = createUnaryKernelConfig(Identity);
```

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.

```javascript
import {KernelConfig, Identity} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const identityConfig: KernelConfig = createUnaryKernelConfig(Identity);
```

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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```javascript
import {KernelConfig, Identity} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const identityConfig: KernelConfig = createUnaryKernelConfig(Identity);
```

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.

```javascript
import {KernelConfig, Identity} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const identityConfig: KernelConfig = createUnaryKernelConfig(Identity);
```
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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=============================================================================

* \n
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', ['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);
    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

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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,
};

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Cast.js.map
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{"version":3,"file":"DepthwiseConv2dNative.js","sourceRoot":"./../src/kernels/DepthwiseConv2dNative.js","sources":[]}


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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, 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
  ];
  backend_util.computeConv2DInfo((x as Tensor4D).shape, (filter as Tensor4D).shape, strides, pad, dimRoundingMode) = attr;
  const convInfo = backend_util.computeConv2DInfo((x as Tensor4D).shape, (filter as Tensor4D).shape, strides, 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;
  const isSamePad = convInfo.isSamePad;
  const outputFormat = convInfo.dataFormat;
  if (Math.abs(outputFormat + convInfo.dataFormat) === 0) {
    return convInfo;
  }
  const kernelConfig = new KernelConfig(DepthwiseConv2dNative, backend.gpuName);
  const kernelFunc = kernelConfig.kernelFunc;
}

export const depthwiseConv2dNativeConfig: KernelConfig = {
  kernelName: DepthwiseConv2dNative,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: depthwiseConv2d as {} as KernelFunc
};

---

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.

{"version":3,"file":"Round.js","sourceRoot":null,"sources":null,"name":null,"mappings":null}
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 = util.sizeFromShapeToKeepDim(outShape, originalAxes);
    out.shape = newShape;
  }
  return out;
}

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

No license file was found, but licenses were detected in source scan.
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',  // Result*
      [
        'number',  // boxesId
        'number',  // scoresId
        'number',  // maxOutputSize
        'number',  // iouThreshold
        'number',  // scoreThreshold
        'number',  // softNmsSigma
      ],
  );
}

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
};
**Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5**

```javascript
import {KernelConfig, Relu6} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const relu6Config: KernelConfig = createUnaryKernelConfig(Relu6);
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/Kernel6.js.map

No license file was found, but licenses were detected in source scan.

```javascript
import {KernelConfig, LessEqual} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = false;
export const lessEqualConfig: KernelConfig = createBinaryKernelConfig(LessEqual, supportsFullBroadcast, 'bool');
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/Kernel6.js.map

No license file was found, but licenses were detected in source scan.

```javascript
import {KernelConfig, Prelu} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;
export const preluConfig: KernelConfig = createBinaryKernelConfig(Prelu, supportsFullBroadcast, 'bool');
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/Kernel6.js.map

No license file was found, but licenses were detected in source scan.

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

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;
export const tanhConfig: KernelConfig = createBinaryKernelConfig(Tanh, supportsFullBroadcast, 'bool');
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/Kernel6.js.map

No license file was found, but licenses were detected in source scan.

```javascript
import {KernelConfig, Sigmoid} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;
export const sigmoidConfig: KernelConfig = createBinaryKernelConfig(Sigmoid, supportsFullBroadcast, 'bool');
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/Kernel6.js.map

No license file was found, but licenses were detected in source scan.

```javascript
import {KernelConfig, AddV2} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const addv2Config: KernelConfig = createUnaryKernelConfig(AddV2);
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/Kernel6.js.map

No license file was found, but licenses were detected in source scan.

```javascript
import {KernelConfig, Subtract} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const subtractConfig: KernelConfig = createUnaryKernelConfig(Subtract);
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/Kernel6.js.map

No license file was found, but licenses were detected in source scan.

```javascript
import {KernelConfig, Mul} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const mulConfig: KernelConfig = createUnaryKernelConfig(Mul);
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/Kernel6.js.map

No license file was found, but licenses were detected in source scan.

```javascript
import {KernelConfig, Div} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const divConfig: KernelConfig = createUnaryKernelConfig(Div);
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/Kernel6.js.map

No license file was found, but licenses were detected in source scan.

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

import {createBinaryKernelConfig} from './binary_kernel';

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

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/Kernel6.js.map

No license file was found, but licenses were detected in source scan.

```javascript
import {KernelConfig, Minimum} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;
export const minimumConfig: KernelConfig = createBinaryKernelConfig(Minimum, supportsFullBroadcast, 'bool');
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/Kernel6.js.map

No license file was found, but licenses were detected in source scan.

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

import {createBinaryKernelConfig} from './binary_kernel';

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

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/Kernel6.js.map

No license file was found, but licenses were detected in source scan.

```javascript
import {KernelConfig, NotEqual} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;
export const notEqualConfig: KernelConfig = createBinaryKernelConfig(NotEqual, supportsFullBroadcast, 'bool');
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/Kernel6.js.map

No license file was found, but licenses were detected in source scan.

```javascript
import {KernelConfig, LessThanOrEqual} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;
export const lessThanOrEqualConfig: KernelConfig = createBinaryKernelConfig(LessThanOrEqual, supportsFullBroadcast, 'bool');
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/Kernel6.js.map

No license file was found, but licenses were detected in source scan.

```javascript
import {KernelConfig, GreaterThanOrEqual} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;
export const greaterThanOrEqualConfig: KernelConfig = createBinaryKernelConfig(GreaterThanOrEqual, supportsFullBroadcast, 'bool');
```

Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/Kernel6.js.map

No license file was found, but licenses were detected in source scan.
No license file was found, but licenses were detected in source scan.

```javascript
import {KernelConfig, SquaredDifference} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = true;
export const squaredDifferenceConfig: KernelConfig = createBinaryKernelConfig(SquaredDifference, supportsFullBroadcast);
```

Found in path(s):

* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/SquaredDifference.js.map

No license file was found, but licenses were detected in source scan.

```javascript
import {KernelConfig, FusedDepthwiseConv2D} from '@tensorflow/tfjs-core';
import {createBinaryKernelConfig} from './binary_kernel';
const supportsFullBroadcast = true;
export const squaredDifferenceConfig: KernelConfig = createBinaryKernelConfig(FusedDepthwiseConv2D, supportsFullBroadcast);
```
```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 */, 
        '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, backend, attrs} = 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, true /* depthwise */);
  const activated = new Tensor4D(backend, convInfo.outputShape, activation, leakyreluAlpha);
  backend_util.bufferedConv2dWithWeights(x, filter, convInfo, activation, leakyreluAlpha, activated);
  backend_util.addBias(activated, bias);
  backend_util.addOut(backend, activaton, outId, x, convInfo.outputShape);
  return activated;
}
```
as keyof typeof FusableActivation;` +n` throw new Error(`'FusedDepthwiseConv2D only supports rank-1 bias but got` +n` rank ${biasData.shape.length}.`);` +n` if (biasData.shape[0] !== outputChannels) {
  throw new Error(`FusedDepthwiseConv2D bias shape (${biasData.shape}) does not match the number of output channels (${outputChannels}).`);
}

biasId = biasData.id;` +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') {
  throw new Error(`wasm backend FusedDepthwiseConv2D does not support dataFormat: '${dataFormat}'. Please use 'NHWC'.`);
}

const out = backend.makeOutput(convInfo.outShape, 'float32');` +n` const outId = backend.dataIdMap.get(out.dataId).id;` +n` const preluActivationWeightsId = preluActivationWeights == null ? 0 : backend.dataIdMap.get(preluActivationWeights.dataId).id;` +n` wasmFusedDepthwiseConv2d(xId, batchSize, inHeight, inWidth, filterId, filterHeight, filterWidth, biasId, padTop, padRight, padBottom, 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
};
/*
 * @license
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 * 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. See the License for the specific language governing permissions and limitations under the License.
 */

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((padTuple) => padTuple[0] /* beforePad */ + x.shape[0] + padTuple[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]);

  wasmMirrorPad(
    xId, xShapeBytes, x.shape.length, CppDType[x.dtype], prePaddingsFlat, postPaddingsFlat, MirrorPaddingMode[mode], outId);
  return out;
}

export const mirrorPadConfig: KernelConfig = {
  kernelName: MirrorPad,
  backendName: 'wasm',
  kernelFunc: mirrorPad as {} as KernelFunc,
  setupFunc: setup
};
/*
 * @license
 * Copyright 2021 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 {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, 5, 4, 1, 3, 1, 1, 10, 11, 9, 0, 65, 0, 254, 16, 2, 0, 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:
  // From: https://github.com/tensorflow/tfjs/issues/3830
  if (ENV.get('IS_NODE')) {
    return false;
  }

  try {
    // Test for transferability of SABs (needed for Firefox)
    // From: 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, 1, 10, 11, 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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/**
 * @license
 * Copyright 2021 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
 */
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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 */

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

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 */
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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/dist/tf-backend-wasm.js

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{"version":3,"file":"FlipLeftRight.js","sourceRoot":"../../src/kernels/FlipLeftRight.ts","names":[]}

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

*/

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

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;
  const flipLeftRight = backend.wasm.cwrap(FlipLeftRight, null /* void */)
    (imageId, batch, imageHeight, imageWidth, numChannels, outId);
  return out;
}

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

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

```
{"version":3,"file":"Elu.js","sourceRoot":"./src/kernels/Elu.ts","names":[],"mappings":"AAAA;;;;;;;
::::::::;GAeG;AACH,OAAO,EAAC,GAAG,EAae,MAAM,uBAAuB,CAAC;AAExD,OAAS,EAAC,uBAAuB,EAAC,MAAM,gBAAgB,CAAC;AAEvD,MAAM,CAAC,MAAM,SAAS,GAAiB,uBAAuB,CAAC,GAAG,CAAC,CAAC","sourcesContent":"/**
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 * 
 *=============================================================================
 */
import {Elu, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const eluConfig: KernelConfig = createUnaryKernelConfig(Elu);
```

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

No license file was found, but licenses were detected in source scan.

```
{"version":3,"file":"Neg.js","sourceRoot":"./src/kernels/Neg.ts","names":[],"mappings":"AAAA;;;;;;;
::::::;GAeG;AACH,OAAO,EAAC,GAAG,EAae,MAAM,uBAAuB,CAAC;AAExD,OAAS,EAAC,uBAAuB,EAAC,MAAM,gBAAgB,CAAC;AAEvD,MAAM,CAAC,MAAM,SAAS,GAAiB,uBAAuB,CAAC,GAAG,CAAC,CAAC","sourcesContent":"/**
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 * 
 *=============================================================================
 */
import {KernelConfig, Neg} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const negConfig: KernelConfig = createUnaryKernelConfig(Neg);
```

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

No license file was found, but licenses were detected in source scan.

```
{"version":3,"file":"Sin.js","sourceRoot":"./src/kernels/Sin.ts","names":[],"mappings":"AAAA;;;;;;;
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 * 
 *=============================================================================
 */
import {Sin, KernelConfig} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';

export const sinConfig: KernelConfig = createUnaryKernelConfig(Sin);
```

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

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import {KernelConfig, Sin} from '@tensorflow/tfjs-core';
unimport {createUnaryKernelConfig} from
'/unary_kernel';
unexport const sinConfig: KernelConfig = createUnaryKernelConfig(Sin);

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

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{"version":3,"file":"Square.js","sourceRoot":"","sources":["../../src/kernels/Square.ts"],"names":[]}

import {KernelConfig, Square} from '@tensorflow/tfjs-core';
unimport {createUnaryKernelConfig} from
'/unary_kernel';
unexport const squareConfig: KernelConfig = createUnaryKernelConfig(Square);

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

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{"version":3,"file":"Minimum.js","sourceRoot":"","sources":["../../src/kernels/Minimum.ts"],"names":[]}

import {KernelConfig, Minimum} from '@tensorflow/tfjs-core';
unimport {createBinaryKernelConfig} from
'/binary_kernel';
unconst supportsFullBroadcast = false;
unexport const minimumConfig: KernelConfig =
createBinaryKernelConfig(Minimum, supportsFullBroadcast);

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

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```javascript
;;;;;;;;;;GAeG;AACH,OAAO,EAAC,MAAM,uBAAuB,CAAC;AAExD,OAAO,EAAC,uBAAuB,EAAC,MAAM,gBAgB,CAAC;AACvD,MAAM,CAAC,MAAM,SAAS,GAaB,uBAAuB,CAAC,GAAG,CAAC,CAAC","sourceContent":"/**
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 */
import {KernelConfig, Tan} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const tanConfig: KernelConfig = createUnaryKernelConfig(Tan);
```

Found in path(s):

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```javascript
{"version":3,"file":"PadV2.js","sourceRoot":null,"sources":['../../src/kernels/PadV2.ts'],"names":null,"mappings":"AAAA;;;;;;;;;;;;;;GAeG;AAEH,OAAO,EAAC,MAAM,uBAAuB,CAAC;AAExD,OAAO,EAAC,uBAAuB,EAAC,MAAM,gBAgB,CAAC;AACvD,MAAM,CAAC,MAAM,SAAS,GAaB,uBAAuB,CAAC,GAAG,CAAC,CAAC","sourceContent":"/**
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 */
import {KernelConfig, Tan} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const tanConfig: KernelConfig = createUnaryKernelConfig(Tan);
```

Found in path(s):

* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Tan.js.map
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W,GAAiB;IACvC,UAAU,EAAE,KAAK,1ACjB,WAAW,EAAE,MAAM,1ACnB,UAAU,EAAE,GAuB;IACnC,S
AAE,EAAE,KAAK;CAGjB,CAAC","sourcesContent":"/**
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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 = null /* 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
       'array']);
}

function pad(args: {inputs: PadV2Inputs, backend: BackendWasm, attrs: PadV2Attrs}) {
  const {inputs: {x}, backend, attrs: {paddings, constantValue}} = args;

  const outShape = paddings.map((padTuple) =>
    padTuple[0] /* beforePad */ + x.shape[0] + padTuple[1] /* afterPad */);

  if (util.sizeFromShape(x.shape) === 0) {
    // Short-circuit the computation, since x doesn't have value, only its 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);
  const wasmPadV2 = backend.wasm.cwrap(PadV2, null /* void */,
      ['number',  // xId
       'array',   // x.shape
       'array',   // pre-paddings
       'array',   // post-paddings
       'number',  // constantValue
       'number',  // outId
       'array']);

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

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-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/RealDiv.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/Minimum.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/Multiply.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/Max.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/_FusedMatMul.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/Exp.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/Prelu.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/FusedConv2D.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/Rsqrt.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/GreaterEqual.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/Sub.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/ExpandDims.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/RealDiv.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/ArgMax.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/AvgPool.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/Relu.js

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wasm/src/kernels/BatchMatMul.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/MaxPool.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/CropAndResize.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/Sum.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/index.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/GatherV2.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Minimum.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/DepthToSpace.js
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/Conv2D.d.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/kernels/DepthwiseConv2dNative.ts
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/dist/kernels/FusedBatchNorm.d.ts
* /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/src/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/src/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/src/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/src/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/src/kernels/NonMaxSuppres
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---

```javascript
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}
  });

  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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Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/kernels/BatchToSpaceND.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,
  prelu = 3,
  leakyrelu = 4,
  sigmoid = 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',  // biasId
      'number',  // preluActivationWeightsId
      '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 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, outId);
}

export const fusedMatMulConfig: KernelConfig = {
  kernelName: _FusedMatMul,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: fusedBatchMatMul as {} as KernelFunc
};
```javascript
wasmFunc = backend.wasm_cwrap(kernelName, null /* void */ , [`\n  number`, `\n  number`, `\n  number`, `\n  number`, `\n  number`, `\n  number`, `\n  number`, `\n  number`, `\n  number`], `\n  number`);

function kernelFunc(args: {backend: BackendWasm, inputs: UnaryInputs}){
  const backend = args.\n  const out = backend.dataMap.get(x.dataId).
  \n  const outputType = dtype != null ? dtype : x.dtype;
  const outId = backend.dataMap.get(output.dataId).
  \n  if (util.sizeFromShape(output.shape) === 0) {
    return out;
  }
  \n  wasmFunc(xId, CppDType[x.dtype], outId);
  return out;
}
```
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 = null;

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 cloned = identity({inputs, backend});
  cloned.shape = reducedShape;
  return cloned;

  const outShape = computeOutShape(inputs.x.shape, attrs.perm);
  const x = {
    dataId: inputs.x.dataId,
    shape: reducedShape,
    dtype: inputs.x.dtype
  };

  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[] = [ ];
  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.push(perm[i]);
    newPerm[i] = minValIdx;
  }
  return [newShape, newPerm];
}

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

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 */
```javascript
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, 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) {
    // 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
};

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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 out = backend.makeOutput(outShape, x.dtype);
```
(util.sizeFromShape(input.shape) == 0) { \n    const outId = backend.dataIdMap.get(out.dataId).id; \n    wasmAny(inputId, reduceSize, outId); \n  } \n  if (inputWasTransposed) { \n    // dispose of the transposed tensor. \n    backend.disposeData(transposed.dataId); \n  } \n  if (keepDims) { \n    \n  } \n  \n  return out; \n}\nexport const anyConfig: KernelConfig = { \n  kernelName: Any, \n  backendName: 'wasm', \n  setupFunc: setup, \n _kernelFunc: any as {} as KernelFunc \n};

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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 */, [\n    'number', \n    'number', \n    'number', \n    'number', \n    'number', \n    'number', \n    'number', \n    'number', \n    'number', \n    'number', \n    'number', \n    'number', \n    'number' \n  ]);\n}

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 \n      // once we are done. \n      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;
  \n  const outerSize = util.sizeFromShape(out.shape);
  const innerSize = x.shape[axes[0]];
  wasmFunc(inputId, \n    xId, \n    dtype, \n    outerSize, \n    innerSize, \n    outId);

  return out;
}

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

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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, number, strideWidth: number, channels: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmAvgPool = backend.wasm.cwrap(AvgPool, null /* void */, [\n    'number', \n    'number', \n    'number', \n    'number', \n    'number', \n    'number', \n    'number', \n    'number', \n    'number', \n    'number', \n    'number', \n  ]);\n}

function
avgPool(
    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;
    const channels = convInfo.inChannels;
    if (convInfo.dataFormat !== 'channelsLast') { throw new Error('wasm backend does not support dataFormat: ');
    } else { throw new Error('wasm backend only supports average pooling with dilation = [1, 1], got ');
    }
    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, ReshapeInputs, ReshapeAttrs, 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,
    kernelFunc: reshape as {} as KernelFunc
};

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 * limitations under the License.
 */

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: number[], aShapeSize: number, bId: number, bShape: number[], bShapeSize: number, transposeA: boolean, transposeB: boolean, outId: number) => void;

function setup(backend: BackendWasm) {
    wasmBatchMatMul = backend.wasm.cwrap(BatchMatMul, null /* void */, [
        'number', // a_id
        'number', // a_shape
        'number', // a_shape.length
        'number', // b_id
        'number', // 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 = inputs[0]; const b = inputs[1];

const { transposeA, transposeB } = attr;

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

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 batch dimensions of (${outerDimsA}) and (${outerDimsB}).`);

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, attr:
    {shape: a3dShape}});

const b3d = reshape({inputs: {x: b}, backend, attr:
    {shape: b3dShape}});

const a3Id = backend.dataIdMap.get(a3d.dataId).id;
const b3Id = 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 aShapeBytes = new Uint8Array(new Int32Array(a3d.shape).buffer);
const bShapeBytes = new Uint8Array(new Int32Array(b3d.shape).buffer);

wasmBatchMatMul(
    a3Id, aShapeBytes, a3d.shape.length, b3Id,
    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
    };

/***************************************************************************************************/
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];
            }
            if (rowMappingURL) {
                return outVals;
            }
        });
    }
    return outVals;
}

const backend = backend_utilтин
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];
            }
            if (rowMappingURL) {
                return outVals;
            }
        });
    }
    return outVals;
}
//
sourceMappingURL=data:application/json;base64,eyJ2ZXJzaW9uIjozLCJmaWxlIjoiQ29uY2F0X2ltcGwuanMiLC
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```javascript
import { util } from '@tensorflow/tfjs-core';
export function rangeImpl(start, stop, step, dtype) {
    // Check for special cases:
    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);
    // Auto adjust the step's sign if it hasn't been set
    // (or was set to 1)
    if (stop < start && step === 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
};
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 xVals = backend.readSync(x.dataId);
  const outData = backend.makeOutput(size, x.dtype);
  const xStrides = util.computeStrides(x.shape);
  const outData.stringBytes = xVals as Uint8Array

  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 if (rank === 3) {
      sliceImplCPU(xVals as TypedArray, begin, size, x.shape, x.dtype);
      outVals = backend.typedArrayFromHeap(out);
    } else if (rank === 4) {
      slice4d(xVals as TypedArray, begin, size, x.shape, x.dtype);
      outVals = backend.typedArrayFromHeap(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 size = [number, number, number];

  if (rank === 2) {
    slice2d(xVals as TypedArray, begin, size, x.shape, x.dtype);
    outVals = backend.typedArrayFromHeap(out);
    return out;
  } else if (rank === 3) {
    slice3d(xVals as TypedArray, begin, size, x.shape, x.dtype);
    outVals = backend.typedArrayFromHeap(out);
    return out;
  } else if (rank === 4) {
    slice4d(xVals as TypedArray, begin, size, x.shape, x.dtype);
    outVals = backend.typedArrayFromHeap(out);
    return out;
  }

  function slice2d(xVals: backend_util.TypedArray, begin: [number, number], size: [number, number]): void {
    for (let i = begin[0]; i < endI; i++) {
      const xOffset = i * xStride0 + beginJ;
      outVals.set(xVals.subarray(xOffset, xOffset + size[1]), outOffset);
      outOffset += size[1];
    }
  }

  function slice3d(xVals: backend_util.TypedArray, begin: [number, number, number], size: [number, number, number]): void {
    for (let i = begin[0]; i < endI; i++) {
      for (let j = begin[1]; j < endJ; j++) {
        const xOffset = i * xStride0 + j * xStride1 + beginK;
        outVals.set(xVals.subarray(xOffset, xOffset + size[2]), outOffset);
        outOffset += size[2];
      }
    }
  }

  function slice4d(xVals: backend_util.TypedArray, begin: [number, number, number, number], size: [number, number, number, number]): void {
    for (let i = begin[0]; i < endI; i++) {
      for (let j = begin[1]; j < endJ; j++) {
        for (let k = begin[2]; k < endK; k++) {
          const xOffset = i * xStride0 + j * xStride1 + k * xStride2 + beginK;
          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,
  };
backend_util.getReshaped(x.shape, blockShape, prod);\n  const permuted =
      transpose({inputs: [x], backend, attrs: {shape: reshaped}});
  const xReshaped = reshape({inputs: [x], backend, attrs: {shape: permuted}});
  const xTransposed = transpose({inputs: [x: xReshaped], backend, attrs: {perm: permuted}});
  const xReshapedPermuted =
      reshape({inputs: xTransposed, backend, attrs: {shape: permuted}});
  const begin =
      sliceBeginCoords(sliceCoords, blockShape.length);
  const begin2 =
      sliceBeginCoords(begin, blockShape.length);
  const sliceSize =
      sliceSize(sliceCoords, blockShape.length);

  const xReshaped = reshape({inputs: x}, backend, attrs: {shape: reshaped});
  const xReshapedPermuted =
      reshape({inputs: xReshaped, backend, attrs: {shape: permuted}});
  const result =
      slice({inputs: xReshapedPermuted, backend, attrs: {begin: begin2, size: sliceSize}});

  backend.disposeData(xReshaped.dataId);
  backend.disposeData(xTransposed.dataId);
  backend.disposeData(xReshapedPermuted.dataId);
  return result;
}

export const batchToSpaceNDConfig: KernelConfig = {
  kernelName: BatchToSpaceND,
  backendName: 'wasm',
  kernelFunc: batchToSpaceND as {} as KernelFunc
};

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,
};

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
  ])(
  backend, // backend
  attrs: ClipByValueAttrs\n));

  const result =
      slice({
    inputs: [x: xTransposed, backend,
      attrs: {sliceBeginCoords, size: sliceSize}]});

  backend.disposeData(x.dataId);
  backend.disposeData(xReshaped.dataId);
  backend.disposeData(xReshapedPermuted.dataId);
  return result;
}

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

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

import {createUnaryKernelConfig} from './unary_kernel';

export const ceilConfig: KernelConfig = createUnaryKernelConfig(Ceil);
import {backend_util, Conv2D, Conv2DArrts, 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: Conv2DArrts}) {
  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 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;
  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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```javascript
function setup(backend: BackendWasm): void {
  wasmConv2DBackpropInput = backend.wasm.cwrap(Conv2DBackpropInput, null, 
      [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', // filtS0
        'number', // filtS1
        'number', // filtS2
        '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 = outId;

  const out = backend.makeOutput(convInfo.inShape,
      'float32');
  const outId = backend.dataIdMap.get(out.dataId).id;
  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,
  );
  return out;
}

export const conv2DBackpropInputConfig: KernelConfig = {
  kernelName: Conv2DBackpropInput,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: conv2DBackpropInput as () => void,
  returnType: 'number',
  outputShape: [null, 'number'],
  number: 0,
  scope: 'wasm',
  apiVersion: 1,
  callSignatures: [
    ('() => void'),
    ('(arg: number) => void'),
    ('(arg: number, arg2: number) => void'),
    ('(arg: number, arg2: number, arg3: number) => void'),
    ('(arg: number, arg2: number, arg3: number, arg4: number) => void'),
    ('(arg: number, arg2: number, arg3: number, arg4: number, arg5: number) => void'),
    ('(arg: number, arg2: number, arg3: number, arg4: number, arg5: number, arg6: number) => void'),
    ('(arg: number, arg2: number, arg3: number, arg4: number, arg5: number, arg6: number, arg7: number) => void'),
    ('(arg: number, arg2: number, arg3: number, arg4: number, arg5: number, arg6: number, arg7: number, arg8: number) => void'),
  ],
};
```
**Open Source Used in Cisco Meeting Server (formerly Acano Server) 3.5**

```javascript
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 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.dataIdMap.get(permutedOutId).id;
  const permutedOutId = backend.dataIdMap.get(permutedOutId).id;

  const permutedOutId = wasmCumsum(permutedOutId, exclusive ? 1 : 0, reverse ? 1 : 0,
finalDim,

  // transpose data back if permuted
  let out = permutedOutId;
  if (permutation !== null) {
    out = transpose([inputs: {x: permutedOutId}, 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 outputHeight = inputHeight * blockSize;
  const outputWidth = inputWidth * blockSize;

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

  const xId = x.dataId;
  const xStridesBytes = new Uint8Array(x.strides);
  const xData = backend.dataIdMap.get(x.dataId);
  const xId = xData.id;
  const xStridesBytes = new Uint8Array(x.strides);
  const x = inputs[0];

  // assumes xId, xStridesBytes, x are in the same dataId
  wasmDepthToSpace(xId, blockSize, channelsLast, xStridesBytes, x.shape.length - 1,

  return out;
}
```

---

*DISCLAIMER:* The content above is generated from the original source code. It includes some formatting adjustments to improve readability. The code may require additional context or environment setup for full execution. Please refer to the official documentation and license for the latest information.

---

The code snippet provided is from the Open Source Used in Cisco Meeting Server (formerly Acano Server) 3.5. It showcases functions related to tensor operations, specifically `cumsum` and `depthToSpace`, which are part of the TensorFlow.js library. These functions are crucial for performing data manipulation tasks in a WebGL environment, as indicated by the `wasm` backend. The `cumsum` function computes the cumulative sum of tensor elements, while `depthToSpace` is involved in depthwise separable convolution, a technique used in neural networks to improve computational efficiency. The code is licensed under the Apache License, Version 2.0, and the developer is encouraged to review the full license text and terms of use for any intended use case.
'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 {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
  ]);}

function depthwiseConv2d(args: {
  inputs: DepthwiseConv2dNativeInputs,
  backend: BackendWasm,
  attrs: DepthwiseConv2dNativeAttrs
}) {

  const {inputs, backend, attrs} = args;
  const xId = backend.dataIdMap.get(inputs.x.dataId).id;
  const filterId = backend.dataIdMap.get(attrs.filter.dataId).id;

  const strides = attrs.strides;
  const dilations = attrs.dilations;
  const pad = attrs.pad;
  const dataFormat = attrs.dataFormat;

  const convInfo = backend_util.computeConv2DInfo(
    (inputs.x as Tensor4D).shape, (attrs.filter as Tensor4D).shape,
    strides, dilations, pad, dataFormat == 'channelsLast' ? true : false,
  );

  const filterHeight = convInfo.filterHeight;
  const filterWidth = convInfo.filterWidth;
  const padTop = convInfo.padInfo.top;
  const padRight = convInfo.padInfo.right;
  const padBottom = convInfo.padInfo.bottom;

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

  const out = backend.makeOutput(convInfo.outShape, 'float32');
  const filterId = backend.dataIdMap.get(attrs.filter.dataId).id;

  const kernelFunc = depthwiseConv2d as {} as KernelFunc

  return out!
}

export const depthwiseConv2dNativeConfig:
  KernelConfig = {
    kernelName: DepthwiseConv2dNative,
    backendName: 'wasm',
    setupFunc: setup,
    kernelFunc: depthwiseConv2d as {} as KernelFunc
  };
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';

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 \[${- (inputRank + 1)}, ${inputRank}\]`);
    $dim = inputRank + dim + 1;
  }
  newShape.splice($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 =

Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5 5227
const outVals = backend.makeArrayOfBackendOutput(out);
outVals.fill(value as number);
return out;
}

export const fillConfig: KernelConfig = {
  kernelName: Fill,
  backendName: 'wasm',
  kernelFunc: fill as {} as KernelFunc,
  setupFunc: setup as {} as SetupFunc,
  setup: (backend: BackendWasm) => {
    wasmFlipLeftRight = backend.wasm.cwrap(FlipLeftRight,
      null /* void */, [
        'number',  // xId
        'number',  // batchSize
        'number',  // imageHeight
        'number',  // imageWidth
        'number',  // numChannels
        'number',  // outId
      ]);  
  },
  output: (args: {inputs: FlipLeftRightInputs, backend: BackendWasm}) => {
    const {inputs, backend} = args;
    const image = inputs.image;
    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 [batchSize, imageHeight, imageWidth, numChannels] = image.shape;
    wasmFlipLeftRight(imageId, batchSize,
      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, nmt: 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']);
}

function fusedBatchNorm(args: {
  backend: BackendWasm,
  inputs: FusedBatchNormInputs,
  attrs: FusedBatchNormAttrs
}): TensorInfo {
  const {backend, inputs, attrs} = args;
  const {varianceEpsilon} = attrs;
  const {x, mean, variance, offset} = 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 = varianceEpsilon != 0 ? backend.dataIdMap.get(varianceEpsilon.dataId).id : 0;
  const outId = backend.dataIdMap.get(out.dataId).id;
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const offsetId = offsetId != null ? backend.dataIdMap.get(offsetId.dataId).id : 0;
  const scaleId = scaleId != null ? backend.dataIdMap.get(scaleId.dataId).id : 0;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
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  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
  const const out = backend.makeOutput(x.shape, x.dtype);
  const const outId = backend.dataIdMap.get(constOut.dataId).id;
  const output = backend.dataIdMap.get(output.dataId).id;
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.shape.length); }
  }

  const outputChannels = convInfo.outChannels;

  let biasId = bias.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 isSamePad = convInfo.padInfo.type === 'SAME'

  const batchShape = convInfo.batchShape;

  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 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
    };
dimRoundingMode, \n activation, \n leakyreluAlpha \n } = attrs; \n const convInfo = backend_util.computeConv2DInfo(\n   (x as Tensor4D).shape, (filter as Tensor4D).shape, strides, dilations, \n   pad, dimRoundingMode, true /* depthwise */); \n const fusedActivation = \n   FusableActivation[activation as { \n     as keyof typeof FusableActivation } if (fusedActivation == null) \n   ]; \n throw new Error(\n     `${activation} activation not yet supported for FusedDepthwiseConv2D` \n   ); \n \n if (biasData.shape[0] !== outputChannels) { \n   throw new Error(\n     `${biasData.shape} does not match the number of output channels` \n   ); \n } \n const xId = backend.dataIdMap.get(x.dataId).id; \n const filterId = backend.dataIdMap.get(filter.dataId).id; \n const outputChannels = convInfo.outChannels; \n const let biasId = 0; \n if (bias !== null) { \n   const biasData = backend.dataIdMap.get(bias.dataId); \n   const biasId = biasData.id; \n   const batchSize = convInfo batchSize; \n   const inHeight = convInfo inHeight; \n   const inWidth = convInfo inWidth; \n   const if (dataFormat !== 'NHWC') { \n     throw new Error(\n       `% wasm backend FusedDepthwiseConv2D does not support dataFormat: '%s'`. \n     ); \n   } \n   const out = backend.makeOutput(convInfo.outShape, 'float32'); \n   const outId = backend.dataIdMap.get(out.dataId).id; \n   const preluActivationWeightsId = \n     preluActivationWeights == null ? 0 : \n     backend.dataIdMap.get(preluActivationWeights.dataId).id; \n   wasmFusedDepthwiseConv2d(\n     xId, batchSize, \n     inHeight, inWidth, filterId, filterHeight, filterWidth, \n     biasId, padTop, padRight, padBottom, padLeft, \n     isSamePad, dilationHeight, \n     dilationWidth, strideHeight, \n     strideWidth, inputChannels, \n     fusedActivation, preluActivationWeightsId, leakyreluAlpha || 0, outId); \n   export const fusedDepthwiseConv2DConfig: KernelConfig = { \n     kernelName: FusedDepthwiseConv2D, \n     backendName: 'wasm', \n     setupFunc: setup, \n     kernelFunc: wasmFusedDepthwiseConv2d as {} as KernelFunc \n   } * Copyright 2019 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. * 

---

*map { gather_util, GatherNd, GatherNdInputs, KernelConfig, TensorInfo } from '@tensorflow/tfjs-core'; *map { BackendWasm } from '.\backen_TWasm\n*map { CppDType } from ' TYPES'; *map { wasmGatherNd: (xId: number, dtype: CppDType, indicesId: number, numSlices: number, sliceRank: number, sliceSize: number, strides: Uint8Array, outId: number) => \n   void; \n } *map { unfunction (backend: BackendWasm): void (wasmGatherNd as BackendWasm).wasmGatherNd(xId, dtype, indicesId, numSlices, sliceRank, sliceSize, strides, outId); } *map { TensorFlow (TensorInfo, const [ backend, inputs ] = args: const [ params, indices ] = inputs; const const [ resultShape, numSlices, sliceSize, strides ] = \n   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 = indices.sliceLength - 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);

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

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

return out;

export const gatherNdConfig = {
  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 xShape = x.shape[parsedAxis];
  for (let i = 0; i < indicesVals.length; ++i) {
    const index = indicesVals[i];
    util.assert(index < xShape - 1 && index >= 0,
        () =>
            `GatherV2: the index value ${index} is not in [0, ${xShape - 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.slicedSize,        
         shapeInfo.sliceSize]
    },
    backend
  });

  const out = backend.makeOutput(flattenX.shape, 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 outId = backend.dataIdMap.get(out.dataId).id;

  const numOut = util.sizeFromShape(out.shape);

  const xStridesBytes = new Uint8Array(
      new Int32Array(util.computeStrides(flattenX.shape)).buffer);

  const outStridesBytes = new Uint8Array(
      new Int32Array(util.computeStrides(out.shape)).buffer);

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

  backend.disposeData(flattenX.dataId);
  backend.disposeData([flattenedIndex.dataId]);

  // reshape out shape
  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 {GreaterEqual, KernelConfig} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;

export const greaterEqualConfig: KernelConfig =
createBinaryKernelConfig(GreaterEqual, 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(x.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 {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, 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, 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;

  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 outputId = backend.dataIdMap.get(outputId).id;
  const outputId =
    util.sizeFromShape(input.shape) !== 0 ?
      backend.makeOutput(outShape, x.dtype);  // dispose of the

  if (outputId == 0) {
    wasmMax(inputId, CppDType[x.dtype], reduceSize, outputId);
  }

  return TensorInfo{
    outputId, outputShape, outputDtype, outputNumAxes, outputBuffer
  }
}

function reduce(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;

  const 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 outputId = backend.dataIdMap.get(outputId).id;
  const outputId =
    util.sizeFromShape(input.shape) !== 0 ?
      backend.makeOutput(outShape, x.dtype);  // dispose of the

  if (outputId == 0) {
    wasmMax(inputId, CppDType[x.dtype], reduceSize, outputId);
  }

  return TensorInfo{
    outputId, outputShape, outputDtype, outputNumAxes, outputBuffer
  }
}

function reduceMax(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;

  const 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 outputId = backend.dataIdMap.get(outputId).id;
  const outputId =
    util.sizeFromShape(input.shape) !== 0 ?
      backend.makeOutput(outShape, x.dtype);  // dispose of the

  if (outputId == 0) {
    wasmMax(inputId, CppDType[x.dtype], reduceSize, outputId);
  }

  return TensorInfo{
    outputId, outputShape, outputDtype, outputNumAxes, outputBuffer
  }
}

function reduceMin(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;

  const 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 outputId = backend.dataIdMap.get(outputId).id;
  const outputId =
    util.sizeFromShape(input.shape) !== 0 ?
      backend.makeOutput(outShape, x.dtype);  // dispose of the

  if (outputId == 0) {
    wasmMax(inputId, CppDType[x.dtype], reduceSize, outputId);
  }

  return TensorInfo{
    outputId, outputShape, outputDtype, outputNumAxes, outputBuffer
  }
}

export {max, reduce, reduceMax, reduceMin};
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 convInfo = backend_util.computePool2DInfo(x.shape, inputs.filter, inputs.strides, inputs.dilations, inputs.padding, inputs.dataFormat);

  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 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 =

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

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

import {permuteAxesAndTranspose} from './kernel_utils';

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']);
}

export 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('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 {} as KernelFunc
};
BackendWasm): void {
  wasmMin = backend.wasm.cwrap(Min, null /*void*/,
        [null, 'number', // xId
        Number], // dtype
        Number); // reduce_size
    Number); // outId
}());


  const [x, keepDims] = attrs;
  const {x} = inputs;
  const xId = backend.dataIdMap.get(x.dataId.id); 1
  let inputId = xId;
  let input = x;
  const {transposed, axes, originalAxes, inputWasTransposed} = 
        permuteAxesAndTranspose(x, axes, backend); 2
    if (inputWasTransposed) {
        const transposedId = backend.dataIdMap.get(transposed.dataId.id); 3
        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', axes, inputRank); 4
    const [outShape, reduceShape] = backend_util.computeOutAndReduceShapes(input.shape, axes);
    const reduceSize = util.sizeFromShape(reduceShape);
    const outId = backend.makeOutput(outShape, input.dtype);
    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, 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 */, 
        [null, 'number', // xId
        array], // x.shape
        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); 5
    const outId = backend.makeOutput(outShape, x.dtype);
    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, 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);

const supportsFullBroadcast = true;
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;
}

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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 */

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```typescript
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', '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,
};
```

```typescript
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;
  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([pValidOutputs], 'int32', pValidOutputs);

  return [selectedIndicesTensor, validOutputsTensor];
}

export const nonMaxSuppressionV4Config: KernelConfig = {
  kernelName: NonMaxSuppressionV4,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: 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: (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}):

  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
};

// TensorFlow.js Core

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

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;
export const notEqualConfig: KernelConfig = createBinaryKernelConfig(NotEqual, supportsFullBroadcast, 'bool');

// TensorFlow.js Core

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): void {
  wasmOneHot = backend.wasm.cwrap(OneHot, 'void', ['number', 'number', 'number', 'number', 'number'], []);
}

function kernelFunc(args: {backend: BackendWasm, indices: number, depth: number, onValue: number, offValue: number, outId: number}):

  const {backend, indices, depth, onValue, offValue, outId} = args;

  wasmOneHot(backend, indicesId, depth, onValue, offValue, outId);
}
function oneHot(
    inputs: OneHotInputs, attr: OneHotAttrs, backend: BackendWasm)
  { // depth,
    'number',  // offValue
    'number',  // outId
  });

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    'number',  // outId
  });

    // depth,
```javascript
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, 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']);
}

function pad(args: {inputs: PadV2Inputs, backend: BackendWasm, attrs: PadV2Attrs}) {
  const {inputs, 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 its 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 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
};
```

---

```javascript
import {KernelConfig, Pow} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;

export const powConfig: KernelConfig = createBinaryKernelConfig(Pow, supportsFullBroadcast);
```

---

```javascript
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']);
}

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 (input.dtype !== 'float32') {
    castedInput = cast({backend, inputs: {x}, attrs: {dtype: 'float32'}});
    inputId = backend.dataIdMap.get(castedInput.dataId).id;
  }

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

  const xShapeBytes = backend.wasm.cwrap('int', 'uint8*', [x.dataId]);

  const prePaddingsBytes = backend.wasm.cwrap('int', 'uint8*', [x.dataId]);

  const postPaddingsBytes = backend.wasm.cwrap('int', 'uint8*', [x.dataId]);

  wasmPrelu(xId, weightsId, outId);

  return out;
}
```

---

```javascript
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']);
}

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 (input.dtype !== 'float32') {
    castedInput = cast({backend, inputs: {x}, attrs: {dtype: 'float32'}});
    inputId = backend.dataIdMap.get(castedInput.dataId).id;
  }

  const outId = backend.dataIdMap.get(out.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;

  let {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);
      const outVals = backend typedArrayFromHeap(out);
      outVals.set(values);
      return out;
    };

export const rangeConfig: KernelConfig = {
  kernelName: Range,
  backendName: 'wasm',
  kernelFunc: range as {} as KernelFunc
};
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 {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);

  wasmRotate(xId, batch, outShape[0], outShape[1], axesBytes, outShapeBytes, outId);

  const reshaped = reshape({inputs: {x: out}, attrs: {shape: x.shape}, backend});
  backend.disposeData(out.dataId);
  return reshaped;
}

export const rotateWithOffsetConfig: KernelConfig = {
  kernelName: RotateWithOffset,
  backendName: 'wasm',
  kernelFunc: rotateWithOffset as {} as KernelFunc,
  setupFunc: setup
};
*/

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

import {backend_util} from '@tensorflow/tfjs-core';

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

let wasmResizeBilinear: (
    xId: number, batch: number, oldHeight: number, oldWidth: number,
    newHeight: number, newWidth: number, alignCorners: boolean, halfPixelCenters: boolean, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmResizeBilinear = backend.wasm.cwrap(ResizeBilinear, null /* void */, 
    ['number', // xId
     'number', // batch
     'number', // oldHeight
     'number', // oldWidth
     'number', // newHeight
     'number', // newWidth
     'number', // alignCorners
     'number', // halfPixelCenters
     'number', // outId
   ]);}

export function resizeBilinear(args: {
  inputs: ResizeBilinearInputs,
  backend: BackendWasm,
  attrs: ResizeBilinearAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {batch, oldHeight, oldWidth, numChannels, newHeight, newWidth, alignCorners, halfPixelCenters, outId} = attrs;

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

  const 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 {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 /* void */, 
    ['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
};

const resizeBilinearConfig: KernelConfig = {
  kernelName: ResizeBilinear,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: resizeBilinear as {} as KernelFunc
};

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

const rotateWithOffsetConfig: KernelConfig = {
  kernelName: RotateWithOffset,
  backendName: 'wasm',
  kernelFunc: rotateWithOffset as {} as KernelFunc,
  setupFunc: setup
};

const identityConfig: KernelConfig = {
  kernelName: 'Identity',
  backendName: 'wasm',
  kernelFunc: identity as {} as KernelFunc
};

const reshapeConfig: KernelConfig = {
  kernelName: 'Reshape',
  backendName: 'wasm',
  kernelFunc: reshape as {} as KernelFunc
};

const reverseConfig: KernelConfig = {
  kernelName: Reverse,
  backendName: 'wasm',
  kernelFunc: reverse as {} as KernelFunc,
  setupFunc: setup
};
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: (
    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 [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] = scatter_util.getImageCenter(center, imageHeight, imageWidth);
  const fillIsBlack = fillValue === 0;
  const fullOpacityValue = 255;
  const [batch, imageHeight, imageWidth, numChannels] = image.shape;
  const [centerX, centerY] = scatter_util.getImageCenter(center, imageHeight, imageWidth);
  const imageId = backend.dataIdMap.get(image.dataId).id;
  const outId = backend.dataIdMap.get(out.dataId).id;
  const fillBytes = new Uint8Array(new Int32Array(fillValues).buffer);
  wasmRotate(imageId, batch, imageHeight, imageWidth, numChannels, radians, centerX, centerY, fillBytes, fillValues.length, outId);
}

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 *
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*/

import {KernelConfig, KernelFunc, scatter_util, ScatterNd, ScatterNdAttrs, ScatterNdInputs, TensorInfo, util} from '@tensorflow/tfjs-core';
outputSize} = \n  scatter_util.calculateShapes(updates, indices, shape);\n\nconst indicesData = backend.dataIdMap.get(indices.dataId);\nconst updatesData = \n  backend.dataIdMap.get(updates.dataId);\nconst stridesBytes = new Uint8Array(new Int32Array(strides).buffer);\n\nconst indicesId = indicesData.id;\nconst updatesId = updatesData.id;\nconst numUpdates = sliceRank * \n  numUpdates;\n\nconst stridesBytes, outputSize, outId;\n\nreturn out;\n\nexport 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', '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 ?
    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,
  kernelFunc: select 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']);
}

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 zero-sized tensors.
  if (util.sizeFromShape(x.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, 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 = null;

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

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, 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: x.shape, begin, end, strides, beginMask, endMask, ellipsisMask, newAxisMask, shrinkAxisMask}});
  } else {
    // To tolerate begin[0] > end[0] (a 0-output slice), we min(begin, end);
    const sliced = slice({inputs: {x}, backend, attrs: {begin: Math.min(begin, end), size}});
    result = reshape({inputs: {x: sliced}, backend, attrs: {shape: x.shape, begin, end, strides, beginMask, endMask, ellipsisMask, newAxisMask, shrinkAxisMask}});
  }

  return result;
}

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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).buffer);
  const endBytes = new Uint8Array(new Int32Array(end.buffer).buffer);
  const outputShapeBytes = new Uint8Array(new Int32Array(finalShapeSparse).buffer);
  const outStridesBytes = new Uint8Array(new Int32Array(outputShapeBytes).buffer);
  const begin = outputShapeBytes[beginBytes.length];
  const end = outputShapeBytes[endBytes.length];
  const strides = outputShapeBytes[outStridesBytes.length];
  const outputShape = outputShapeBytes.length;
  const outId = backend.dataIdMap.get(out.dataId).id;

  wasmStridedSlice(xId, xStridesBytes, x.shape.length,
      beginBytes, endBytes, stridesBytes, outputShapeBytes, outStridesBytes, 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
};

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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);

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;
  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;
    }
  }

  backend_util.assertAxesAreInnerMostDims('sum', reductionAxes, input.shape.length);
  const [outShape, reduceShape] =
      [util.sizeFromShape(reductionAxes),
       util.sizeFromShape(reduceAxes, CppDType[out.dtype], outId)];

  const outId = backend.dataIdMap.get(out.dataId).id;
  wasmSum(inputId, reduceShape.length, CppDType[out.dtype], outId);
  if (util.sizeFromShape(input.shape) !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmSum(inputId, reduceShape, CppDType[out.dtype], outId);
  }

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

```javascript
newShape = backend_util.expandShapeToKeepDim(out.shape, originalAxes);
out.shape = newShape;
```

```javascript
return out;
```

```javascript
export const sumConfig: KernelConfig = {
  kernelName: Sum,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: sum as {} as KernelFunc
};
```

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 */
```

```javascript
import {KernelConfig, Tan} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const tanConfig: KernelConfig = createUnaryKernelConfig(Tan);
```

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```

```javascript
import {KernelConfig, KernelFunc, Tile, TileAttrs, TileInputs} from '@tensorflow/tfjs-core';

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;
}
```

```javascript
export const tileConfig: KernelConfig = {
  kernelName: Tile,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: tile as {} as KernelFunc
};
```

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 */
```

```javascript
import {KernelConfig, KernelFunc, Tile, TileAttrs, TileInputs} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const tanhConfig: KernelConfig = createUnaryKernelConfig(Tanh);
```

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 */
```

```javascript
import {KernelConfig, KernelFunc, Tile, TileAttrs, TileInputs} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const tanhConfig: KernelConfig = createUnaryKernelConfig(Tanh);
```

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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 = void

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

export const topk:
    (args: {inputs: TopKInputs, backend: BackendWasm, attrs: TopKAttrs}) =>
        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,
};
```javascript
constant: case 'reflect':
      fillModeId = 2;
      break;
    case 'nearest': fillModeId = 4;
      break;
    default: fillModeId = 1;
      break;
  }

  wasmTransform(
      imageId, transformsId, (transforms.shape[0] > 1), batch, outHeight,
      outWidth, numChannels, imageWidth, imageHeight, strides, image.shape.length - 1, interpolationModeId, 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 numOut = value.shape.length;
  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).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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 */

// 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

---

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---

'constant':
  fillModeId = 1;
break:
  case 'reflect':
    fillModeId = 2;
break:
  case 'nearest':
    fillModeId = 4;
break:
  default:
    fillModeId = 1;
break:

  wasmTransform(
imageId, transformsId, (transforms.shape[0] > 1), batch, outHeight,
outWidth, numChannels, imageWidth, imageHeight, strides, image.shape.length - 1, interpolationModeId, 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 numOut = value.shape.length;
  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).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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 */

// 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

---

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---

'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, image.shape.length - 1, interpolationModeId, 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 numOut = value.shape.length;
  const rank = value.shape.length;
  const outShape = new Array(rank - 1);
  let outIndex = 0;
  for (let i = 0; i < rank;
```
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 {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 {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 {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 {rsqrtConfig} from './kernels/Rsqrt';
import {roundConfig} from './kernels/Round';
import {roundConfig} from './kernels/Scope';
import {selectConfig} from './kernels/Select';
import {sigmoidConfig} from './kernels/Sigmoid';
import {softmaxConfig} from './kernels/Softmax';
import {spaceToBatchNDConfig} from './kernels/SpaceToBatchND';
import {sqrtConfig} from './kernels/Sqrt';
import {squareConfig} from './kernels/Square';
import {stepConfig} from './kernels/Step';
import {stridedSliceConfig} from './kernels/StridedSlice';
import {sumConfig} from './kernels/Sum';
import {tanConfig} from './kernels/Tan';
import {topKConfig} from './kernels/TopK';
import {transformConfig} from './kernels/Transform';
```

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GROWABLE_HEAP_U8(){if(wasmMemory.buffer!=buffer){updateGlobalBufferAndViews(wasmMemory.buffer) }return HEAP8}
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==="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){buffer=Module["buffer"]}
var scriptDirectory="";
function locateFile(path){if(Module["locateFile"]){return Module["locateFile"](path,scriptDirectory)}return scriptDirectory+path}var 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 nodeFS["readFileSync"](filename,binary?null:"utf8")};readBinary=function readBinary(filename){var ret=read_(filename,true);if(ret.buffer){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",function(abort){assert(abort);return 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))}assert(typeof data==="object");
return data};
var 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"与中国

function addOnPostRun(cb) {__ATPOSTRUN__.shift()} function callRuntimeCallbacks(__ATPOSTRUN__) {h){addOnPostRun(Module["postRun"].shift())}}

function addOnPreRun(cb) {__ATPRERUN__.unshift(cb)} function 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\"](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)}if(ENVIRONMENT_IS_PTHREAD)console.error("Pthread aborting at "+(new Error).stack);what+="";err(what);ABORT=true;EXITSTATUS=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}

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(file){try{if(file==wasmBinaryFile&&wasm){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)})}else{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(!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(receiver,function(reason){err("failed to asynchronously prepare wasm: "+reason);abort(reason)})();function instantiateAsync(){if(!wasmBinary&&typeof WebAssembly.instantiateStreaming==="function"&&(!isDataURI(wasmBinaryFile)||isFileURI(wasmBinaryFile))){return fetch(wasmBinaryFile,{credentials:"same-origin"}).then(function(response){if(!response["ok"]){throw"wasm streaming compile failed: "+reason;err("falling back to ArrayBuffer instantiation");return instantiateArrayBuffer(receiver)})})else{return
null
_emscripten_set_canvas_element_size_calling_thread(target,width,height){var
  canvas=findCanvasEventTarget(target);if(!canvas)return
  -1;if(canvas.canvasSharedPtr){GROWABLE_HEAP_I32()
    [canvas.canvasSharedPtr>>2]=width;GROWABLE_HEAP_I32()
    [canvas.canvasSharedPtr+4>>2]=height;if(canvas.offscreenCanvas)!!canvas.controlTransferredOffscreen
    &&
    (canvas=canvas.offscreenCanvas)var
  autoResizeViewport=false;if(canvas.GLctxObject&&canvas.GLctxObject.GLctx){var
    prevViewport=canvas.GLctxObject.GLctx.getParameter(2978);autoResizeViewport=prevViewport[0]==0&&prev
    Viewport[1]==0&
    {canvas.GLctxObject.GLctx.viewport(0,0,width,height)}else
  if(canvas.canvasSharedPtr){var
    targetThread=GROWABLE_HEAP_I32()
    [canvas.canvasSharedPtr+8>>2];_emscripten_set_offscreen_canvas_size_on_target_thread(targetThread,
    width,height);return 1}else{return -4}return 0}function
  _emscripten_set_canvas_element_size_main_thread(target,width,height){if(ENVIRONMENT_IS_PTHREAD)retu
    r _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_canvas_element_size_main_thread(target,width,height){if(canvas){return _emscripten_set_canvas_element_size_calling_thread(target,
    width,height)}}function
  _emscripten_set_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_dra
        w"))}var
      GL={counter:1,buffers:[]};framebuffers:[];renderbuffers:[];textures:[];uniforms:[];shaders:[];
      vaos:[];cont
      ects:{},offscreenCanvases:{},timerQueriesEXT:{},programInfos:{},stringCache:{},unpackAlignment:4,
      recordError:function(recordError,errorCode){if(!GL.lastError){GL.lastError=errorCode}},getNewId:
        function(threadId,name){var
      ret=GL.counter++;for(var i=table.length;i<ret;i++)if(table[i]==null){return
        i}table[i]=newId;return ret},getSource:function(shader,count,string,length){var source="";
      for(var i=0;i<count;++i){var
        len=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){ctx=ctx.valueOf();
    GL=GL["context"];
      return
    }else{GL.ctx=ctx;return ctx}function
        createContextattributes(ctx,webGLContextAttributes){var
      handle=GL.registerContext(ctx,webGLContextAttributes);return
    handle};getContext: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=ctx;
    GLcontexts[handle]=context;if(typeof

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Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5 5268

_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;j<iovcnt;i++){

ptr=GROWABLE_HEAP_I32([iov+i*8>>2]);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.execute() 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 ever be called from main application thread!";var worker=PThread.getNewWorker();if(!worker pthread==undefined)throw"Internal 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]=new PThreadWorker({pthread:worker,stackBase:stackSizeallocatedOwnStack:threadParams.stackSize,threadInfoStruct:threadParams pthread d_ptr}:var tis=pthread.threadInfoStruct>>2;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+(40>>2),pthread.threadInfoStruct);Atomics.store(GROWABLE_HEAP_U32(),tis+(80>>2),threadParams.stackSize);Atomics.store(GROWABLE_HEAP_U32(),tis+(76>>2),stackHigh);Atomics.store(GROWABLE_HEAP_U32(),tis+(104>>2),threadParams.stackSize);Atomics.store(GROWABLE_HEAP_U32(),tis+(104+12>>2),threadParams.size);var global_libc=_emscripten_get_global_libc();var global_locale=global libc+40;Atomics.store(GROWABLE_HEAP_U32(),tis+(122>>2),global Locale);worker pthread=pthread;var msg={cmd:"run",start_routine:threadParams.startRoutine,threadInfoStruct:threadParams pthread_ptr}worker.runPthread=function(){msg.time=performance.now();worker.postMessage(msg,threadParams.transferList)};if(worker.loaded){worker.runPthread();delete worker.runPthread}function __pthread_testcancel_js(){if(!ENVIRONMENT_IS_PTHREAD)return;var tb=_pthread_self();if(!tb)return;var stackBase=0;var detached=0;if(has attr del attr!={stackSize:GROWABLE_HEAP_I32([attr+8>>2]),stackBase:GROWABLE_HEAP_I32([attr+12>>2])}else{stackBase=2097152}var allocatedOwnStack=stackBase;0;allocatedOwnStack stackBase_memalign(16,stackSize);stackBase=stackBase assert(stackBase>0) var threadInfoStruct=_malloc(228);for(var i=0;i<228;++i)GROWABLE_HEAP_U32([threadInfoStruct>>2]+i)=0;GROWABLE_HEAP_I32([pthread_ptr>>2]=threadInfoStruct.GROWABLE_HEAP_I32([threadInfoStruct+12>>2]=threadInfoStruct var headPtr=threadInfoStruct+152;GROWABLE_HEAP_I32([headPtr>>2]=headPtr);var threadParams PThread threadInfoStruct.stackSize allocatedOwnStack allocatedOwnStack detached;detached startRoutine start_routine pthread_ptr threadInfoStruct arg,transferList transferList;if(ENVIRONMENT_IS_PTHREAD)threadParams.cmd="spawnThread";postMessage(threadParams.transferList)}else{spawnThread(threadParams)}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_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(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.ESRCH}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>>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();_ems Frontier
en_webgl_create_context,"l":_fd_close,"m":_fd_seek,"g":_fd_write,"o":initPthreadsJS,"a":wasmMemory||Mo
dule[wasmMemory]\,"v":_pthread_cleanup_pop,"k":_pthread_cleanup_push,"h":_pthread_create,"m":_pthread
read_join,"t":_sysconf};var asm=createWasm();var
___wasm_call_ctors=Module["___wasm_call_ctors"]=function(){return(___wasm_call_ctors=Module["___wasm
call_ctors"]=Module["asm"]["BV"]()).apply(null,arguments)};var
_init=Module["_init"]=function(){return(_init=Module["_init"]=Module["asm"]["CI"]()).apply(null,arguments)};var
_init_with_threads_count=Module["_init_with_threads_count"]=function(){return(_init_with_threads_count=Modu
le["_init_with_threads_count"]=Module["asm"]["D"]()).apply(null,arguments)};var
_get_threads_count=Module["_get_threads_count"]=function(){return(_get_threads_count=Module["_get_threads
_count"]=Module["asm"]["EF"]()).apply(null,arguments)};var
_register_tensor=Module["_register_tensor"]=function(){return(_register_tensor=Module["_register_tensor"]
=Module["asm"]["F"]()).apply(null,arguments)};var
Dispose_data=Module["Dispose_data"]=function(){return(Dispose_data=Module["Dispose_data"]=Module["asm"]["G"]().a
pply(null,arguments))};var
Abs=Module["Abs"]=function(){return(Abs=Module["Abs"]=Module["asm"]["H"]()).apply(null,arguments)
};var
Add=Module["Add"]=function(){return(Add=Module["Add"]=Module["asm"]["I"]()).apply(null,arguments)
};var
AddN=Module["AddN"]=function(){return(AddN=Module["AddN"]=Module["asm"]["J"]()).apply(null,arguments)
};var
All=Module["All"]=function(){return(All=Module["All"]=Module["asm"]["K"]()).apply(null,arguments)
};var
Any=Module["Any"]=function(){return(Any=Module["Any"]=Module["asm"]["L"]()).apply(null,arguments)
};var
ArgMax=Module["ArgMax"]=function(){return(ArgMax=Module["ArgMax"]=Module["asm"]["M"]()).apply(nul
n,arguments)};var
AvgPool=Module["AvgPool"]=function(){return(AvgPool=Module["AvgPool"]=Module["asm"]["N"]()).a
pply(null,arguments)};var
BatchMatMul=Module["BatchMatMul"]=function(){return(BatchMatMul=Module["BatchMatMul"]=Modu
le["asm"]["O"]()).apply(null,arguments)};var
Ceil=Module["Ceil"]=function(){return(Ceil=Module["Ceil"]=Module["asm"]["P"]()).apply(null,arguments)
};var
ClipByValue=Module["ClipByValue"]=function(){return(ClipByValue=Module["ClipByValue"]=Module["a
sm"]["Q"]()).apply(null,arguments)};var
Conv2D=Module["Conv2D"]=function(){return(Conv2D=Module["Conv2D"]=Module["asm"]["R"]()).apply(nul
n,arguments)};var
Conv2DBackpropInput=Module["Conv2DBackpropInput"]=function(){return(Conv2DBackpropInput=Modu
le["Conv2DBackpropInput"]=Module["asm"]["S"]()).apply(null,arguments)};var
Cos=Module["Cos"]=function(){return(Cos=Module["Cos"]=Module["asm"]["T"]()).apply(null,arguments)
};var
Cosh=Module["Cosh"]=function(){return(Cosh=Module["Cosh"]=Module["asm"]["U"]()).apply(null,arguments)
};var
CropAndResize=Module["CropAndResize"]=function(){return(CropAndResize=Module["CropAndResize"]
=Module["asm"]["V"]()).apply(null,arguments)};var
Cumsum=Module["Cumsum"]=function(){return(Cumsum=Module["Cumsum"]=Module["asm"]["W"]()).a
pply(null,arguments)};var

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arguments)};var
 Мин=Module["_Min"]=function(){return(Мин=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
 _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'])};
stringToUTF8(str,outPtr,maxBytesToWrite){return
stringToUTF8Array(str,HEAPU8,outPtr,maxBytesToWrite)}function
writeArrayToMemory(array_buffer){HEAP8.set(array_buffer)}function
alignUp(x,multiple){if(x%multiple>0){x+=multiple-x%multiple}return x}var
buffer,HEAP8,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];var wasmTable;var __ATPRERUN__=[];var
__ATINIT__=[];var __ATMAIN__=[];var __ATPOSTRUN__=[];var
runtimeInitialized=false;__ATINIT__.push({func:function(){___wasm_call_ctors()}});function
preRun(){if(Module["preRun"]){if(typeof Module["preRun"]=="function")Module["preRun"]=[]];while(Module["preRun"].length){addOnPreRun(Module["preRun"][0].shift())}callRuntimeCallbacks(__ATPRERUN__)}}function
initRuntime(){runtimeInitialized=true;callRuntimeCallbacks(__ATINIT__)}}function
preMain(){callRuntimeCallbacks(__ATMAIN__)}function postRun(){if(Module["postRun"]){if(typeof Module["postRun"]=="function")Module["postRun"]=[]];while(Module["postRun"].length){addOnPostRun(Module["postRun"][0].shift())}callRuntimeCallbacks(__ATPOSTRUN__)}}function
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["monitorRunDepen
dencies"][id]=0;runDependencyWatcher&&runDependencyWatcher(checkRunDependencies)}function
removeRunDependency(id){runDependencies--;if(Module["monitorRunDependencies"])Module["monitorRunDepend
cies"][id]++;while(runDependencies==0){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
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){throw err}}function
getBinaryPromise(){if(!wasmBinary&&(ENVIRONMENT_IS_WEB||ENVIRONMENT_IS_WORKER)){if(typeof fetch==="function"&&isSameOriginFile(wasmBinaryFile))return fetch(wasmBinaryFile,credentials)\{return Promise.resolve().then(function(){return
getBinary(wasmBinaryFile))\}}else if(readAsync){return new
Promise(function(resolve,reject){readAsync(wasmBinaryFile,function(response){resolve(new
Uint8Array(response)))}).then(function(){return
getBinaryPromise()})})}else{throw"both async and sync fetching of the
wasm failed"}}catch(err){throw err}}function

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```javascript
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']['Ya'])).apply(null,arguments)};var
stackAlloc=Module['stackAlloc']=function(){return(stackAlloc=Module['stackAlloc']=Module['asm']['Ya'])).apply(null,arguments)};Module['cwrap']=cwrap;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']=true;if(ABORT)return;initRuntime();preMain(
);readyPromiseResolve(Module);if(Module['onRuntimeInitialized'])Module['onRuntimeInitialized']();postRun(
);if(Module['setStatus'])Module['setStatus']("Running...");setTimeout(function(){setTimeout(function(){Mo
dule['setStatus']("")},1);doRun();} else {doRun()}) Module['run']=run;doRun();}[]=(Module['preInit']?="["function"]":Module['preInit']=[Module['prevInit']]=[Module['prevInit']]=while(Module['prevInit'][length+0]||
Module['prevInit'].pop())() run();
var a = return WasmBackendModule.ready
|null|;});if(typeof a==="undefined")return a;for(var i=0;i<arguments[0].length;i++)
(function (arg) { try { if (typeof arg === 'function') return arg(); } catch (e) { return null; } })
exports = WasmBackendModule.exports (or exports = WasmBackendModule.exports);else if (typeof arg === 'undefined') return null;}
```

/**
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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 {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:
  /** 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:

  constructor(public wasm:
`````
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.buffer, values.byteOffset, numBytes), memoryOffset);
}
}

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 tensorData = this.dataIdMap.get(dataId);
if (tensorData) {
  if (tensorData.shape != null) {
    return tensorData.values;
  } else {
    return this.createTensorData(dataId, tensorData.shape, tensorData.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);
}

refCount(dataId: DataId): number {
if (this.dataIdMap.has(dataId)) {
  return data.refCount;
}
}

makeOutput(shape: number[], dtype: DataType, memoryOffset?: number): TensorInfo {
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}`);
}
}

default(): {};

function createInstantiateWasmFunc(path: string) {
  this.wasm = null;
  if (fs.existsSync(path)) {
    this.wasm = require(path);
  }
}

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';
  } else if (threadsSupported) {
    path = 'tfjs-backend-wasm-threaded.wasm';
  } else {
    path = 'tfjs-backend-wasm.wasm';
  }

  try {
    return path();
  } catch (error) {
    return null;
  }

  this.wasm = null;
  if (fs.existsSync(path)) {
    this.wasm = require(path);
  }

  return this.wasm;
return wasmFileMap[path];
    }
  }

  return wasmModuleFolder + path;
}

/**
 * Initializes the wasm
 * module and creates the js <-> wasm bridge.
 */
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.
    // Reference:
    // https://github.com/emscripten-core/emscripten/blob/2bca083cbdb54133db61fbd74d047f3eefca907/tests/manual_wasm_instantiate.html#L170
    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});
    };

    let wasm: Promise<BackendWasmModule> =
    createInstantiateWasmFunc(getPathToWasmBinary(
        wasmPathPrefix != null ? wasmPathPrefix : prefix));

    // 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;

      const voidReturnType: string = null;
      // Using the tfjs namespace to avoid conflict with emscripten's API.
      module.tfjs = {
        init: module.cwrap('init', null, []),
        initWithThreadsCount:
            module.cwrap('init_with_threads_count', null, ['number']),
        getThreadsCount: module.cwrap('get_threads_count', 'number', []),
        registerTensor:
            module.cwrap('register_tensor', null, ['number',  // id
              'number',  // size
              'number',  // memoryOffset
            ]),
        disposeData: module.cwrap('dispose_data', voidReturnType, ['number']),
        dispose: module.cwrap('dispose', voidReturnType, []),
      };

      resolve((wasm: module) => {
        // if (customFetch) {
          // factoryConfig.instantiateWasm =
        }
      };
    })
  });
}

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} = {};

/**
 * @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
 */

used in unit tests. */
export function resetWasmPath(): void {
  wasmPath = null;
  wasmPathPrefix = null;
  wasmFileMap = {};
  customFetch = false;
  initAborted = false;
}

let threadsCount = -1;
let actualThreadsCount = -1;

/**
 * Sets the number of threads that will be used by XNNPACK to create a
 * threadpool (default to the number of logical CPU cores).
 * @param numThreads
 */
export function setThreadsCount(numThreads: number) {
  threadsCount = numThreads;
}

/**
 * Gets the actual threads count that is used by XNNPACK.
 * @returns The actual threads count.
 */
export function getThreadsCount(): number {
  if (actualThreadsCount === -1) {
    throw new Error('WASM backend not initialized.');
  }
  return actualThreadsCount;
}

const WASM_PRIORITY = 2;
registerBackend('wasm', async () => {
  const {wasm} = await init();
  return new BackendWasm(wasm);
}, WASM_PRIORITY);
}
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Found in path(s):
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/miniprogram/index.js.map
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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} =
```
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 * 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',
  kernelFunc: splitV as {} as KernelFunc
};

*\n
*/

```

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

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 * License.
 */

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
      'array',   // strides
      'number',  // stridesLength
      '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, 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 imageData =
backend.dataIdMap.get(image.dataId);
const imgId = imageData.id;
const transformsData = backend.dataIdMap.get(transforms.dataId);
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;
}

if (wasmTransform(imageId, transformsId, (transforms.shape[0] > 1), batch, outHeight,
width, numChannels, imageWidth, 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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*/
/**
* @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'}
*/

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* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-dist/tfjs-backend-wasm.es2017.js

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

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* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-starter/parcel/index.html

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{"version":3,"file":"Sigmoid.js","sourceRoot":""","sources":[],"names":[],"mappings":"AAAA;;;;;;;;;;;;;;;GAeG;AAEH,OAAO,EAA2B,OAAB,EA6B,IA1EI,EAAC,MAAM,uBAuB,CAC;AA1zG,IAAI ,QAA8C,CAAC;AAeD,SAAS,KAAK,CAAC,OAAoB;IA3cC,QAAQ,GAAG,OAAB,CAAC,IAAI,CAAC,KAAK ,CAAC,OAAB,EAAE,IAAI,CAAC,UAAB,EAAE,CAAC,QAAQ;EAAE,QAAQ,CAAC,CAAC,CAAC,CAAC;AAChF,C AAC;AAED,SAAS,OAAB,CAAC,IAAmD;IAEI,MAAM,EAAB,OAAB,EAAE,MAAM,EAAB,CAAC,CAAC,E AAC,EAAB,GAAG,IAAI,CAAC;IA3pC,MAAM,GAAG,GAAG,OAAB,CAAC,SAAS,CAAC,GAAG,CAAC,CA AC,CAAC,MAAM,CAAC,EAAB,CAAC;IAC,C,MAAM,GAAG,GAAG,OAAB,CAAC,UAAB,CAAC,CA AC,CAAC,KAAB,EAAB,CAAC,CAAC,KAAB,CAAC,CAAC;IA3jD,MAAM,KAAB,GAAG,OAAB,CAAC,SA AS,CAAC,GAAG,CAAC,GAAG,CAAC,MAAM,CAAC,CAAC,CAAC,EAAB,IAEnD,oCAAcC;IA3pC,IAAlIA AI,CAAC,aAAa,CAAC,GAAG,CAAC,KAAB,KAAC,KAAC,KAAC,EAAB,QACvC,OAAO,GAAG,CAAC;KAC Z;IAED,QAAQ,CAAC,GAAG,EAAB,KAAB,CAAC,CAAC;IA3rB,OAAO,GAAG,CAAC;AABc,CAAC;AAED, MAAM,CAAC,MAAM,aAAa,GAAb;IACxC,UAAB,EAAB,EAAB,SAAS;IA3b,WAAB,EAAB,MAAM,IACnB,SAAS ,EAAB,KAAB;IACHB,UAAU,EAAB,OAA2B,CACxC,CAAC","sourcesContent":null * @license
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  limitations under the License.
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.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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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;
}

/** Return refCount of a `TensorData`. */

incRef(dataId: DataId) {
  const data = this.dataIdMap.get(dataId);
  if (data != null) {
    data.refCount++;
  }
}

floatPrecision(): number {
  return 32;
}

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;
}

memory() {
  return {unreliable: false};
}

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, 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);
        });
      });
    });
    return {};
  };
}

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; /* Initialize the wasm module and creates the js --> wasm bridge. * NO NOTE: We wrap the wasm module in a object with property 'wasm' instead of an * returning Promise<BackendWasmModule> to avoid freezing Chrome (last tested in * Chrome 76). * /n */

  const factoryConfig: WasmFactoryConfig = {
    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, threadsSupported, wasmModuleFolder, string) || null;
      }
      return prefix + path;
    }
  }

  const module = WebAssembly.compileAndLink(path, factoryConfig);
  module.wasm = module.instance;

  return module.wasm;
}

// This function overrides the Emscripten module locateFile utility.

/* @param path The relative path to the file that needs to be loaded. */

prefix The path to the main JavaScript file's directory.

/* @param path The relative path to the file that needs to be loaded. */

prefix The path to the main JavaScript file's directory.

/* Factory Configuration. */

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 getWasmBinary(simdSupported, threadsSupported, wasmModuleFolder, string) || null;
  }
  return prefix + path;
}

// Use the instantiateWasm override when system fetch is not available.

// Reference:

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```javascript
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
do double
    return;
  }

  // Emscripten calls 'onAbort' twice, resulting in double
  error messages.
  return;
}

throwMsg = 'Make sure the server can serve the `.wasm` file relative to the +"bundles js file. For more details see

reject({message: throwMsg});

let wasm: Promise<BackendWasmModule> =
  wasmFactoryThreadedSimd(factoryConfig); try {
  wasm =
    wasmFactoryThreadedSimd(factoryConfig);
} catch (error) {
  throw error;
}

wasm.then((module) => {
  initialized = true;

  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']),
    dispose: module.cwrap('dispose', voidReturnType, ['number']),
    disposeData: module.cwrap('dispose_data', voidReturnType, ['number', 'number']),
  };

  resolve({wasm: module});
}
  );

function typedArrayFromBuffer(buffer, dtype): 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
 * for more details.
 * @param path wasm file path or url
 * @param usePlatformFetch optional boolean to use platform fetch to
download the file, default to false.
 * @doc {heading: 'Environment', namespace: '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 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 file, default to false.
 * @doc {heading: 'Environment', namespace: 'wasm'}
 */
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 `+"setWasmPath()` before you call `tf.setBackend()` or `tf.ready()`');
  }

  wasmPath = path;

  if (initAborted) {
    throw new Error('The WASM backend was already initialized. Make sure you call `+"setWasmPath()` before you call `tf.setBackend()` or `tf.ready()`');
  }

  setWasmPath = usePlatformFetch;

  if (path) {
    customFetch = usePlatformFetch;
  }

  setWasmPaths(
    {tfjs-backend-wasm: 'renamed.wasm', tfjs-backend-wasm-simd: 'renamed-simd.wasm',
     tfjs-backend-wasm-threaded-simd: 'renamed-threaded-simd.wasm'}
  );
}

const wasmFiles = {
  'tfjs-backend-wasm.wasm': '../tests/wasm/it/wasm/track/track.wasm',
  'tfjs-backend-wasm-simd.wasm': '../tests/wasm/it/wasm/track/track-simd.wasm',
  'tfjs-backend-wasm-threaded-simd.wasm': '../tests/wasm/it/wasm/track-simd/track-threaded-simd.wasm',
};
```

boolean to use platform fetch to download the wasm file, default to false.

```javascript
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('wasm')` or `tf.ready('wasm')`).
  }

  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: ${missingPaths.join(', ')}. Please either call `setWasmPaths` with a string providing a path for each binary, or with a string indicating where the directory where all the binaries can be found.`);
    }
  }

  customFetch = usePlatformFetch;
}
```

```javascript
export function resetWasmPath(): void {
  wasmPath = null;
  wasmPathPrefix = null;
  wasmFileMap = {};
  customFetch = false;
  initAborted = false;
}
```

```javascript
let threadsCount = -1;
let actualThreadsCount = -1;

/**
 * Sets the number of threads that will be used by XNNPACK to create a threadpool (default to the number of logical CPU cores).
 *
 * This must be called before calling `tf.setBackend('wasm')`.
 */
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 {KernelConfig, Less} from '@tensorflow/tfjs-core';

import {createBinaryKernelConfig} from './binary_kernel';

const supportsFullBroadcast = false;

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

*/
import {BatchMatMul, BatchMatMulInputs, KernelConfiguration, KernelFunc} from '@tensorflow/tfjs-core';

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);
  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 one input batch dimension must be 1. Got input batch 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(
      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];

  wasmBatchMatMul(aId, aShape, aShapeSize, bId, bShape, bShapeSize, transposeA, transposeB, outId);
}

if (window !== undefined) {
  window['tf'] = window['tf'] || {};
  window['tf']['BatchMatMul'] = batchMatMul;
  window['tf']['WasmBatchMatMul'] = batchMatMul;
}

export default batchMatMul;
innerShapeB \n [batchDimB, innerShapeB, outerShapeB]; The rest of the implementation is designed to operate on rank-3 tensors \n const a3d = reshape(inputs: {x: a}, backend, attr: \n {shape: a3dShape}); \n const b3d = reshape({inputs: {x: b}, backend, attr: \n {shape: b3dShape}}); \n const a3dId = backend.dataIdMap.get(a3d.dataId).id; \n const b3dId = backend.dataIdMap.get(b3d.dataId).id; \n const leftDim = transposeA ? a3d.shape[2] : a3d.shape[1]; \n const rightDim = transposeB ? b3d.shape[1] : b3d.shape[2]; \n const batchDim = Math.max(batchDimA, batchDimB); \n const out = backend.makeOutput([batchDim, leftDim, \n rightDim], a3d.dtype); \n const outId = backend.dataIdMap.get(out.dataId).id; \n const aShapeBytes = new Uint8Array(new Int32Array(a3d.shape).buffer); \n const bShapeBytes = new Uint8Array(new Int32Array(b3d.shape).buffer); \n wasmBatchMatMul(a3dId, aShapeBytes, a3d.shape.length, b3dId, \n bShapeBytes, b3d.shape.length, transposeA, transposeB, outId); \n backend.disposeData(a3d.dataId); \n backend.disposeData(b3d.dataId); \n out.shape = outShape; \n return out; \n \n export const batchMatMulConfig: \n KernelConfig = { \n kernelName: BatchMatMul, \n backendName: 'wasm', \n setupFunc: setup, \n kernelFunc: batchMatMul as {} as KernelFunc};

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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
}

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'   // 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(
        `FusedConv2D only supports rank-1 bias but got ` +
        `rank ${biasData.shape.length}.`);
  }

  const convBackward = BackendWasm.convBackward;
  let output;
  output = convBackward(aId, aShape, aShapeSize, bId, bShape, bShapeSize,
    transposeA, transposeB, activation, biasId, preluActivationWeightsId,
    leakyreluAlpha, outId);
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=============================================================================

*/

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

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: wasmFunc};
}

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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 /* 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: {a, b}} = 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);

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

    // Multiply input with weight and add bias.
    wasmFunc(aId, a.shape, a.shapeLen, bId, b.shape, b.shapeLen, outputType, outId);
    return out;
  }

  return {kernelName, backendName: 'wasm', setupFunc, kernelFunc: wasmFunc};
}
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 ${a.dtype} ${kernelName}.`);
    }
  }

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

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

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 [newShape, newPerm] = computeOutShape(inputs.x.shape, attrs.perm);

  if (newPermIsNoOp) {
    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, x.dtype, outId, permBytes, permLength, null);

  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]);
      newPerm.push(perm[i]);
    } else {
      newShape.push(1);
      newPerm.push(perm[i] + 1);
    }
  }

  return [newShape, newPerm);
}

export const transposeConfig: KernelConfig = {
  kernelName: Transpose,
  backendName: 'wasm',
  kernelFunc: transpose as {} as KernelFunc,
  setupFunc: setup,
};
/*\n\n\n\nimport {backend_util, TensorInfo, util} from '@tensorflow/tfjs-core';\nimport {BackendWasm} from './backend_wasm';\nimport {transpose} from './Transpose';\n
/**
 * Compute permutation axes and do a transpose if necessary.\n * Used by reduction ops.\n * @param x input TensorInfo\n * @param axis reduction axes\n * @param backend wasm backend instance\n */\n
\nexport function permuteAxesAndTranspose(x: TensorInfo, axis: number[], backend: BackendWasm): {\n  transposed: TensorInfo|null,\n  axes: number[],\n  originalAxes: number[],\n  inputWasTransposed: boolean\n} {\n  const xShape = x.shape;\n  const xRank = x.shape.length;\n  const originalAxes = util.parseAxisParam(axis, xShape);\n  const permutedAxes = backend_util.getAxesPermutation(axis, xRank);\n  let xTransposed = null;\n  let inputWasTransposed = false;\n  if (permutedAxes != null) {\n    const newShape: number[] = new Array(xRank);\n    for (let i = 0; i < newShape.length; i++) {\n      newShape[i] = xShape[permutedAxes[i]];\n    }\n    \n    const xId = backend.dataIdMap.get(x.dataId).id;\n    const transposedId = backend.dataIdMap.get(xTransposed.dataId).id;\n    \n    if (transposedId !== xId) {\n      inputWasTransposed = true;\n    }\n  }\n  \n  return {\n    xTransposed,\n    originalAxes,\n    axes,\n    inputWasTransposed\n  };
}

*/

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

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(xTransposed.dataId).id;
    input = transposed;
    inputId = transposedId;
  }

  const inputRank = input.shape.length;
  backend_util.assertAxesAreInnerMostDims('all', axes, inputRank);\n  const [outShape, reduceShape] =\n  backend_util.computeOutAndReduceShapes(input.shape, axes);\n  const constSize =\n  util.sizeFromShape(reduceShape);\n  const outId = backend.makeOutput(outShape, x.dtype);\n  if (util.sizeFromShape(input.shape) !== 0) {\n    const disposeData = disposeOfTheTransposedTensor(x,\n    backend.dataIdMap.get(transposed.dataId).id);\n    const newShape =\n    backend.util.expandShapeToKeepDim(out.shape, originalAxes);\n    out.shape = newShape;\n    return out;\n  }\n  const allConfig: KernelConfig = {\n    kernelName: All,\n    backendName: 'wasm',\n    setupFunc: setup,\n    kernelFunc: all as {} as KernelFunc\n  };

  return allConfig;
}

*/

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

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*/

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

import {permuteAxesAndTranspose} from './kernel_utils';

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

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

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

import {permuteAxesAndTranspose} from './kernel_utils';

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

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

function setup(backend: BackendWasm) {
  wasmAny = backend.wasm.cwrap(Any, null /*void*/, ['number', 'number', 'number', 'number']);
  wasmFunc = backend.wasm.cwrap(ArgMax, null /*void*/, ['number', 'number', '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 (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  return out;
}

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

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 */

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

import {permuteAxesAndTranspose} from './kernel_utils';

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

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

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

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, x.dtype);
  const outerSize = util.sizeFromShape(outShape);
  const innerSize = util.sizeFromShape(outShape);
  const outputId = backend.dataIdMap.get(outId).id;
  if (inputWasTransposed) {
    // dispose of the transposed tensor.
    backend.disposeData(transposed.dataId);
  }

  return out;
}

export const argMaxConfig: KernelConfig = {
  kernelName: ArgMax,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: argmax as {} as KernelFunc
};
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, 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;
  const channels = convInfo.inChannels;
  if (convInfo.dilationWidth !== 1 || convInfo.dilationHeight !== 1) {
    throw new Error(`wasm backend does not support dilations \([\[1, 1\]\].`);
  }
  const out = backend.makeOutput(convInfo.outShape, 'float32', '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
};

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} = args;
  const x = inputs.x as Tensor4D;
  const {shape} = attrs;
  const xSize = util.sizeFromShape(x.shape);
  const $shape = util.inferFromImplicitShape(shape, xSize);
  util.assert(xSize === util.sizeFromShape($shape), () => {
    throw new Error(`new shape: ${$shape}, old shape: ${x.shape}. New shape and old ` + `shape must have the same number of elements.`);
  });
  const out = backend.makeOutput($shape, 'float32', '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 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';

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);
  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 batch dimensions of (${outerDimsA}) and (${outerDimsB}).`);

  const outShapeOuterDims = batchDimA > batchDimB ? a.shape.slice(0, -2) : b.shape.slice(0, -2);
  const outShape = util.sizeFromShape(outShapeOuterDims);

  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, attr: {shape: a3dShape}});
  const b3d = reshape({inputs: {x: b}, backend, attr: {shape: b3dShape}});

  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 out = backend.makeOutput([leftDim, rightDim, batchDimA], a3d.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;

  backend.disposeData(a3d.dataId);
  backend.disposeData(b3d.dataId);

  backend.disposeOutput(out.dataId);

  const outShapeOuterDims = [batchDimA, innerShapeA, outerShapeA];
  const outShape = util.sizeFromShape(outShapeOuterDims);

  util.assert(outShapeOuterDims.length === outShape.length, () => `Error in matMul: the output batch dimensions must either be the same or at least one output batch dimension must be 1. Got output batch dimensions of (${outShapeOuterDims}) and (${outShape}).`);

  const outShapeOuterDims = batchDimA > batchDimB ? a.shape.slice(0, -2) : b.shape.slice(0, -2);
  const outShape = util.sizeFromShape(outShapeOuterDims);

  util.assert(outShape.length === outShapeOuterDims.length, () => `Error in matMul: the output shape (${outShapeOuterDims}) and (${outShape}) must match.`);

  const a3dId = backend.dataIdMap.get(a3d.dataId).id;
  const b3dId = backend.dataIdMap.get(b3d.dataId).id;

  const a3dData = backend.getData(a3d.dataId);
  const b3dData = backend.getData(b3d.dataId);

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

  const aBytes = new Uint8Array(a3d.shape, a3dId, a3d.length);
  const bBytes = new Uint8Array(b3d.shape, b3dId, b3d.length);

  wasmBatchMatMul(a3dId, aBytes, a3d.length, b3dId, bBytes, b3d.length, transposeA, transposeB, outId);

  return out;
}
```javascript
*Animport 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)
        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
};

//
sourceMappingURL=data:application/json;base64,eyJ2ZXJzaW9uIjozLCJmaWxlIjoiU2xpY2UuanMiLCJzb3VyY2l...</code>
Tog2NWdScsXG4gIgtcm5lbEZ1bmM6IHNsaWNIGFzIHZ1IGFzIEtcm5lbEZ1bmNcbn07XG4iXX0=" / **\n @license * Copyright 2019 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 {backend_util, KernelConfig, KernelFunc, Slice, slice_util, SliceInputs, SliceAttrs, 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 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 = 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 = 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++) {
        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 = 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++) {
          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 {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
};
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 => {
  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);
  }
  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 => {
  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);
  }
  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 => {
  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);
  }
  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 => {
  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);
  }
  return out;
});
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---

```typescript
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, yChannelStride: 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']);
}

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 dyStrides = util.computeStrides(dyInfo.inShape);
  const yBatchStride = dyStrides[0];
  const yRowStride = dyStrides[1];
  const yColStride = dyStrides[2];
  const yChannelStride = dyStrides[3];
  const xBatchStride = xStrides[0];
  const xRowStride = xStrides[1];
  const xColStride = xStrides[2];

  const convInfo.padInfo.left = filterHeight - 1 - convInfo.padInfo.top;
  const convInfo.padInfo.top = filterWidth - 1 - convInfo.padInfo.left;
  const isChannelsLast = convInfo.dataFormat === 'channelsLast';
  const dxStrides = util.computeStrides(convInfo.inShape);
  const dyStrides = util.computeStrides(dyInfo.shape);
  const xBatchStride = xStrides[0];
  const xRowStride = xStrides[1];
  const xColStride = xStrides[2];
  const xChannelStride = xStrides[3];
  const convInfo.padInfo.left = filterHeight - 1 - convInfo.padInfo.top;
  const convInfo.padInfo.top = filterWidth - 1 - convInfo.padInfo.left;
  const isChannelsLast = convInfo.dataFormat === 'channelsLast';
  const dxStrides = util.computeStrides(convInfo.inShape);
  const dyStrides = util.computeStrides(dyInfo.shape);
  const xBatchStride = xStrides[0];
  const xRowStride = xStrides[1];
  const xColStride = xStrides[2];
  const xChannelStride = xStrides[3];
  const convInfo.padInfo.left = filterHeight - 1 - convInfo.padInfo.top;
  const convInfo.padInfo.top = filterWidth - 1 - convInfo.padInfo.left;
  const isChannelsLast = convInfo.dataFormat === 'channelsLast';
  const dxStrides = util.computeStrides(convInfo.inShape);
  const dyStrides = util.computeStrides(dyInfo.shape);
  const xBatchStride = xStrides[0];
  const xRowStride = xStrides[1];
  const xColStride = xStrides[2];
  const xChannelStride = xStrides[3];

  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;
}
```

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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;

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 = cast({backend, inputs: {x: image}, attrs: {dtype: 'float32'}});
  let imagesData = backend.dataIdMap.get(castedData.dataId);
  let const imagesId = imagesData.id;
  let const boxesId = backend.dataIdMap.get(boxes.dataId);
  let const boxIndId = backend.dataIdMap.get(boxInd.dataId);

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

  const imagesShapeBytes = new Uint8Array(new Int32Array(image.shape).buffer);
  const wasmCropAndResize = imagesId, boxesId, boxIndId, numBoxes, imagesShapeBytes, cropHeight, cropWidth,
  InterpolationMethod[method as {} as keyof typeof InterpolationMethod], extrapolationValue, outId);
  if (castedData != null) {
    const disposedDataId = disposedData.dataId;
    const disposedData = backend.dataIdMap.get(disposedDataId);
  }
  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, Cusum, CusumAttrs, CusumInputs, TensorInfo, util} from '@tensorflow/tfjs-core';
import {BackendWasm} from '../backend_wasm';

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

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

export function cumsum(
  args: {inputs: CusumInputs, backend: BackendWasm, attrs: CusumAttrs}: 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: Cusum,
  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
     'number' // dtype
  ]);}

export function depthToSpace(args: {inputs: DepthToSpaceInputs, backend: BackendWasm, 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[3] : x.shape[2]);

  // compute sizes of the output tensor
  let outputWidth = 0;
  let outputHeight = 0;
  if (dataFormat === 'NHWC') {
    outputWidth = (inputHeight / blockSize) | 0;
    outputHeight = (inputWidth / blockSize) | 0;
  } else {
    outputWidth = (inputHeight / blockSize) | 0;
    outputHeight = (inputWidth / blockSize) | 0;
  }

  // create output tensor
  const output = backend.makeOutput([outputWidth, outputHeight, inputDepth], x.dtype);

  // call the depth to space function
  wasmDepthToSpace(xId, blockSize, channelsLast, xStrides, xStridesLength, outputShape, outputStrides, 0, outputHeight, outputWidth);

  return output;
}

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

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

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 */
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 xId = x.dataId;
new Uint8Array(new Int32Array(x.shape).buffer);

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

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

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

wasmDepthToSpace(xId, blockSize, channelsLast, x.strides, x.shape.length - 1, outputShapeBytes, x.stridesBytes, x.shape.length, xId, x.dataId); 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, 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, number => void) => 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
  ]);\n
  function depthwiseConv2d(args: {
    inputs: DepthwiseConv2dNativeInputs,
    backend: BackendWasm,
    attrs: DepthwiseConv2dNativeAttrs
  }) {\n    const {inputs, attrs, backend} = args;\n    const xId = backend.dataIdMap.get(x.dataId).id;\n    const filterId = backend.dataIdMap.get(filter.dataId).id;\n    const strides = attrs.stides;
    const dilationMode = attrs.dilationMode;
    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 dilationHeight = attrs.dilationHeight;
    const dilationWidth = attrs.dilationWidth;
    const strideHeight = attrs.strideHeight;
    const strideWidth = attrs.strideWidth;
    const inputChannels = attrs.inputChannels;
    const outputChannels = attrs.outputChannels;
    const isSamePad = attrs.isSamePad;
    \n    const convInfo = backend_util.computeConv2DInfo(x as Tensor4D, shape, (filter as Tensor4D), shape, strides, (dilations as number | [number, number]), pad, dimRoundingMode, true /* depthwise */);\n    \n    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.inputChannels;
    const outputChannels = convInfo.outputChannels;
    const isSamePad = convInfo.isSamePad;\n    \n    const convInfo.dataFormat = attrs.dataFormat;\n    const convInfo.outShape = attrs.outShape;\n    \n    throw new Error('wasm backend DepthwiseConv2dNative does not support dataFormat: ' + convInfo.dataFormat);\n  }\n
wasmDepthwiseConv2d(\n    xId, x.shape[0], x.shape[1], x.shape[2], filterId, filterHeight, \n    padTop, padRight, padBottom, padLeft, isSamePad, \n    dilationHeight, dilationWidth, strideHeight, strideWidth, \n    inputChannels, \n    outputChannels, outId) return out;

export const depthwiseConv2dNativeConfig:
  KernelConfig = {
    kernelName: DepthwiseConv2dNative, \n    backendName: 'wasm', \n    setupFunc: setup, \n    kernelFunc: depthwiseConv2d as {} as KernelFunc\n  } as KernelConfig;

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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';

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\n}) {
    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;
    }
    for (let $dim = dim; $dim < newShape.length; $dim++) {
        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 = $(inputRank + dim + 1);
        }
        newShape.slice($dim, 0, 0);
newShape}});\n}\n\nexport const expandDimsConfig: KernelConfig = {\n kernelName: ExpandDims,\n
backendName: 'wasm',\n kernelFunc: expandDims as {} as KernelFunc,\n};\n","/**\n * @license\n * Copyright
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=============================================================================\n
*/\n\nimport {KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';\nimport {Fill, FillAttrs} from
'@tensorflow/tfjs-core';\n\nimport {BackendWasm} from '../backend_wasm';\n\nexport function fill(args: {attrs:
FillAttrs, backend: BackendWasm}) {\n const {attrs: {shape, value, dtype}, backend} = args;\n const out =
backend.makeOutput(shape, dtype);\n const outVals = backend.typedArrayFromHeap(out);\n outVals.fill(value as
number);\n return out;\n}\n\nexport const fillConfig: KernelConfig = {\n kernelName: Fill,\n backendName:
'wasm',\n kernelFunc: fill as {} as KernelFunc,\n};\n","/**\n * @license\n * Copyright 2019 Google LLC. All
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=============================================================================\n
*/\n\nimport {FlipLeftRight, FlipLeftRightInputs, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjscore';\n\nimport {BackendWasm} from '../backend_wasm';\n\nlet wasmFlipLeftRight: (\n xId: number, batch:
number, imageHeight: number, imageWidth: number,\n numChannels: number, outId: number) =>
void;\n\nfunction setup(backend: BackendWasm) {\n wasmFlipLeftRight = backend.wasm.cwrap(FlipLeftRight,
null /* void */, [\n 'number', // xId\n 'number', // batch\n 'number', // imageHeight\n 'number', //
imageWidth\n 'number', // numChannels\n 'number', // outId\n ]);\n}\n\nexport function flipLeftRight(\n
args: {inputs: FlipLeftRightInputs, backend: BackendWasm}): TensorInfo {\n const {inputs, backend} = args;\n
const {image} = inputs;\n\n const out = backend.makeOutput(image.shape, image.dtype);\n const imageId =
backend.dataIdMap.get(image.dataId).id;\n const outId = backend.dataIdMap.get(out.dataId).id;\n\n const [batch,
imageHeight, imageWidth, numChannels] = image.shape;\n\n wasmFlipLeftRight(\n
imageId, batch,
imageHeight, imageWidth, numChannels, outId);\n return out;\n}\n\nexport const flipLeftRightConfig:
KernelConfig = {\n kernelName: FlipLeftRight,\n backendName: 'wasm',\n kernelFunc: flipLeftRight as {} as
KernelFunc,\n setupFunc: setup\n};\n","/**\n * @license\n * Copyright 2020 Google LLC. All Rights Reserved.\n
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=============================================================================\n
*/\nimport {Floor, KernelConfig} from '@tensorflow/tfjs-core';\n\nimport {createUnaryKernelConfig} from
'./unary_kernel';\nexport const floorConfig: KernelConfig = createUnaryKernelConfig(Floor);\n","/**\n *
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=============================================================================

*/

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

const supportsFullBroadcast = false;

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

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

import {FusedBatchNorm, FusedBatchNormAttrs, FusedBatchNormInputs, KernelConfig, KernelFunc,

import {FusedConv2D, FusedConv2DAttrs, FusedConv2DInputs, KernelConfig, KernelFunc,

import {backend_util, FusedConv2D, FusedConv2DAttrs, FusedConv2DInputs, KernelConfig, KernelFunc,

import {backend_util, FusedConv2D, FusedConv2DAttrs, FusedConv2DInputs, KernelConfig, KernelFunc,

=============================================================================
'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
    ]);\n\nfunction fusedConv2d(args: {
  inputs: FusedConv2DInputs,
  backend: BackendWasm,
  attrs: FusedConv2DAattrs
}) {
  const {inputs, attrs, backend} = args;
  const {x, filter, bias, preluActivationWeights} = inputs;
  const {strides, dilations, dataFormat, dimRoundingMode, activation, leakyreluAlpha} = attrs;
  const convInfo = backend_util.computeConv2DInfo(x as Tensor4D).shape, (filter as Tensor4D).shape, strides, dilations, pad, dimRoundingMode;
  const fusedActivation = activation 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 constChannels = convInfo.outChannels;
  const constChannels = backend.dataIdMap.get(bias.dataId).id;
  const biasId = 0;
  if (bias != null) {
    const biasData = backend.dataIdMap.get(bias.dataId);
    if (biasData.shape.length !== 1) {
      throw new Error(`${biasData.shape} does not match the number of output channels`);
    }
    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;
  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;
  const 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);

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

  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, FusedDepthwiseConv2DAtrrs, 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, number, biasId: number, padTop: number, padRight: number, padBottom: number, padLeft: number, isSamePad: number, dilationHeight: number, dilationWidth: number, strideHeight: number, strideWidth: number, number, outputChannels: number, outputChannels: number, outputChannels: number) => {...};

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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', // 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(
      `${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}).`);
    }

    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';

  if (dataFormat !== 'NHWC') {
    throw new Error(
      `wasm backend FusedDepthwiseConv2D does not support ` +
      `${dataFormat}. Please use 'NHWC'.`);
  }

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

  if (dataFormat !== 'NHWC') {
    return;
  }

  backend.dataIdMap.get(preluActivationWeights.dataId).id;
  const outId =
backend.dataIdMap.get(out.dataId).id;
  const wasmFusedDepthwiseConv2d =
backend.wasm.cwrap(FusedDepthwiseConv2D, null, [
  'number', // xId
  'number', // batchSize
  'number', // inHeight
  'number', // inWidth
  'number', // filterId
  'number', // filterHeight
  'number', // filterWidth
  'number', // biasId
  'number', // padTop
  'number', // padRight
  'number', // padBottom
  'number', // padLeft
];

  const func =
backend.wasm.cwrap(FusedDepthwiseConv2D, null, [
  'number', // xId
  'number', // batchSize
  'number', // inHeight
  'number', // inWidth
  '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
];

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

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', 'number', 'number', 'number', 'number']
    , 'array', outId);
}

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

  const resultShape = backend_util.getShape(indices.shape);
  const [numSlices, sliceSize, strides] =
      gather_util.prepareAndValidate(params, indices);
  const out = backend.makeOutput(resultShape, params.dtype);

  if (numSlices === 0) {
    return out;
  }

  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
};
Int32Array(util.computeStrides(flattenX.shape)).buffer);\n  const outStridesBytes = new Uint8Array(new Int32Array(util.computeStrides(flattenOutputShape)).buffer);\n  wasmGather(xId, CppDType[x.dtype], xStridesBytes, stridesSize, indicesId, shapeInfo.batchSize, outStridesBytes, outId);\n\nbackend.disposeData(flattenX.dataId);\nbackend.disposeData(flattenIndex.dataId);\n\n// reshape\nshapeInfo.outputShape = out.shape;\nreturn out;\n\noutStridesBytes = new Uint8Array(new Int32Array(util.computeStrides(flattenOutputShape)).buffer);\n\nconst outStridesBytes = new Uint8Array(new Int32Array(util.computeStrides(flattenOutputShape)).buffer);

wasmGather(xId, CppDType[x.dtype], xStridesBytes, stridesSize, indicesId, shapeInfo.batchSize, outStridesBytes, outId);
\nbackend.disposeData(flattenX.dataId);\nbackend.disposeData(flattenIndex.dataId);\n\n// reshape\nout.shape = shapeInfo.outputShape;\nreturn out;\n}

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 {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;
  }

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

export const leakyReluConfig: KernelConfig = {
  kernelName: LeakyRelu,
  backendName: 'wasm',
  setupFunc: setup,
  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');

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

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',  // out_id
    '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;
    backend_util.assertAxesAreInnerMostDims('max', axes, inputRank);
    const [outShape, reduceShape] = 
      backend_util.computeOutAndReduceShapes(input.shape, axes);
    const reduceSize = 
      util.sizeFromShape(reduceShape);
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmMax(inputId, CppDType[x.dtype], reduceSize, outId);
  }
}

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

const supportsFullBroadcast = false;
export const maximumConfig: KernelConfig =
  createBinaryKernelConfig(Maximum, supportsFullBroadcast);
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.padTop;
const padBottom = convInfo.padBottom;
const padLeft = convInfo.padLeft;
const padRight = convInfo.padRight;
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
};
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 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
};

const supportsFullBroadcast = false;
export const minimumConfig: KernelConfig =
    createBinaryKernelConfig(Minimum, supportsFullBroadcast);

import {KernelConfig, KernelFunc, MirrorPad, MirrorPadInputs, MirrorPadAttrs} from '@tensorflow/tfjs-core';

const supportsFullBroadcast = false;
export const mirrorpadConfig: KernelConfig =
    createBinaryKernelConfig(MirrorPad, supportsFullBroadcast);
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', 'array', 'number', 'number', 'array', 'array', 'number', '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 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
};

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);
shape equivalent to `\n * `Result`.\n */
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 {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
      'bool'    // padToMaxOutputSize
  ));
}

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,
};

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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
      'bool',    // padToMaxOutputSize
  ));
}

function kernelFunc(args: {
  backend: BackendWasm,
  inputs: NonMaxSuppressionV4Inputs,
  attrs: NonMaxSuppressionV4Attrs
}):
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```javascript
TensorInfo[] {\n  const {backend, inputs, attrs} = args;\n  const {iouThreshold, maxOutputSize, scoreThreshold,\n    padToMaxOutputSize} = attrs;\n  const {boxes, scores} = inputs;\n  const boxesId = backend.dataIdMap.get(boxes.dataId).id;\n  const scoresId = backend.dataIdMap.get(scores.dataId).id;\n  const resOffset = wasmFunc(\n    boxesId, scoresId, maxOutputSize, iouThreshold, scoreThreshold,\n    padToMaxOutputSize);\n  const {pSelectedIndices, selectedSize, pSelectedScores, pValidOutputs} =\n    parseResultStruct(backend, resOffset);\n  // Since we are not using scores for V4, we have to delete it from the\n  // heap.\n  backend.wasm._free(pSelectedScores);\n  const selectedIndicesTensor =\n    backend.makeOutput([selectedSize], 'int32', pSelectedIndices);\n  const validOutputsTensor =\n    backend.makeOutput([], 'int32', pValidOutputs);\n  return [selectedIndicesTensor, validOutputsTensor];
}

export const nonMaxSuppressionV4Config: KernelConfig = {\n  kernelName: NonMaxSuppressionV4,\n  backendName: 'wasm',\n  setupFunc: setup,\n  kernelFunc: nonMaxSuppressionV4 as {}\n};

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import {KernelConfig, KernelFunc, NonMaxSuppressionV5, NonMaxSuppressionV5Attrs,\n  NonMaxSuppressionV5Inputs, TensorInfo} from '@tensorflow/tfjs-core';\n
import {BackendWasm} from '../backend_wasm';\n
import {parseResultStruct} from './NonMaxSuppression_util';\n
let wasmFunc:\n  (boxesId: number, scoresId: number, maxOutputSize: number,\n   iouThreshold: number, scoreThreshold: number,\n   softNmsSigma: number) =>\n        number;

function setup(backend: BackendWasm): void {\n  wasmFunc =\n    backend.wasm.cwrap(\n      NonMaxSuppressionV5,\n      'number',  // Result*\n      [\n        'number',  // boxesId\n        'number',  // scoresId\n        'number',  // maxOutputSize\n        'number',  // iouThreshold\n        'number',  // scoreThreshold\n        'number',  // softNmsSigma\n      ]);\n}

function kernelFunc(args: {\n  backend: BackendWasm,\n  inputs: NonMaxSuppressionV5Inputs,\n  attrs: NonMaxSuppressionV5Attrs\n}): TensorInfo[] {\n  const {backend, inputs, attrs} = args;\n  const {iouThreshold, maxOutputSize, scoreThreshold,\n    softNmsSigma} = attrs;\n  const {boxes, scores} = inputs;\n  const boxesId = backend.dataIdMap.get(boxes.dataId).id;\n  const scoresId = backend.dataIdMap.get(scores.dataId).id;\n  const resOffset = wasmFunc(\n    boxesId, scoresId, maxOutputSize, iouThreshold, scoreThreshold,\n    softNmsSigma);\n  const {pSelectedIndices, selectedSize,\n    pSelectedScores, pValidOutputs} =\n    parseResultStruct(backend, resOffset);\n  // Since we are not using validOutputs for V5, we have to delete it from the\n  // heap.\n  backend.wasm._free(pValidOutputs);\n  const\n    selectedIndicesTensor =\n      backend.makeOutput([selectedSize], 'int32', pSelectedIndices);\n  const\n    selectedScoresTensor =\n      backend.makeOutput([selectedSize], 'float32', pSelectedScores);\n  return [\n    selectedIndicesTensor,\n    selectedScoresTensor\n  ];\n}

export const nonMaxSuppressionV5Config: KernelConfig = {\n  kernelName: NonMaxSuppressionV5,\n  backendName: 'wasm',\n  setupFunc: setup,\n  kernelFunc: nonMaxSuppressionV5 as {}\n};

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import {KernelConfig, NotEqual} from '@tensorflow/tfjs-core';\n
const supportsFullBroadcast = false;
export const notEqualConfig: KernelConfig = {\n  kernelName: NotEqual,\n  setupFunc: setup,\n  kernelFunc: notEqual as {}\n};
```
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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',  // indicesId
    'number',  // depth
    'number',  // onValue
    'number',  // offValue
    'number'   // outId
  ]);}

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, 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');
  });

  return packInputs(backend, attrs, inputs);
}

function packInputs(backend: BackendWasm, attrs: PackAttrs): TensorInfo {
  const inputs = [inputs]
  const {input, backend, attrs} = inputs[0];
  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');
  });

  return packInputs(backend, attrs, inputs);
}

export function stack(
    args: {inputs: PackInputs, backend: BackendWasm, attrs: PackAttrs}) {
  const inputs = [inputs]
  const {input, backend, attrs} = inputs[0];
  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');
  });

  return stackInputs(backend, attrs, inputs);
}

function stackInputs(backend: BackendWasm, attrs: PackAttrs): TensorInfo {
  const inputs = [inputs]
  const {input, backend, attrs} = inputs[0];
  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');
  });

  return stackInputs(backend, attrs, inputs);
}
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const intermediateTensorInfos: TensorInfo[] = [];
const expandedTensors = inputs.map(t => {
  const expandedT = backend.expandDims({inputs: [t]}, backend, attr: {dim: axis});

  intermediateTensorInfos.push(expandedT);
  return expandedT;
});

const result = concat(intermediateTensorInfos, backend, attr: {axis});

intermediateTensorInfos.forEach(t => 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, 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 its 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 xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
  const prePaddings = paddings.map(padTuple => padTuple[0]);
  const postPaddings = paddings.map(padTuple => padTuple[1]);

  wasmPadV2(
    xId, xShapeBytes, x.shape.length, CppDType[x.dtype], prePaddings, postPaddings, 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';

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, weightsId: number, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmPrelu = backend.wasm.cwrap(Prelu, null /* void */, 
[91x701]  ['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;
  if (input.dtype !== 'float32') {
    const 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
};

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*/, 
[91x386]  ['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 (reduceSize !== 0) {
    const outId = backend.dataIdMap.get(out.dataId).id;
    wasmProd(inputId, reduceSize, CppDType[input.dtype], outId);
  }
  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';\n
import {BackendWasm} from '../backend_wasm';\n
export const range =\n    (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,\n  backendName: 'wasm',\n  kernelFunc: range as {} as KernelFunc
};

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

import {KernelConfig, RealDiv} from '@tensorflow/tfjs-core';\n
const supportsFullBroadcast = true;
export const realDivConfig: KernelConfig = createBinaryKernelConfig(RealDiv, supportsFullBroadcast);

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

import {KernelConfig, Relu} from '@tensorflow/tfjs-core';\n
export const reluConfig: KernelConfig = createUnaryKernelConfig(Relu);

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

import {KernelConfig, Relu6} from '@tensorflow/tfjs-core';\n
export const relu6Config: KernelConfig = createUnaryKernelConfig(Relu6);

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

import {KernelConfig, KernelFunc, ResizeBilinear, ResizeBilinearAttrs, ResizeBilinearInputs, TensorInfo,
```javascript
import {BackendWasm} from '../backend_wasm';
import {Identity} from './Identity';
import {reshape} from './Reshape';

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

function setup(backend: BackendWasm): void {
  wasmReverse = backend.wasm.cwrap(Reverse, null /*void*/), [xId], [axes], [axesLength], [outShape], [outShapeLength], [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(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',
  setupFunc: setup,
  kernelFunc: reverse as {} as KernelFunc,
};
```

```javascript
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);
  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 {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 conditionShape = condition.shape;

  if (conditionShape.length === 0) {
    return t;
  }

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

  const conditionIdAndShape = conditionId + conditionShape.map((d, i) => 'd' + i);
  const tIdAndShape = tId + t.shape.map((d, i) => 'd' + i);

  const conditionId = backend.dataIdMap.get(conditionIdAndShape).id;
  const tId = backend.dataIdMap.get(tIdAndShape).id;

  const out = backend.makeOutput(t.shape + e.shape, t.dtype);
  const outId = backend.dataIdMap.get(out.dataId).id;

  const conditionBytes = condition.dataBytes;
  const tBytes = t.dataBytes;
  const eBytes = e.dataBytes;

  const conditionId = backend.dataIdMap.get(conditionIdAndShape).id;
  const tId = backend.dataIdMap.get(tIdAndShape).id;

  wasmSelect(conditionId, tId, eId, 0, outId);

  return out;
}

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';

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

let wasmSigmoid: (xId: number, dtype: CppDType, outId: number) => void;

function setup(backend: BackendWasm) {
  wasmSigmoid = backend.wasm.cwrap('Sigmoid', null, [
    'number',  // xId
    'number',  // dtype
    'number',  // outId
  ]);}

function sigmoid(args: {input: TensorInfo, backend: BackendWasm}) {
  const {input, backend} = args;
  const {dataId} = input;
  const {shape} = input;

  const xId = backend.dataIdMap.get(dataId).id;
  const xBytes = input.dataBytes;

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

  const outBytes = out.dataBytes;

  wasmSigmoid(xId, CppDType['float32'], outId);

  return out;
}

export const sigmoidConfig: KernelConfig = {
  kernelName: Sigmoid,
  backendName: 'wasm',
  kernelFunc: sigmoid as {} as KernelFunc,
  setupFunc: setup
};

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 */

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

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

export 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 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
};
```

---

```javascript
import {KernelConfig, Sin} from '@tensorflow/tfjs-core';

export const sinConfig: KernelConfig = createUnaryKernelConfig(Sin);
```

---

```javascript
import {KernelConfig, KernelFunc, Softmax, SoftmaxAttrs, SoftmaxInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

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

export 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 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
};
```

---

```javascript
import {backend_util, KernelConfig, KernelFunc, ReshapeAttrs, ReshapeInputs, SpaceToBatchND, SpaceToBatchNDAttrs, SpaceToBatchNDInputs, TensorInfo, TransposeAttrs, TransposeInputs, util} from '@tensorflow/tfjs-core';

import {PadV2Config} from './PadV2';

export function spaceToBatchND(args: {
  inputs: SpaceToBatchNDInputs,
  backend: BackendWasm,
  attrs: SpaceToBatchNDAttrs
}) {...
```

SpaceToBatchNDAttrs
}) {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  const {blockShape, paddings} = attrs;
  const prod = util.sizeFromShape(blockShape);
  const completePaddings: Array<[number, number]> = Array([0, 0]).fill(0).
  const for (let i = 1 + blockShape.length; i < x.shape.length; ++i) {
    completePaddings.push([0, 0]);
  }
  completePaddings.push((paddings as Array<[number, number]>));
  const paddedX =
      padV2Config.kernelFunc({
        inputs: [x],
        backend, attr: (paddings: completePaddings, constantValue: 0)
      }) as TensorInfo;
  const flattenedPaddedShape =
      backend_util.getReshaped(paddedX.shape, blockShape, prod, false);
  const permutedReshapedPaddedPermutation =
      backend_util.getPermuted(reshapedPaddedShape.length, blockShape.length, false);
  const flattenedShape =
      backend_util.getReshapedPermuted(paddedX.shape, blockShape, prod, false);
  const reshapeInputs: ReshapeInputs = {x: paddedX};
  const resultReshapeInputs: ReshapeInputs = {x: paddedXT};
  const reshapeOutputs =
      reshape({inputs: reshapeInputs, backend, attrs: reshapeAttrs});
  const resultReshapeOutputs =
      reshape({inputs: resultReshapeInputs, backend, attrs: resultReshapeAttrs});
  const begin =
      new Array(x.shape.length).fill(0);
  const size =
      x.shape.slice();
  return resultReshapeOutputs.map(s => {
    const xSliceSize =
        new Array(x.shape.length).fill(0);
    xSliceSize[$axis] = s;
    const xSlice =
        slice({inputs: {x}, attrs: {begin, size: xSliceSize}, backend});
    begin[$axis] += s;
    return xSlice;
  });
}

export const spaceToBatchNDConfig: KernelConfig = {
  kernelName: SpaceToBatchND,
  backendName: 'wasm',
  kernelFunc: spaceToBatchND as {} as KernelFunc
};
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=============================================================================

import {KernelConfig, Square} from '@tensorflow/tfjs-core';
import {createUnaryKernelConfig} from './unary_kernel';
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 =
backend.wasm.cwrap(Step, null /*void*/, ['number', 'number', 'number', 'number']);
function setup(backend:
BackendWasm): void {
  wasmStep = backend.wasm.cwrap(Step, null /*void*/, ['number', 'number', '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 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 =
backend.wasm.cwrap(StridedSlice, null /*void*/, ['number', 'array', 'array', 'array', 'array', 'array', 'array', 'array', 'number', 'number', 'number', 'number']);

=============================================================================
outShapeLength: 
    return result; // Optimization #1, slice is a no-op plus reshape
    result = reshape({inputs: [x], backend, attrs: {shape: finalShape}}); 
  } else if (sliceDim == 0 && 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');
    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 outStridesBytes =
        new Uint8Array(new Int32Array(util.computeStrides(finalShapeSparse)).buffer);
    const outId =
        backend.dataIdMap.get(out.dataId).id;
    wasmStridedSlice(
        xId, xStridesBytes, x.shape.length, beginBytes, endBytes, stridesBytes,
        outputShapeBytes, outStridesBytes, 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
};

const supportFullBroadcast = true;
export const sumConfig: KernelConfig =
    createBinaryKernelConfig(Add, supportFullBroadcast);

export * from '@tensorflow/tfjs-core';

const supportsFullBroadcast = true;
export const sumConfig: KernelConfig =
    createBinaryKernelConfig(Add, supportFullBroadcast);

const supportsFullBroadcast = true;
export const sumConfig: KernelConfig =
    createBinaryKernelConfig(Add, supportFullBroadcast);
const {axis, keepDims} = attrs;
const x = inputs[0];
const xId = backend.dataIdMap.get(x.dataId).id;
let inputId = xId;
let input = x;
const xIsTransposed = inputWasTransposed;
if (xIsTransposed) {
  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(x.shape.length);

// sum
const {x} = inputs;
const {axis, keepDims} = attrs;
const {x} = inputs[0];
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('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[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 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, Tile} from '@tensorflow/tfjs-core';

import {createUnaryKernelConfig} from './unary_kernel';
export const tileConfig: KernelConfig = createUnaryKernelConfig(Tan);

/**
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 */

import {KernelConfig, TileFunc, 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
      'array',   // 'array'
      'array',   // 'number'
      'array',   // 'number'
      'array',   // 'number'
      'array'
  ]);}

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] || 1);
}
const xShapeBytes = new Uint8Array(new Int32Array(x.shape).buffer);
const newShapeBytes = new Uint8Array(new Int32Array(newShape).buffer);

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

export const tileConfig: KernelConfig = {
  kernelName: Tile,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: tile as {} as KernelFunc
};

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 * limitations under the License.
 *
 *=============================================================================

*/

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, '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
};

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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',  // stridesLength
    'number',  // interpolationModeId
    'number',  // fillModeId
    'number',  // fillValue
    'number',  // outId
    'number',  // outId
  ]);}

export const transform:
    (args: {inputs: TransformInputs, backend: BackendWasm,
    attrs: TransformAttrs}) =>
        TensorInfo[] | TensorInfo = ({inputs, backend, attrs}) => {
          const {x} = inputs;
          const {transform: t, transformAttrs: tAttrs} = 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] = tAttrs.numChannels;
          const out = backend.makeOutput(outputShape, x.dtype);
          const outId = backend.dataIdMap.get(out.dataId).id;
          return out;
};

export const transformConfig: KernelConfig = {
  kernelName: Transform,
  backendName: 'wasm',
  setupFunc: setup,
  kernelFunc: transform as {} as KernelFunc
};
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 ?
    [imageHeight, imageWidth] : outShape;
  const 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 outId = backend.dataIdMap.get(out.dataId);
  const const imageSize = backend.dataMap.get(image.dataId);
  const const transformsData = backend.dataMap.get(transforms.dataId);
  const const interpolationModelId = interpolation === 'nearest' ? 1 : 2;
  let fillModeId;
  switch (fillMode) {
    case 'constant': fillModeId = 1;
    case 'reflect': fillModeId = 2;
    case 'wrap': fillModeId = 3;
    case 'nearest': fillModeId = 4;
    default: fillModeId = 1;
  }
  const 
    interpolationModeId = fillModelId === 1;
  let break;
  case 'reflect': fillModelId = 2;
  let break;
  case 'wrap': fillModelId = 3;
  let break;
  case 'nearest': fillModelId = 4;
  let break;
  default: fillModelId = 1;
  }
  const interpolationModeId = interpolation === 'nearest' ? 1 : 2;
  let fillModeId;
  switch (fillMode) {
    case 'constant': fillModeId = 1;
    case 'reflect': fillModeId = 2;
    case 'wrap': fillModeId = 3;
    case 'nearest': fillModeId = 4;
    default: fillModeId = 1;
  }
  const 
    interpolationModeId = fillModelId === 1;
  let break;
  case 'reflect': fillModelId = 2;
  let break;
  case 'wrap': fillModelId = 3;
  let break;
  case 'nearest': fillModelId = 4;
  let break;
  default: fillModelId = 1;
  }
  const 
    interpolationModeId = fillModelId === 1;
  let break;
  case 'reflect': fillModelId = 2;
  let break;
  case 'wrap': fillModelId = 3;
  let break;
  case 'nearest': fillModelId = 4;
  let break;
  default: fillModelId = 1;
  }
  const interpolationModelId = interpolation === 'nearest' ? 1 : 2;
  let fillModeId;
  switch (fillMode) {
    case 'constant': fillModeId = 1;
    case 'reflect': fillModeId = 2;
    case 'wrap': fillModeId = 3;
    case 'nearest': fillModeId = 4;
    default: fillModeId = 1;
  }
  const 
    interpolationModeId = fillModelId === 1;
  let break;
  case 'reflect': fillModelId = 2;
  let break;
  case 'wrap': fillModelId = 3;
  let break;
  case 'nearest': fillModelId = 4;
  let break;
  default: fillModeId = 1;
  }
  const 
    interpolationModeId = interpolation === 'nearest' ? 1 : 2;
  let fillModeId;
  switch (fillMode) {
    case 'constant': fillModeId = 1;
    case 'reflect': fillModeId = 2;
    case 'wrap': fillModeId = 3;
    case 'nearest': fillModeId = 4;
    default: fillModeId = 1;
  }
  const 
    interpolationModeId = fillModelId === 1;
  let break;
  case 'reflect': fillModelId = 2;
  let break;
  case 'wrap': fillModeId = 3;
  let break;
  case 'nearest': fillModelId = 4;
  let break;
  default: fillModeId = 1;
  }
  const interpolationModelId = interpolation === 'nearest' ? 1 : 2;
  let fillModeId;
  switch (fillMode) {
    case 'constant': fillModeId = 1;
    case 'reflect': fillModeId = 2;
    case 'wrap': fillModeId = 3;
    case 'nearest': fillModeId = 4;
    default: fillModeId = 1;
  }
  const 
    interpolationModeId = fillModelId === 1;
  let break;
  case 'reflect': fillModelId = 2;
  let break;
  case 'wrap': fillModeId = 3;
  let break;
  case 'nearest': fillModelId = 4;
  let break;
  default: fillModeId = 1;
  }
  const interpolationModelId = interpolation === 'nearest' ? 1 : 2;
  let fillModeId;
  switch (fillMode) {
    case 'constant': fillModeId = 1;
    case 'reflect': fillModeId = 2;
    case 'wrap': fillModeId = 3;
    case 'nearest': fillModeId = 4;
    default: fillModeId = 1;
  }
  const 
    interpolationModeId = fillModelId === 1;
  let break;
  case 'reflect': fillModelId = 2;
  let break;
  case 'wrap': fillModeId = 3;
  let break;
  case 'nearest': fillModeId = 4;
  let break;
  default: fillModeId = 1;
  }
  const interpolationModelId = interpolation === 'nearest' ? 1 : 2;
  let fillModeId;
  switch (fillMode) {
    case 'constant': fillModeId = 1;
    case 'reflect': fillModeId = 2;
    case 'wrap': fillModeId = 3;
    case 'nearest': fillModeId = 4;
    default: fillModeId = 1;
  }
const outVals = backend.typedArrayFromHeap(out);
outVals.fill(0);
return out;
}

export const zerosLikeConfig: KernelConfig = {
  kernelName: ZerosLike,
  backendName: 'wasm',
  kernelFunc: zerosLike
}

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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';
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 {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 {onesLikeConfig} from './kernels/OnesLike';
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 {realDivConfig} from './kernels/RealDiv';
import {relu6Config} from './kernels/Relu6';
import {reshapeConfig} from './kernels/Reshape';
import {realDivConfig} from './kernels/RealDiv';
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 {scatterNdConfig} from './kernels/ScatterNd';
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 {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,
  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,
  maxPoolConfig,
  meanConfig,
  minConfig,
  minimumConfig,
  mirrorPadConfig,
  multiplyConfig,
  negConfig,
  nonMaxSuppressionV3Config,
  nonMaxSuppressionV4Config,
  nonMaxSuppressionV5Config,
  notEqualConfig,
  onesLikeConfig,
  packConfig,
  padV2Config,
  powConfig,
  preluConfig,
  prodConfig,
  rangeConfig,
  realDivConfig,
  reluConfig,
  relu6Config,
  reshapeConfig,
  reshapeBilinearConfig,
  reverseConfig,
  roundConfig,
  roundTonearestUpConfig,
  roundToZeroConfig,
  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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 */
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)); // This typed array is a WebAssembly
program containing threaded
instructions.
return WebAssembly.validate(new Uint8Array([0, 97, 115, 109, 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, 0]));
}
catch (e) {
  throw e;
}

var WasmBackendModuleThreadedSimd = (function() {
  var _scriptDir = typeof document !== 'undefined' ? document.currentScript.src :
  undefined;
  if (typeof __filename !== 'undefined') _scriptDir = _scriptDir || __filename;
  return (function(WasmBackendModuleThreadedSimd) {
  WasmBackendModuleThreadedSimd = WasmBackendModuleThreadedSimd || {};

  GROWABLE_HEAP_I8() {
    if (wasmMemory.buffer != buffer) {updateGlobalBufferAndViews(wasmMemory.buffer)}
    return HEAP8();
  }

  GROWABLE_HEAP_U8() {
    if (wasmMemory.buffer != buffer) {updateGlobalBufferAndViews(wasmMemory.buffer)}
    return HEAPU8();
  }

  GROWABLE_HEAP_I32() {
    if (wasmMemory.buffer != buffer) {updateGlobalBufferAndViews(wasmMemory.buffer)}
    return HEAP32();
  }

  GROWABLE_HEAP_U32() {
    if (wasmMemory.buffer != buffer) {updateGlobalBufferAndViews(wasmMemory.buffer)}
    return HEAPU32();
  }

  GROWABLE_HEAP_F64() {
    if (wasmMemory.buffer != buffer) {updateGlobalBufferAndViews(wasmMemory.buffer)}
    return HEAPF64();
  }


  // readyPromiseResolve, readyPromiseReject;
  Module['ready'] = new Promise(resolve, reject) {
    readyPromiseResolve = resolve;
    readyPromiseReject = reject;
  };

  moduleOverrides = {};

  thisProgram = './this.program';
  arguments_ = process.argv.slice(2);

  process.on('uncaughtException', function(ex) {
    throw ex;
  });

  quit = function(status) {
    process.exit(status);
  };

  // WasmBackendModuleThreadedSimd
  var wasmMemory = Module['wasmMemory'] || {};

  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?

if(typeof readFileSync !== "function")

if(moduleOverrides(hasOwnProperty(key)))

abort("Assertion failed: "+text)

assert(condition, text)

call(\"string\", function(str){var ret=0;if(str!==null&&str!==undefined&&str!="\"")

assert(condition, text)

assert(condition, text)

convertReturnValue(ret)

"boolean"

"string"

"array"

"object"

"undefined"

})

}
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);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++]=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&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"] = 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=buffer;var Int8Array=Module["INT8_ARRAY"];Int16Array=Module["INT16_ARRAY"]}if(ENVIRONMENT_IS_NODE)console.log("on node you may need: --experimental-wasm-threads --experimental-wasm-bulk-memory and also use a recent version");if(!ver{if(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");}}(buffer,byteLength,updateGlobalBufferAndViews(buf))}
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```
function preMain() { if (ENVIRONMENT_IS_PTHREAD) return; callRuntimeCallbacks(__ATMAIN__); }
function preRun() { if (ENVIRONMENT_IS_PTHREAD) return; Module['__preRun__'](); if (typeof Module['__preRun__'] == 'function') Module['__preRun__'](); }
function postRun() { if (ENVIRONMENT_IS_PTHREAD) return; Module['__postRun__'](); if (typeof Module['__postRun__'] == 'function') Module['__postRun__'](); }
function onPreRun(cb) { __ATPRERUN__.unshift(cb); }
function onPostRun(cb) { __ATPOSTRUN__.unshift(cb); }
function addRunDependency(id) { assert(!ENVIRONMENT_IS_PTHREAD, "addRunDependency cannot be used in a pthread worker"); runDependencies++; if (Module['monitorRunDependencies']) { Module['monitorRunDependencies'](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(); } }
```

numWorkersToLoad=PTHread.unusedWorkers.length; PThread.unusedWorkers.forEach(function(w){ PThread.load WasmModuleToWorker(w.function) }); if(!numWorkersToLoad) { removeRunDependency("wasm-instantiate"); } function receiveInstantiatedSource(output) { receiveInstance(output["instance"], output["module"]); } function instantiateArrayBuffer(receiver) { return getBinaryPromise().then(function(binary) { WebAssembly.instantiate(binary, info)); 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).then(function(response) { var result = WebAssembly.instantiateStreaming(response, info); 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"]){ var exports = Module["instantiateWasm"](info, receiveInstance); return exports; } catch(e) { err("Module.instantiateWasm callback failed with error: "+e); abort(e); } } } var ASM_CONSTS = { 10250: 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); } } } err = function() { ... } // Setup the emscripten futex APIs _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, 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

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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 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);initWorker:function(){},pthre
ads:[],threadExitHandlers:[],setThreadStatus:function(){},runExitHandlers:function(){while(PThread.threadExitHandlers.length>0){PThread.threadExitHandlers.pop()}};if(ENVIRONMENT_IS_PTHREAD&;&.pthread.sel(f()___pthread
_tsd_run_dtors()),runExitHandlersAndDeinitThread:function(th,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_wake(tb+0,2147483647);_emscripten_thread_init(0,0,0);threadExit:function(exitCode){var
pb=_pthread_self();if(pb){PThread.runExitHandlersAndDeinitThread(tb,exitCode);if(ENVIRONMENT_IS_PTHRE
AD){postMessage("\"cmd\":\"exit\""}]);threadCancel:function(){(PThread.runExitHandlersAndDeinitThread(_pthr
ead_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);}}PThre
ad.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=[]};freeTh
readData:function(pthread){if(!pthread)return;free(pthread.threadInfoStruct){var
_tlsMemory=GROWABLE_HEAP_I32([pthread.threadInfoStruct+100>>>2],GROWABLE_HEAP_I32([pthread.thre
adInfoStruct+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=null);returnWorkerToPool:function(worker){PThread.runWithoutMainThreadQueuedCalls(funcio
n())delete
PThread.pthreads[worker.pthread.threadInfoStruct];PThread.unusedWorkers.push(worker);PThread.runningWorker.
s.splice(PThread.runningWorkers.indexOf(worker),1);PThread.freeThreadData(worker.pthread);worker.pthread=un
defined});runWithoutMainThreadQueuedCalls:function(func){GROWABLE_HEAP_I32([_emscripten_allow_m
ain_runtime_queued_calls>>>2]=0;try{func()}finally{GROWABLE_HEAP_I32([_emscripten_allow_main_runti
me_queued_calls>>>2]=1})},receiveObjectTransfer:function(data){}};loadWasmModuleToWorker:function(worker,o
HEAP_I32([a+(48>>2)],renderViaOffscreenBackBuffer,GROWABLE_HEAP_I32([a+(52>>2)]));

canvas=findCanvasEvenTarget(target);if(canvas){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,[],[]],printChar:function(stream,curr){var
buffer=SYSCALLS.buffers[stream];if(curr===0){curr===10}{stream===1?out:err}(UTF8ArrayToString(buffer,0));
buffer.length=0}else{buffer.push(curr)}},varargs:undefined,func():{SYSCALLS.varargs+=4;var
ret=GROWABLE_HEAP_I32([SYSCALLS.varargs+4)>>2];return ret},getStr:function(ptr){var
ret=UTF8ToString(ptr);return ret},get64:function(low,high){return low}};

_fd_close(fd){if(ENVIRONMENT_IS_PTHREAD)return _emscripten_proxy_to_main_thread_js(3,1,fd);return
0}

_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)}

_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<iiovcnt;i++){
ptr=GROWABLE_HEAP_I32([iov+i*8+4])=2};for(var
j=0;j<len;j++){SYSCALLS.printChar(fd,GROWABLE_HEAP_U8([ptr+j])=len}GROWABLE_HEAP_I32
([pnum+2]=num;return 0}function _pthread_cleanup_pop(execute){var
routine=PThread.threadExitHandlers.pop();if(execute)routines()}function
(pthread_cleanup_push(routine,arg){PThread.threadExitHandlers.push(function(){wasmTable.get(routine)(arg)})}

_spawnThread(threadParams){if(ENVIRONMENT_IS_PTHREAD)throw"Internal Error! spawnThread() can only ever be called from main application thread!";
var
worker=PThread.getNewWorker();if(worker.pthread!==undefined)throw"Internal 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)=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.pthrea
d_ptr};var
tis=pthread.threadInfoStruct<<2;Atomics.store(GROWABLE_HEAP_U32(tis+(64)>>2),threadParams.detached);A

tomics.store(GROWABLE_HEAP_U32(tis+(100)>>2),tlsMemory);Atomics.store(GROWABLE_HEAP_U32(tis
+(40)>>2),pthread.threadInfoStruct);Atomics.store(GROWABLE_HEAP_U32(tis+(80)>>2),threadParams.stackSiz
e);Atomics.store(GROWABLE_HEAP_U32(tis+(76)>>2),stackHigh);Atomics.store(GROWABLE_HEAP_U32(tis
+(104)>>2),threadParams.stackSize);Atomics.store(GROWABLE_HEAP_U32(tis+(108)>>2),stackHigh);Atom
ics.store(GROWABLE_HEAP_U32(tis+(104+12)>>2),threadParams.detached);var
global_libc=_emscripten_get_global_libc();var
global_locale=global_libc+40;Atoms.store(GROWABLE_HEAP_U32(tis+(172)>>2),global_locale);worker.pthre
ad=pthread;var
msg="\"cmd:\"run\\n\"start_routine\\n\"arg\\n\"\";worker.postMessage(msg,worker.transferList)}

if(worker.loaded){worker.runPthread(delete worker.runPthread)}

_spread_create(pthread_ptr,attr,start_routine,arg){if(typeof SharedArrayBuffer==="undefined")throw("Current environment does not support SharedArrayBuffer. pthreads are not available!\"");return
6}if(pthread_ptr){errno("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_fd(687865856,pthread_ptr,attr,start_routine,arg)}

if(error)return error;var
stackSize=0;var stackBase=0;var detached=0;var attr&&attr!=--
```javascript
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; ++i) {GROWABLE_HEAP_U32()[threadInfoStruct + i] = 0}
if (ENVIRONMENT_IS_PTHREAD) {threadParams.cmd = "spawnThread"; postMessage(threadParams, transferList)} else {spawnThread(threadParams)}
return 0
}

function __pthread_testcancel_js(){
if (!ENVIRONMENT_IS_PTHREAD) return;
var tb = _pthread_self();
if (!tb) return;
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_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){
var self = GROWABLE_HEAP_I32()[thread + 12 >> 2];
var detached = Atomics.load(GROWABLE_HEAP_U32(), thread + 64 >> 2);
if (detached) throw "Attempted to join thread already detached!";

var threadStatus = Atomics.load(GROWABLE HEAP_U32(), thread + 0 >> 2); if (!threadStatus) return 1;

var threadExitCode = Atomics.load(GROWABLE_HEAP_U32(), thread + 4 >> 2); if (threadExitCode) return 1;

cleanupThread(thread);
if (!ENVIRONMENT_IS_PTHREAD) cleanupThread(thread);

postMessage({cmd: "cleanupThread", thread: thread});
return 0;
}

function __sysconf(name){
var maxHeapSize = 2147483648;
return maxHeapSize;
}
```

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var
__free=Module['\_\_free\']=function(){return(\_\_free=Module['\_\_free\']=Module['asm']['\_\_free\']).apply(null,arguments)};
var
\_\_errno\_location=Module['\_\_errno\_location\']=function(){return(\_\_errno\_location=Module['\_\_errno\_location\']=Module['asm']['\_\_errno\_location\']).apply(null,arguments)};
var
_emscripten\_get\_global\_libc=Module['\_\_emscripten\_get\_global\_libc\']=function(){return(\_\_emscripten\_get\_global\_libc=Module['\_\_emscripten\_get\_global\_libc\']=Module['asm']['\_\_emscripten\_get\_global\_libc\']).apply(null,arguments)};
var
_pthread\_self=Module['\_\_pthread\_self\']=function(){return(\_\_pthread\_self=Module['\_\_pthread\_self\']=Module['asm']['\_\_pthread\_self\']).apply(null,arguments)};
var
_emscripten\_main\_thread\_process\_queued\_calls=Module['\_\_emscripten\_main\_thread\_process\_queued\_calls\']=function(){return(\_\_emscripten\_main\_thread\_process\_queued\_calls=Module['\_\_emscripten\_main\_thread\_process\_queued\_calls\']=Module['asm']['\_\_emscripten\_main\_thread\_process\_queued\_calls\']).apply(null,arguments)};
var
_emscripten\_current\_thread\_process\_queued\_calls=Module['\_\_emscripten\_current\_thread\_process\_queued\_calls\']=function(){return(\_\_emscripten\_current\_thread\_process\_queued\_calls=Module['\_\_emscripten\_current\_thread\_process\_queued\_calls\']=Module['asm']['\_\_emscripten\_current\_thread\_process\_queued\_calls\']).apply(null,arguments)};
var
_emscripten\_register\_main\_browser\_thread\_id=Module['\_\_emscripten\_register\_main\_browser\_thread\_id\']=function(){return(\_\_emscripten\_register\_main\_browser\_thread\_id=Module['\_\_emscripten\_register\_main\_browser\_thread\_id\']=Module['asm']['\_\_emscripten\_register\_main\_browser\_thread\_id\']).apply(null,arguments)};
var
_emscripten\_main\_browser\_thread\_id=Module['\_\_emscripten\_main\_browser\_thread\_id\']=function(){return(\_\_emscripten\_main\_browser\_thread\_id=Module['\_\_emscripten\_main\_browser\_thread\_id\']=Module['asm']['\_\_emscripten\_main\_browser\_thread\_id\']).apply(null,arguments)};
var
_emscripten\_do\_dispatch\_to\_thread=Module['\_\_emscripten\_do\_dispatch\_to\_thread\']=function(){return(\_\_emscripten\_do\_dispatch\_to\_thread=Module['\_\_emscripten\_do\_dispatch\_to\_thread\']=Module['asm']['\_\_emscripten\_do\_dispatch\_to\_thread\']).apply(null,arguments)};
var
_emscripten\_sync\_run\_in\_main\_thread\_4=Module['\_\_emscripten\_sync\_run\_in\_main\_thread\_4\']=function(){return(\_\_emscripten\_sync\_run\_in\_main\_thread\_4=Module['\_\_emscripten\_sync\_run\_in\_main\_thread\_4\']=Module['asm']['\_\_emscripten\_sync\_run\_in\_main\_thread\_4\']).apply(null,arguments)};
var
_emscripten\_run\_in\_main\_runtime\_thread\_js=Module['\_\_emscripten\_run\_in\_main\_runtime\_thread\_js\']=function(){return(\_\_emscripten\_run\_in\_main\_runtime\_thread\_js=Module['\_\_emscripten\_run\_in\_main\_runtime\_thread\_js\']=Module['asm']['\_\_emscripten\_run\_in\_main\_runtime\_thread\_js\']).apply(null,arguments)};
var
_emscripten\_call\_on\_thread=Module['\_\_emscripten\_call\_on\_thread\']=function(){return(\_\_emscripten\_call\_on\_thread=Module['\_\_emscripten\_call\_on\_thread\']=Module['asm']['\_\_emscripten\_call\_on\_thread\']).apply(null,arguments)};
var
_emscripten\_tls\_init=Module['\_\_emscripten\_tls\_init\']=function(){return(\_\_emscripten\_tls\_init=Module['\_\_emscripten\_tls\_init\']=Module['asm']['\_\_emscripten\_tls\_init\']).apply(null,arguments)};
var
_emscripten\_tls\_init\_init=Module['\_\_emscripten\_tls\_init\_init\']=function(){return(\_\_emscripten\_tls\_init\_init=Module['\_\_emscripten\_tls\_init\_init\']=Module['asm']['\_\_emscripten\_tls\_init\_init\']).apply(null,arguments)};
var
_stack\_save=Module['\_\_stack\_save\']=function(){return(\_\_stack\_save=Module['\_\_stack\_save\']=Module['asm']['\_\_stack\_save\']).apply(null,arguments)};
var
_stack\_restore=Module['\_\_stack\_restore\']=function(){return(\_\_stack\_restore=Module['\_\_stack\_restore\']=Module['asm']['\_\_stack\_restore\']).apply(null,arguments)};
var
_stack\_allocate=Module['\_\_stack\_allocate\']=function(){return(\_\_stack\_allocate=Module['\_\_stack\_allocate\']=Module['asm']['\_\_stack\_allocate\']).apply(null,arguments)};
var
_emscripten\_stack\_set\_limits=Module['\_\_emscripten\_stack\_set\_limits\']=function(){return(\_\_emscripten\_stack\_set\_limits=Module['\_\_emscripten\_stack\_set\_limits\']=Module['asm']['\_\_emscripten\_stack\_set\_limits\']).apply(null,arguments)};
var
_memalign=Module['\_\_memalign\']=function(){return(\_\_memalign=Module['\_\_memalign\']=Module['asm']['\_\_memalign\']).apply(null,arguments)};
var


if(ex!=\"unwind\"){if(ex instanceof
Module[\"ExitStatus\"]){if(Module[\"getNoExitRuntime\"]()){}else{Module[\"PThread\"].threadExit(ex.status)}}el
se{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
\"+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}};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=require;global.Module=Module;eval.call(null,x)}importScripts=function(f){globalEva
l(nodeRead(f))};postMessage=function(msg){parentPort.postMessage(msg)};if(typeof
performance===\"undefined\"){performance={now:function(){return Date.now()}}}}';","\nvar
WasmBackendModule = (function() {\n var _scriptDir = typeof document !== 'undefined' &&
document.currentScript ? document.currentScript.src : undefined;\n if (typeof __filename !== 'undefined')
_scriptDir = _scriptDir || __filename;\n return (\nfunction(WasmBackendModule) {\n WasmBackendModule =
WasmBackendModule || {};\n\nvar Module=typeof
WasmBackendModule!==\"undefined\"?WasmBackendModule:{};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===\"object\"&&typeof
process.versions.node===\"string\";ENVIRONMENT_IS_SHELL=!ENVIRONMENT_IS_WEB&&!ENVIRONM
ENT_IS_NODE&&!ENVIRONMENT_IS_WORKER;var scriptDirectory=\"\";function
locateFile(path){if(Module[\"locateFile\"]){return Module[\"locateFile\"](path,scriptDirectory)}return
scriptDirectory+path}var 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=n
odePath[\"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};if(process[\"argv\"].length>1){thisProgram=process[\"argv\"][1].replace(/\\\\/g,\"/\")}arguments_=process[\"arg
v\"].slice(2);process[\"on\"](\"uncaughtException\",function(ex){if(!(ex instanceof ExitStatus)){throw
ex}});process[\"on\"](\"unhandledRejection\",abort);quit_=function(status){process[\"exit\"](status)};Module[\"insp
ect\"]=function(){return\"[Emscripten Module object]\"}}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

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```
    _RealDiv=Module['\_RealDiv']=function(){return(_RealDiv=Module['\_RealDiv']=Module['asm\'][\'sa\']).apply(null,arguments)};var
    _Relu=Module['\_Relu']=function(){return(_Relu=Module['\_Relu']=Module['asm\'][\'ta\']).apply(null,arguments)};var
    _Relu6=Module['\_Relu6']=function(){return(_Relu6=Module['\_Relu6']=Module['asm\'][\'ua\']).apply(null,arguments)};var
    _ResizeBilinear=Module['\_ResizeBilinear']=function(){return(_ResizeBilinear=Module['\_ResizeBilinear']=Module['asm\'][\'va\']).apply(null,arguments)};var
    _Reverse=Module['\_Reverse']=function(){return(_Reverse=Module['\_Reverse']=Module['asm\'][\'wa\']).apply(null,arguments)};var
    _RotateWithOffset=Module['\_RotateWithOffset']=function(){return(_RotateWithOffset=Module['\_RotateWithOffset']=Module['asm\'][\'xa\']).apply(null,arguments)};var
    _Round=Module['\_Round']=function(){return(_Round=Module['\_Round']=Module['asm\'][\'ya\']).apply(null,arguments)};var
    _Rsqrt=Module['\_Rsqrt']=function(){return(_Rsqrt=Module['\_Rsqrt']=Module['asm\'][\'za\']).apply(null,arguments)};var
    _ScatterNd=Module['\_ScatterNd']=function(){return(_ScatterNd=Module['\_ScatterNd']=Module['asm\'][\'Aa\']).apply(null,arguments)};var
    _SelectV2=Module['\_SelectV2']=function(){return(_SelectV2=Module['\_SelectV2']=Module['asm\'][\'Ba\']).apply(null,arguments)};var
    _Sigmoid=Module['\_Sigmoid']=function(){return(_Sigmoid=Module['\_Sigmoid']=Module['asm\'][\'Ca\']).apply(null,arguments)};var
    _Sin=Module['\_Sin']=function(){return(_Sin=Module['\_Sin']=Module['asm\'][\'Da\']).apply(null,arguments)};var
    _Softmax=Module['\_Softmax']=function(){return(_Softmax=Module['\_Softmax']=Module['asm\'][\'Ea\']).apply(null,arguments)};var
    _Sqrt=Module['\_Sqrt']=function(){return(_Sqrt=Module['\_Sqrt']=Module['asm\'][\'Fa\']).apply(null,arguments)};var
    _Square=Module['\_Square']=function(){return(_Square=Module['\_Square']=Module['asm\'][\'Ga\']).apply(null,arguments)};var
    _SquaredDifference=Module['\_SquaredDifference']=function(){return(_SquaredDifference=Module['\_Squared Difference\']=Module['asm\'][\'Ha\']).apply(null,arguments)};var
    _Step=Module['\_Step']=function(){return(_Step=Module['\_Step']=Module['asm\'][\'Ja\']).apply(null,arguments)};var
    _StridedSlice=Module['\_StridedSlice']=function(){return(_StridedSlice=Module['\_StridedSlice']=Module['asm\'][\'Ka\']).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
```

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```
.Transform=Module["._Transform"] = function() { return (_Transform = Module["asm\"]["Va" }).apply(null, arguments);var
.Transpose=Module["._Transpose"] = function() { return (_Transpose = Module["asm\"]["Va" }).apply(null, arguments);var
._FusedMatMul=Module["._FusedMatMul"] = function() { return (_FusedMatMul = Module["asm\"]["Va" }).apply(null, arguments);var
._malloc=Module["._malloc"] = function() { return (_malloc = Module["asm\"]["Ta" ]).apply(null, arguments);var
._free=Module["._free"] = function() { return (_free = Module["asm\"]["Va"] }).apply(null, arguments);var
.__errno_location=Module[".__errno_location"] = function() { return (__errno_location = Module["asm\"]["Va"] ).apply(null, arguments);var
.stackSave=Module["stackSave"] = function() { return(stackSave = Module["asm\"]["Va"] }).apply(null, arguments);var
.stackRestore=Module["stackRestore"] = function() { return(stackSave = Module["asm\"]["Va"] }).apply(null, arguments);var
.stackAlloc=Module["stackAlloc"] = function() { return(stackAlloc = Module["asm\"]["Va"] }).apply(null, arguments);var


  return WasmBackendModule.ready
}(),
});
if (typeof exports === 'object' && typeof module === 'object')
  module.exports = WasmBackendModule;
else if (typeof define === 'function' && define['amd'])
  define([], function() { return WasmBackendModule; });

```

```
DataStorage<TensorData>

constructor(public wasm:
 BackendWasmModule|BackendWasmThreadedSimdModule) {
  super();

  actualThreadsCount = this.wasm.tfjs.getThreadsCount();

  this.dataIdMap = new DataStorage(this, engine());

  this.move(dataId, values, shape, dtype, 1); return dataId;

  async time(f: () => void) {
    const start = util.now();
    f();
    const kernelMs = util.now() - start;
    return {kernelMs};
  }

  async read(dataId: DataId): Promise<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;
  }

  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);
      default:
        throw new Error(`Unknown dtype ${dtype}`);
    }
  }
}

function createInstantiateWasmFunc(path: string) {
  // this will be replace by rollup plugin patchWechatWebAssembly
// 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 => {
      WebAssembly.instantiate(binary, imports).then(output => {
        return (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
 */
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 = '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];
  }
  return wasmModuleFolder + path;
}

/**
 * Initializes the wasm module and creates the js <-> wasm bridge.
 * @param simdSupported whether SIMD is supported
 * @param threadsSupported whether multithreading is supported
 * @param wasmModuleFolder the directory containing the WASM binaries.
 * @function init
 */
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) => {
    let initialized = false;
    const wasm: Promise<BackendWasmModule> = null;
    wasm.then(module => {
      initialized = true;
      const voidReturnType: string = 'void';
      module.tfjs = {
        init: module.cwrap('init', null, ['number', 'number', 'number', 'number', 'number']),
        initWithThreadsCount: module.cwrap('init_with_threads_count', null, ['number', 'number', 'number', 'number', 'number']),
      }
      resolve(module);
    })
  });

  factorConfig.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 bundle file. For more details see https://github.com/tensorflow/tfjs/blob/master/tfjs-backend-wasm/README.md#using-bundlers';
    reject({message: rejectMsg});
  };

  factorConfig>MainObject
  let wasm: BackendWasmModule;
  if (threadsSupported && simdSupported) {
    wasm = wasmFactoryThreadedSimd(factorConfig);
  } else {
    wasm = wasmFactory(factorConfig);
  }
  return wasm;
}

/**
 * This function overrides the Emscripten locateFile utility.
 * @param prefix The relative path to the file that needs to be loaded.
 * @param prefix
 */
function 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;
}

/**
 * @param factory The relative path to the main JavaScript file's directory.
 * @function factoryConfig
 */
export interface FactoryConfig {
  locateFile: (path, prefix) => string;
  instantiateWasm: (path) => string;
  mainScriptUrlOrBlob: Blob;
}

export function createInstantiateWasmFunc(getPathToWasmBinary(
  simdSupported as boolean, threadsSupported as boolean,
  wasmPathPrefix as string) {
  return (wasmPathPrefix != null ? wasmPathPrefix : '') => {
    const factoryConfig: FactoryConfig = {
      locateFile: locateFile,
      instantiateWasm: getPathToWasmBinary,
    };
    wasm = wasmFactory(factoryConfig);
    return wasm;
  };
}

async function initWasm(): Promise<BackendWasmModule> {
  const wasm = await createInstantiateWasmFunc(getPathToWasmBinary(
    threadsSupported as boolean,
    wasmPath == null ? null : wasmPath));
  return wasm;
}

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```javascript
        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
     * 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'}
     */
    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 ` +
                `tf.setBackend()` before you call `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'
     * });
     * tf.setBackend('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 your WASM binaries are not all located in the same directory, or if you're using different paths and prefix. 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()` before you call `tf.ready()`
            );
        }

        if (typeof prefixOrFileMap === 'string') {
            wasmPathPrefix = prefixOrFileMap;
        } else {
            wasmFileMap = prefixOrFileMap;
            const missingPaths = Object.keys(wasmBinaryNames).filter(name => wasmFileMap[name] == null);
            if (missingPaths.length > 0) {
                throw new 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.`);
            }
        }

        usePlatformFetch = false;
        wasmPathPrefix = prefixOrFileMap;
    }

    /**
     * Used in unit tests.
     */
    export function resetWasmPath(): void {
        wasmPath = null;
        wasmPathPrefix = null;
        wasmFileMap = {};
        customFetch = false;
    }

    let threadsCount = -1;
    let actualThreadsCount = -1;

    /**
     * Sets the number of threads that will be used by XNNPACK to create a threadpool (default to the number of logical CPU cores).
     * @param numThreads number
     * @doc {heading: 'Environment', namespace: 'wasm'}
     */
    export function setThreadsCount(numThreads: number): void {
        threadsCount = numThreads;
        actualThreadsCount = numThreads;
    }

    /**
     * Gets the actual threads count that is used by XNNPACK.
     * @doc {heading: 'Environment', namespace: 'wasm'}
     */
    export function getThreadsCount(): number {
        return actualThreadsCount;
    }
```

** @license See the LICENSE file. */
```

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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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```javascript
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,
};
```

---

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

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Found in path(s):
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* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/unary.cc
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* /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
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* /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
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* /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
* /opt/cola/permits/1234600203_1638277742.68/0/tfjs-backend-wasm-zip/tfjs-backend-wasm/src/cc/kernels/PadV2_test.cc

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```
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```

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{"version":3,"file":"Cos.js","sourceRoot":null,"sources":null,"names":null,"mappings":null}
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```
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```

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* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1.jar/org/springframework/beans/factory/config/YamlPropertiesFactoryBean.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1.jar/org/springframework/beans/factory/config/PreferencesPlaceholderConfigurer.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1.jar/org/springframework/beans/factory/support/MethodConverters.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1.jar/org/springframework/beans/factory/support/FactoryBeanUtils.java

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* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/support/BeanDefinitionOverrideException.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/propertyeditors/URIEditor.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/Aware.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/config/DestructionAwareBeanPostProcessor.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/propertyeditors/PropertyAccessorFactory.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/PropertyAccessor.java

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* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/support/ArgumentConvertingMethodInvoker.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/support/BeanDefinitionReaderUtils.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/support/BeanDefinitionDefaults.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/support/PropertiesBeanDefinitionReader.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/support/ConstructorResolver.java

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* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/CachedIntrospectionResults.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/support/AbstractBeanDefinition.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/parsing/ParseState.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/support/AbstractBeanDefinition.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/support/DefaultListableBeanFactory.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/support/AbstractAutowireCapableBeanFactory.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/support/FactoryBeanRegistrySupport.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/support/GenericTypeAwareAutowireCandidateResolver.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/support/AbstractBeanFactory.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/support/ListableBeanFactory.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/support/AutowireCandidateResolver.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/support/AbstractBeanFactory.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/support/BeanDefinitionValueResolver.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/support/DefaultSingletonBeanRegistry.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/support/AutowireCandidateResolver.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/support/AbstractBeanFactory.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/support/GenericTypeAwareAutowireCandidateResolver.java

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* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/propertyeditors/ZoneIdEditor.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/config/Scope.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/serviceloader/ServiceListFactoryBean.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/BeanNameAware.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/xml/UtilNamespaceHandler.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/propertyeditors/URLEditor.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/factory/parsing/SourceExtractor.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/support/ResourceEditorRegistrar.java
* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/propertyeditors/InputStreamEditor.java
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* /opt/cola/permits/1135888101_1613626209.41/0/spring-beans-5-2-8-release-sources-1-jar/org/springframework/beans/propertyeditors/ReaderEditor.java
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* /opt/ cola/ permits/ 1135888101_1613626209.41/0/ spring- beans- 5-2-8- release- sources- 1-
jar/ org/ springframework/ beans/ factory/ ImplicitlyAppearedSingletonException.java
* /opt/ cola/ permits/ 1135888101_1613626209.41/0/ spring- beans- 5-2-8- release- sources- 1-
jar/ org/ springframework/ beans/ factory/ BeanInitializationException.java
* /opt/ cola/ permits/ 1135888101_1613626209.41/0/ spring- beans- 5-2-8- release- sources- 1-
jar/ org/ springframework/ beans/ propertyeditors/ FileEditor.java
* /opt/ cola/ permits/ 1135888101_1613626209.41/0/ spring- beans- 5-2-8- release- sources- 1-
jar/ org/ springframework/ beans/ NullValueInNestedPathException.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\}. 

### Sub-types

- \{@link ChannelInboundHandler\} to handle inbound I/O events, and
- \{@link ChannelOutboundHandler\} to handle outbound I/O operations.

Alternatively, the following adapter classes are provided for your convenience:

- \{@link ChannelInboundHandlerAdapter\} to handle inbound I/O events,
- \{@link ChannelOutboundHandlerAdapter\} to handle outbound I/O operations,
- \{@link ChannelDuplexHandler\} to handle both inbound and outbound events

For more information, please refer to the documentation of each subtype.

### The context object

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.

### State management

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;

    @code @Override
    public void channelRead0([@link ChannelHandlerContext} ctx, Message message) {
        if (message instanceof LoginMessage) {
            authenticate((LoginMessage) message);
            loggedIn = true;
        } else (message instanceof GetDataMessage) {
            if (loggedIn) {
                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:

// Create a new handler instance per channel.
// See [ @link ChannelInitializer#initChannel(Channel)].
public class DataServerInitializer extends @link ChannelInitializer}{Channel} {

    @code @Override
    public void initChannel([@link Channel] channel) {
        channel.pipeline().addLast("handler", new DataServerHandler());
    }

}

Using [@link 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 [@link AttributeKey]s which is provided by
[@link ChannelHandlerContext]:

public interface Message {
public class DataServerHandler extends SimpleChannelInboundHandler<Message> {
    private final AttributeKey<Boolean> auth = AttributeKey.valueOf("auth");

    @Override
    public void channelRead(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 (Boolean.TRUE.equals(attr.get())) {
                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:

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 ChannelPipelines multiple times without
* a race condition.
* This annotation is provided for documentation purpose, just like

* Additional resources worth reading

* Please refer to the [@link ChannelHandler], and
  * [@link 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.
*/

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Written by Adam Twiss (adam@zeus.co.uk). March 1996

Thanks to the following people for their input:
Mike Belshe (mbelshe@netscape.com)
Michael Campanella (campanella@stevms.enet.dec.com)

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    var s = d.createElement('script');
    s.type = 'text/javascript';
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    s.src = 'https://comments.apache.org/show_comments.lua?site=' + comments_shortname + '&page=' + comments_identifier;
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* /opt/ws_local/PERMITS_SQL/1077639554_1597066895.65/0/netty-codec-socks-4-1-51-final-sources-jar/io/netty/handler/codec/socks/SocksAddressType.java
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* /opt/ws_local/PERMITS_SQL/1077639554_1597066895.65/0/netty-codec-socks-4-1-51-final-sources-jar/io.netty.handler.codec.socksx/SocksInitRequestDecoder.java

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# Contributions to the urllib3 project

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## Contributors

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* victor.vde <http://code.google.com/u/victor.vde/>
  * HTTPS patch (which inspired HTTPSCconnectionPool)

* erikcederstrand <http://code.google.com/u/erikcederstrand/>
  * NTLM-authenticated HTTPSCconnectionPool
  * Basic-authenticated HTTPSCconnectionPool (merged into make_headers)

* niphlod <niphlod@gmail.com>
  * Client-verified SSL certificates for HTTPSCconnectionPool
  * 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/@WBRSRIbZDhBFXQB6/>
  * Code review, PEP8 compliance, benchmark fix

* kennethreitz <me@kennethreitz.com>
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* Thomas Kluyver <thomas@kluyver.me.uk>
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* 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 Figovskiy <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 <s6ygl1az3@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]

1.371 libarchive 3.4.0-2ubuntu1

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1.372 grpc 1.9.1

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1.377 nghttp2 1.40.0-1build1

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* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/single_person/argmax2d_test.d.ts

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* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/multi_person/build_part_with_score_queue.js
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/multi_person/util.js
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/multi_person/build_part_with_score_queue.d.ts
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/multi_person/decode_single_pose.d.ts
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* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/multi_person/util.js
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/multi_person/decode_part_map.js
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/multi_person/argmax2d.d.ts
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/multi_person/argmax2d.js
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/output_rendering_util.js
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/output_rendering_util.d.ts
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/output_rendering_util.d.ts
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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);
}

/**
 * Takes the sigmoid of the segmentation output, and generates a segmentation map 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.
 */
export function toMaskTensor(segmentScores: tf.Tensor2D, threshold: number): tf.Tensor2D {
  return tf.tidy(() => {
    const segMap = tf.cast(tf.greater(segmentScores, tf.scalar(threshold)), 'int32');
    return tf.tensor1d(segMap)
      .map((val) => {
        return val ? 1 : 0;
      })
      .reshape([segMap.shape[0], segMap.shape[1]]);
  });
}

/**
 * Takes the sigmoid of the person and part map output, and returns a 2d tensor 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.

 @param segmentScores A 3d-tensor of the sigmoid of the segmentation output.
 @param partHeatmapScores A 3d-tensor of the sigmoid of the part heatmap.
 */
  const partMapHeight, partMapWidth, numParts = partHeatmapScores.shape;
  const flattenedMap = toFlattenedOneHotPartMap(partHeatmapScores);
  const partMapFlattened = tf.reshape(partMapFlattened, [partMapHeight, partMapWidth]);
  const partMapShiftedUpForClipping = tf.add(partMapFlattened, tf.scalar(1, 'int32'));
  return tf.tensor1d(partMapShiftedUpForClipping)
    .map((val) => {
      return val ? 1 : 0;
    })
    .reshape([partMapHeight, partMapWidth]);
}

/**
 * Takes the sigmoid of the person and part map output, and returns a 2d tensor 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.

 @param segmentScores A 3d-tensor of the sigmoid of the segmentation output.
 @param partHeatmapScores A 3d-tensor of the sigmoid of the part heatmap.
 */
export function decodeOnlyPartSegmentation(partHeatmapScores: tf.Tensor3D): tf.Tensor2D {
  const partMapHeight, partMapWidth, numParts = partHeatmapScores.shape;
  const flattenedMap = toFlattenedOneHotPartMap(partHeatmapScores);
  const partMapFlattened = tf.reshape(partMapFlattened, [partMapHeight, partMapWidth]);
  const partMapShiftedUpForClipping = tf.add(partMapFlattened, tf.scalar(1, 'int32'));
  return tf.tensor1d(partMapShiftedUpForClipping)
    .map((val) => {
      return val ? 1 : 0;
    })
    .reshape([partMapHeight, partMapWidth]);
}

/**
 * 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);
}

/**
 * Takes the sigmoid of the segmentation output, and generates a segmentation map 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.
 */
export function toMaskTensor(segmentScores: tf.Tensor2D, threshold: number): tf.Tensor2D {
  return tf.tidy(() => {
    const segMap = tf.cast(tf.greater(segmentScores, tf.scalar(threshold)), 'int32');
    return tf.tensor1d(segMap)
      .map((val) => {
        return val ? 1 : 0;
      })
      .reshape([segMap.shape[0], segMap.shape[1]]);
  });
}

/**
 * Takes the sigmoid of the person and part map output, and returns a 2d tensor 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.

 @param segmentScores A 3d-tensor of the sigmoid of the segmentation output.
 @param partHeatmapScores A 3d-tensor of the sigmoid of the part heatmap.
 */
  const partMapHeight, partMapWidth, numParts = partHeatmapScores.shape;
  const flattenedMap = toFlattenedOneHotPartMap(partHeatmapScores);
  const partMapFlattened = tf.reshape(partMapFlattened, [partMapHeight, partMapWidth]);
  const partMapShiftedUpForClipping = tf.add(partMapFlattened, tf.scalar(1, 'int32'));
  return tf.tensor1d(partMapShiftedUpForClipping)
    .map((val) => {
      return val ? 1 : 0;
    })
    .reshape([partMapHeight, partMapWidth]);
}

/**
 * Takes the sigmoid of the person and part map output, and returns a 2d tensor 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.

 @param segmentScores A 3d-tensor of the sigmoid of the segmentation output.
 @param partHeatmapScores A 3d-tensor of the sigmoid of the part heatmap.
 */
export function decodeOnlyPartSegmentation(partHeatmapScores: tf.Tensor3D): tf.Tensor2D {
  const partMapHeight, partMapWidth, numParts = partHeatmapScores.shape;
  const flattenedMap = toFlattenedOneHotPartMap(partHeatmapScores);
  const partMapFlattened = tf.reshape(partMapFlattened, [partMapHeight, partMapWidth]);
  const partMapShiftedUpForClipping = tf.add(partMapFlattened, tf.scalar(1, 'int32'));
  return tf.tensor1d(partMapShiftedUpForClipping)
    .map((val) => {
      return val ? 1 : 0;
    })
    .reshape([partMapHeight, partMapWidth]);
}
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 on
 * (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 [${inputShape[1]}, ${inputShape[2]}]` + ` must both be equal to or -1`);
    /*\n     * Predicts intermediate Tensor representations.
     */
    * @param input The input RGB image of the base
     * model.
     * A Tensor of shape: inputResolution x inputResolution x 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
     * instances.
     * - longOffsets: A Tensor3D that represents the long offsets used
     * for
     * - partHeatmaps: A Tensor3D that represents the body part segmentation.
     *
     * @return A dictionary of base
     * model's intermediate predictions.
     */
    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,
      partOffsets: 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,
          partOffsets: namedResults.partOffsets
        };
      });
    }

  // 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.
  abstract preprocessInput(input: tf.Tensor3D): tf.Tensor3D;

  // MobileNet and ResNet predict methods output a different order for
  // these values, we have a method that needs to be implemented to order them.
  abstract nameOutputResults(results: tf.Tensor3D[]): {
    heatmap:
    offsets:
    displacementFwd:
    displacementBwd:
    segmentation:
    partHeatmaps:
    longOffsets:
    partOffsets:
  };

  /**
   * Releases the CPU and GPU memory allocated by the model.
   */
  dispose() {
    this.model.dispose();
  }
}

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, 
    };
  }

/*\n\n\n*/
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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', '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;
    }, {});

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'],
];

export const CONNECTED_PART_INDICES =
    CONNECTED_PART_NAMES.map(([jointNameA, jointNameB]) =>
        [PART_IDS[jointNameA],
            PART_IDS[jointNameB]]);

export function getScale(
  [height, width]: [number, number],
  [inputResolutionY, inputResolutionX]: [number, number],
  padding: Padding): [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 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
  return (x1 - x2)**2 + (y1 - y2)**2;}

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)};
}

export function getImageCoords(part: Part, outputStride: number, offsets: TensorBuffer3D): Vector2D {
  const {heatmapX, id: keypoint} = part;
  const {y, x} = getOffsetPoint(heatmapX, keypoint, offsets);
  return {y: part.heatmapX * outputStride + y, x: part.heatmapY * outputStride + x};
}

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 squaredDistance(y1: number, x1: number, y2: number, x2: number): number { const
  return (x1 - x2)**2 + (y1 - y2)**2;}

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dy = y2 - y1; 
const dx = x2 - x1;
return dy * dy + dx * dx;
}

export function addVectors(a: Vector2D, b: Vector2D) {
  return {x: a.x + b.x, y: a.y + b.y};
}

export function clampVector(a: Vector2D, min: number, max: number) {
  return {x: clamp(a.x, min, max), y: clamp(a.y, min, max)};
}

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 */

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(position: Pair, [padT, padL]: [number, number], [scaleX, scaleY]: [number, number], stride: number): Pair {
  const y = Math.round(((padT + position.y + 1.0) * scaleY - 1.0) / stride);
  const x = Math.round(((padL + position.x + 1.0) * scaleX - 1.0) / stride);
  return {x, y};
}

function getEmbedding(location: Pair, keypointIndex: number, convertToPosition: (pair: Pair) => Pair, outputResolutionX: number, longOffsets: Float32Array, refineSteps: number, [height, width]: [number, number]): Pair {
  const newLocation = convertToPosition(location);
  const nn = newLocation.y * outputResolutionX + newLocation.x;
  let dy = longOffsets[NUM_KEYPOINTS * 2 * nn + keypointIndex];
  let dx = longOffsets[NUM_KEYPOINTS * 2 * nn + 1 + keypointIndex];
  let y = location.y + dy;
  let x = location.x + dx;
  for (let t = 0; t < refineSteps; t++) {
    y = Math.min(y, height - 1);
    x = Math.min(x, width - 1);
    const newPos = convertToPosition({x, y});
    const nn = newPos.y * outputResolutionX + newPos.x;
    dy = longOffsets[NUM_KEYPOINTS * 2 * nn + keypointIndex];
    dx = longOffsets[NUM_KEYPOINTS * 2 * nn + 1 + keypointIndex];
    y = y + dy;
    x = x + dx;
  }
  return {x, y};
}

function matchEmbeddingToInstance(location: Pair, longOffsets: Float32Array, poses: Pose[], numKptForMatching: number, [padT, padL]: [number, number], [scaleX, scaleY]: [number, number], stride: number): number {
  const embed: Pair[] = [];
  const convertToPosition = (pair: Pair) =>
      convertToPositionInOutput(pair, [padT, padL], [scaleX, scaleY], stride);
  for (let keypointsIndex = 0; keypointsIndex < numKptForMatching; keypointsIndex++) {
    const embedding = getEmbedding(
        location, keypointsIndex, convertToPosition, outputResolutionX,
        longOffsets, refineSteps, number, [height, width], [number, number]);
    embed.push(embedding);
  }
  let kMin = -1;
  let kMinDist = 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], 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[], height: number, width: number, stride: number,
    [inHeight, inWidth]: [number, number], padding: Padding,
    refineSteps: number, numKptForMatching: number) {
  const dataArrays =
      posesAboveScore.map(x => new Uint8Array(height * width).fill(0));
  const [top: padT, left: padL] =
      padding;
  const [scaleX, scaleY] =
      getScale([height, width], [inHeight, inWidth], padding);
  const [outputResolutionX, ] =
      getOutputResolution([inHeight, inWidth], stride);
  for (let i = 0; i < height; i++) {
    for (let j = 0; j < width; j += 1) {
      const n = i * width + j;
      const prob = segmentation[n];
      if (prob === 1) {
        const kMin = matchEmbeddingToInstance(n,
            [x, y: i], longOffsets, posesAboveScore,
            [numKptForMatching, number, number]);
        dataArrays[n] =
            padT + left; [padT, padL] =
      padding;
    }
  }
  return dataArrays;
}
numKptForMatching, num, 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, [inHeight, inWidth]: [number, number],
    padding: Padding, refineSteps: number,
    numKptForMatching = 5): Int32Array[] {
  const dataArrays =
      posesAboveScore.map(x => new Int32Array(numKptForMatching));

  const {top: padT, left: padL} = padding;

  const [scaleX, scaleY] =
      getScale([height, width], [inHeight, inWidth], padding);
  const [outputResolutionX, outputResolutionY] =
      getOutputResolution([inHeight, inWidth], stride);

  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;
}

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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';
 *
 * decodeMultiplePartMasksWebGl
 *
 * 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));
 *     }
 * `,
 *     userCode: `
 *     float dist(float x1, float y1, float x2, float y2) {
 *         return pow(x1 - x2, 2.0) + pow(y1 - y2, 2.0);
 *     }
 * `,
 *     userCode: `
 *     int keypoint = tf.tensor(poseVals[kp], [maxNumPeople, NUM_KEYPOINTS, 3]);
 * `,
 *     userCode: `
 *     int convertToPositionInOutput(int pos, int pad, float scale, int stride) {
 *         return round(((float(pos + pad) + 1.0) * scale - 1.0) / float(stride));
 *     }
 * `,
 *     userCode: `
 *     float dist(float x1, float y1, float x2, float y2) {
 *         return pow(x1 - x2, 2.0) + pow(y1 - y2, 2.0);
 *     }
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 *     int keypoint = tf.tensor(poseVals[kp], [maxNumPeople, NUM_KEYPOINTS, 3]);
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 *     int convertToPositionInOutput(int pos, int pad, float scale, int stride) {
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 *     float dist(float x1, float y1, float x2, float y2) {
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 *     userCode: `
 *     int keypoint = tf.tensor(poseVals[kp], [maxNumPeople, NUM_KEYPOINTS, 3]);
 * `,
 *     userCode: `
 *     int convertToPositionInOutput(int pos, int pad, float scale, int stride) {
 *         return round(((float(pos + pad) + 1.0) * scale - 1.0) / float(stride));
 *     }
 * `,
 *     userCode: `
 *     float dist(float x1, float y1, float x2, float y2) {
 *         return pow(x1 - x2, 2.0) + pow(y1 - y2, 2.0);
 *     }
 * `,
 *     userCode: `
 *     int keypoint = tf.tensor(poseVals[kp], [maxNumPeople, NUM_KEYPOINTS, 3]);
 * `,
 *     userCode: `
 *     int convertToPositionInOutput(int pos, int pad, float scale, int stride) {
 *         return round(((float(pos + pad) + 1.0) * scale - 1.0) / float(stride));
 *     }
 * `,
 *     userCode: `
 *     float dist(float x1, float y1, float x2, float y2) {
 *         return pow(x1 - x2, 2.0) + pow(y1 - y2, 2.0);
 *     }
 * `,
 *     userCode: `
 *     int keypoint = tf.tensor(poseVals[kp], [maxNumPeople, NUM_KEYPOINTS, 3]);
 * `,
 *     userCode: `
 *     int convertToPositionInOutput(int pos, int pad, float scale, int stride) {
 *         return round(((float(pos + pad) + 1.0) * scale - 1.0) / float(stride));
 *     }
 * `,
 *     userCode: `
 *     float dist(float x1, float y1, float x2, float y2) {
 *         return pow(x1 - x2, 2.0) + pow(y1 - y2, 2.0);
 *     }
 * `,
 *     userCode: `
 *     int keypoint = tf.tensor(poseVals[kp], [maxNumPeople, NUM_KEYPOINTS, 3]);
 * `,
 *     userCode: `
 *     int convertToPositionInOutput(int pos, int pad, float scale, int stride) {
 *         return round(((float(pos + pad) + 1.0) * scale - 1.0) / float(stride));
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 *     userCode: `
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 *     }
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 *     userCode: `
 *     int keypoint = tf.tensor(poseVals[kp], [maxNumPeople, NUM_KEYPOINTS, 3]);
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 *     userCode: `
 *     int convertToPositionInOutput(int pos, int pad, float scale, int stride) {
 *         return round(((float(pos + pad) + 1.0) * scale - 1.0) / float(stride));
 *     }
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 *     userCode: `
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 *         return pow(x1 - x2, 2.0) + pow(y1 - y2, 2.0);
 *     }
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 *     userCode: `
 *     int keypoint = tf.tensor(poseVals[kp], [maxNumPeople, NUM_KEYPOINTS, 3]);
 * `,
 *     userCode: `
 *     int convertToPositionInOutput(int pos, int pad, float scale, int stride) {
 *         return round(((float(pos + pad) + 1.0) * scale - 1.0) / float(stride));
 *     }
 * `,
 *     userCode: `
 *     float dist(float x1, float y1, float x2, float y2) {
 *         return pow(x1 - x2, 2.0) + pow(y1 - y2, 2.0);
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 *     userCode: `
 *     int keypoint = tf.tensor(poseVals[kp], [maxNumPeople, NUM_KEYPOINTS, 3]);
 * `,
 *     userCode: `
 *     int convertToPositionInOutput(int pos, int pad, float scale, int stride) {
 *         return round(((float(pos + pad) + 1.0) * scale - 1.0) / float(stride));
 *     }
 * `,
 *     userCode: `
 *     float dist(float x1, float y1, float x2, float y2) {
 *         return pow(x1 - x2, 2.0) + pow(y1 - y2, 2.0);
 *     }
 * `,
 *     userCode: `
 *     int keypoint = tf.tensor(poseVals[kp], [maxNumPeople, NUM_KEYPOINTS, 3]);
 * `,
 *     userCode: `
 *     int convertToPositionInOutput(int pos, int pad, float scale, int stride) {
 *         return round(((float(pos + pad) + 1.0) * scale - 1.0) / float(stride));
 *     }
 * `,
 *     userCode: `
 *     float dist(float x1, float y1, float x2, float y2) {
 *         return pow(x1 - x2, 2.0) + pow(y1 - y2, 2.0);
 *     }
 * `,
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);

    int iMin = -1;
    for (int i = 0; i < $maxNumPeople; i++) {
        float curDistSum = 0.0;
        int numKpt = 0;
        for (int k = 0; k < $NUM_KEYPOINTS; k++) {
            float dy = sampleLongOffsets(stridedH, stridedW, 0, k);
            float dx = sampleLongOffsets(stridedH, stridedW, 1, k);

            float y = float(h) + dy;
            float x = float(w) + dx;

            for (int s = 0; s < $refineSteps; s++) {
                int yRounded = round(min(y, float($height - 1.0)));
                int xRounded = round(min(x, float($width - 1.0)));

                float yStrided = convertToPositionInOutputFloat(yRounded, $padT, $scaleY, $stride);
                float xStrided = convertToPositionInOutputFloat(xRounded, $padL, $scaleX, $stride);

                float dy = sampleLongOffsets(yStrided, xStrided, 0, k);
                float dx = sampleLongOffsets(yStrided, xStrided, 1, k);

                y = y + dy;
                x = x + dx;
            }

            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 && curDistSum / float(numKpt) < minDist) {
            return iMin;
        }
    }

    return -1;
}

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]);
}
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.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 =
```javascript
this.priorityQueue[i] = this.priorityQueue[i].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 maxima 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);

        // 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(heatmapY, heatmapX, keypointId, scores)) {
          queue.enqueue({score, part: {heatmapY, heatmapX, id: keypointId}});
        }
      }
    }
  }

  return queue;
}
```

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.

```javascript
function traverseToTargetKeypoint(
  edgeId: number, sourceKeypoint: Keypoint, targetKeypointId: number,
  scoresBuffer: TensorBuffer3D, offsets: TensorBuffer3D, outputStride: number,
  displacements: TensorBuffer3D, offsetRefineStep = 2): Keypoint {

  const [height, width] = scoresBuffer.shape;

  let targetKeypointIndices = getStridedIndexNearPoint(
    sourceKeypoint.position, outputStride, height, width);
  const displacement =
    getDisplacement(edgeId, sourceKeypointIndices, displacements);

  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(
      {x: targetKeypointIndices.x * outputStride,
       y: targetKeypointIndices.y * outputStride},
      {x: offsetPoint.x, y: offsetPoint.y});
  }

  let score = scoresBuffer.get(
    targetKeypointIndices.y, targetKeypointIndices.x, targetKeypointId);

  return {position: targetKeypoint, score, part: PART_NAMES[targetKeypointId]};
}
```

```javascript
export function decodePose(
    root: PartWithScore, scores: TensorBuffer3D, offsets: TensorBuffer3D,
    outputStride: number, displacementsFwd: TensorBuffer3D,
    displacementsBwd: 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 rootPoint = getImageCoords(root.part, outputStride, offsets);

  instanceKeypoints[root.part.id] = {
    position: rootPoint,
    score: rootScore,
  };

  // Decode the part positions downwards in the tree, following the forward displacements.
  for (let edge = 0; edge < numEdges; ++edge) {
    const sourceKeypointId = parentToChildEdges[edge];
    const targetKeypointId = childToParentEdges[edge];
    if (instanceKeypoints[sourceKeypointId] && !instanceKeypoints[targetKeypointId]) {
      instanceKeypoints[targetKeypointId] = traverseToTargetKeypoint(
        edge, instanceKeypoints[sourceKeypointId], targetKeypointId, scores,
        offsets, outputStride, displacementsFwd);
    }
  }

  return instanceKeypoints;
}
```
squaredDistance

function withinNmsRadiusOfCorrespondingPoint(
    poses: Pose[], squaredNmsRadius: number, {x, y}: {x: number, y: number},
    keypointId: number, keypoint: Keypoint): 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;
}

const kLocalMaximumRadius = 1;

/**
 * Detects multiple poses and finds their parts
 * from part scores and displacement vectors. It returns up to `maxDetections`
 * object instances 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
 * `numParts`.

 * 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]` is the short range offset vector of the `k`-th
 * object part at heatmap position `(y, x)`.

 * The value of `displacementsFwd[y, x, k]` is the forward displacement vector
 * between consecutive part from the root towards the leaves.

 * The value of `displacementsBwd[y, x, k]` is the backward displacement vector between
 * consecutive part from the root towards the leaves.

 * The output stride that was used when feed-forwarding
 * through the PoseNet model.

 * Must be 32, 16, or 8.

 * Maximum number of returned instance detections per image.

 * Only return instance detections that have root part score greater or equal to this value.

 * `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 0.5.

 * `scoreThreshold` Only return instance detections that have root part score greater or equal to this value.

 * `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 0.5.

 * Generate at most `maxDetections` object instances per image
 * in decreasing root part score order while (poses.length < `maxDetections`) & &
 * `queue.empty()`) {

 * The top element in the queue is the next root candidate.

 * `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.
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, 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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 * limitations under the License.
 */

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|
  HTMLCanvasElement|
  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.
    return [input.height, input.width];
  } else {
    return [input.videoHeight, input.videoWidth];
  }
}

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(`error: Unknown input type: ${input}.`);
  }
}

function isValidInputResolution(
    resolution: number, outputStride: number): boolean {
  return (resolution - 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 = {
  [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(
    internalResolution: BodyPixInternalResolution): number {
  if (typeof internalResolution === 'string') {
    const result = INTERNAL_RESOLUTION_PERCENTAGES[internalResolution];

    tf.util.assert(
        typeof result === 'number',
        () => `string value of inputResolution must be one of ${Object.values(INTERNAL_RESOLUTION_STRING_OPTIONS).join(',')} but was ${internalResolution}.`);
    return result;
  } else {
    tf.util.assert(
        typeof internalResolution === 'number' &&
            internalResolution <= MAX_INTERNAL_RESOLUTION &&
            internalResolution >= MIN_INTERNAL_RESOLUTION,
        () => `inputResolution must be a string or number between ${MIN_INTERNAL_RESOLUTION} and ${MAX_INTERNAL_RESOLUTION}, but was ${internalResolution}.`);

    return internalResolution;
  }
}

export function toInputTensor(input: BodyPixInput) {
  // TODO: tf.browser.fromPixels types to support OffscreenCanvas
  // @ts-ignore
  return input instanceof tf.Tensor ? input : tf.browser.fromPixels(input);
}

export function resizeAndPadTo(
    imageTensor: tf.Tensor3D, [targetH, targetW]: [number, number],
    flipHorizontal = false): {
  resizedAndPadded: tf.Tensor3D,
  paddedBy: [[number, number], [number, number]]
} {
  const targetAspect = targetW / targetH;
  const aspect = width / height;
  let
resizeW: number;
let resizeH: number;
let padL: number;
let padR: number;
let padT: number;
let padB: number;
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(targetW * aspect);
  const padWidth = targetW - resizeW;
padL = Math.floor(padWidth / 2);
padR = targetW - (resizeW + padL);
padT = 0;
padB = 0;
}
}
}

const resizedAndPadded = tf.tidy(() => {
  // resize to have largest dimension match image
  let resized: tf.Tensor3D;
  if (flipHorizontal) {
    resized = tf.image.resizeBilinear(tf.reverse(imageTensor, 1),
        [resizeH, resizeW]);
  } else {
    resized = tf.image.resizeBilinear(imageTensor, [resizeH, resizeW]);
  }

  const padded = tf.pad3d(resized, [[padT, padB], [padL, padR], [0, 0]]);
}

return {
  resizedAndPadded, paddedBy: [[padT, padB], [padL, padR]]};
}

export function scaleAndCropToInputTensorShape(
    tensor: tf.Tensor3D,
    [inputTensorHeight, inputTensorWidth]: [number, 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, originalWidth]: [number, number],
    [[padT, padB], [padL, padR]]: [[number, number], [number, 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], [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((keyPoint, part) => ({
      score: keyPoint.score,
      position: (x, y) => position.x * scaleX + offsetX
    })),
  }
}

export function scalePoses(
    poses: Pose[], scaleY: number, scaleX: number, offsetY = 0, offsetX = 0): Pose[] {
  return poses.map(pose => scalePose(pose, scaleX, offsetY, offsetX));
}

export function flipPoseHorizontal(poses: Pose, imageUrl: number): Pose {
  return pose => scalePose(pose, imageUrl, offsetY, offsetX);
imageWidth - 1 - position.x, y: position.y

export function flipPoseHorizontal(poses: Pose[], imageWidth: number) { if (imageWidth <= 0) { return poses; } return poses.map(pose => flipPoseHorizontal(pose, imageWidth)); }

export function scaleAndFlipPoses(poses: Pose[], [inputResolutionHeight, inputResolutionWidth]: [number, number], [padding: Padding, flipHorizontal: boolean]: Pose[]) { const scaleY = (height + padding.top + padding.bottom) / inputResolutionHeight;
  const scaleX = (width + padding.left + padding.right) / inputResolutionWidth;
  const scaledPoses = poses.map(poses => scaleAndFlipPoses(poses, scaleX, scaleY, -padding.top, -padding.left));
  return if (flipHorizontal) { return flipPoseHorizontal(scaledPoses, width); } else { return scaledPoses; }
}

export function scaleAndFlipPoses(poses: Pose[], [height, width]: [number, number], [inputResolutionHeight, inputResolutionWidth]: [number, number], padding: Padding, flipHorizontal: boolean): Pose[] { const scaleY = (height + padding.top + padding.bottom) / inputResolutionHeight;
  const scaleX = (width + padding.left + padding.right) / inputResolutionWidth;
  const scaledPoses = poses.map(poses => scaleAndFlipPoses(poses, scaleX, scaleY, -padding.top, -padding.left));
  return if (flipHorizontal) { return flipPoseHorizontal(scaledPoses, width); } else { 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 {decodeMultiplePoses} from './multi_person/decode_multiple_poses';
import {ResNet} from './resnet';
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.
 * (And for references, the default configuration for loading ResNet based PoseNet is also included).
 * ```
 * const RESNET_CONFIG = {
 *   architecture: 'ResNet50',
 *   outputStride: 32,
 *   quantBytes: 4,
 * } as ModelConfig;
 * ```
 *
 * `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.
 *
 * `modelUrl`: An optional string that specifies custom url of the model. This is useful for area/countries that don't have access to the host 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.
 *
 * `architecture`: BodyPixArchitecture - architecture of the BodyPix model. This must be specified.
 *
 * `outputStride`: BodyPixOutputStride - output stride of the BodyPix model. This must be specified.
 *
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': [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]} 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;
  }
  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;
}

/**
 * Person Inference Config
 *
 * `maxDetections`: Defaults to 10. Maximum number of person pose detections per image.
 *
 * `scoreThreshold`: Defaults to 0.4. Only return person pose that have root part score greater or equal to this value.
 *
 * `nmsRadius`: Defaults to 20. Non-maximum suppression part distance in pixels.
 */
export interface PersonInferenceConfig extends InferenceConfig {
  maxDetections?: number;
  scoreThreshold?: number;
  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 larger or equal to this value.
 *
 * `nmsRadius`: Defaults to 20. Non-maximum suppression part distance in pixels.
 */
export interface MultiPersonInstanceInferenceConfig extends InferenceConfig {
  maxDetections?: number;
  scoreThreshold?: number;
  nmsRadius?: number;
  minKeypointScore?: number;
  refineSteps?: number;
}

export const PERSON_INFERENCE_CONFIG: PersonInferenceConfig = {
  // Initialize the configuration with default values
}
MULTI_PERSON_INSTANCE_INFERENCE_CONFIG

MULTI_PERSON_INSTANCE_INFERENCE_CONFIG

export const 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}.`);
  }
}

export class BodyPix {
  constructor(net: BaseModel) {
    this.baseModel = net;
  }

  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,
    };
  }

  predictForMultiPersonInstanceSegmentationAndPart(input: tf.Tensor3D): {
    segmentLogits: tf.Tensor3D,
    partHeatmapLogits: tf.Tensor3D,
    heatmapScores: tf.Tensor3D,
    offsets: tf.Tensor3D,
    displacementFwd: tf.Tensor3D,
    displacementBwd: tf.Tensor3D,
  } {
    const {
      segmentation,
      partHeatmaps,
      heatmapScores,
      offsets,
      displacementFwd,
      displacementBwd,
    } = this.baseModel.predict(input);
    return {
      segmentLogits: segmentation,
      partHeatmapLogits: partHeatmaps,
      heatmapScores,
      offsets,
      displacementFwd,
      displacementBwd,
    };
  }

  * 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) heatmapScores, 3) offsets, and 4) paddings.
  * *
  * *param input
  * *param internalResolution
  * *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, 0.5, 0.75, and 1.0 correspondingly.

* @param segmentationThreshold The minimum that segmentation values must have to be considered part of the person. Affects the generation of the segmentation mask.

* @return A dictionary containing 'segmentation', 'heatmapScores', 'offsets', and 'padding'.

* A 2D Tensor 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.

* @param segmentation

* @param tf.Tensor2D offset:

* @param tf.Tensor3D displacementFwd:

* @return A dictionary containing

* - 'segmentation': A 2d Tensor 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.

* @param segmentation

* @param tf.Tensor2D heatmapScores:

* @param tf.Tensor3D offsets:

* @param tf.Tensor3D displacementFwd:

* @return A dictionary containing

* - 'segmentation': A 2d Tensor 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.

* @param segmentation

* @param tf.Tensor2D heatmapScores:

* @param tf.Tensor3D offsets:

* @param tf.Tensor3D displacementFwd:

* @return A dictionary containing

* - 'segmentation': A 2d Tensor 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.

* @param segmentation

* @param tf.Tensor2D heatmapScores:

* @param tf.Tensor3D offsets:

* @param tf.Tensor3D displacementFwd:

* @return A dictionary containing

* - 'segmentation': A 2d Tensor 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.

* @param segmentation

* @param tf.Tensor2D heatmapScores:

* @param tf.Tensor3D offsets:

* @param tf.Tensor3D displacementFwd:

* @return A dictionary containing

* - 'segmentation': A 2d Tensor 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.

* @param segmentation

* @param tf.Tensor2D heatmapScores:

* @param tf.Tensor3D offsets:

* @param tf.Tensor3D displacementFwd:

* @return A dictionary containing

* - 'segmentation': A 2d Tensor 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.
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: result, allPoses: poses} /**  * 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 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  * number of pixels in the 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. */

async segmentMultiPerson(input: BodyPixInput,
config: MultiPersonInstanceInferenceConfig = MULTI_PERSON_INSTANCE_INFERENCE_CONFIG):

Promise<PersonSegmentation[]> {
  config = {...MULTI_PERSON_INSTANCE_INFERENCE_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,
  } = 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;
  let scaledLongOffsets;
  if (longOffsetsResized) {
    scaledLongOffsets = scaleAndCropToInputTensorShape(longOffsets, [height, width],
internalResolutionHeightAndWidth,
[[padding.top, padding.bottom], [padding.left, padding.right]],
APPLY_SIGMOID_ACTIVATION);
  } else {
    scaledLongOffsets = longOffsets;
  }

const segmentation = toMaskTensor(tf.squeeze(scaledSegmentScores), config.segmentationThreshold);

const instanceMasks = await decodePersonInstanceMasks(
  segmentation, longOffsets, poses, height, width,
  this.baseModel.outputStride, internalResolutionHeightAndWidth, padding,
  FLIP_POSES_AFTER_SCALING);

const instanceBuffers = await TensorFlowBuffers3D([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);

poses = scaleAndFlipPoses(poses, [height, width], internalResolutionHeightAndWidth, padding,
FLIP_POSES_AFTER_SCALING);

const instanceMasks = await decodePersonInstanceMasks(
  segmentation, longOffsets, poses, height, width,
  this.baseModel.outputStride, internalResolutionHeightAndWidth, padding,
  config.scoreThreshold, config.minKeypointScore, config.maxDetections);

resized.dispose();

poses.dispose();

heatmapScoresRaw.dispose();

offsetsRaw.dispose();

displacementFwdRaw.dispose();

displacementBwdRaw.dispose();

return instanceMasks;}

Given an image with many people, returns a dictionary containing: height, width, a tensor with a part id from 0-24 for the pixels that are part of a corresponding body part, and -1 otherwise. This does standard ImageNet
pre-processing before inferring through the model. The image
* should pixels should have values [0-255].
*
* @param input ImageData|HTMLImageElement|HTMLCanvasElement|HTMLVideoElement
* The input image to feed through the network.
*
* @param 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 \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.
*
* @param segmentationThreshold The minimum that segmentation values
must have \* to be considered part of the person. Affects the clipping of the colored
* part image.
*
* @return A dictionary containing `partSegmentation`, `heatmapScores`, `offsets`, and `padding`.
*
* - `partSegmentation`: A 2D Tensor with a part id from 0-24 for \* the pixels that are part of a corresponding body
part, and -1 otherwise.
* - `heatmapScores`: A 3D Tensor of the keypoint heatmaps used by \* single-person pose estimation decoding.
* - `offsets`: A 3D Tensor of the keypoint offsets used by single-person 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.
*
* An segmentPersonPartsActivation(input: BodyPixInput,
internalResolution: BodyPixInternalResolution,
segmentationThreshold = 0.5): \{ \n  partSegmentation:
  tf.Tensor2D, \n  heatmapScores: tf.Tensor3D, \n  offsets: tf.Tensor3D, \n  displacementFwd: tf.Tensor3D, \n  padding: Padding, \n  internalResolutionHeightAndWidth: [number, number] \n} \{ \n  const [height, width] = getInputSize(input); \n  const internalResolutionHeightAndWidth =
  toInputResolutionHeightAndWidth(this.baseModel.outputStride, [height, width]);
  const { \n    resized, \n    padding, \n  } = padAndResizeTo(input, internalResolutionHeightAndWidth); \n  const \n  { \n    partSegmentation, \n    heatmapScores, \n    offsets, \n    displacementFwd, \n    displacementBwd \n  } = \n  tf.tidy(() => { \n    const \n    { \n      segmentLogits, \n      partHeatmapLogits, \n      heatmapScores, \n      offsets, \n      displacementFwd, \n      displacementBwd \n    } = this.predictForPersonSegmentationAndPart(resized); \n    const [resizedHeight, resizedWidth] = resized.shape; \n    const scaledSegmentScores =
    scaleAndCropToInputTensorShape(segmentLogits, [height, width], [resizedHeight, resizedWidth],
    [[padding.top, padding.bottom], [padding.left, padding.right]], APPLY_SIGMOID_ACTIVATION); \n    const scaledPartHeatmapScore = scaleAndCropToInputTensorShape(partHeatmapLogits, [height, width],
    [resizedHeight, resizedWidth], [[padding.top, padding.bottom], [padding.left, padding.right]],
    APPLY_SIGMOID_ACTIVATION); \n    const segmentation =
    toMaskTensor(tf.squeeze(scaledSegmentScores), segmentationThreshold); \n    return \n    { \n      partSegmentation:
      decodePartSegmentation(segmentation, scaledPartHeatmapScore, heatmapScores, offsets, displacementFwd, \n      displacementBwd, \n      padding, \n      internalResolutionHeightAndWidth \n    } \n  }); \n  \n  return { \n    partSegmentation, \n    heatmapScores, \n    offsets, \n    displacementFwd, \n    displacementBwd, \n    padding, \n    internalResolutionHeightAndWidth \n  } \n*/
* \n* @return A SemanticPartSegmentation dictionary that
* contains the body part segmentation mask for all people and a single
* pose.
* \n* 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.
* \n* @param input ImageData|HTMLImageElement|HTMLCanvasElement|HTMLVideoElement
* The input image to feed through the network.
* \n* @param config PersonInferenceConfig object that contains \* parameters for the
* BodyPix inference using single person decoding.
* \n* @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` \* `width`
row-major order.

- `allPoses`: The 2d poses of all people.

```javascript
async segmentPersonParts(input: BodyPixInput, config: PersonInferenceConfig = PERSON_INFEERENCE_CONFIG):
```

```javascript
validatePersonInferenceConfig(config):
```

```javascript
const segmentPersonPartsActivation(input, config, internalResolution, config.segmentationThreshold):
```

```javascript
validateMultiPersonInstanceInferenceConfig(config):
```

```javascript
validateMultiPersonInstanceInferenceConfig(config):
```

```javascript
segmentPersonPartsActivation(input, config, internalResolutionHeightAndWidth):
```

```javascript
async segmentMultiPersonParts(input: BodyPixInput, config: MultiPersonInstanceInferenceConfig = MULTI_PERSON_INSTANCE_INFERENCE_CONFIG):
```

```javascript
validateMultiPersonInstanceInferenceConfig(config):
```
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_AFTERSCALING);
const instanceMasks = await decodePersonInstancePartMasks(
    segmentation, longOffsets, partSegmentation, poses, [height, width], internalResolutionHeightAndWidth, padding,
    config.scoreThreshold, config.refineSteps, config.maxDetections);
resized.dispose();
    segmentation.dispose();
    longOffsets.dispose();
    heatmapScoresRaw.dispose();
offsetsRaw.dispose();
disposeFwdRaw.dispose();
disposeBwdRaw.dispose();
partSegmentation.dispose();
    return instanceMasks;
}
}

/**
 * Loads the MobileNet BodyPix model.
 */
async function loadMobileNet(config: ModelConfig): Promise<BodyPix> {
    const outputStride = config.outputStride;
    const quantBytes = config.quantBytes;
    const multiplier = config.multiplier;
    if (tf == null) {
        throw new Error(`Cannot find TensorFlow.js. If you are
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
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 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 = 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;
    }
}

/**
 * @license
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 * BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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 * 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,
  compositeOperation: string) {
  ctx.globalCompositeOperation = compositeOperation;
  ctx.drawImage(image, 0, 0);
}

function drawWithCompositing(
  ctx: CanvasRenderingContext2D|OffscreenCanvasRenderingContext2D,
  image: Canvas|ImageType,
  compositeOperation: string) {
  ctx.globalCompositeOperation = compositeOperation;
  ctx.drawImage(image, 0, 0);
}

function drawWithCompositing(
  ctx: CanvasRenderingContext2D|OffscreenCanvasRenderingContext2D,
  image: Canvas|ImageType,
  compositeOperation: string) {
  ctx.globalCompositeOperation = compositeOperation;
  ctx.drawImage(image, 0, 0);
}

function drawWithCompositing(
  ctx: CanvasRenderingContext2D|OffscreenCanvasRenderingContext2D,
  image: Canvas|ImageType,
  compositeOperation: string) {
  ctx.globalCompositeOperation = compositeOperation;
  ctx.drawImage(image, 0, 0);
}
number, column: number, width: number,\n
radius: number, color: Color = {r: 0, g: 255, b: 255, a: 255}) {\n
for (let i = -radius; i <= radius; i++) {\n
for (let j = -radius; j <= radius; j++) {\n
if (i !== 0 && j !== 0) {\n
const n = (row + i) * width + (column + j);\n
bytes[4 * n + 0] = color.r;\n
bytes[4 * n + 1] = color.g;\n
bytes[4 * n + 2] = color.b;\n
bytes[4 * n + 3] = color.a;\n
}\n
}\n }\n }\n\n function
isSegmentationBoundary(\n
segmentationData: Uint8Array|Int32Array,\n
row: number,\n
column:
number,\n
width: number,\n
foregroundIds: number[] = [1],\n
radius = 1,\n
): boolean {\n let
numberBackgroundPixels = 0;\n for (let i = -radius; i <= radius; i++) {\n
for (let j = -radius; j <= radius; j++)
{\n
if (i !== 0 && j !== 0) {\n
const n = (row + i) * width + (column + j);\n
if
(!foregroundIds.some(id => id === segmentationData[n])) {\n
numberBackgroundPixels += 1;\n
}\n
}\n
}\n }\n return numberBackgroundPixels > 0;\n }\n\n for (let i = 0; i < height; i += 1) {\n for (let j = 0; j
< width; j += 1) {\n
const n = i * width + j;\n
bytes[4 * n + 0] = background.r;\n
bytes[4 * n + 1] =
background.g;\n
bytes[4 * n + 2] = background.b;\n
bytes[4 * n + 3] = background.a;\n
for (let k = 0; k <
multiPersonOrPartSegmentation.length; k++) {\n
if (foregroundIds.some(\n
id => id ===
multiPersonOrPartSegmentation[k].data[n])) {\n
bytes[4 * n] = foreground.r;\n
bytes[4 * n + 1] =
foreground.g;\n
bytes[4 * n + 2] = foreground.b;\n
bytes[4 * n + 3] = foreground.a;\n
const
isBoundary = isSegmentationBoundary(\n
multiPersonOrPartSegmentation[k].data, i, j, width,\n
foregroundIds);\n
if (drawContour && i - 1 >= 0 && i + 1 < height && j - 1 >= 0 &&\n
j + 1 < width
&& isBoundary) {\n
drawStroke(bytes, i, j, width, 1);\n
}\n
}\n
}\n }\n }\n\n return new
ImageData(bytes, width, height);\n}\n\nconst RAINBOW_PART_COLORS: Array<[number, number, number]> =
[\n [110, 64, 170], [143, 61, 178], [178, 60, 178], [210, 62, 167],\n [238, 67, 149], [255, 78, 125], [255, 94, 99],
[255, 115, 75],\n [255, 140, 56], [239, 167, 47], [217, 194, 49], [194, 219, 64],\n [175, 240, 91], [135, 245, 87],
[96, 247, 96], [64, 243, 115],\n [40, 234, 141], [28, 219, 169], [26, 199, 194], [33, 176, 213],\n [47, 150, 224], [65,
125, 224], [84, 101, 214], [99, 81, 195]\n];\n\n/**\n * Given the output from person body part segmentation (or
multi-person\n * instance body part segmentation) and an array of colors indexed by part id,\n * generates an image
with the corresponding color for each part at each pixel,\n * and white pixels where there is no part.\n *\n * @param
partSegmentation The output from segmentPersonParts\n * or segmentMultiPersonParts. The former is a
SemanticPartSegmentation\n * object and later is an array of PartSegmentation object.\n *\n * @param partColors A
multi-dimensional array of rgb colors indexed by\n * part id. Must have 24 colors, one for every part.\n *\n *
@returns An ImageData with the same width and height of all the element in\n * multiPersonPartSegmentation,
with the corresponding color for each part at\n * each pixel, and black pixels where there is no part.\n */\nexport
function toColoredPartMask(\n partSegmentation: SemanticPartSegmentation|PartSegmentation[],\n partColors:
Array<[number, number, number]> =\n
RAINBOW_PART_COLORS): ImageData {\n if
(Array.isArray(partSegmentation) && partSegmentation.length === 0) {\n return null;\n }\n\n let
multiPersonPartSegmentation;\n if (!Array.isArray(partSegmentation)) {\n multiPersonPartSegmentation =
[partSegmentation];\n } else {\n multiPersonPartSegmentation = partSegmentation;\n }\n const {width, height}
= multiPersonPartSegmentation[0];\n const bytes = new Uint8ClampedArray(width * height * 4);\n\n for (let i = 0;
i < height * width; ++i) {\n // invert mask. Invert the segmentation mask.\n const j = i * 4;\n bytes[j + 0] =
255;\n bytes[j + 1] = 255;\n bytes[j + 2] = 255;\n bytes[j + 3] = 255;\n for (let k = 0; k <
multiPersonPartSegmentation.length; k++) {\n
const partId = multiPersonPartSegmentation[k].data[i];\n
if
(partId !== -1) {\n
const color = partColors[partId];\n
if (!color) {\n
throw new Error(`No color could
be found for part id ${partId}`);\n
}\n
bytes[j + 0] = color[0];\n
bytes[j + 1] = color[1];\n
bytes[j +
2] = color[2];\n
bytes[j + 3] = 255;\n
}\n }\n }\n return new ImageData(bytes, width, height);\n}\n\nconst
CANVAS_NAMES = {\n blurred: 'blurred',\n blurredMask: 'blurred-mask',\n mask: 'mask',\n lowresPartMask:
'lowres-part-mask',\n};\n\n/**\n * Given an image and a maskImage of type ImageData, draws the image with the\n
* mask on top of it onto a canvas.\n *\n * @param canvas The canvas to be drawn onto.\n *\n * @param image The
original image to apply the mask to.\n *\n * @param maskImage An ImageData containing the mask. Ideally this
should be\n * generated by toMask or toColoredPartMask.\n *\n * @param maskOpacity The opacity of the mask
when drawing it on top of the\n * image. Defaults to 0.7. Should be a float between 0 and 1.\n *\n * @param

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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. * 

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 mask = renderImageDataToOffScreenCanvas(maskImage, CANVAS_NAMES.mask);
        const blurredMask = drawAndBlurImageOnOffScreenCanvas(mask, maskBlurAmount, CANVAS_NAMES.blurredMask);
        ctx.drawImage(blurredMask, 0, 0, width, height);
    }
    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 The mask to apply.
 * @param maskBlurAmount How many pixels to blur the mask by. Defaults to 0.
 * @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 = 10.0) {
    const [height, width] = getInp\tputSize(image);
    const mask = renderImageDataToOffScreenCanvas(maskImage, CANVAS_NAMES.mask);
    const blurredMask = drawAndBlurImageOnOffScreenCanvas(mask, maskBlurAmount, CANVAS_NAMES.blurredMask);
    const offscreenCanvas = ensureOffscreenCanvasCreated(CANVAS_NAMES.lowresPartMask);
    const offscreenCanvasCtx = offscreenCanvas.getContext('2d');
    offscreenCanvas.width = blurredMask.width * (1.0 / pixelCellWidth);
    offscreenCanvas.height = blurredMask.height * (1.0 / pixelCellWidth);
    offscreenCanvasCtx.drawImage(blurredMask, 0, 0, blurredMask.width, blurredMask.height, 0, 0, canvas.width, canvas.height);
    ctx.imageSmoothingEnabled = false;
    ctx.drawImage(offscreenCanvas, 0, 0, canvas.width, canvas.height);
    ctx.beginPath();
    ctx.strokeStyle = '#ffffff';
    ctx.moveTo(pixelCellWidth * i, 0);
    ctx.lineTo(pixelCellWidth * i, canvas.height);
    ctx.stroke();
    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.restore();
}

function createPersonMask(multiPersonSegmentation: PersonSegmentation[], SemanticPersonSegmentation, 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);
    }
}

// A SemanticPersonSegmentation or an array of PersonSegmentation object.
* @param personSegmentation A SemanticPersonSegmentation or an array of PersonSegmentation object.
* @param backgroundBlurAmount How many pixels in the background blend into each\n* other. Defaults to 3. Should be an
integer between 1 and 20. The parameter `image` represents the original image where the blur effect will be applied. The function `drawBokehEffect` takes a `canvas` as an argument, which is used to draw the blurred image. The `image` parameter is the original image that will be blurred and composited with the background.

In the `drawBokehEffect` function, the parameters `edgeBlurAmount` and `flipHorizontal` are used to control the blur effect and whether the output should be flipped horizontally.

The `drawWithCompositing` function is used to draw the image on the canvas with specific compositing modes. The `ctx` object is used to draw the image on the `canvas`.

The `createBodyPartMask` function creates a mask for specific body parts, which is then used to blur the background around those body parts. The `blurBodyPart` function performs the actual blur operation using a similar approach as `drawBokehEffect`.

Overall, these functions provide a way to implement blur effects with specific control over the blurring of background areas around people in video conferencing applications.
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```javascript
// 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);
  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;
    }
  }
  ctx.globalAlpha = 1;
  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;
}
```

```javascript
export const PART_CHANNELS: string[] = [
  'left_face',
  'right_face',
  'left_upper_arm_front',
  'left_upper_arm_back',
  'right_upper_arm_front',
  'right_upper_arm_back',
  'left_lower_arm_front',
  'left_lower_arm_back',
  'right_lower_arm_front',
  'right_lower_arm_back',
  'left_hand',
  'right_hand',
  'torso_front',
  'torso_back',
  'left_upper_leg_front',
  'left_upper_leg_back',
  'right_upper_leg_front',
  'right_upper_leg_back',
  'left_lower_leg_front',
  'left_lower_leg_back',
  'right_lower_leg_front',
  'right_lower_leg_back',
  'left_feet',
  'right_feet'];
```

```javascript
// This code is auto-generated, do not modify this file!
const version = '2.2.0';
export {version};
```
Found in path(s):
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/body-pix.min.js.map

No license file was found, but licenses were detected in source scan.

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 * limitations under the License.
 */

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, 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 segmentationThreshold The minimum that segmentation values must have to be considered part of a person.
 */
```
segmentation mask and the clipping of the colored part image.

```typescript
/**
 * 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.
 * @param segmentScores A 3d-tensor of the sigmoid of the segmentation output.
 * @param partHeatmapScores A 3d-tensor of the sigmoid of the part heatmap output. The third dimension corresponds to the part.
 * @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. It will have values of -1 for pixels that are outside of the body and do not have a corresponding part.
 */
  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'), ['int32']);
    const partMap = tf.reshape(partMapFlattened, [partMapHeight, partMapWidth]);
    const partMapShiftedUpForClipping = tf.add(partMap, tf.scalar(1, 'int32'));
    const partMapShiftedUpForClipping = tf.sub(clipByMask2d(partMapShiftedUpForClipping as tf.Tensor2D, segmentationMask), tf.scalar(1, 'int32'));
    return tf.tidy(() => {
      return tf.matmul(partMapShiftedUpForClipping, partHeatmapScores); // Clip by segmentation mask
    });
  });
}
```

```typescript
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'), ['int32']);
    const partMap = tf.reshape(partMapFlattened, [partMapHeight, partMapWidth]);
    const partMapShiftedUpForClipping = tf.add(partMap, tf.scalar(1, 'int32'));
    const partMapShiftedUpForClipping = tf.sub(clipByMask2d(partMapShiftedUpForClipping as tf.Tensor2D, segmentationMask), tf.scalar(1, 'int32'));
    return tf.tidy(() => {
      return tf.matmul(partMapShiftedUpForClipping, partHeatmapScores); // Clip by segmentation mask
    });
  });
}
```
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.

* an 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,
  partOffsets: 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.Tensor3D[];
    const segmentation = namesResults.segmentation;
    const partHeatmaps = namesResults.partHeatmaps;
    const longOffsets =
    namesResults.longOffsets;
    const partOffsets = namesResults.partOffsets;
    return {
      heatmapScores:
      tf.sigmoid(namesResults.heatmap),
      offsets: namesResults.offsets,
      displacementFwd:
      namesResults.displacementFwd,
      displacementBwd: namesResults.displacementBwd,
      segmentation: namesResults.segmentation,
      partHeatmaps: namesResults.partHeatmaps,
      longOffsets: namesResults.longOffsets,
      partOffsets: namesResults.partOffsets,
    };
  });
}

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*
`[rightKnee, 'rightAnkle'],
  ['leftShoulder', 'rightShoulder'], ['leftHip', 'rightHip'],
  ['nose', 'rightEye'], ['leftEye', 'rightEye'], ['nose', 'leftShoulder'],
  ['rightShoulder', 'leftElbow'], ['leftElbow', 'rightWrist'],
  ['rightWrist', 'rightAnkle'], ['leftShoulder', 'leftHip'], ['leftHip', 'leftKnee'],
  ['nose', 'rightShoulder'], ['rightShoulder', 'rightElbow'],
  ['leftShoulder', 'leftElbow'], ['leftElbow', 'rightAnkle']];

/*
 * 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'], ['leftEye', 'leftEar'], ['nose', 'rightEye'],
  ['rightEye', 'rightEar'], ['nose', 'leftShoulder'], ['leftShoulder', 'leftElbow'],
  ['leftElbow', 'leftWrist'], ['leftShoulder', 'leftHip'], ['leftHip', 'leftKnee'],
  ['nose', 'rightShoulder'], ['rightShoulder', 'rightElbow'], ['rightElbow', 'rightWrist'],
  ['rightWrist', 'rightAnkle'], ['rightShoulder', 'rightHip'], ['rightHip', 'rightKnee']];

export const CONNECTED_PART_INDICES =
  CONNECTED_PART_NAMES.map(
    ([jointNameA, jointNameB]) =>
      (PART_IDS[jointNameA], PART_IDS[jointNameB]));

export 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 getEmbedding(
    location: Pair, keypointIndex: number,
    convertToPosition: (pair: Pair) =>
    Pair, outputResolutionX: number,
    longOffsets: Float32Array, refineSteps: number,
    [height, width]: [number, number]): Pair {
  const newPos = convertToPosition(location);
  return {x: newPos.x, y: newPos.y} * outputResolutionX + newLocation.y;
}

function matchEmbeddingToInstance(
    location: Pair, keypointIndex: number,
    convertToPosition: (pair: Pair) =>
    Pair, outputResolutionX: number, outputResolutionY: number,
    longOffsets: Float32Array, refineSteps: number,
    [height, width]: [number, number]): number {
  const embed: Pair[] = [];
  const convertToPosition = (pair: Pair) =>
      convertToPositionInOuput(pair, [padT, padL], [scaleX, scaleY], stride);

  for (let keypointsIndex = 0; keypointsIndex < numKptForMatching;
       keypointsIndex++) {
    const embedding = 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(embed, 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];
}

const segmentation = Uint8Array.prototype.map(x => { return 0; });

export function decodeMultipleMasksCPU(
    segmentation: Uint8Array, longOffsets: Float32Array,
    posesAboveScore: Pose[], height: number, width: number,
    stride: number, refineSteps: number, numKptForMatching = 5): Uint8Array[] {
  const {top: padT, left: padL} = padding;
  const [scaleX, scaleY] = getScale([height, width], [inHeight, inWidth], padding);
  const [outputResolutionX, outputResolutionY] = getOutputResolution([inHeight, inWidth], stride);

  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}, [padT, padL], [scaleX, scaleY], outputResolutionX,
            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, refineSteps: number, numKptForMatching = 5): Int32Array[] {
  const {top: padT, left: padL} = padding;
  const [scaleX, scaleY] = getScale([height, width], [inHeight, inWidth], padding);
  const [outputResolutionX, outputResolutionY] = getOutputResolution([inHeight, inWidth], stride);

  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}, [padT, padL], [scaleX, scaleY], outputResolutionX,
            numKptForMatching, [padT, padL], [scaleX, scaleY], outputResolutionX, [height, width], stride,
            refineSteps);  
        if (kMin >= 0) {
          dataArrays[kMin][n] = partSegmentation[n];
        }
      }
    }
  }

  return dataArrays;
}
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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, inWidth]: [number, 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, 2, NUM_KEYPOINTS]);

  // Make pose tensor of shape [MAX_NUM_PEOPLE, NUM_KEYPOINTS, 3] where h // 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: [inHeight, inWidth],
    userCode: `// Done(Tyler): convert from output space h/w to strided space.'
      float dfw = frac(w);
      int cH = ceil(h);
      int cW = ceil(w);
      float h0 = getSegmentation(h, w);
      int jMin = -1;
      for (int i = 0; i < ${maxNumPeople}; i++) {
        float curDistSum = 0.0;
        int numKpt = 0;
        for (int k = 0; k < ${NUM_KEYPOINTS}; k++) {
          float poseScore = getPoses(i, k, 0);
          float poseY = getPoses(i, k, 2);
          if (poseScore > ${minKptScore}) {
            numKpt = numKpt + 1;
            curDistSum = curDistSum + dist(x, y, poseX, poseY);
          }
        }
        if (numKpt > 0 & curDistSum / float(numKpt) < minDist) {
          minDist = curDistSum / float(numKpt);
          iMin = i;
        }
      }
      return iMin;
    }
  
  return
  };
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]);
}

// A function for finding the nearest pose among a set of poses.

function findNearestPose(coords0, coords1) {
  const output = output;
  return findNearestPose(coords0, coords1);
}

function findNearestPose(coords0, coords1) {
  let nearestPose = 0;
  for (let i = 0; i < coords0.length; i++) {
    for (let j = 0; j < coords1.length; j++) {
      const distance = distanceTo(coords0[i], coords1[j]);
      if (distance < distanceTo(coords0[nearestPose], coords1[j])) {
        nearestPose = j;
      }
    }
  }
  return nearestPose;
}

// A function for generating output based on the nearest pose.

function generateOutput(float(nearestPose)) {
  return generateOutput(float(nearestPose));
}

function generateOutput(float(nearestPose)) {
  return generateOutput(float(nearestPose));
}

// A function for finding the nearest pose among a set of poses.

function findNearestPose(coords0, coords1) {
  let nearestPose = 0;
  for (let i = 0; i < coords0.length; i++) {
    for (let j = 0; j < coords1.length; j++) {
      const distance = distanceTo(coords0[i], coords1[j]);
      if (distance < distanceTo(coords0[nearestPose], coords1[j])) {
        nearestPose = j;
      }
    }
  }
  return nearestPose;
}

// A function for generating output based on the nearest pose.

function generateOutput(float(nearestPose)) {
  return generateOutput(float(nearestPose));
}

// A function for finding the nearest pose among a set of poses.

function findNearestPose(coords0, coords1) {
  let nearestPose = 0;
  for (let i = 0; i < coords0.length; i++) {
    for (let j = 0; j < coords1.length; j++) {
      const distance = distanceTo(coords0[i], coords1[j]);
      if (distance < distanceTo(coords0[nearestPose], coords1[j])) {
        nearestPose = j;
      }
    }
  }
  return nearestPose;
}

// A function for generating output based on the nearest pose.

function generateOutput(float(nearestPose)) {
  return generateOutput(float(nearestPose));
}

// A function for finding the nearest pose among a set of poses.

function findNearestPose(coords0, coords1) {
  let nearestPose = 0;
  for (let i = 0; i < coords0.length; i++) {
    for (let j = 0; j < coords1.length; j++) {
      const distance = distanceTo(coords0[i], coords1[j]);
      if (distance < distanceTo(coords0[nearestPose], coords1[j])) {
        nearestPose = j;
      }
    }
  }
  return nearestPose;
}

// A function for generating output based on the nearest pose.

function generateOutput(float(nearestPose)) {
  return generateOutput(float(nearestPose));
}
as Uint8Array;

const longOffsetsData = await longOffsets.data() as Float32Array;

const partSegmentationData = await partSegmentation.data() as Uint8Array;

partSegmentationByPersonData = decodeMultiplePartMasksCPU(
    segmentationsData, longOffsetsData, partSegmentationData,
    posesAboveScore, height, width, stride, [inHeight, inWidth], padding,
    refineSteps); return partSegmentationsByPersonData.map((data, k) => {
  return ((pose: posesAboveScore[k], data, height, width));});

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) => {
  return ((pose: posesAboveScore[k], data, height, width));});

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

// 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);
    const priorityQueue = this.priorityQueue[0];
    const publicDequeueValue = priorityQueue[0];
    const publicEmptyValue = priorityQueue[0];
    return publicEmptyValue;
  }

  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)
        j++;
      if (!this.less(k, j)) {
        break;
      }
      this.exchange(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) {
    const [height, width] = scores.shape;

    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) {
          return false;
        }
      }
    }
    return true;
  }
localMaximum: \n\n@builds a priority queue with part candidate positions for a specific image \n* the batch. For this we find all local maxima in the score maps with score \n* values above a threshold. We create a \nsingle priority queue across all parts.\n*/

```

/**
 * Builds a priority queue with part candidate positions for a specific image in\n * the batch. For this we find all local maxima in the score maps with score \n* values above a threshold. We create a single priority queue across all parts.\n */

export function buildPartWithScoreQueue(
    scoreThreshold: number,
    localMaximumRadius: number,
    scores: TensorBuffer3D): MaxHeap<PartWithScore> { \n  const [height, width, \n    numKeypoints] = scores.shape; \n  const queue = new MaxHeap<PartWithScore>(\n      height * width * \n    numKeypoints, ((score) => score)); \n  for (let heatmapY = 0; heatmapY < height; ++heatmapY) { \n    for (let heatmapX = 0; heatmapMapX < width; ++heatmapMapX) { \n      for (let keypointId = 0; keypointId < numKeypoints; \n        ++keypointId) { \n        const score = scores.get(mapY, heatmapX, keypointId); \n        if (score > scoreThreshold) { \n          queue.enqueue({\n            score, \n            part: {mapY, heatmapX, id: keypointId} \n          }); \n        } \n      } \n    } \n  } \n  return queue; \n}
```
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.
 * Returns an array of decoded keypoints and their scores for a single pose
 * function decodePose.
 * @param root - PartWithScore, scores:
 * TensorBuffer3D, offsets: TensorBuffer3D, outputStride: number, displacementsFwd: TensorBuffer3D,
 * displacementsBwd: TensorBuffer3D
 * @return An array of decoded keypoints and their associated scores and their root keypoints.
 */
export function decodePose(
    root: PartWithScore, scores: TensorBuffer3D,
    offsets: TensorBuffer3D, outputStride: number,
    displacementsFwd: TensorBuffer3D,
    displacementsBwd: TensorBuffer3D): Keypoint[] {
  const numParts = scores.shape[2];
  const numEdges = parentToChildEdges.length;
  const instanceKeypoints = 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;
}

/* Score the newly proposed object instance without taking into account
 * the scores of the parts that overlap with any previously detected
 * object instance.
 */
function getInstanceScore(
    existingPoses: Pose[], squaredNmsRadius: number, instanceKeypoints: Keypoint[]): number {
  let notOverlappedKeypointScores = instanceKeypoints.reduce(
      (result, {position, score}, keypointId) => {
        return result + score if (!withinNmsRadiusOfCorrespondingPoint(
          existingPoses, squaredNmsRadius, position, keypointId));
      }, 0.0);
  return notOverlappedKeypointScores /
      instanceKeypoints.length; // A point (y, x) is considered as root part candidate if its score is above a window in a maximum 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 \(numParts\).
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 \((y, x)\).

@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 \([height, width, 2 * numParts]\). The value of \(offsets[y, x, k + numParts]\) is the short range offset vector of the \(k\)-th object part at \(heatmap\) position \((y, x)\).

@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.

@arg outputStride The output stride that was used when feed-forwarding through the PoseNet model. Must be 32, 16, or 8.

@arg maxPoseDetections Maximum number of returned instance detections per image.

@arg scoreThreshold Only return instance detections that have root part score greater or equal to this value. Defaults to 0.5.

@arg 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.
heatmaps, longOffsets, offsets, partHeatmaps, segmentation, partOffsets ] = results;
return { offsets, segmentation, partHeatmaps, longOffsets, heatmap, displacementFwd, displacementBwd, partOffsets };
input.shape[1];
 } else {
 throw new Error('error: Unknown input type: ' + input);
 }

isValidInputResolution(
    resolution: number, outputStride: number): boolean {
  return (resolution - 1) % outputStride === 0;
}

function toValidInputResolution(
    inputResolution: number, outputStride: number): 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',
}

const INTERNAL_RESOLUTION_FUNCTION_OPTIONS = {
  low: 'low',
  medium: 'medium',
  high: 'high',
}

const INTERNAL_RESOLUTION_PERCENTAGES = {
  low: 0.25,
  medium: 0.5,
  high: 0.75,
}

const INTERNAL_RESOLUTION_OPTIONS = {
  low: 'low',
  medium: 'medium',
  high: 'high',
  full: 'full',
}

const MIN_INTERNAL_RESOLUTION = 0.1;
const MAX_INTERNAL_RESOLUTION = 2.0;

function toInternalResolutionPercentage(
    internalResolution: BodyPixInternalResolution): number {
  if (typeof internalResolution === 'string') {
    const result = INTERNAL_RESOLUTION_PERCENTAGES[internalResolution];

    tf.util.assert(
        typeof result === 'number',
        () => `string value of inputResolution must be one of ${Object.values(INTERNAL_RESOLUTION_STRING_OPTIONS).join(',')} but was ${internalResolution}.`);
    return result;
  } else {
    tf.util.assert(
        typeof internalResolution === 'number' &&
            internalResolution <= MAX_INTERNAL_RESOLUTION &&
            internalResolution >= MIN_INTERNAL_RESOLUTION,
        () =>
            `inputResolution must be a string or number between ${MIN_INTERNAL_RESOLUTION} and ${MAX_INTERNAL_RESOLUTION}, but ` +
            `was ${internalResolution}.`);
    return internalResolution;
  }
}

export function toInputResolutionHeightAndWidth(
    internalResolution: BodyPixInternalResolution,
    outputStride: number, inputHeight: number, inputWidth: number): [number, number] {
  const internalResolutionPercentage = toInternalResolutionPercentage(internalResolution);

  return [
    toValidInputResolution(inputHeight * internalResolutionPercentage, outputStride),
    toValidInputResolution(inputWidth * internalResolutionPercentage, outputStride)
  ];
}

export function toInputTensor(input: BodyPixInput) {
  // TODO: tf.browser.fromPixels types to support OffscreenCanvas
  // @ts-ignore
  return input instanceof tf.Tensor ? input : tf.browser.fromPixels(input);
}

export function resizeAndPadTo(
    imageTensor: tf.Tensor3D, targetHeight: number, targetWidth: number, flipHorizontal = false): tf.Tensor3D {
  const [height, width] = imageTensor.shape;

  const targetAspect = targetWidth / targetHeight;
  const aspect = width / height;

  let resizeW: number;
  let resizeH: number;
  let padL: number;
  let padR: number;
  let padT: number;
  let padB: number;

  if (aspect > targetAspect) {
    // resize to have the larger dimension match the shape.
    resizeW = targetWidth;
    resizeH = Math.ceil(targetWidth / aspect);

    const padHeight = targetHeight - resizeHeight;
    padL = 0;
    padR = 0;
    padT = Math.floor(padHeight / 2);
    padB = targetHeight - (resizeHeight + padHeight);
  } else {
    resizeH = targetHeight;
    resizeW = Math.ceil(targetHeight * aspect);

    const padWidth = targetWidth - resizeWidth;
    padL = Math.floor(padWidth / 2);
    padR = targetWidth - (resizeWidth + padL);
    padT = 0;
    padB = 0;
  }

  const resizedAndPadded = tf.tidy(() => {
    // resize to have the larger dimension match the shape.
    resizeW = targetWidth;
    resizeH = Math.ceil(resizeW / aspect);

    const padHeight = targetHeight - resizeHeight;
    padL = 0;
    padR = 0;
    padT = Math.floor(padHeight / 2);
    padB = targetHeight - (resizeHeight + padHeight);

    const resizedAndPadded = tf.image.resizeBilinear(imageTensor, [resizeHeight, resizeWidth], flipHorizontal);

    if (flipHorizontal) {
      resizedAndPadded = tf.reverse(resizedAndPadded, 1);
    }

    return resizedAndPadded;
  });

  return resizedAndPadded;
}

export function scaleAndCropToInputTensorShape(
    tensor: tf.Tensor3D, inputTensorHeight: number, inputTensorWidth: number,
    resizedAndPaddedHeight: number, resizedAndPaddedWidth: number,
    applySigmoidActivation = false): tf.Tensor3D {
  const resizedAndPadded = tf.tidy(() => {
    let inResizedAndPadded = tf.image.resizeBilinear(imageTensor, [resizedAndPaddedHeight, resizedAndPaddedWidth], true);

    if (applySigmoidActivation) {
      inResizedAndPadded = tf.sigmoid(inResizedAndPadded);
    }

    return removePaddingAndResizeBack(inResizedAndPadded);
  });

  return resizedAndPadded;
inResizedAndPadded, [inputTensorHeight, inputTensorWidth], \n[[padT, padB], [padL, padR]]));

export function removePaddingAndResizeBack(input, \nresizedAndPadded: tf.Tensor3D, \noriginalHeight: number, \noriginalWidth: number): tf.Tensor3D {
  return tf.squeeze(input, [0, 1]);
}

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, \ntargetH: number, targetW: number): {resized: tf.Tensor3D, \nwidth: number, \nheight: number, \npadding: number, \npadT: number, \npadB: number, \npadL: number, \npadR: number} {
  const [width, height] = getInputSize(input);
  const aspect = width / height;
  const targetAspect = targetW / targetH;
  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 = input;
    imageTensor = tf.pad3d(imageTensor, \n[[padT, padB], [padL, padR], [0, 0]]);
    return tf.image.resizeBilinear(imageTensor, \ntargetH, targetW);
  });

  return {resized, padding: {top: padT, left: padL, right: padR, bottom: padB}};
}

export 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) {
  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}) => ({
                                    score,
                                    part,
                                    position: {x: imageWidth - 1 - position.x, y: position.y}
                                  }))
  };
}

export function flipPosesHorizontal(poses: Pose[], imageWidth: number) {
  if (imageWidth <= 0) {
    return poses.map(pose => flipPoseHorizontal(pose, imageWidth));
  }
}

export interface Padding {
  top: number;
  left: number;
  right: number;
  bottom: number;
}

export interface Pose {
  score: number;
  keypoints: number[];
  x: number;
  y: number;
  part: string;
  position: number[];
}

export interface TensorBuffer3D {
  input: tf.Tensor3D;
  output: tf.Tensor3D;
}

export interface BodyPixInput {
  image: string;
  width: number;
  height: number;
}

export interface Number {
  value: number;
}

export interface Padding {
  top: number;
  left: number;
  right: number;
  bottom: number;
}

export interface Pose {
  score: number;
  keypoints: number[];
  x: number;
  y: number;
  part: string;
  position: number[];
}

export interface TensorBuffer3D {
  input: tf.Tensor3D;
  output: tf.Tensor3D;
}

export interface BodyPixInput {
  image: string;
  width: number;
  height: number;
}

export interface Number {
  value: number;
}

export interface Padding {
  top: number;
  left: number;
  right: number;
  bottom: number;
}

export interface Pose {
  score: number;
  keypoints: number[];
  x: number;
  y: number;
  part: string;
  position: number[];
}

export interface TensorBuffer3D {
  input: tf.Tensor3D;
  output: tf.Tensor3D;
}

export interface BodyPixInput {
  image: string;
  width: number;
  height: number;
}

export interface Number {
  value: number;
}

export interface Padding {
  top: number;
  left: number;
  right: number;
  bottom: number;
}

export interface Pose {
  score: number;
  keypoints: number[];
  x: number;
  y: number;
  part: string;
  position: number[];
}

export interface TensorBuffer3D {
  input: tf.Tensor3D;
  output: tf.Tensor3D;
}

export interface BodyPixInput {
  image: string;
  width: number;
  height: number;
}

export interface Number {
  value: number;
}

export interface Padding {
  top: number;
  left: number;
  right: number;
  bottom: number;
}

export interface Pose {
  score: number;
  keypoints: number[];
  x: number;
  y: number;
  part: string;
  position: number[];
}

export interface TensorBuffer3D {
  input: tf.Tensor3D;
  output: tf.Tensor3D;
}

export interface BodyPixInput {
  image: string;
  width: number;
  height: number;
}

export interface Number {
  value: number;
}

export interface Padding {
  top: number;
  left: number;
  right: number;
  bottom: number;
}

export interface Pose {
  score: number;
  keypoints: number[];
  x: number;
  y: number;
  part: string;
  position: number[];
}

export interface TensorBuffer3D {
  input: tf.Tensor3D;
  output: tf.Tensor3D;
}

export interface BodyPixInput {
  image: string;
  width: number;
  height: number;
}

export interface Number {
  value: number;
}

export interface Padding {
  top: number;
  left: number;
  right: number;
  bottom: number;
}

export interface Pose {
  score: number;
  keypoints: number[];
  x: number;
  y: number;
  part: string;
  position: number[];
}

export interface TensorBuffer3D {
  input: tf.Tensor3D;
  output: tf.Tensor3D;
}

export interface BodyPixInput {
  image: string;
  width: number;
  height: number;
}

export interface Number {
  value: number;
}

export interface Padding {
  top: number;
  left: number;
  right: number;
  bottom: number;
}

export interface Pose {
  score: number;
  keypoints: number[];
  x: number;
  y: number;
  part: string;
  position: number[];
}

export interface TensorBuffer3D {
  input: tf.Tensor3D;
  output: tf.Tensor3D;
}
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 {decodeMultiplePoses} from './multi_person/decode_multiple_poses';
import {ResNet} from './resnet';
import {mobileNetSavedModel, resNet50SavedModel} from './saved_models';
import {BodyPixArchitecture, BodyPixInput, BodyPixInternalResolution, BodyPixMultiplier, BodyPixOutputStride, BodyPixQuantBytes, Padding} 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.
 *
 * `outputStride`: Specifies the output stride of the BodyPix model.
 * The larger the output resolution, and more accurate the model at the cost of
 * speed. Set this to a larger value to increase speed and 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 and 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 model 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 ResNet is also included).

const MOBILENET_V1_CONFIG = {
  architecture: 'MobileNetV1',
  outputStride: 16,
  quantBytes: 4,
  multiplier: 0.75,
} as ModelConfig;

const RESNET_CONFIG = {
  architecture: 'ResNet50',
  outputStride: 32,
  quantBytes: 4,
} as ModelConfig;

// const APPLY_SIGMOID_ACTIVATION = true;
const FLIP_POSES_AFTER_SCALING = false;

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');
  }

  if (config.outputStride == null) {
    config.outputStride = 16;
  }
  if (VALID_STRIDE[config.architecture].indexOf(config.outputStride) < 0) {
    throw new Error('Invalid outputStride');
  }

  if (config.multiplier == null) {
    config.multiplier = 1.0;
  }
  if (VALID_MULTIPLIER[config.architecture].indexOf(config.multiplier) < 0) {
    throw new Error('Invalid multiplier');
  }

  if (config.quantBytes == null) {
    config.quantBytes = 4;
  }
  if (VALID_QUANT_BYTES.indexOf(config.quantBytes) < 0) {
    throw new Error('Invalid quantBytes');
  }

  return config;
}
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${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 videos where
 * the video is by default flipped horizontally (i.e. a webcam).
 * `internalResolution`: The internal resolution percentage that the input
 * is resized to before inference. The larger the internal resolution the more
 * accurate the model at the cost of slower prediction times. Available values
 * are 'low', 'medium', 'high', 'full', or an * 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
 * 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.
 */
export interface InferenceConfig {
  flipHorizontal?: boolean;
  internalResolution?: BodyPixInternalResolution;
  segmentationThreshold?: number;
  maxDetections?: number;
}

/**
 * Person Inference Config
 *
 * `maxDetections`: Defaults to 10. Maximum number of returned instance
 * segmentation and pose detections per image. 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.
 *
 * `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 pose keypoints suppress each other if
 * they are less than `nmsRadius` pixels away. 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.
 */
export interface PersonInferenceConfig extends InferenceConfig {
  maxDetections?: number;
  scoreThreshold?: number;
  nmsRadius?: number;
  minKeypointScore?: number;
  refineSteps?: number;
}

/**
 * Multiple Person Instance Inference Config
 *
 * `maxDetections`: Defaults to 10. Maximum number of returned instance
 * segmentation and pose detections per image. 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.
 *
 * `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 pose keypoints suppress each other if
 * they are less than `nmsRadius` pixels away. 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.
 */
export interface MultiPersonInstanceInferenceConfig extends InferenceConfig {
  maxDetections?: number;
  scoreThreshold?: number;
  nmsRadius?: number;
  minKeypointScore?: number;
  refineSteps?: number;
  refineSteps?: number;
}

function validatePersonInferenceConfig(config: PersonInferenceConfig) {
  const {segmentationThreshold, maxDetections, scoreThreshold, nmsRadius} = config;
  if (segmentationThreshold < 0.0 || segmentationThreshold > 1.0) {
    throw new Error(`Illegal 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 (nmsRadius > 20) {
    throw new Error(`Invalid nmsRadius ${nmsRadius}.`);}

  if (scoreThreshold < 0.0 || scoreThreshold > 1.0) {
    throw new Error(`Invalid scoreThreshold ${scoreThreshold}. Should be in range [0.0, 1.0]`);}
  }

  if (maxDetections <= 0) {
    throw new Error(`Invalid maxDetections`);}

  return config;
}

function validateMultiPersonInstanceInferenceConfig(config: MultiPersonInstanceInferenceConfig) {
  const {segmentationThreshold, maxDetections, scoreThreshold, nmsRadius, minKeypointScore, refineSteps} = config;
  if (segmentationThreshold < 0.0 || segmentationThreshold > 1.0) {
    throw new Error(`Invalid segmentationThreshold ${segmentationThreshold}. Should be in range [0.0, 1.0]`);}
  }

  if (maxDetections <= 0) {
    throw new Error(`Invalid maxDetections`);}

  return config;
}
${\text{maxDetections}}$. 

```javascript
+\n  '\text{Should be > 0}'.\n)\n  if (scoreThreshold < 0.0 || scoreThreshold > 1.0) \n  throw new Error('Invalid scoreThreshold $\{\text{scoreThreshold}\}$.'); 
+\n  '\text{Should be in range [0.0, 1.0]}'.\n)\n  if (nmsRadius <= 0) \n  throw new Error('Invalid nmsRadius $\{\text{nmsRadius}\}$.'); 
+\n  '\text{minKeypointScore > 1}'.\n)\n  if (minKeypointScore < 0 || minKeypointScore > 1) \n  throw new Error('Invalid minKeypointScore $\{\text{minKeypointScore}\}$.'); 
+\n  '\text{Should be in range [0.0, 1.0]}'.\n)\n  if (refineSteps <= 0) \n  throw new Error('Invalid refineSteps $\{\text{refineSteps}\}$.'); 
+\n  '\text{Should be in range [1, 20]}'.\n)\n  export class BodyPix {
+\n    baseModel: BaseModel; 
+\n    constructor(net: BaseModel) {
+\n      this.baseModel = net; 
+\n    } 
+\n    private predictForPersonSegmentation(input: tf.Tensor3D): 
+\n      \{
+\n        segmentLogits: tf.Tensor3D, 
+\n        heatmapScores: tf.Tensor3D, 
+\n        offsets: tf.Tensor3D, 
+\n        displacementFwd: tf.Tensor3D, 
+\n        displacementBwd: tf.Tensor3D, 
+\n      \} \n+\n      const \n+\n      \{
+\n        segmentation, 
+\n        heatmapScores, 
+\n        offsets, 
+\n        displacementFwd, 
+\n        displacementBwd
+\n      } = this.baseModel.predict(input); 
+\n      return \{
+\n        segmentLogits: segmentation, 
+\n        heatmapScores, 
+\n        offsets, 
+\n        displacementFwd, 
+\n        displacementBwd
+\n      } 
+\n    private predictForPersonSegmentationAndPart(input: tf.Tensor3D): 
+\n      \{
+\n        segmentLogits: tf.Tensor3D, 
+\n        partHeatmapLogits: tf.Tensor3D, 
+\n        heatmapScores: tf.Tensor3D, 
+\n        offsets: tf.Tensor3D, 
+\n        displacementFwd: tf.Tensor3D, 
+\n        displacementBwd: tf.Tensor3D, 
+\n      \} \n+\n      const \n+\n      \{
+\n        segmentation, 
+\n        partHeatmaps, 
+\n        heatmapScores, 
+\n        offsets, 
+\n        displacementFwd, 
+\n        displacementBwd
+\n      } = this.baseModel.predict(input); 
+\n      return \{
+\n        segmentLogits: segmentation, 
+\n        partHeatmapLogits: partHeatmaps, 
+\n        heatmapScores, 
+\n        offsets, 
+\n        displacementFwd, 
+\n        displacementBwd
+\n      } 
+\n    private predictForMultiPersonInstanceSegmentationAndPart(input: tf.Tensor3D): 
+\n      \{
+\n        segmentLogits: tf.Tensor3D, 
+\n        longOffsets: tf.Tensor3D, 
+\n        heatmapScores: tf.Tensor3D, 
+\n        offsets: tf.Tensor3D, 
+\n        displacementFwd: tf.Tensor3D, 
+\n        displacementBwd: tf.Tensor3D, 
+\n        partHeatmaps: tf.Tensor3D, 
+\n      \} \n+\n      const \n+\n      \{
+\n        segmentation, 
+\n        longOffsets, 
+\n        heatmapScores, 
+\n        offsets, 
+\n        displacementFwd, 
+\n        displacementBwd, 
+\n        partHeatmaps
+\n      } \n+\n      \} \n+\n      *\n+\n      * Given an image with people, returns a dictionary of all intermediate
+\n      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
+\n      ImageData|HTMLImageElement|HTMLCanvasElement|HTMLVideoElement)
+\n      * The input image to feed through the network.
+\n      * @param internalResolution
+\n      Defaults to 'medium'. The internal resolution
+\n      * that the input is resized to before inference. The larger the
the
+\n      * internalResolution the more accurate the model at the
+\n      * 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
+\n      The minimum that segmentation values must have
+\n      * to be considered
+\n      * part of the person. Affects the generation of the
+\n      * segmentation mask.
+\n      * @return A dictionary containing
+\n      * 'segmentation', 'heatmapScores', 'offsets', and 'padding'.
+\n      * A 2d Tensor with 1 for the islands that are part of
+\n      * the 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 model.
+\n      */
+\n      \} \n+\n      segmentPersonActivation(input: BodyPixInput, internalResolution:
+\n      BodyPixInternalResolution, segmentationThreshold = 0.5): 
+\n      \{
+\n        segment: tf.Tensor2D, 
+\n        heatmapScores: tf.Tensor3D, 
+\n        offsets: tf.Tensor3D, 
+\n        displacementFwd: tf.Tensor3D, 
+\n        displacementBwd: tf.Tensor3D, 
+\n        padding: Padding, 
+\n        internalResolutionHeightAndWidth: [number, number]
+\n      } \n+\n      const [height, width] = getInputStreamSize(input); 
+\n      const internalResolutionHeightAndWidth = 
+\n      toInputResolutionHeightAndWidth(internalResolution, this.baseModel.outputStride, [height, width]); 
+\n      const {resized, padding} = 
+\n      padAndResizeTo(input, internalResolutionHeightAndWidth); 
+\n      const {
segmentation,
heatmapScores,
offsets,
displacementFwd,
displacementBwd
} = tf.tidy(() =>
{
  const {
    segmentLogits,
    heatmapScores,
    offsets,
    displacementFwd,
    displacementBwd
  } = this.predictForPersonSegmentation(resized);
  const [resizedHeight, resizedWidth] = resized.shape;
  const scaledSegmentScores = scaleAndCropToInputTensorShape(reluLogits,
    [height, width], [resizedHeight, resizedWidth],
    [[padding.top, padding.bottom], [padding.left, padding.right]],
    APPLY_SIGMOID_ACTIVATION);

  return {
    segmentation: toMaskTensor(
      tf.squeeze(scaledSegmentScores), segmentationThreshold),
    heatmapScores,
    offsets,
    displacementFwd,
    displacementBwd,
    padding,
    internalResolutionHeightAndWidth
  };

  /**
   * 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.
   */
  async segmentMultiPerson(
      input: BodyPixInput,
      config: MultiPersonInstanceInferenceConfig =
          MULTI_PERSON_INSTANCE_INFERENCE_CONFIG):
      Promise<SemanticPersonSegmentation> {
    config = {
      ...PERSON_INFERENCE_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 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);

    heatmapScores.dispose();
    offsets.dispose();
    displacementFwd.dispose();
    displacementBwd.dispose();
    return [height, width, data: result, allPoses: poses];

  };

  /**
   * 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 an 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].
   */
  async segmentMultiPerson(
      input: BodyPixInput,
      config: MultiPersonInstanceInferenceConfig =
          MULTI_PERSON_INSTANCE_INFERENCE_CONFIG):

Promise<PersonSegmentation[]>
{
    config = {...MULTI_PERSON_INSTANCE_INFRINGEMENT_CONFIG, ...
    ...config};
    validateMultiPersonInstanceInferenceConfig(config);
    const [height, width] =
      getInInputSize(input);
    const internalResolutionHeightAndWidth = toInputResolutionHeightAndWidth(
      config.internalResolution, this.baseModel.outputStride, [height, width]);
    const [resized, padding] =
      padAndResizeTo(input, internalResolutionHeightAndWidth);
    const [segmentation, longOffsets, heatmapScoresRaw, offsetsRaw,
      displacementFwdRaw, displacementBwdRaw, ...] = 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;
        let scaledLongOffsets = longOffsets;
        if (longOffsetsResized) {
          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,
          heatmapScoresRaw: heatmapScores, offsetsRaw: offsets,
          displacementFwdRaw: displacementFwdRaw: displacementBwdRaw: displacementBwd,
        }
      });
      ...;
    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);
    poses = scaleAndFlipPoses(
      poses, [height, width], internalResolutionHeightAndWidth, padding,
      FLIP_POSES_AFTER_SCALING);
    const instanceMasks = await decodePersonInstanceMasks(
      segmentation, longOffsets, poses, height, width,
      this.baseModel.outputStride, internalResolutionHeightAndWidth, padding,
      config.scoreThreshold, config.refineSteps, config.minKeypointScore,
      config.maxDetections);
    resized.dispose();
    segmentation.dispose();
    heatmapScoresRaw.dispose();
    offsetsRaw.dispose();
    displacementFwdRaw.dispose();
    displacementBwdRaw.dispose();
    return instanceMasks;
}
/**
 * Given an image with many people, returns a dictionary containing:
 * height, width, a tensor with a part id from 0-24 for the pixels that are
 * part of a corresponding body part, and -1 otherwise. This does standard
 * ImageNet
 * pre-processing before inferring through the model. The image should have values [0-255].
 * @param input imageData|HTMLImageElement|HTMLCanvasElement|HTMLVideoElement)
 * The input
 * image to feed through the network.
 * @param inputImage
 * @param segmentationThreshold
 * The minimum that segmentation values
 * must have to be considered part of the person. Affects the clipping of the colored
 * image, * @param segmentationThreshold
 * The min 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 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.
 * @param segmentationThreshold
 * The minimum that segmentation values
 * must have to be considered part of the person. Affects the clipping of the colored
 * image, * @param segmentationThreshold
 * The min 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 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.
 * @param segmentationThreshold
tf.Tensor2D, \n heatmapScores: tf.Tensor3D, \n offsets: tf.Tensor3D, \n displacementFwd: tf.Tensor3D, \n displacementBwd: tf.Tensor3D, \n padding: Padding, \n internalResolutionHeightAndWidth: [number, number], \n }

\n\nconst [height, width] = getInputSize(input); \nconst internalResolutionHeightAndWidth = \n toInputResolutionHeightAndWidth(\n  internalResolution, this.baseModel.outputStride, [height, width]); \n\nconst { \n  resized, \n  padding } = padAndResizeTo(input, internalResolutionHeightAndWidth); \n\nconst { \n  partSegmentation, \n  heatmapScores, \n  offsets, \n  displacementFwd, \n  displacementBwd } = \n  this.predictForPersonSegmentationAndPart(resized); \n\nconst [resizedHeight, resizedWidth] = resized.shape; \nconst scaledSegmentScores = \n  scaleAndCropToInputTensorShape(\n    segmentLogits, \n    [height, width], \n    [resizedHeight, resizedWidth], \n    [[padding.top, padding.bottom], \n     [padding.left, padding.right]], \n    APPLY_SIGMOID_ACTIVATION); \n\nconst segmentation = \n  toMaskTensor(tf.squeeze(scaledSegmentScores), segmentationThreshold); \nreturn { \n  partSegmentation: \n    decodePartSegmentation(segmentation, scaledPartHeatmapScore), \n  heatmapScores, \n  offsets, \n  displacementFwd, \n  displacementBwd, \n  padding, \n  internalResolutionHeightAndWidth \n};\n\n/**\n  * Given an image with multiple people,\n  * returns a PartSegmentation dictionary that\n  * contains the body part segmentation mask for all people and a single\n  * pose.\n  * Note: The body part segmentation mask returned by this method covers all\n  * people but the pose\n  * works well when there is one person. If you want to\n  * estimate instance-level multiple person body part\n  * segmentation & pose for n * each person, use `segmentMultiPersonParts` instead.\n  * @param input\n  * ImageData|HTMLImageElement|HTMLCanvasElement|HTMLVideoElement\n  * The input image to feed through the network.\n  * *n * @param config PersonInferenceConfig object that contains n * parameters for the\n  * BodyPix inference using single person decoding.\n  * *n * @return A SemanticPartSegmentation dictionary that\n  * contains height, width,\n  * the flattened binary segmentation mask and the pose for the person. The\n  * `n * width and\n  * height correspond to the same dimensions of the input image.\n  * - `height`: The height of the person part\n  * segmentation data in pixel unit.\n  * - `width`: The width of the person part segmentation data in pixel unit.\n  * - `data`: The flattened Int32Array of person part segmentation data with n\n  * part id from 0-24 for the pixels that are part of a corresponding body\n  * part, and -1 otherwise. The size of the array is equal to `height` x `width` in\n  * row-major order.\n  * - `allPoses`: The 2d poses of all people.\n  * *n async segmentPersonParts(n * input: BodyPixInput,\n  * config: PersonInferenceConfig = PERSON_INFEERENCE_CONFIG);\n  * Promise<\n  * SemanticPartSegmentation\n  * >\n  * validatePersonInferenceConfig(config):\n  * \n  * const { \n  *  partSegmentation, \n  *  heatmapScores, \n  *  offsets, \n  *  displacementFwd, \n  *  displacementBwd, \n  *  padding, \n  *  internalResolutionHeightAndWidth \n  * } =\n  * this.segmentPersonPartsActivation\n  * (input, config.internalResolution, config.segmentationThreshold);\n  * const [height, width] = partSegmentation.shape;\n  * const data = await partSegmentation.data() as Int32Array;\n  * const tensorBuffers = await TensorFlowBuffers3D\n  * (heatmapScores, offsets,\n  * displacementFwd, displacementBwd);\n  * const [scoresBuf, offsetsBuf, displacementsFwdBuf,\n  * displacementsBwdBuf] =\n  * tensorBuffers;\n  * let poses = decodeMultiplePoses\n  * (scoresBuf, offsetsBuf, displacementsFwdBuf, displacementsBwdBuf,\n  * this.baseModel.outputStride, config.maxDetections,\n  * config.scoreThreshold, config.nmsRadius);\n  * poses = scaleAndFlipPoses(\n  *  poses, [height, width],\n  *  internalResolutionHeightAndWidth,\n  *  FLIP_POSES_AFTER_SCALING);\n  * heatmapScores.dispose();\n  * offsets.dispose();\n  * displacementFwd.dispose();\n  * displacementBwd.dispose();\n  * return \n  *  [height, width, data, allPoses: poses];\n  */ \n} \n*/
each
  * person.
  * This does standard ImageNet pre-processing before inferring through
  * the model. The image pixels should have values [0-255].

  The input image to feed through the network 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`.

  @param input BodyPixInput
  @param config MultiPersonInstanceInferenceConfig

  validateMultiPersonInstanceInferenceConfig(config): Promise<PartSegmentation[]>

  validate 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, partSegmentation} =

    this.predictForMultiPersonInstanceSegmentationAndPart(resized);

    const scaledSegmentScores = scaleAndCropToInputTensorShape([segmentLogits, [height, width]],
      internalResolutionHeightAndWidth, [[padding.top, padding.bottom], [padding.left, padding.right]],
      // decoding with scaling.
      const const offsetsRaw, displacementFwdRaw, displacementBwdRaw, partSegmentation, } = tf.tidy(() => {
      const segmentation = toMaskTensor(tf.squeeze(scaledSegmentScores), config.segmentationThreshold);
      const partSegmentation = decodeOnlyPartSegmentation(scaledPartSegmentationScores);

      const instanceMasks = await decodePersonInstancePartMasks(
        segmentation, longOffsets, partSegmentation, height, width,
        this.baseModel.outputStride, internalResolutionHeightAndWidth, padding,
        config.scoreThreshold, config.refineSteps, config.minKeypointScore, config.maxDetections);

      resized.dispose();
      segmentation.dispose();
      longOffsets.dispose();
      heatmapScoresRaw.dispose();
      offsetsRaw.dispose();
      displacementFwdRaw.dispose();
      displacementBwdRaw.dispose();
      partSegmentation.dispose();

      return instanceMasks;
    });

    const tensorBuffers = await toTensorBuffers3D([heatmapScoresRaw, offsetsRaw, displacementFwdRaw, displacementBwdRaw]);

    const poses = decodeMultiplePoses(
      tensorBuffers, config.segmentationThreshold, config.partSegmentation,
      heatmapScoresRaw, offsetsRaw, displacementFwdRaw, displacementBwdRaw, config.maxDetections,
      config.scoreThreshold, config.nmsRadius);

    const tensorBuffers = await toTensorBuffers3D([heatmapScoresRaw, offsetsRaw, displacementFwdRaw, displacementBwdRaw]);

    const poses = scaleAndFlipPoses(poses, [height, width], internalResolutionHeightAndWidth, padding,
      FLIP_POSES_AFTER_SCALING);

    const instanceMasks = await decodePersonInstancePartMasks(
      segmentation, longOffsets, partSegmentation, poses, height, width,
      this.baseModel.outputStride, internalResolutionHeightAndWidth, padding,
      config.scoreThreshold, config.refineSteps, config.minKeypointScore, config.maxDetections);

    resized.dispose();
    segmentation.dispose();
    longOffsets.dispose();
    heatmapScoresRaw.dispose();
    offsetsRaw.dispose();
    displacementFwdRaw.dispose();
    displacementBwdRaw.dispose();
    partSegmentation.dispose();

    return instanceMasks;
  });

  public dispose() {
    this.baseModel.dispose();

  }

  /**
   * Loads the MobileNet BodyPix model.
   */
  async function loadMobileNet(config: ModelConfig): Promise<BodyPix> {
    const outputStride = config.outputStride;
    const quantBytes = config.quantBytes;
    const multiplier = config.multiplier;

    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 interface. The predefined `MOBILENET_V1_CONFIG` and `RESNET_CONFIG` can also be used as references for defining your customized config.
 * @param config ModelConfig dictionary that contains parameters for the BodyPix loading process. Please find more details of each parameter 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 = MOBILENET_V1_CONFIG) {
  config = validateModelConfig(config);
  if (config.architecture === 'ResNet50') {
    return loadResNet(config);
  } else if (config.architecture === 'MobileNetV1') {
    return loadMobileNet(config);
  } else {
    return null;
  }
}

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 *
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 *
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 * limitations under the License.
 */

// 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;
      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} = {};

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);
}
```
drawWithCompositing(
    ctx: CanvasRenderingContext2D|OffscreenCanvasRenderingContext2D,
    image: Canvas|ImageType,
    compositeOperation: string) {
  ctx.globalCompositeOperation = compositeOperation;
  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, canvas: Canvas) {
  const {width, height} = image;
  const ctx = canvas.getContext('2d');
  canvas.width = width;
  canvas.height = height;
  ctx.clearRect(0, 0, width, height);
  ctx.save();
  if (isSafari()) {
    cpuBlur(canvas, image, blurAmount);
  } else {
    (ctx as any).filter = `blur(${blurAmount}px)`;
    ctx.drawImage(image, 0, 0, width, height);
  }
  ctx.restore();
}

function drawAndBlurImageOnOffScreenCanvas(image: ImageType, blurAmount: number, offscreenCanvasName: string): Canvas {
  const canvas = ensureOffscreenCanvasCreated(offscreenCanvasName);
  if (blurAmount === 0) {
    renderImageToCanvas(image, canvas);
  } else {
    drawAndBlurImageOnCanvas(image, blurAmount, canvas);
  }
  return canvas;
}

renderImageToCanvas(image: ImageType, canvas: Canvas) {
  const {width, height} = image;
  const ctx = canvas.getContext('2d');
  canvas.width = width;
  canvas.height = height;
  ctx.drawImage(image, 0, 0, width, height);
}

renderImageDataToCanvas(image: ImageData, canvas: Canvas) {
  const {width, height} = image;
  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 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 {
  const multiPersonOrPartSegmentation = personOrPartSegmentation;
  if (Array.isArray(personOrPartSegmentation)) {
    return AnImageDataWithSameWidthAndHashCodeOfAllSegments(multiPersonOrPartSegmentation, drawContour, foregroundIds, 0);
  } else {
    return AnImageDataWithSameWidthAndHashCodeOfAllSegments([personOrPartSegmentation], drawContour, foregroundIds, 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);
      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, foregroundIds: number[], 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;
}

function drawStroke(bytes, i, j, width, height) {
  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;
    }
  }
}

const RAINBOW_PART_COLORS: Array<[number, number, number]> = [
  [0, 0, 255], [0, 128, 255], [0, 255, 255], [0, 255, 128], [0, 255, 0], [255, 255, 0],
  [255, 128, 0], [255, 0, 0], [128, 0, 0], [0, 0, 0]
];

const CANVAS_NAMES = {
  blurred: 'blurred',
  blurredMask: 'blurred-mask',
  mask: 'mask',
  lowresPartMask: 'lowres-part-mask',
};

function toColoredPartMask(partSegmentation: SemanticPartSegmentation|PartSegmentation, partColors: Array<[number, number, number]> = RAINBOW_PART_COLORS): ImageData {
  if (partSegmentation.type === SemanticPartSegmentation) {
    return toColoredPartSegmentation(partSegmentation, partColors);
  }
  if (partSegmentation.type === PartSegmentation) {
    return toColoredPartSegmentation(partSegmentation, partColors);
  }
}

function toColoredPartSegmentation(partSegmentation: SemanticPartSegmentation, partColors: Array<[number, number, number]> = RAINBOW_PART_COLORS): ImageData {
  if (Array.isArray(partSegmentation)) {
    return toColoredPartSegmentation(partSegmentation, partColors);
  }
  if (Array.isArray(partSegmentation) && partSegmentation.length !== 0) {
    return toColoredPartSegmentation(partSegmentation, partColors);
  }
  if (Array.isArray(partSegmentation) && partSegmentation.length === 0) {
    return null;
  }
  let multiPersonOrPartSegmentation = partSegmentation;
  if (!Array.isArray(partSegmentation)) {
    multiPersonOrPartSegmentation = [partSegmentation];
  }
  else {
    multiPersonOrPartSegmentation = partSegmentation;
  }
  const {width, height} = multiPersonOrPartSegmentation[0];
  const bytes = new Uint8ClampedArray(width * height * 4);
  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;
    }
  }
  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],
];

function toColoredPartSegmentation(partSegmentation: SemanticPartSegmentation|PartSegmentation, partColors: Array<[number, number, number]> = RAINBOW_PART_COLORS): ImageData {
  if (Array.isArray(partSegmentation)) {
    return toColoredPartSegmentation(partSegmentation, partColors);
  }
  if (Array.isArray(partSegmentation) && partSegmentation.length !== 0) {
    return toColoredPartSegmentation(partSegmentation, partColors);
  }
  if (Array.isArray(partSegmentation) && partSegmentation.length === 0) {
    return null;
  }

  let multiPersonOrPartSegmentation = partSegmentation;
  if (!Array.isArray(partSegmentation)) {
    multiPersonOrPartSegmentation = [partSegmentation];
  }
  else {
    multiPersonOrPartSegmentation = partSegmentation;
  }
  const {width, height} = multiPersonOrPartSegmentation[0];
  const bytes = new Uint8ClampedArray(width * height * 4);
  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;
    }
  }
  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],
];

function toColoredPartSegmentation(partSegmentation: SemanticPartSegmentation|PartSegmentation, partColors: Array<[number, number, number]> = RAINBOW_PART_COLORS): ImageData {
  if (Array.isArray(partSegmentation)) {
    return toColoredPartSegmentation(partSegmentation, partColors);
  }
  if (Array.isArray(partSegmentation) && partSegmentation.length !== 0) {
    return toColoredPartSegmentation(partSegmentation, partColors);
  }
  if (Array.isArray(partSegmentation) && partSegmentation.length === 0) {
    return null;
  }

  let multiPersonOrPartSegmentation = partSegmentation;
  if (!Array.isArray(partSegmentation)) {
    multiPersonOrPartSegmentation = [partSegmentation];
  }
  else {
    multiPersonOrPartSegmentation = partSegmentation;
  }
  const {width, height} = multiPersonOrPartSegmentation[0];
  const bytes = new Uint8ClampedArray(width * height * 4);
  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;
    }
  }
  return new ImageData(bytes, width, height);
}
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, width, height);

  ctx.globalAlpha = maskOpacity;
  if (maskImage) {
    assertSameDimensions({width, height}, maskImage, 'image', 'mask');
    const mask = renderImageDataToOffScreenCanvas(maskImage, CANVAS_NAMES.mask);
    const blurredMask = drawAndBlurImageOnOffScreenCanvas(mask, maskBlurAmount, CANVAS_NAMES.blurredMask);
    ctx.drawImage(blurredMask, 0, 0, width, height);
  }
  ctx.restore();
}

export function drawPixelatedMask(
    canvas: Canvas, image: ImageType, maskImage: ImageData,
    maskOpacity = 0.7, maskBlurAmount = 0, flipHorizontal = false,
    pixelCellWidth = 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 offscreenCanvas =
    ensureOffscreenCanvasCreated(CANVAS_NAMES.lowresPartMask);
  const offscreenCanvasCtx =
    offscreenCanvas.getContext('2d');
  offscreenCanvas.width = blurredMask.width * (1.0 / pixelCellWidth);
  offscreenCanvas.height = blurredMask.height * (1.0 / pixelCellWidth);
  offscreenCanvasCtx.drawImage(
    blurredMask, 0, 0, blurredMask.width, blurredMask.height,
    0, 0, canvas.width, canvas.height);

  // Draws vertical grid lines that are `pixelCellWidth` apart from each other.
  for (let i = 0; i < offscreenCanvas.width; i++) {
    ctx.beginPath();
    ctx.strokeStyle = '#ffffff';
    ctx.moveTo(pixelCellWidth * i, 0);
    ctx.lineTo(pixelCellWidth * i, canvas.height);
    ctx.stroke();
  }

  // Draws horizontal grid lines that are `pixelCellWidth` apart from each other.
  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.restore();
}

function createPersonMask(
    multiPersonSegmentation: PersonSegmentation
        || SemanticPersonSegmentation, 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);
  }
}
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, CANSAS_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 personMask = createPersonMask(multiPersonSegmentation, edgeBlurAmount);
  ctx.save();
  if (flipHorizontal) {
    flipCanvasHorizontal(canvas);
  } // draw the original image on the final canvas
  const [height, width] = getInputSize(image);
  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.
  ctx.drawImage(blurredImage, 0, 0);
  // 'destination-over' - The existing canvas content is kept where both the
  // new shape and existing canvas content overlap. Everything else is made
  // transparent.
  ctx.restore();
}

/**
 * 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 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.
 *
 * @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, CANSAS_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
  const [height, width] = getInputSize(image);
  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.
  ctx.drawImage(blurredImage, 0, 0);
  // 'destination-over' - The existing canvas content is kept where both the
  // new shape and existing canvas content overlap. Everything else is made
  // transparent.
  ctx.restore();
}
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```javascript
export const PART_CHANNELS: string[] = [
  'left_face', 'right_face', 'left_upper_arm_front', 'left_upper_arm_back', 'right_upper_arm_front', 'right_upper_arm_back', 'left_lower_arm_front', 'left_lower_arm_back', 'right_lower_arm_front', 'right_lower_arm_back', 'left_hand', 'right_hand', 'torso_front', 'torso_back', 'left_upper_leg_front', 'left_upper_leg_back', 'right_upper_leg_front', 'right_upper_leg_back', 'left_lower_leg_front', 'left_lower_leg_back', 'right_lower_leg_front', 'right_lower_leg_back', 'left_feet', 'right_feet'];
```

/** @license See the LICENSE file */

const version = '2.2.0';
export { version };

```javascript
// This code is auto-generated, do not modify this file!
const PART_IDS = {
  'left_face': 0, 'right_face': 1, 'left_upper_arm_front': 2, 'left_upper_arm_back': 3, 'right_upper_arm_front': 4, 'right_upper_arm_back': 5, 'left_lower_arm_front': 6, 'left_lower_arm_back': 7, 'right_lower_arm_front': 8, 'right_lower_arm_back': 9, 'left_hand': 10, 'right_hand': 11, 'torso_front': 12, 'torso_back': 13, 'left_upper_leg_front': 14, 'left_upper_leg_back': 15, 'right_upper_leg_front': 16, 'right_upper_leg_back': 17, 'left_lower_leg_front': 18, 'left_lower_leg_back': 19, 'right_lower_leg_front': 20, 'right_lower_leg_back': 21, 'left_feet': 22, 'right_feet': 23};
```

```javascript
const PART_NAMES = {
```

```javascript
// MobileNet
const MobileNet = tf.net(
  'MobileNet
  weights: https://tf.per/compute/channels/mobilenet_v1_0.25_224_v1.5.h5
  trainable: false
  name: 'Mobilenet'
);
```

```javascript
// **kwargs = {}
MobileNet.preprocessInput();
```

```javascript
outputShape = MobileNet.call(inputShape);
```

```javascript
nn = tf.layers.conv2d(outputShape, filters=64, kernel_size=7, strides=(2,2), padding='valid', activation=tf.nn.relu, use_bias=False, kernel_initializer='he_normal', name='Conv2d_1a_7x7');
```

```javascript
results = nn;
```

```javascript
/** @license See the LICENSE file. */

export { PART_CHANNELS, PART_IDS, PART_NAMES, NUM_KEYPOINTS, length, PART_IDS, reduce, result, jointName, i, CONNECTED_PART_INDICES, jointNameA, jointNameB, getScale, b, padding, height, width, inputResolutionY, inputResolutionX, padT, padB, getOffsetPoint, x, keypoint, get, getImageCoords, part, heatmap, heatmapX, heatmapY, clamp, a, min, max, squaredDistance, y1, x1, y2, x2, dy, dx, addVectors, b, computeDistance, embedding, pose, minPartScore, distance, numKpt, p, keypoints, score, Math, position, Infinity, convertToPositionInOutput, stride, padL, scaleX, scaleY, round, getEmbedding, location, keypointIndex, convertToPosition, outputResolutionX, refineSteps, newLocation, mn, t, newPos, nm_1, matchEmbeddingToInstance, poses, numKptForMatching, s, embed, pair, keypointsIndex, push, kMin, kMinDist, k, dist, getOutputResolution, decodeMultipleMasksWithCPU, posesAboveScore, inHeight, inWidth, dataArrays, Uint8Array, fill, j, n, decodeMultiplePartMapsCPU, partSegmentaion, Int32Array, decodeMultipleMasksWithWebGl, minKptScore, maxNumPeople, origHeight, origWidth, slice, outHeight, outWidth, shapedLongOffsets, poseVals, Float32Array, poseOffset, kp, offset, d, posesTensor, tf.tensor, program, variableNames, outputShape, userCode, tf.backend, compileAndRun, toPersonKSegmentation, tf.equal, toPersonKPartSegmentation, bodyParts, isWebGlBackend, getBackend, decodePersonInstanceMasks, minPoseScore, minKeypointScore, filter, personSegmentations, masksTensorInfo, masksTensor, tf.engine, makeTensorFromDataId, dataId, dtype, Promise, all, data, personSegmentationsData, forEach, segmentationsData, longOffsetsData, decodePersonInstancePartMaps, partSegmentation, partSegmentations, partSegmentationsByPersonData, partSegmentaionData, half, floor, maxSize, getElementValue, priorityQueue, Array, number, offsets, offset, inputs, inputs, offset, outputs, displacements, numEdges, getStridedIndexNearPoint, traverseToTargetKeypoint, sourceKeypoint, targetKeypointId, scoresBuffer, offsetRefineStep, displacement, targetKeypoint, targetKeypointIndices, offsetPoint, targetKeypointIndices, decodePose, root, displacementsFwd, displacementsBwd, instanceKeypoints, root
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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.esm.js.map
No license file was found, but licenses were detected in source scan.

```javascript
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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.
 *
 *=============================================================================

*/

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;
}

/**
 * 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 to be considered part of 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));
}

/**
 * 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.

@param segmentScores A 3d-tensor of the sigmoid of the segmentation output.
@param partHeatmapScores A 3d-tensor of the sigmoid of the part heatmap output. The third dimension corresponds to the part.
@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. It will have values of -1 for pixels that are outside of the body and do not have a corresponding part.

export function decodePartSegmentation(
    segmentationMask: tf.Tensor2D,
    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'));
  });
}

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');
  });
}

/**
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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 (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 [${inputShape[1]}, ${inputShape[2]}] must both be equal to or -1`);
    abstract preprocessInput(input: tf.Tensor3D): tf.Tensor3D;
    /**
     * Predicts intermediate Tensor representations.
     *
     * @param inp @param input T
     * he input RGB image of the base model.
     * @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.
     * heatmaps: A Tensor3D that represents the body part segmentation.
     * predict(input: tf.Tensor3D): tf.Tensor3D;
     * @returns A 3d 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. It will have values of -1 for pixels that are outside of the body and do not have a corresponding part.
     */
  }
}

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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,
partOffsets: namedResults.partOffsets
};
});
// 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.
abstract nameOutputResults(results: tf.Tensor3D[]): {
  heatmap: tf.Tensor3D,
  offsets: tf.Tensor3D,
  displacementFwd: tf.Tensor3D,
  displacementBwd: tf.Tensor3D,
  segmentation: tf.Tensor3D,
  partHeatmaps: tf.Tensor3D,
  longOffsets: tf.Tensor3D,
  partOffsets: tf.Tensor3D
};

/*
 * Defines 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'], ['leftEye', 'leftEar'], ['rightEye', 'rightEar'],
  ['leftShoulder', 'rightShoulder'], ['leftElbow', 'rightElbow'], ['leftWrist', 'rightWrist'],
  ['leftHip', 'rightHip'], ['leftKnee', 'rightKnee'], ['leftAnkle', 'rightAnkle'],
  ['leftShoulder', 'leftElbow'], ['leftElbow', 'leftWrist'], ['rightShoulder', 'rightElbow'],
  ['rightElbow', 'rightWrist'], ['leftHip', 'rightHip'], ['leftKnee', 'rightKnee'],
  ['leftAnkle', 'rightAnkle'],
] as tf.Tensor;
/* Releases the CPU and GPU memory allocated by the model.
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 */

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  ['leftShoulder', 'rightShoulder'], ['leftElbow', 'rightElbow'], ['leftWrist', 'rightWrist'],
  ['leftHip', 'rightHip'], ['leftKnee', 'rightKnee'], ['leftAnkle', 'rightAnkle'],
  ['leftShoulder', 'leftElbow'], ['leftElbow', 'leftWrist'], ['rightShoulder', 'rightElbow'],
  ['rightElbow', 'rightWrist'], ['leftHip', 'rightHip'], ['leftKnee', 'rightKnee'],
  ['leftAnkle', 'rightAnkle'],
] as tf.Tensor;
/* Releases the CPU and GPU memory allocated by the model.
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 */

/*
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 * 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.
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export const POSE_CHAIN: StringTuple[] =
[ ['nose', 'leftEye'], ['leftEye', 'leftEar'], ['rightEye', 'rightEar'],
  ['leftShoulder', 'rightShoulder'], ['leftElbow', 'rightElbow'], ['leftWrist', 'rightWrist'],
  ['leftHip', 'rightHip'], ['leftKnee', 'rightKnee'], ['leftAnkle', 'rightAnkle'],
  ['leftShoulder', 'leftElbow'], ['leftElbow', 'leftWrist'], ['rightShoulder', 'rightElbow'],
  ['rightElbow', 'rightWrist'], ['leftHip', 'rightHip'], ['leftKnee', 'rightKnee'],
  ['leftAnkle', 'rightAnkle'],
] as tf.Tensor;
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(position: Pair, padT: number, padL: number, outputResolutionX: number, longOffsets: number[], refineSteps: number, outputResolutionY: number): Pair {
  const nn = position.y * outputResolutionX + position.x;
  const dy = longOffsets[NUM_KEYPOINTS * (2 * nn) + position.y];
  const dx = longOffsets[NUM_KEYPOINTS * (2 * nn) + position.x];
  return {x: position.x + dx, y: position.y + dy};
}

function getEmbedding(location: Pair, keypointIndex: number, convertToPosition: (pair: Pair) => Pair, outputResolutionX: number, longOffsets: number[], refineSteps: number, outputResolutionY: number): Pair {
  const newLocation = convertToPosition(location);
  const nn = newLocation.y * outputResolutionX + newLocation.x;
  const dy = longOffsets[NUM_KEYPOINTS * (2 * nn) + keypointIndex];
  const dx = longOffsets[NUM_KEYPOINTS * (2 * nn) + (keypointIndex + NUM_KEYPOINTS)];
  return {x: newLocation.x + dx, y: newLocation.y + dy};
}

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 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 clamp(a: number, min: number, max: number): number {
  if (a < min) {
    return min;
  }
  if (a > max) {
    return max;
  }
  return a;
}

export function getScale(height, width: [number, number], inputResolutionY, inputResolutionX: [number, number], padding: Padding): [number, number] {
  const scaleY = inputResolutionY / (padT + padB + height);
  const scaleX = inputResolutionX / (padL + padR + width);
  return [scaleX, scaleY];
}

export function getOffsetPoint(y: number, x: number, keypoint: number, offsets: TensorBuffer3D): Vector2D {
  return {x: offsets.get(y, x, keypoint), y: offsets.get(y, x, keypoint + NUM_KEYPOINTS)};
}

export function getImageCoords(part: Part, outputStride: number, offsets: TensorBuffer3D) {
  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;
}
dx = longOffsets[NUM_KEYPOINTS * (2 * nn + 1) + keypointIndex];
  let y = location.y + dy;
  let x = location.x + dx;
  for (let t = 0; t < refineSteps; t++) {
    y = Math.min(y, height - 1);
    x = Math.min(x, width - 1);
    const newPos = convertToPosition({x, y});
    const nn = newPos.y * outputResolutionX + newPos.x;
    dy = longOffsets[NUM_KEYPOINTS * (2 * nn + 1) + keypointIndex];
    dx = longOffsets[NUM_KEYPOINTS * (2 * nn + 1) + keypointIndex];
    y = y + dy;
    x = x + dx;
  }
  return {x, y};
}

function matchEmbeddingToInstance(location: Pair, longOffsets: Float32Array, poses: Pose[], numKptForMatching: number, [padT, padL]: [number, number], scale: Pose, strides: number) {
  const embed: Pair[] = [];
  for (let keypointsIndex = 0; keypointsIndex < numKptForMatching; keypointsIndex++) {
    const embedding = 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(embed, poses[k]);
    if (dist < kMinDist) {
      kMin = k;
      kMinDist = dist;
    }
  }
  return kMin;
}

function getOutputResolution(inputResolution: [number, number], stride: number) {
  const outputResolutionX = Math.round((inputResolution[0] - 1.0) / stride + 1.0);
  const outputResolutionY = Math.round((inputResolution[1] - 1.0) / stride + 1.0);
  return [outputResolutionX, outputResolutionY];
}

export function decodeMultipleMasksCPU(segmentation: Uint8Array, longOffsets: Float32Array, posesAboveScore: Pose[], height: number, width: number, stride: number, [inHeight, inWidth]: [number, number], padding: Padding, refineSteps: number) {
  const dataArrays = posesAboveScore.map(x => new Uint8Array(height * width).fill(0));
  const {top: padT, left: padL} = padding;
  const scale = getScale([height, width], [inHeight, inWidth], padding);
  const outputResolutionX = getOutputResolution([height, width], [inHeight, inWidth], stride);
  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], scale, outputResolutionX, stride, refineSteps);
      }
    }
  }
  return dataArrays;
}

export function decodeMultiplePartMasksCPU(segmentation: Uint8Array, partSegmentation: Uint8Array, longOffsets: Float32Array, partSegmentation: Pose[], height: number, width: number, stride: number, [inHeight, inWidth]: [number, number], padding: Padding, refineSteps: number, numKptForMatching: number) {
  const dataArrays = partSegmentation.map(x => new Int32Array(height * width).fill(-1));
  const {top: padT, left: padL} = padding;
  const scale = getScale([height, width], [inHeight, inWidth], padding);
  const outputResolutionX = getOutputResolution([height, width], [inHeight, inWidth], stride);
  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], scale, outputResolutionX, stride, refineSteps);
      }
    }
  }
  return dataArrays;
}

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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 {
  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];
      poseVals[poseOffset + kp * 3] = keypoint.x;
    }
  }
  const [scaleX, scaleY] = getScale([height, width], [inHeight, inWidth], padding);
  const posesTensor = tf.tensor(poseVals, [maxNumPeople, NUM_KEYPOINTS, 3]);
  const program: tf_webgl.GPGPUProgram = {
    variableNames: ['segmentation', 'longOffsets', 'poses'],
    outputShape: [inHeight, inWidth],
    userCode: '
    int convertToPositionInOutput(int pos, int pad, float scale, int stride) {
      return round(((float(pos + pad) + 1.0) * scale - 1.0) / float(stride));
    }
    float dist(float x1, float y1, float x2, float y2) {
      return pow(x1 - x2, 2.0) + pow(y1 - y2, 2.0) / float(stride);
    }
    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 minDist = 1000000.0;
      int iMin = -1;
      for (int i = 0; i < maxNumPeople; i++) {
        float curDistSum = 0.0;
        for (int k = 0; k < NUM_KEYPOINTS; k++) {
          float poseScore = getPoses(i, k, 0);
          float poseY = getPoses(i, k, 1);
          float poseX = getPoses(i, k, 2);
          if (poseScore > minKptScore) {
            curDistSum += dist(x, y, poseX, poseY);
          }
        }
        if (curDistSum / float(numKpt) < minDist) {
          minDist = curDistSum / float(numKpt);
          iMin = i;
        }
      }
      return iMin;
    }
    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, longOffsets, posesTensor]);
}
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 * 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_webgl';

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(
  return tf.tidy(
      () => tf.sub(tf.mul(tf.cast(tf.equal(segmentation, tf.scalar(k)), 'int32')), 1));
}

function isWebGlBackend() {
  return getBackend() === 'webgl';
}

export async function decodePersonInstanceMasks(
    segmentation: tf.Tensor2D, longOffsets: tf.Tensor3D,
    poses: Pose[],
    height: number, width: number, stride: number,
    Padding: Padding, minPoseScore = 0.2,
    refineSteps = 8,
    minKeypointScore = 0.3,
    maxNumPeople = 10): Promise<PersonSegmentation[]> {
  // Filter out poses with smaller score.
  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,
          [height, width], Padding, minPoseScore, refineSteps, minKeypointScore,
          maxNumPeople);
      const masksTensor = tf.engine().makeTensorFromDataId(
          masksTensorInfo.dataId, masksTensorInfo.shape,
          'uint8') as tf.Tensor3D;

      return posesAboveScore.map(
          (_, i) => toPersonKSegmentation(masksTensor, i));
    });

    const personSegmentationsData = await Promise.all(personSegmentations.map(x => x.data())) as Uint8Array[];

    personSegmentations.forEach(x => x.dispose());
  } else {
    const segmentationsData = await segmentation.data() as Uint8Array;
    const longOffsetsData = await longOffsets.data() as Float32Array;

    personSegmentationsData = decodeMultipleMasksCPU(
        segmentationsData, longOffsetsData,
        posesAboveScore, height, width, stride,
        [height, width], Padding, minPoseScore, refineSteps, minKeypointScore,
        maxNumPeople);

    const masksTensor = tf.engine().makeTensorFromDataId(
        masksTensorInfo.dataId, masksTensorInfo.shape,
        'uint8') as tf.Tensor3D;

    const personSegmentations = decodeMultipleMasksWebGl(
        segmentation, longOffsets, posesAboveScore, height, width, stride,
        [height, width], Padding, minPoseScore, refineSteps, minKeypointScore,
        maxNumPeople);

    const personSegmentationsData = await Promise.all(personSegmentations.map(x => x.data())) as Uint8Array[];

    personSegmentations.forEach(x => x.dispose());
  }

  return personSegmentationsData.map(
      (data, i) => ((data, pose) => (
          data[i], pose.score >= minPoseScore));
  )
}

export async function decodePersonInstancePartMasks(
    segmentation: tf.Tensor2D, longOffsets: tf.Tensor3D,
    partSegmentation: tf.Tensor2D, poses: Pose[],
    height: number, width: number, stride: 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,
          [height, width], Padding, minPoseScore, refineSteps, minKeypointScore,
          maxNumPeople);
      const masksTensor = tf.engine().makeTensorFromDataId(
          masksTensorInfo.dataId, masksTensorInfo.shape,
          'int32') as tf.Tensor3D;

      const partSegmentations = tf.tidy(() => {
          const masksTensorInfo = decodeMultipleMasksWebGl(
              segmentation, longOffsets, posesAboveScore, height, width, stride,
              [height, width], Padding, minPoseScore, refineSteps, minKeypointScore,
              maxNumPeople);

          const masksTensor = tf.engine().makeTensorFromDataId(
              masksTensorInfo.dataId, masksTensorInfo.shape,
              'int32') as tf.Tensor3D;

          return await Promise.all(personSegmentations.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;

    const partSegmentationsData = decodeMultiplePartMasksCPU(
        segmentationsData, longOffsetsData, partSegmentationData,
        posesAboveScore, height, width, stride,
        [height, width], Padding, refineSteps, minKeypointScore,
        maxNumPeople);

    const partSegmentations = await Promise.all(partSegmentationsData.map(x => x.data())) as Int32Array[];

    const partSegmentations = decodeMultiplePartMasksWebGl(
        segmentation, longOffsets, posesAboveScore, height, width, stride,
        [height, width], Padding, refineSteps, minKeypointScore,
        maxNumPeople);

    const partSegmentations = await Promise.all(partSegmentations.map(x => x.data())) as Int32Array[];
  }

  return partSegmentationsByPersonData.map((data, i) => {
      return (pose) => { return [data[i], pose.score >= minPoseScore];
      });
  })
}
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=============================================================================

*/

// 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;
  }

  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);
    }
  }

  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;
  }
}

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;
      }
    }
  }
  return localMaximum;
}

/**
 * Builds a priority queue with part candidate positions for a specific image in
 * the batch. This filters out all images with more than one local maximum.
 */
export function buildPartWithScoreQueue(scoreThreshold: number, localMaximumRadius: number, scores: TensorBuffer3D): MaxHeap<PartWithScore> {
  const [height, width] = scores.shape;
  const queue = new MaxHeap<PartWithScore>(
      height * width * numKeypoints, ({score}) => score);
  for (let yCurrent = 0; yCurrent < height; ++yCurrent) {
    for (let xCurrent = 0; xCurrent < width; ++xCurrent) {
      if (scores.get(yCurrent, xCurrent, numKeypoints) > scoreThreshold) {
        const x = xCurrent;
        const y = yCurrent;
        const keypointId = numKeypoints;
        queue.enqueue({
          position: {x, y},
          score: scores.get(y, x, keypointId),
          keypointId: keypointId,
        });
      }
    }
  }
  return queue;
}
heatmapX = 0; heatmapX < width; ++heatmapX) {
    for (let keypointId = 0; keypointId < numKeypoints; ++keypointId) {
        const score = scores.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 (scoresIsMaximumInLocalWindow(heatmapY, heatmapX, keypointId, localMaximumRadius, score)) {
            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((
    [parentJoinName, childJoinName]) =>

    [PART_IDS[parentJoinName], PART_IDS[childJoinName]]);

const parentToChildEdges: number[] = parentChildrenTuples.map((
    [parentJointId, childJointId]) =>

    childJointId);

const childToParentEdges: number[] = parentChildrenTuples.map((
    [parentJointId, childJointId]) =>

    parentJointId);

function getDisplacement(edgeId: number, point: Vector2D, displacements: TensorBuffer3D) {
    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) {
    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's vector is refined using the offset vector by `offsetRefineStep` times.
 * 
 * @param edgeId The edge number.
 * @param sourceKeypoint The source keypoint.
 * @param targetKeypointId The target keypoint ID.
 * @returns The new keypoint.
 */
function traverseToTargetKeypoint(edgeId: number, sourceKeypoint: Keypoint, targetKeypointId: number, scoresBuffer: TensorBuffer3D, offsets: TensorBuffer3D, outputStride: number, displacementsFwd: 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 sourceKeypointIndices = addVectors(sourceKeypointIndices, displacement);
    let targetKeypoint = displacementsFwd.getDisplacement(edgeId, sourceKeypointIndices, displacements);
    for (let i = 0; i < offsetRefineStep; i++) {
        const targetKeypointIndices = getStridedIndexNearPoint(targetKeypoint, outputStride, height, width);
        const offsetPoint = getOffsetPoint(targetKeypointIndices, targetKeyPointIndices, x, offsetPoint, y, offsetPoint.y);
        targetKeypointIndices = addVectors(targetKeypointIndices, offsetPoint);
    }

    const targetKeypoint = displacementsFwd.getDisplacement(edgeId, targetKeypointIndices, displacements);
    const score = scoresBuffer.get(targetKeypointIndices, targetKeypointId, score);

    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 part.
 * @returns A list of decoded keypoints and their scores for a single pose.
 */
export function decodePose(root: PartWithScore, scores: TensorBuffer3D, offsets: TensorBuffer3D, outputStride: number, displacementsFwd: TensorBuffer3D, offsetRefineStep = 2): Array<{position: Vector2D, part: string, score: number}> { return decodePose(root, scores, offsets, outputStride, displacementsFwd, offsetRefineStep); }
displacementsBwd: 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);
  const 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;
}

export 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(x, y, correspondingKeypoint.y, correspondingKeypoint.x) <= squaredNmsRadius;
  });
}

export 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 /

* pixels away from the corresponding part of all previously detected instances, divided by the total number of parts `numParts`: \[\text{numParts} \times \text{heatmapScores}[y, x, k]\] The score of placing the `k`-th object part at position `(y, x)` is the short range offset vector of the `k`-th object part at heatmap position `(y, x)`. \text{displacementsFwd} 3-D tensor of shape `[height, width, 2 * num_edges]`, where `num_edges = num_parts - 1` is the number of number of edges (parent-child pairs) in the tree. It contains the forward displacements between consecutive part from the root towards the leaves. \text{displacementsBwd} 3-D tensor of shape `[height, width, 2 * num_edges]`, where `num_edges = num_parts - 1` is the number of number of edges (parent-child pairs) in the tree. It contains the backward displacements between consecutive part from the root towards the leaves. \text{outputStride} was used when feed-forwarding through the PoseNet model. Must be 32, 16, or 8. \text{numParts} Maximum number of returned instance detections per image. Only return instance detections that have root part score greater or equal to this value. Defaults to 0.5. \text{numParts} 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. \text{numParts} @param return An array of poses and their scores, each containing keypoints and the corresponding keypoint scores. \text{export function decodeMultiplePoses(scoresBuffer: TensorBuffer3D, offsetsBuffer: TensorBuffer3D, displacementsFwdBuffer: TensorBuffer3D, displacementsBwdBuffer: TensorBuffer3D, outputStride: number, maxPoseDetections: number, scoreThreshold = 0.5, nmsRadius = 20): Pose[]} \text{const queue = buildPartWithScoreQueue(scoreThreshold, kLocalMaximumRadius, scoresBuffer);\text{const squaredNmsRadius = nmsRadius * nmsRadius;\text{// Generate at most maxDetections object instances per image in decreasing root part score order.\text{while (poses.length < maxPoseDetections) && queue.empty()) {\text{// The top element in the queue is the next root candidate.\text{const root = queue.dequeue();\text{// 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.\text{const rootImageCoords = getImageCoords(root.part, outputStride, offsetsBuffer);\text{if (withinNmsRadiusOfCorrespondingPoint(pose.poses, squaredNmsRadius, rootImageCoords, root.part.id)) \text{continue;}}\text{// Start a new detection instance at the position of the root.\text{const keypoints = decodePose(root, scoresBuffer, offsetsBuffer, outputStride, displacementsFwdBuffer,\text{displacementsBwdBuffer);\text{const score = get InstanceScore(pose, squaredNmsRadius, keypoints);\text{poses.push({keypoints, score});\text{const return poses;}}}}\* Copyright 2019 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 https://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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=============================================================================
*/

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 module
// 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 module
// format.
export function mobileNetSavedModel(stride: number, multiplier: number, quantBytes: number): string {
  const toStr = {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;
  }
}

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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 | HTMLCanvasElement | OffscreenCanvas): [number, number] {
  if ('offsetHeight' in input && 'offsetWidth' in input && input.offsetHeight !== 0 && 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.
    return [input.height, input.width];
  } else {
    return [input.videoHeight, input.videoWidth];
  }
}

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 (Tensor) !== 'undefined' && input instanceof Tensor) {
    return [input.shape[0], input.shape[1]];
  } else {
    throw new Error('error: Unknown input type: ');
  }
}

function validInputResolution(inputResolution: number, outputStride: number): boolean {
  if (isValidInputResolution(inputResolution, outputStride)) {
    return true;
  }
  return false;
}

const INTERNAL_RESOLUTION_STRING_OPTIONS = { low: 'low', medium: 'medium', high: 'high' };
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(
    internalResolution: BodyPixInternalResolution): number {
  if (typeof internalResolution === 'string') {
    const
result = INTERNAL_RESOLUTION_PERCENTAGES[internalResolution];

    tf.util.assert(
        typeof result === 'number',
        () => `string value of inputResolution must be one of ${
Object.values(INTERNAL_RESOLUTION_STRING_OPTIONS).join(',')} but was
${internalResolution}.`);
    return result;
  } else {
    const internalResolution = parseFloat(internalResolution);

    tf.util.assert(
        typeof internalResolution === 'number' &&
        internalResolution <= MAX_INTERNAL_RESOLUTION &&
        internalResolution >= MIN_INTERNAL_RESOLUTION,
        () =>
            `inputResolution must be a string or number between ${MIN_INTERNAL_RESOLUTION} and ${MAX_INTERNAL_RESOLUTION}, but ` +
            `was ${internalResolution}.`);
    return internalResolution;
  }
}

export function toInputResolutionHeightAndWidth(
    internalResolution: BodyPixInternalResolution,
    outputStride: BodyPixOutputStride,
    [inputHeight, inputWidth]: [number, number]: [number, number]) {
  const
internalResolutionPercentage =
toInternalResolutionPercentage(internalResolution);

  return [
    toValidInputResolution(
        inputHeight * internalResolutionPercentage, outputStride),
    toValidInputResolution(
        inputWidth * internalResolutionPercentage, outputStride)
  ];
}

export function toInputTensor(input: BodyPixInput) {
  return input instanceof tf.Tensor ? input : tf.browser.fromPixels(input);
}

export function resizeAndPadTo(
    imageTensor: tf.Tensor3D, [targetH, targetW]: [number, number],
    flipHorizontal = false): {
  const
[height, width] = imageTensor.shape;

  const targetAspect = targetW / targetH;
  const aspect = width / height;

  let
resizeW, resizeH, padL, padR, padT, padB;

  if (aspect > targetAspect) {
    resizeW = targetW;
    resizeH = Math.ceil(resizeW / aspect);

    const padHeight = targetH - resizeH;
    padL = 0; padR = 0; padT = Math.floor(padHeight / 2); padB = targetH - (resizeH + padT);
    const
  resizeH = targetH;
  resizeW = Math.ceil(targetH * aspect);
  const
  const padWidth = targetW - resizeW;
  padL = Math.floor(padWidth / 2); padR = targetW - (resizeW + padL);
  padT = 0; padB = 0;

  const
  resizedAndPadded = tf.tidy(() => {
    let resized:
    tf.Tensor3D;
    if (flipHorizontal) {
      resized = tf.image.resizeBilinear(tf.reverse(imageTensor, 1),
        [resizeH, resizeW]);
    } else {
      resized = tf.image.resizeBilinear(imageTensor, [resizeH, resizeW]);
    }

    const
  const pad = tf.pad3d(resized, [[padT, padB], [padL, padR]]);

  return [resizedAndPadded, resizedAndPadded);
  });
}

export function scaleAndCropToInputTensorShape(
    tensor: tf.Tensor3D, [inputTensorHeight, inputTensorWidth]: [number, number],
    [resizedAndPaddedHeight, resizedAndPaddedWidth]: [number, number],
    [padT, padB, padL, padR]: [number, number],
    applySigmoidActivation = false): tf.Tensor3D {
  return tf.tidy(() => {
    const
    [originalHeight, originalWidth] = tf.shape(tensor);

    const
    const resizedAndPadded = tf.tidy(() => {
      let resized = tf.image.resizeBilinear(tensor, [originalHeight, originalWidth]);

      const
    const pad = tf.pad3d(resized, [[padT, padB], [padL, padR]]);

      return resizedAndPadded;
    });

    const
    const resizedAndPadded = tf.tidy(() => {
      let resized = tf.image.resizeBilinear(tensor, [originalHeight, originalWidth]);

      const
    const pad = tf.pad3d(resized, [[padT, padB], [padL, padR]]);

      return resizedAndPadded;
    });

    const
    const resizedAndPadded = tf.tidy(() => {
      let resized = tf.image.resizeBilinear(tensor, [originalHeight, originalWidth]);

      const
    const pad = tf.pad3d(resized, [[padT, padB], [padL, padR]]);

      return resizedAndPadded;
    });

    const
    const resizedAndPadded = tf.tidy(() => {
      let resized = tf.image.resizeBilinear(tensor, [originalHeight, originalWidth]);

      const
    const pad = tf.pad3d(resized, [[padT, padB], [padL, padR]]);

      return resizedAndPadded;
    });

    const
    const resizedAndPadded = tf.tidy(() => {
      let resized = tf.image.resizeBilinear(tensor, [originalHeight, originalWidth]);

      const
    const pad = tf.pad3d(resized, [[padT, padB], [padL, padR]]);

      return resizedAndPadded;
    });

    const
    const resizedAndPadded = tf.tidy(() => {
      let resized = tf.image.resizeBilinear(tensor, [originalHeight, originalWidth]);

      const
    const pad = tf.pad3d(resized, [[padT, padB], [padL, padR]]);

      return resizedAndPadded;
    });
//
// (originalHeight + padT + padB - 1.0) / (originalWidth + padL + padR - 1.0)

function resize2d(tensor, resolution) {
  const [height, width] = getInputSize(input);
  const aspect = width / height;
  let [padT, padB, padL, padR] = [0, 0, 0, 0];
  if (aspect < targetAspect) {
    padT = 0;
    padB = 0;
    padL = Math.round(0.5 * (targetAspect * height - width));
    padR = Math.round(0.5 * (targetAspect * height - width));
  } else {
    padT = Math.round(0.5 * ((1.0 / targetAspect) * width - height));
    padB = Math.round(0.5 * ((1.0 / targetAspect) * width - height));
    padL = 0;
    padR = 0;
  }
  return tf.tidy(() => {
    const batchedImage = tf.expandDims(tensor, 2);
    return tf.squeeze(tf.image.resizeBilinear(batchedImage, resolution, nearestNeighbor));
  });
}

export function resize2d(tensor, resolution) {
  const [height, width] = getInputSize(input);
  const aspect = width / height;
  let [padT, padB, padL, padR] = [0, 0, 0, 0];
  if (aspect < targetAspect) {
    padT = 0;
    padB = 0;
    padL = Math.round(0.5 * (targetAspect * height - width));
    padR = Math.round(0.5 * (targetAspect * height - width));
  } else {
    padT = Math.round(0.5 * ((1.0 / targetAspect) * width - height));
    padB = Math.round(0.5 * ((1.0 / targetAspect) * width - height));
    padL = 0;
    padR = 0;
  }
  return tf.tidy(() => {
    const batchedImage = tf.expandDims(tensor, 2);
    return tf.squeeze(tf.image.resizeBilinear(batchedImage, resolution, nearestNeighbor));
  });
}

export function padAndResizeTo(input, targetH, targetW) {
  const [height, width] = getInputSize(input);
  const aspect = width / height;
  let [padT, padB, padL, padR] = [0, 0, 0, 0];
  if (aspect < targetAspect) {
    padT = 0;
    padB = 0;
    padL = Math.round(0.5 * (targetAspect * height - width));
    padR = Math.round(0.5 * (targetAspect * height - width));
  } else {
    padT = Math.round(0.5 * ((1.0 / targetAspect) * width - height));
    padB = Math.round(0.5 * ((1.0 / targetAspect) * width - height));
    padL = 0;
    padR = 0;
  }
  return tf.tidy(() => {
    const batchedImage = tf.expandDims(tensor, 2);
    return tf.squeeze(tf.image.resizeBilinear(batchedImage, [targetH, targetW]));
  });
}

export function padAndResizeTo(input, targetH, targetW) {
  const [height, width] = getInputSize(input);
  const aspect = width / height;
  let [padT, padB, padL, padR] = [0, 0, 0, 0];
  if (aspect < targetAspect) {
    padT = 0;
    padB = 0;
    padL = Math.round(0.5 * (targetAspect * height - width));
    padR = Math.round(0.5 * (targetAspect * height - width));
  } else {
    padT = Math.round(0.5 * ((1.0 / targetAspect) * width - height));
    padB = Math.round(0.5 * ((1.0 / targetAspect) * width - height));
    padL = 0;
    padR = 0;
  }
  return tf.tidy(() => {
    const batchedImage = tf.expandDims(tensor, 2);
    return tf.squeeze(tf.image.resizeBilinear(batchedImage, [targetH, targetW]));
  });
}

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 {decodeMultiplePoses} from './multi_person/decode_multiple_poses';
import {ResNet} from './resnet';
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.
 *
 * `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 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 model 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 ResNet
// based PoseNet is also included).
const RESNET_CONFIG = {
  architecture: 'ResNet50',
  outputStride: 32,
  quantBytes: 4,
} as ModelConfig;

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]: BodyPixOutputStride[]} = {
  'MobileNetV1': [8, 16, 32],
  'ResNet50': [32, 16],
};

const VALID_MULTIPLIER: {[id: string]: BodyPixMultiplier[]} = {
  '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
  ` + `should be one of ${VALID_ARCHITECTURE}.` + `config.architecture`);
  }

  if (config.outputStride == null) {
    config.outputStride = 16;
  }
  if (VALID_Stride[config.architecture].indexOf(config.outputStride) < 0) {
    throw new Error(`Invalid outputStride
  ` + `should be one of ${VALID_STRIDE[config.architecture]}.` + `config.outputStride`);
  }

  if (config.multiplier == null) {
    config.multiplier = 1.0;
  }
  if (VALID_MULTIPLIER[config.architecture].indexOf(config.multiplier) < 0) {
    throw new Error(`Invalid multiplier
  ` + `should be one of ${VALID_MULTIPLIER[config.architecture]}.` + `config.multiplier`);
  }

  if (config.quantBytes == null) {
    config.quantBytes = 4;
  }
  if (VALID_QUANT_BYTES.indexOf(config.quantBytes) < 0) {
    throw new Error(`Invalid quantBytes
  ` + `should be one of ${VALID_QUANT_BYTES}.` + `config.quantBytes`);
  }

  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.
 */

// The default configuration for inference
// (And for references, the default configuration for inference
// based PoseNet is also included).
const RESNET_INFER_CONFIG = {
  flipHorizontal: false,
} as ModelConfig;

const MOBILENET_V1_INFER_CONFIG = {
  flipHorizontal: false,
} as ModelConfig;

const VALID_INPUT_SIZE: {[id: string]: number[]} = {
  'MobileNetV1': [256, 128],
  'ResNet50': [224, 224],
};

function validateInferConfig(config: ModelConfig): ModelConfig {
  config = config || MOBILENET_V1_INFER_CONFIG;

  if (config.flipHorizontal == null) {
    config.flipHorizontal = false;
  }
  if (VALID_INPUT_SIZE[config.architecture].indexOf(config.flipHorizontal) < 0) {
    throw new Error(`Invalid flipHorizontal
  ` + `should be one of ${VALID_INPUT_SIZE[config.architecture]}.` + `config.flipHorizontal`);
  }

  return config;
}
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 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. The 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.

interface InferenceConfig { flipHorizontal?: boolean; internalResolution?: BodyPixInternalResolution; segmentationThreshold?: number; maxDetections?: number; Person Inference Config: segmentationThreshold?: number; maxDetections?: number; *nmsRadius*: number; *nmsRadius*: number; minKeypointScore?: number; refineSteps?: number; }

export interface PersonInferenceConfig extends InferenceConfig { maxDetections?: number; scoreThreshold?: number; nmsRadius?: number; segmentationThreshold?: number; maxDetections?: number; scoreThreshold?: number; nmsRadius?: number; minKeypointScore?: number; refineSteps?: number; }

export interface MultiPersonInstanceInferenceConfig extends InferenceConfig { maxDetections?: number; scoreThreshold?: number; nmsRadius?: number; minKeypointScore?: number; refineSteps?: number; }

validatePersonInferenceConfig(config: PersonInferenceConfig) {
  const {segmentationThreshold, maxDetections, scoreThreshold, nmsRadius} = config;
  if (segmentationThreshold < 0.0 || segmentationThreshold > 1.0) {
    throw new Error(`Invalid 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}. Should be > 0`);
  }
}

validateMultiPersonInstanceInferenceConfig(config: MultiPersonInstanceInferenceConfig) {
  const {segmentationThreshold, maxDetections, scoreThreshold, nmsRadius, minKeypointScore, refineSteps} = config;
  if (segmentationThreshold < 0.0 || segmentationThreshold > 1.0) {
    throw new Error(`Invalid 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}. Should be > 0`);
  }
  if (minKeypointScore < 0 || minKeypointScore > 1) {
    throw new Error(`Invalid minKeypointScore ${minKeypointScore}. Should be in range [0, 1]`);
  }
  if (refineSteps <= 0 || refineSteps > 20) {
    throw new Error(`Invalid refineSteps ${refineSteps}. Should be in range [1, 20]`);
  }
}

export class BodyPix {
```javascript
baseModel: BaseModel; constructor(net: BaseModel) {
  this.baseModel = net;
}

private predictForPersonSegmentation(input: tf.Tensor3D) {
  const segmentation, heatmapScores, offsets, displacementFwd, displacementBwd = this.baseModel.predict(input);
  return {
    segmentLogits: segmentation, heatmapScores, offsets, displacementFwd, displacementBwd
  };
}

private predictForMultiPersonInstanceSegmentationAndPart(input: tf.Tensor3D) {
  const segmentation, longOffsets, heatmapScores, offsets, displacementFwd, displacementBwd = this.baseModel.predict(input);
  return {
    segmentLogits: segmentation, longOffsets, heatmapScores, offsets, displacementFwd, displacementBwd
  };
}

/**
 * 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) heatmapScores, 3) offsets, and 4) paddings.
 *
 * @param input ImageData|HTMLImageElement|HTMLCanvasElement|HTMLVideoElement
 * 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
 * internalResolution 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, 0.5, 0.75, and 1.0 correspondingly.
 * @param segmentationThreshold The minimum that segmentation values must have
 * to be considered part of the person. Affects the generation of the segmentation mask.
 * @return A dictionary containing 'segmentation', 'heatmapScores', 'offsets', and 'padding':
 * - 'segmentation': A 2d Tensor 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, segmentationThreshold = 0.5) {
  const segmentation = this.baseModel.predict(applyMaskTensorFromImage(input, segmentationThreshold, bodyPixInput, internalResolution, segmentationThreshold));
  return {
    segmentation, heatmapScores, offsets, displacementFwd, displacementBwd
  };
}
```

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tf.squeeze(scaledSegmentScores), segmentationThreshold), heatmapScores, offsets, displacementFwd, displacementBwd

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...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...
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;
if (longOffsetsResized) {
  const scaledLongOffsets = scaleAndCropToInputTensorShape(
    longOffsets, [height, width], internalResolutionHeightAndWidth,
    [padding.top, padding.bottom], [padding.left, padding.right],
    APPLY_SIGMOID_ACTIVATION);
} else {
  const scaledLongOffsets = longOffsets;
}

const segmentation = toMaskTensor(
  tf.squeeze(scaledSegmentScores), config.segmentationThreshold);

return {
  segmentation,
  longOffsets: scaledLongOffsets,
  heatmapScoresRaw: heatmapScores,
  offsetsRaw: offsets,
  displacementFwdRaw: displacementFwd,
  displacementBwdRaw:
};

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);

poses = scaleAndFlipPoses(
  poses, [height, width], internalResolutionHeightAndWidth, padding,
  FLIP_POSES_AFTER_SCALING);

const instanceMasks = await decodePersonInstanceMasks(
  segmentation, longOffsets, poses, height, width,
  this.baseModel.outputStride, internalResolutionHeightAndWidth, padding,
  config.refineSteps, config.minKeypointScore,
  config.maxDetections,
  config.segmentationThreshold);

resized.dispose();
segmentation.dispose();
longOffsets.dispose();
heatmapScoresRaw.dispose();
offsetsRaw.dispose();
displacementFwdRaw.dispose();
displacementBwdRaw.dispose();
resized.dispose();
let tensorBuffers = await toTensorBuffers3D(
  [ heatmapScoresRaw, offsetsRaw, displacementFwdRaw, displacementBwdRaw ]);
const [ scoresBuf, offsetsBuf, displacementsFwdBuf, displacementsBwdBuf ] = tensorBuffers;

Given an image with many people, returns a dictionary containing:
- `partSegmentation`: A 2d Tensor with a part id from 0-24 for the pixels that are part of a corresponding body part, and -1 otherwise. This does standard ImageNet pre-processing before inferring through the model.
- `heatmapScores`: A 3d Tensor of the keypoint heatmaps used by single-person pose estimation decoding.
- `offsets`: A 3d Tensor of the keypoint offsets used by single-person 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.
- `segmentation`: A 2d Tensor with a part id from 0-24 for the pixels that are part of a corresponding body part, and -1 otherwise.
- `heatmapScores`: A 3d Tensor of the keypoint heatmaps used by single-person pose estimation decoding.
- `offsets`: A 3d Tensor of the keypoint offsets used by single-person 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.

```javascript

// BodyPixInput

const segmentation = toMaskTensor(
  tf.squeeze(scaledSegmentScores), config.segmentationThreshold);

return {

};

// toTensorBuffers3D

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);

poses = scaleAndFlipPoses(
  poses, [height, width], internalResolutionHeightAndWidth, padding,
  FLIP_POSES_AFTER_SCALING);

const instanceMasks = await decodePersonInstanceMasks(
  segmentation, longOffsets, poses, height, width,
  this.baseModel.outputStride, internalResolutionHeightAndWidth, padding,
  config.refineSteps, config.minKeypointScore,
  config.maxDetections,
  config.segmentationThreshold);

resized.dispose();
segmentation.dispose();
longOffsets.dispose();
heatmapScoresRaw.dispose();
offsetsRaw.dispose();
displacementFwdRaw.dispose();
displacementBwdRaw.dispose();
resized.dispose();
let tensorBuffers = await toTensorBuffers3D(
  [ heatmapScoresRaw, offsetsRaw, displacementFwdRaw, displacementBwdRaw ]);
const [ scoresBuf, offsetsBuf, displacementsFwdBuf, displacementsBwdBuf ] = tensorBuffers;

Given an image with many people, returns a dictionary containing:
- `partSegmentation`: A 2d Tensor with a part id from 0-24 for the pixels that are part of a corresponding body part, and -1 otherwise.
- `heatmapScores`: A 3d Tensor of the keypoint heatmaps used by single-person pose estimation decoding.
- `offsets`: A 3d Tensor of the keypoint offsets used by single-person 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.
```
tf.tidy(() => {
  const {
    segmentLogits,
    partHeatmapLogits,
    heatmapScores,
    offsets,
    displacementFwd,
    displacementBwd
  } = this.predictForPersonSegmentationAndPart(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 [resizedHeight, resizedWidth] = resized.shape;
  const scaledPartHeatmapScore = scaleAndCropToInputTensorShape(
    partHeatmapLogits, [height, width], [resizedHeight, resizedWidth],
    [[padding.top, padding.bottom], [padding.left, padding.right]],
    APPLY_SIGMOID_ACTIVATION);

  const segmentation =
    toMaskTensor(tf.squeeze(scaledSegmentScores), segmentationThreshold);
  return {
    partSegmentation:
      decodePartSegmentation(segmentation, scaledPartHeatmapScore),
    heatmapScores,
    offsets,
    displacementFwd,
    displacementBwd,
    padding,
    internalResolutionHeightAndWidth
  };
});

async segmentPersonParts(
    input:
      BodyPixInput,
      config: PersonInferenceConfig = PERSON_INFERENCE_CONFIG):
      Promise<SemanticPartSegmentation> {
    config = {...PERSON_INFERENCE_CONFIG, ...config};

    validatePersonInferenceConfig(config);
    const {
      partSegmentation,
      heatmapScores,
      offsets,
      displacementFwd,
      displacementBwd
    } =
      this.segmentPersonPartsActivation(input, config.internalResolution, config.segmentationThreshold);

    const [height, width] = partSegmentation.shape;
    const data = await partSegmentation.data() as Int32Array;

    const tensorBuffers = await toTensorBuffers3D(
        [heatmapScores, offsets, displacementFwd, displacementBwd]);
    const [scoresBuf, offsetsBuf, displacementsFwdBuf,
      displacementsBwdBuf] =
        tensorBuffers;

    let poses = decodeMultiplePoses(scoresBuf, offsetsBuf,
      displacementsFwdBuf, displacementsBwdBuf,
      config, scoreThreshold, config.nmsRadius);

    poses = scaleAndFlipPoses(poses, [height, width],
      internalResolutionHeightAndWidth, padding,
      FLIP_POSES_AFTER_SCALING);

    return {height, width, data, allPoses: poses};
  }

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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(input: BodyPixInput, config: MultiPersonInstanceInferenceConfig = MULTI_PERSON_INSTANCE_INFERENCE_CONFIG): Promise<PartSegmentation[]> {
    const [height, width] = getInputElementSize(input);
    const internalResolutionHeightAndWidth = toInputResolutionHeightAndWidth(this.baseModel.outputStride, [height, width]);
    const {segmentation, longOffsets, heatmapScoresRaw, offsetsRaw, displacementFwdRaw, displacementBwdRaw, partSegmentation,_offsets, displacementBwdRaw, } = tf.tidy(() => {
        const {segmentLogits, longOffsets, heatmapScores, offsets, displacementFwd, displacementBwd, partSegmentation, } = this.predictForMultiPersonInstanceSegmentationAndPart(resized);
        // decoding with scaling.
        const scaledSegmentScores = scaleAndCropToInputTensorShape(segmentLogits, [height, width], internalResolutionHeightAndWidth, [padding.top, padding.bottom], [padding.left, padding.right], APPLY_SIGMOID_ACTIVATION);
        const scaledPartSegmentationScores = scaleAndCropToInputTensorShape(partHeatmaps, [height, width], internalResolutionHeightAndWidth, [padding.top, padding.bottom], [padding.left, padding.right], APPLY_SIGMOID_ACTIVATION);
        const scaledLongOffsets = longOffsets;
        const segmentation = toMaskTensor(scaledSegmentScores, config.segmentationThreshold);
        const partSegmentation = decodeOnlyPartSegmentation(scaledPartSegmentationScores);
        return {
            segmentation,
            longOffsets: scaledLongOffsets,
            heatmapScoresRaw: heatmapScores,
            offsetsRaw: offsets,
            displacementFwdRaw: displacementFwd,
            displacementBwdRaw: displacementBwd,
            partSegmentation
        };
    });
    const tensorBuffers = await toTensorBuffers3D([heatmapScoresRaw, offsetsRaw, displacementFwdRaw, displacementBwdRaw]);
    const [scoresBuf, offsetsBuf, displacementsFwdBuf, displacementsBwdBuf] = tensorBuffers;
    const poses = decodeMultiplePoses(scoresBuf, offsetsBuf, displacementsFwdBuf, displacementsBwdBuf);
    const instanceMasks = await decodePersonInstancePartMasks(segmentation, longOffsets, partSegmentation, resized, height, width, this.baseModel.outputStride, internalResolutionHeightAndWidth, padding, config.scoreThreshold, config.refineSteps, config.minKeypointScore, config.maxDetections);
    resized.dispose();
    segmentation.dispose();
    longOffsets.dispose();
    heatmapScoresRaw.dispose();
    displacementFwdRaw.dispose();
    displacementBwdRaw.dispose();
    return instanceMasks;
}

public dispose() {
    this.baseModel.dispose();
}

/**
 * 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, 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);
MobileNet architecture. The model to be loaded is configurable using the config dictionary ModelConfig. Please find more details in the documentation of the ModelConfig. The predefined `MOBILENET_V1_CONFIG` and `RESNET_CONFIG` can also be used as references for defining your customized config.

```typescript
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;
  }
}
```

```typescript
// 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;
}
```

```typescript
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, compositeOperation: string) {
  ctx.globalCompositeOperation = compositeOperation;
  ctx.drawImage(image, 0, 0);
}
```

```typescript
// 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;
}
```

```typescript
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
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  return (/^((?!chrome|android).)*safari/i.test(navigator.userAgent));
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  ctx.translate(-canvas.width, 0);
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```

```typescript
// method copied from bGlur in https://codepen.io/zhaojun/pen/zZmRQe
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  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;
}
```
offScreenCanvases[id] = createOffScreenCanvas();
}

function drawAndBlurImageOnCanvas(image: ImageType, blurAmount: number, canvas: Canvas) {
  const [height, width] = image.size;
  const ctx = canvas.getContext('2d');
  canvas.width = width;
  canvas.height = height;
  ctx.clearRect(0, 0, width, height);
  if (isSafari()) {
    ctx.filter = `blur(${blurAmount}px)`;
    ctx.drawImage(image, 0, 0, width, height);
  } else {
    ctx.drawImage(image, 0, 0, width, height);
  }
}

function drawAndBlurImageOnOffScreenCanvas(image: ImageData, 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(imageData: ImageData, canvas: Canvas) {
  const {width, height} = imageData;
  canvas.width = width;
  canvas.height = height;
  const ctx = canvas.getContext('2d');
  ctx.putImageData(imageData, 0, 0);
}

function renderImageDataToOffScreenCanvas(imageData: ImageData, canvasName: string): Canvas {
  const canvas = ensureOffscreenCanvasCreated(canvasName);
  renderImageDataToCanvas(imageData, 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.
 */

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]): ImageData {
  if (Array.isArray(personOrPartSegmentation) && personOrPartSegmentation.length === 0) {
    return null;
  }

  let multiPersonOrPartSegmentation: Array<SemanticPersonSegmentation|SemanticPartSegmentation|PersonSegmentation|PartSegmentation>;
  if (!Array.isArray(personOrPartSegmentation)) {
    multiPersonOrPartSegmentation = [personOrPartSegmentation];
  } else {
    multiPersonOrPartSegmentation = personOrPartSegmentation;
  }

  const {width, height} = multiPersonOrPartSegmentation[0].size;
  const bytes = new Uint8ClampedArray(width * height * 4);
  function drawStroke(bytes: Uint8ClampedArray, row: number, column: number, radius: number, color: Color) {
    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, row: number, column: number, width: number, foregroundIds: number[] = [1]: boolean) {
    const n = (row + i) * width + (column + j);
    if (i !== 0 && j !== 0) {
      if (i <= 0 && j <= 0) {
        bytes[4 * n + 0] = color.r;
        bytes[4 * n + 1] = color.g;
        bytes[4 * n + 2] = color.b;
        bytes[4 * n + 3] = color.a;
      }
    }
  }

  for (let i = -radius; i <= radius; i++) {
    for (let j = -radius; j <= radius; j++) {
      if (i !== 0 && j !== 0) {
        if (i === 0 && j === 0) {
          drawStroke(bytes, row, column, radius, {r: 255, g: 255, b: 255, a: 255});
        }
      }
    }
  }

  return bytes;
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### Render Image With Pixelated Mask

```javascript
const blurredMask = drawAndBlurImageOnOffScreenCanvas(mask, maskBlurAmount, CANVAS_NAMES.blurredMask);

const mask = renderImageDataToOffScreenCanvas(maskImage, CANVAS_NAMES.mask);
const blurredMask = drawAndBlurImageOnOffScreenCanvas(blurredMask, 0, 0, width, height);
ctx.drawImage(blurredMask, 0, 0, width, height);
ctx.restore();
```

### Draw Pixelated Mask

```javascript
export function drawPixelatedMask(canvas: Canvas, image: ImageType, maskImage: ImageData, maskOpacity = 0.7, maskBlurAmount = 0, flipHorizontal = false, pixelCellWidth = 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 * (1.0 / pixelCellWidth);
  offscreenCanvas.height = blurredMask.height * (1.0 / pixelCellWidth);
  offscreenCanvasCtx.drawImage(blurredMask, 0, 0, blurredMask.width, blurredMask.height, 0, 0, canvas.width, canvas.height);
  ctx.imageSmoothingEnabled = false;
  ctx.drawImage(offscreenCanvas, 0, 0, offscreenCanvas.width, offscreenCanvas.height, 0, 0, canvas.width, canvas.height);

  // Draws vertical grid lines that are 'pixelCellWidth' apart from each other.
  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();
  }

  // Draws horizontal grid lines that are 'pixelCellWidth' apart from each other.
  for (let i = 0; i < offscreenCanvas.height; i++) {
    ctx.beginPath();
    ctx.strokeStyle = '#ffffff';
    ctx.moveTo(0, pixelCellWidth * i);
    ctx.lineTo(offscreenCanvas.width, pixelCellWidth * i);
    ctx.stroke();
  }

  ctx.globalAlpha = 1.0 - maskOpacity;
  ctx.drawImage(image, 0, 0, blurredMask.width, blurredMask.height);
  ctx.restore();
}
```

### Create Person Mask

```javascript
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 {
  const blurredImage = drawAndBlurImageOnOffScreenCanvas(blurredImage, CANVAS_NAMES.blurredMask);
  return blurredImage;
}
```
```javascript
blurredImage.height;\n\nconst ctx = canvas.getContext('2d');\n\nif (Array.isArray(multiPersonSegmentation) &&
    multiPersonSegmentation.length === 0) {\n\n    const destInImage = ctx.drawImage(blurredImage, 0, 0);\n    return;\n}\n\nconst personMask = createPersonMask(multiPersonSegmentation, edgeBlurAmount);\n\nctx.drawImage(personMask, 0, 0);\n\nif (flipHorizontal) {\n    flipCanvasHorizontal(canvas);\n}\n\n// draw the original image on the final canvas\nconst [height, width] = getInputSize(image);\n\nctx.drawImage(image, 0, 0, width, height);\n\n// "destination-in" - \"The existing canvas content is kept where both the new shape and existing canvas content overlap. Everything else is made transparent.\"\n\n// crop what's not the person using the mask from the original image\n\n\ncontext.drawImage(ctx, personMask, 'destination-in');\n\n// "destination-over" - \"The existing canvas content is kept where both the new shape and existing canvas content overlap. Everything else is made transparent.\"\n\n\n```

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export const PART_CHANNELS: string[] = [
  'left_face',
  'right_face',
  'left_upper_arm_front',
  'left_upper_arm_back',
  'right_upper_arm_front',
  'right_upper_arm_back',
  'left_lower_arm_front',
  'left_lower_arm_back',
  'right_lower_arm_front',
  'right_lower_arm_back',
  'left_upper_leg_front',
  'left_upper_leg_back',
  'right_upper_leg_front',
  'right_upper_leg_back',
  'left_lower_leg_front',
  'left_lower_leg_back',
  'right_lower_leg_front',
  'right_lower_leg_back',
  'left_feet',
  'right_feet',
];

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 */

export { BodyPix, load } from './body_pix_model';
export { blurBodyPart, drawBokehEffect, drawMask, drawPixelatedMask, toColoredPartMask, toMask } from './output_rendering_util';
export { PART_CHANNELS } from './part_channels';
export { PartSegmentation, PersonSegmentation, SemanticPartSegmentation, SemanticPersonSegmentation } from './types';
export { flipPoseHorizontal, resizeAndPadTo, scaleAndCropToInputTensorShape } from './util';
export { version } from './version';
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* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-pix/dist/mobilenet.d.ts
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* /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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"../src/dat/controllers/NumberController.js","../src/dat/controllers/NumberControllerBox.js","../src/dat/controllers/NumberControllerSlider.js","../src/dat/controllers/FunctionController.js","../src/dat/controllers/ColorController.js","../src/util/stats.js","../src/gui/saveDialogue.html.js","../src/dat/controllers/ControllerFactory.js","../src/dat/utils/requestAnimationFrame.js","../src/dat/dom/CenteredDiv.js","../src/dat/gui/GUI.js","node_modules/stats.js/build/stats.min.js","node_modules\tensorflow\models\posenet\dist\posenet.esm.js","demo_util.js","part_color_scales.js","index.js"],names:["cachedSetTimeout","cachedClearTimeout","process","module","exports","defaultSetTimeout","Error","defaultClearTimeout","runTimeOut","fun","setTimeout","el","call","runClearTimeout","marker","clearTimeout","currentTimeQueue","queue","draining","queueIndex","cleanUpNextTick","length","concat","drainQueue","timeout","len","run","Item","array","noop","nextTick","args","Array","arguments","i","push","prototype","apply","title","env","argv","version","versions","on","addListener","once","off","removeListener","removeAllListeners","emit","prependListener","prependOnceListener","listeners","name","binding","cwd","chdir","dir","umask","color","forceCSSHex","colorFormat","_state","conversionName","toString","Math","round","g","b","a","h","s","toFixed","v","str","hex","ARR\_EACH","forEach","ARR\_SLICE","slice","Common","target","each","obj","isObject","Object","keys","key","isUndefined","bind","toCall","i","tr","scope","I","BREAK","fn","func","threshold","callImmediately","callNow","delayed","toArray","undefined","i",sNaN,"isArray","constructor","INTERPRETATIONS","common","isString","original","test","match","parseInt","parseFloat","isNumber","result","toReturn","interpret","family","litmus","conversions","conversion","read","impComponent","ColorMath","hi","floor","f","p","q","r","c","min","max","delta","NaN","hex_with_component","componenIndex","value","Color","toString","write","defineRGBComponent","component","componentHexIndex","defineProperty","space","recalculateRGB","defineHSVComponent","recalculateHSV","math","component_from_hex","extend","hsv_to_rgb","rgb_to_hsv","COMPONENTS","rgb_to_hex","Controller","object","property","initialValue","domElement","document","createElement","_onChange","_onFinishChange","newValue","updateDisplay","getVal","EVENT\_MAP","EVENT\_MAP\_INV","k","CSS\_VALUE\_PIXELS","cssValueToPixels","val","isNull","dom","elem","selectable","style","onselectstart","MozUserSelect","KhtmlUserSelect","unselectable","horizontal","vertical","position","left","right","top","bottom","eventType","pars","aux","params","className","event","createEvent","clientX","clientY","initMouseEvent","bubbles","cancelable","window","initEvent","dispatchEvent","event","newBool","bool","addEventListener","attachEvent","removeEventListener","detachEvent","removeEventListener","domEvent","document","createElement","_createElement","_onChange","_onFinishChange","newValue","updateDisplay","getVal","EVENT\_MAP","EVENT\_MAP\_INV","k","CSS\_VALUE\_PIXELS","cssValueToPixels","val","isNull","dom","elem","selectable","style","onselectstart","MozUserSelect","KhtmlUserSelect","unselectable","horizontal","vertical","position","left","right","top","bottom","eventType","pars","aux","params","className","event","createEvent","clientX","clientY","y","initMouseEvent","bubbles","cancelable","window","initEvent","dispatchEvent","event","newBool","bool","addEventListener","attachEvent","removeEventListener","detachEvent","removeEventListener","domEvent","document","createElement","_createElement","_onChange","_onFinishChange","newValue","updateDisplay","getVal","EVENT\_MAP","EVENT\_MAP\_INV","k","CSS\_VALUE\_PIXELS","cssValueToPixels","val","isNull","dom","elem","selectable","style","onselectstart","MozUserSelect","KhtmlUserSelect","unselectable","horizontal","vertical","position","left","right","top","bottom","eventType","pars","aux","params","className","event","createEvent","clientX","clientY","y","initMouseEvent","bubbles","cancelable","window","initEvent","dispatchEvent","event","newBool","bool","addEventListener","attachEvent","removeEventListener","detachEvent","removeEventListener","domEvent","document","createElement","_createElement",""]
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Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5

AG, IAIAImb, EAAE, SAAS+H, GAAe IqB, GAAU, OAAAA, EAAK, EAAAA, MAAA, WAAqBA, UAAAA, EAAEiiB, QA AQjib, EAAEA, EAEiB, WA Ae 1a, JAAA, GAAE, EAAO, EAAAA, QAQ, OAOA, SA AqGxB, OAA AA, EAAEwC, IAAIvB, KAAK, IAAImjB, GAAO, WAAoB3qB, SAAAA, EAAE, EAAEwH, GAAQ4a, KAAAA, MA AMpib, EAAAMsD, IAAA, EAAE, KAAK&c, MAAMC, OAAO, GAAGC, MAAWT, EAAAA, KAAAA, QAQ, IAIAi vC, EAAE, KAAKJIAIA, EAAE, GAAE, WAIIB, MAAG, gBAAqBG, EAAE, GAAG, KAAK, EAAE, GAAG, kCAAk C, KAAKif, aA AAa, EAAASxH, OAAEYb, UAAU+gB, QAQ, QAASxiB, GAAOwH, IAAA, EAAE, KAAY, OAAA, EAAE, EAAA, MAAM, WAAE, IAAE, EAAEonB, GA Ae1qB, GAAGyib, WAAW, GAAGC, EAAEib, EAA E4a, MAAM, QAQ IfQ, GAAGqf, EAAED, EAAE, GAAAmhB, EAAEwH, EAAE, GAAE7c, EAAE6e, EAAE, GAAS, MAAA, CAACe, cACf, EAAE, GAAG, UAcua, QAACQ, QAAGQ, EAAAg, UAAUG, gBAAgBL, EAAE, UAA U1, gBAAgB1hB, EAAEshB, cAC7iB, EAAEYb, UAAUyhB, QAQ, WAAgBd, KAAAA, MAAMMc, WAAWjB, EAA E5hB, GAiiB4qB, GAAoB, CAACC, aAAA, cACf, aAAa, GAAGuL, WAAW, IAIAIC, gBAgB, KAAK, GAAMc, BA AC, cACc, YAAY, YAAAC, GAAC, YAAY, EAAE, GAAG, IAIAiC, SAAS, CAAC, GAAGC, GAAGC, SAAS, CAAC, IAIAiA, IAAC, IAIAiC, IAAC, KAACK, GAAiB, CAAC, YAY, YAY, CAAC, G GAAO, IAIAIC, GAAGC, SAAS, CAAC, IAIAiA, IAAC, GAAGC, EAAE, EAAE, GAAG, SAASC, GAAGoBvB, GAAM, GA AA, OAAAA, EAAE, GAAGq4B, IAAQBc, cAACe, cAAE, WA Ae, IAAE, EAAE, MAAM, wBAAwBk, EAAE6eQB, aA AAa, sBAAsBG, IAAuB, GAAA, MAAMhB, EAA E4qB, KBAAbkB/qB, EAAE+qB, gBAgB, KAAK, GAuuBxd, QAAPQN5, EAAE+qB, ibAAIb, EAAE, MAAM, IAAMp rb, MAAM, 2AA2kB2k, EAAE+qB, gBAgB, sBAAsBK, IAAK2kB, GAAA, MAAMprB, EAAEuuB, eEAAeVib, EAAEuuB, aAAa, IAIAI0I, GAAAjrB, EAAE6eQB, cACjdC, QAAPQN5, EAAEuuB, cACc, EAAE, MAAM, IAAMiB, MAAM, wBAAwBk, EAAE6eQB, sBAAsBG, GAAOwH, IAAMiB, MAAM, wBAAwBk, EAAE6eQB, aAAPM, KAAK, IAAMiB, MAAM, sBAAsBK, EAAE6eQB, WAAW, IAAMiB, MAAM, sBAAsBF, GAA KkB, qBAAqBtrB, EAAE6eQB, aA AAa, KAAAY7qB, OAAAA, EAAE4H, QA AAuBAAa, GAA93H, IAAlyRB, GAA+ cBA, ACC, gBAEe, GAACIC, GAA8B, CAACD, gBAAeC, EAAEge, cACc, EAAEAC, cACe, GAAE, GAAGC, UAAA, IAIAL, IAASC, GA A+B+RB, GAAOwH, IAAA, EAAEhI, EAAE4B, cCAactB, EAAEitD, EAAE6rB, eAAEn, EAAEiiB, EAAEtrasB, UAA tkB, GAAAE, GAAG, EAAE, MAAM, IAAMiB, MAAM, wBAA0B2D, EAAE, mA CAAsCof, GAAA, GAAG, EAAE, MAAM, IAAMiI b, MAAM, qBAAqB+IB, EAAE, EAAE, KAAK, IAAMiJG, GAAQ, WAAoBhsB, SAAAA, EAAE, EAAEwH, GAAGyKB, KAA AA, UAAAuB, EAAE, KAAK+qB, gBAgB, vB, EAAExH, OAAA, EAAEYb, UAAUyQb, sBAAsB, SAASISb, EAA EwH, GAAU, YAAA, IAASa, IAIAA, EAAEmkB, IAA+BhF, EAAE, UAAK, OAAO, EAAO, WAAerB, IAAA, EAA EoF, EAAECA, EAAEPHb, EAAEiC, EAAF, EAAEwB, EAAEhI, EAAEiC, EAAEiiC, EAAEiNC, EAAEiD, EAAEygB, EAAEiG5b, EAAEiiUib, EAAEiNC, EAAEroB, EAAEisoB, EAAEpgB, EAAEsB, OAAAA, EAAE, KAA K, SAAASgF, GAAUAA, OAAAA, EAAEeF, OAAAY, KAAA, EAAAS5jB, OAAAA, EAAEikB, EAAE, GAAAGmF, GAAG8Bn kB, GAAUGkB, GAA+BVk, GAAAGkB, KAALKU, UAAU1J, aAAaL, EAAE, KAALKoL, gBAAqBjN, EAAWvBcG, AAG X, EAAE, KAALKjB, gBAAgBtrLB, GAAgHnB, EAAEsnB, EAAy7bO, GAAG6D, EAAEiiC, EAAEiGC, EAAEGeC, EA AEPC, EAAE, GAAGq4B, EAAE+E, EAAeIbB, EAAE, CAAC2IB, EAAE, IAIAixd, EAAEiF, EAAEgF, QAQQ9HbB, E AA E8c, EAAEKF, QAQQ5hB, EAAE, KAAKwK, UAAUJ1, QAQQrd, GAAGIYf, EAAE3C, EAAEEmc, cACtb, EAAEgE, EA AEsb, QAQQnf, EAAE6D, EAAEub, gBAgBqB, EAAE5C, EAAEwB, gBAgBqB, CAAC, EAAEufB, EAAEikB, CAACp E, EAAE9C, EAAEI1B, EAAEygB, KAAU, KAAA, EAAAs5Gb, OAAAA, EAAE6oB, EAAEenF, OAaOnB, EAAEviB, EAA E, GAAG00b, EAAEioB, EAAE, GAAAG2OB, EAAE30B, EAAE, GAAGM, EAAEaEN, EAAE, GAAG, CAAC, EAAE8i B, EAAoBp, EAAEnG, EAAE, EAAEiEBO, EAAE2E, EAAEepB, EAAEsoB, EAAActoB, EAAEutoB, EAAEevoB, EAAE Ew0B, YAAiB, KAAA, EAAASo, OAAAA, EAAE, EAAEfiF, OAAOlb, EAAEeqd, GAAKb+C, EAAE, CAACx0B, EAAEeF, GAAG, CAACgf, EAAEaE, GAAGtbB, EAAE/D, EAAEooB, gBAgBtH, EAAEib, UAAU5b, EAAE4b, UAAUtrf, EAAEes f, UAAUmB, EAAEnB, UAAU+e4d, UAAU, CAAC, EAAEjeX, SAAJSjM, EAAEyiB, UAAUqB, mBAAMb, SAA SvsB, EAAEwH, GAAU, YAAA, IAASa, IAIAA, EAAEikB, IAAgC9E, EAAU, UAAK, OAAO, EAAO, WAerJB, IAA AA, EAAEof, EAAEAC, EAAEPhb, EAAEiC, EAAF, EAAEwEb, EAAEhF, EAAEikC, EAAEI2C, EAAE9c, EAA
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>;

  // Some additional methods for tensor storage
}

// Additional interfaces for backend-specific information
export interface BackendSpecificInfo {
  // Backend-specific methods
}

// Example of a backend interface
interface AMDBackend extends Backend {
  // Backend-specific methods
}

// Backend-specific configurations
const backendConfig: BackendConfig = { // Backend-specific configurations

  // Backend-specific configurations
};
readSync(dataId: DataId): BackendValues;
disposeData(dataId: DataId, force?: boolean): boolean;
write(values: BackendValues, shape: number[], dtype: DataType): DataId;
move(dataId: DataId, values: BackendValues, shape: number[], dtype: DataType, refCount: number): void;
memory(): {unreliable: boolean; reasons?: string[]};
** 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;
  }
}

export interface DataMover {
  moveData(backend: KernelBackend, dataId: DataId): void;
}

export interface BackendTimer {
  timerAvailable(): boolean;
  time(f: () => void): Promise<BackendTimingInfo>;
}

/**
 * The interface that defines the kernels that should be implemented when 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).
 */
export class KernelBackend implements TensorStorage, Backend, BackendTimer {
  refCount(dataId: DataId): number {
    return notYetImplemented('refCount');
  }
  incRef(dataId: DataId): void {
    return notYetImplemented('incRef');
  }
  timerAvailable(): boolean {
    return true;
  }
  time(f: () => void): Promise<BackendTimingInfo> {
    return notYetImplemented('time');
  }
  read(dataId: object): Promise<BackendValues> {
    return notYetImplemented('read');
  }
  readSync(dataId: object): BackendValues {
    return notYetImplemented('readSync');
  }
  numDataIds(): number {
    return notYetImplemented('numDataIds');
  }
  disposeData(dataId: object, force?: boolean): boolean {
    return notYetImplemented('disposeData');
  }
  write(values: BackendValues, shape: number[], dtype: DataType): DataId {
    return notYetImplemented('write');
  }
  move(dataId: DataId, values: BackendValues, shape: number[], dtype: DataType, refCount: number): void {
    return notYetImplemented('move');
  }
  memory(): {unreliable: boolean; reasons?: string[]} {
    return notYetImplemented('memory');
  }
  floatPrecision(): 16|32 {
    return notYetImplemented('floatPrecision');
  }
  epsilon(): number {
    return this.floatPrecision() === 32 ? EPSILON_FLOAT32 : EPSILON_FLOAT16;
  }
}

function notYetImplemented(kernelName: string): never {
  throw new Error(
      `'${kernelName}' not yet implemented or not found in the registry. ` +
      `This kernel may not be supported by the tfjs backend you have chosen`);
}

import {DataType, DataTypeMap, FlatVector, NumericDataType, RecursiveArray, TensorLike, TypedArray} from './types';

/**
 * Shuffles the array in-place using Fisher-Yates algorithm.
 *
 * ```js
 * const a = [1, 2, 3, 4, 5];
 * tf.util.shuffle(a);
 * console.log(a);
 * ```
 *
 * @param array The array to shuffle in-place.
 *
 *
@doc {heading: 'Util', namespace: 'util'}
// tslint:disable-next-line:no-any
export function shuffle(array: any[]): void {
  let counter = array.length;
  let temp = 0;
  let index = 0;
  // While there are elements in the array
  while (counter > 0) {
    // Pick a random index
    index = Math.floor(Math.random() * counter);
    temp = array[index];
    array[index] = array[counter - 1];
    array[counter - 1] = temp;
    counter--;
  }
}
makeZerosTypedArray(size, dtype): return for (let i = 0; i < array.length; i++) { array[i] = 1; } return array;
export function makeZerosTypedArray<D extends DataType>(
    size: number, dtype: D): DataTypeMap[D] {
    if (dtype == null || dtype === 'float32' || dtype === 'complex64') {
        return new Float32Array(size);
    } else if (dtype === 'int32') {
        return new Int32Array(size);
    } else if (dtype === 'bool') {
        return Uint8Array(size);
    } else {
        throw new Error(`Unknown data type ${dtype}`);
    }
}

export function makeZerosTypedArray<D extends DataType>(
    size: number, dtype: D): DataTypeMap[D] {
    if (dtype == null || dtype === 'float32') {
        return new Float32Array(size) as DataTypeMap[D];
    } else if (dtype === 'int32') {
        return new Int32Array(size) as DataTypeMap[D];
    } else if (dtype === 'bool') {
        return new Uint8Array(size) as DataTypeMap[D];
    } else {
        throw new Error(`Unknown data type ${dtype}`);
    }
}

/**
 * Make nested `TypedArray` filled with zeros.
 * @param shape The shape for the nested array.
 * @param dtype dtype of the array element.
 */
export function makeZerosNestedTypedArray<D extends DataType>(
    shape: number[], dtype: D): nestedArray {
    const size = shape.reduce((prev, curr) => prev * curr, 1);
    if (dtype == null || dtype === 'float32') {
        return toNestedArray(shape, new Float32Array(size));
    } else if (dtype === 'int32') {
        return toNestedArray(shape, new Int32Array(size));
    } else if (dtype === 'bool') {
        return toNestedArray(shape, new Uint8Array(size));
    } else {
        throw new Error(`Unknown data type ${dtype}`);
    }
}

export function assertNonNegativeIntegerDimensions(shape: number[]): number {
    shape.forEach(dimSize => {
        assert(
            Number.isInteger(dimSize) && dimSize >= 0,
            () =>
                `Tensor must have a shape comprised of positive integers but got` +
                `shape [${shape}].`);
    });
}

/**
 * Computes flat index for a given location (multidimensional index) in an array.
 * @param shape The shape of the array.
 * @param locs Location in the array.
 * @param rank Rank of the tensor.
 * @param strides Tensor strides.
 */
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/multi-dimensional
 * array for a given flat index.
 * @param index Index in flat array.
 * @param rank Rank of tensor.
 * @param strides Tensor strides.
 */
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.
 * @param object
 */
export function isPromise(object: any) {
    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';

interface FlagValue {
    [featureName: string]: FlagValue;
}
export interface FlagRegistryEntry {
    evaluationFn: () => FlagValue;
    setHook: (value: FlagValue) => void;
}

export type Flags = {
    [featureName: string]: FlagValue
};
export type FlagRegistryEntry = {
    evaluationFn: () => FlagValue;
    setHook: (value: FlagValue) => void;
};

export type FlagRegistryEntry = {
    evaluationFn: () => FlagValue;
    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
 * `@doc {heading: 'Environment'}`.
 */
export interface Environment {
    private flags: Flags;
    private flagRegistry: {
        evaluationFn: () => FlagValue;
        setHook: (value: FlagValue) => void;
    };
    platformName: string;
    platform(): Platform;
    // tslib:disable-next-line: no-any
    platform(): Platform;
}

export interface Platform {
    env(): Environment;
    setPlatform(platformName: string);
    private flags(): Flags;
    private flagRegistry: {
        evaluationFn: () => FlagValue;
        setHook: (value: FlagValue) => void;
    };
    platformName: string;
    platform(): Platform;
    // tslib:disable-next-line: no-any
    platform(): Platform;
}
string, platform: Platform) {
  if (this.platform != null) {
    console.warn(`Platform
${this.platformName} has already been set. ` +
    `Overwriting the platform with ${platform}.`);
  }
  this.platformName = platformName;
  this.platform = platform;
}

registerFlag(flagName: string, evaluationFn: FlagEvaluationFn, setHook?: (value: FlagValue) => void) {
  if (this.flagRegistry[flagName] == null) {
    this.flagRegistry[flagName] = {
      evaluationFn, setHook};
  }
  else // Override the flag value from the URL. This has to happen here because the
  // environment is initialized before flags get registered.
  if (this.urlFlags[flagName] != null) {
    const flagValue = this.urlFlags[flagName];
    console.warn(`Setting feature override from URL Flag Value: ${flagValue}.`);
    this.set(flagName, flagValue);
  }
}

async getAsync(flagName: string): Promise<FlagValue> {
  if (flagName in this.flags) {
    return this.flags[flagName];
  }
  this.flags[flagName] = await this.evaluateFlag(flagName);
  return this.flags[flagName];
}

get(flagName: string): FlagValue {
  if (flagName in this.flags) {
    return this.flags[flagName];
  }
  const flagValue = this.evaluateFlag(flagName);
  if (isPromise(flagValue)) {
    throw new Error(`Flag Value cannot be synchronously evaluated. ` +
    `Please use getAsync() instead.`);
  }
  this.flags[flagName] = flagValue as number | boolean;
  return this.flags[flagName];
}

getNumber(flagName: string): number {
  return this.get(flagName) as number;
}

getBool(flagName: string): boolean {
  return this.get(flagName) as boolean;
}

getFlags(): Flags {
  return this.flags;
}

set(flagName: string, value: FlagValue): void {
  if (this.flagRegistry[flagName] == null) {
    throw new Error(`Cannot set flag '${flagName}': no evaluation function found.`);
  }
  this.flags[flagName] = value;
  if (this.flagRegistry[flagName].setHook != null) {
    this.flagRegistry[flagName].setHook(value);
  }
}

private evaluateFlag(flagName: string): FlagValue|Promise<FlagValue> {
  if (this.flagRegistry[flagName] == null) {
    throw new Error(`Cannot evaluate flag '${flagName}': no evaluation function found.`);
  }
  return this.flagRegistry[flagName].evaluationFn();
}

setFlags(flags: Flags) {
  this.flags = Object.assign({}, flags);
}

reset() {
  this.flags = {};
  this.urlFlags = {};
  this.populateURLFlags();
}

private populateURLFlags(): void {
  if (typeof this.global === 'undefined' ||
      typeof this.global.location === 'undefined' ||
      typeof this.global.location.search === 'undefined') {
    return;
  }
  const urlParams = getQueryParams(this.global.location.search);
  if (TENSORFLOWJS_FLAGS_PREFIX in urlParams) {
    const keyValues = urlParams[TENSORFLOWJS_FLAGS_PREFIX].split(',');
    keyValues.forEach(keyValue => {
      const [key, value] = keyValue.split(':') as [string, string];
      this.urlFlags[key] = parseValue(key, value);
    });
  }
}

/**
 * Returns the current environment (a global singleton).
 * @doc {heading: 'Environment'}
 */
export function env() {
  return ENV;
}

export let ENV: Environment = null;
export function setEnvironmentGlobal(environment: Environment) {
  ENV = environment;
  // shim for using process in browser
  var process = module.exports = {};
  // cached from whatever global is present so that test runners that
  // stub it don't break things. But we need to wrap it in a try catch in case it isn't/
  // wrapped in strict mode code which doesn't define any globals.
  // It's inside an function because try/catches deoptimize in certain engines.
  var cachedSetTimeout;
  var cachedClearTimeout;
  var function defaultSetTimeout() {
    throw new Error('setTimeout has not been defined');
  }
  var function defaultClearTimeout() {
    throw new Error('clearTimeout has not been defined');
  }
  var function () {
    try {
      if (typeof setTimeout !== 'function') {
        cachedSetTimeout = setTimeout;
      } else {
        cachedSetTimeout = defaultSetTimeout;
      }
      try {
        if (typeof clearTimeout !== 'function') {
          cachedClearTimeout = clearTimeout;
        } else {
          cachedClearTimeout = defaultClearTimeout;
        }
        t0[1].addEventListener('t0', () => {
          t0[1].addEventListener('t0', () => {
            var t0 = window.document.createElement('div');
            t0.classList.add('t0');
            t0.innerHTML = `Hello, world!`;
            t0.addEventListener('t0', () => {
              t0.innerHTML = `Hello, world!`;
            });
            document.body.appendChild(t0);
          });
        });
      } catch (e) {
        if (cachedSetTimeout !== defaultSetTimeout) {
          cachedSetTimeout = defaultSetTimeout;
        } else {
          cachedClearTimeout = defaultClearTimeout;
        }
      }
    } finally {
      t0[1].remove();
      t0[1].remove();
      t0[1].remove();
    }
  }
```javascript
// Note that the identifier globalNameSpace is scoped to this module, but will always resolve to the same
```
global object regardless of how the module is\nresolved.\n
```typescript
// tslint:disable-next-line:no-any
let globalNameSpace:
  Map<string, any> = null;\n// tslint:disable-next-line:no-any
export function getGlobalNamespace():
  Map<string, any> {
    if (globalNameSpace == null) {
      // tslint:disable-next-line:no-any
      let ns:
        any = window;\n      if (typeof (window) !== 'undefined') {
        ns = window;
      } else if (typeof (global) !== 'undefined') {
        ns = global;\n      } else if (typeof (process) !== 'undefined') {
        ns = process;
      } else if (typeof (self) !== 'undefined') {
        throw new Error('Could not find a global object');\n      }\n      globalNameSpace = ns;\n    }\n    return globalNameSpace;\n  }

// tslint:disable-next-line:no-any
function getGlobalMap(): Map<string, any> {
  const ns = getGlobalNamespace();\n  if (ns._tfGlobals == null) {
    ns._tfGlobals = new Map();\n  }\n  return ns._tfGlobals;
}

/**
 * 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 */
export function getGlobal<T>(key: string, init: () => T): T {
  const
    globalMap = getGlobalMap();\n  if (globalMap.has(key)) {
    return globalMap.get(key);
  } else {
    const
      singleton = init();\n    globalMap.set(key, singleton);\n    return globalMap.get(key);
  }
```
newAxisMask: number;

shrinkAxisMask: number;

export const Tan = 'Tan';

export type TanInputs = UnaryInputs;

export const Tanh = 'Tanh';

export type TanhInputs = UnaryInputs;

export const Tile = 'Tile';

export type TileInputs = Pick<NamedTensorInfoMap, 'x'>;

export interface TileAttrs {
  k: number;
  sorted: boolean;
}

export const TopK = 'TopK';

export type TopKInputs = Pick<NamedTensorInfoMap, 'x'>;

export interface TopKAttrs {
  k: number;
  sorted: boolean;
}

export const Transpose = 'Transpose';

export type TransposeInputs = Pick<NamedTensorInfoMap, 'x'>;

export interface TransposeAttrs {
  perm: number[];
  unique: Unique;
  uniqueInputs: Pick<NamedTensorInfoMap, 'x'>;
}

export const Unique = 'Unique';

export type UniqueInputs = Pick<NamedTensorInfoMap, 'x'>;

export interface UniqueAttrs {
  axis: number;
}

export type UnaryInputs = Pick<NamedTensorInfoMap, 'x'>;

export const Unpack = 'Unpack';

export type UnpackInputs = Pick<NamedTensorInfoMap, 'value'>;

export interface UnpackAttrs {
  axis: number;
}

export const UnsortedSegmentSum = 'UnsortedSegmentSum';

export type UnsortedSegmentSumInputs =

Pick<NamedTensorInfoMap, 'x'>;

export interface UnsortedSegmentSumAttrs {
  numSegments: number;
}

export const ZerosLike = 'ZerosLike';

export type ZerosLikeInputs = UnaryInputs;

/**
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 * 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 = KernelSetupFunc | unnamedFunc

/** Function that gets called right before the backend is disposed. */
export type KernelDisposeFunc = KernelDisposeFunc | unnamedFunc

/** 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[];
  saveAllInputs?: boolean;
  outputsToSave?: boolean[];
  gradFunc: GradFunc;
}

/** Holds metadata for a given tensor. */
export interface TensorInfo {
  dataId: DataId;
  shape: number[];
  dtype: DataType;
}

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.
 */
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 names.
 *
 * @param kernelName The official TF kernel name.
 */
export function getGradient(kernelName: string): GradConfig {
  return gradRegistry.get(kernelName);
}

export function getKernelsForBackend(backendName: string): KernelConfig[] {
  const it = kernelRegistry.entries();
  const result: KernelConfig[] = [];

  while (true) {
    const {done, value} = it.next();
    if (done) {
      break;
    }
    const [key, config] = value;
    const [backend, ] = key.split('_');
    if (backend === backendName) {
      result.push(config);
    }
  }
  return result;
}

/**
 * Registers the function (forward pass) for the kernel in a global registry.
 *
 * @param config A config object with the following properties:
 * - `kernelName` The official name of the kernel.
 * - `backendName` The official name of the backend.
 * - `kernelFunc` The function to run during the forward pass of the kernel.
 * - `setupFunc` Optional. Gets called once, after the backend initializes.
 * - `disposeFunc` Optional. Gets called once, right before the backend is disposed.
 */
export function registerKernel(config: KernelConfig) {
  const {kernelName, backendName} = config;
  const key = makeKey(kernelName, backendName);
  if (kernelRegistry.has(key)) {
    console.warn(`The kernel '${kernelName}' for backend ` +
        `'${backendName}' is already`);
  }
  kernelRegistry.set(key, config);
}

/**
 * Registers a gradient function for a given kernel in the global registry,
 * to be used during the back-propagation of that kernel.
 *
 * @param config An object with the following properties:
 * - `kernelName` The name of the kernel that the gradient function is for.
 * - `gradFunc` The function to run during back-propagation.
 */
export function registerGradient(config: GradConfig) {
  const {kernelName} = config;

  if (gradRegistry.has(kernelName)) {
    // TODO (yassogba) after 3.0 assess
    // whether we need to keep this gated
    if (env().getBool('DEBUG')) {
      console.warn(`Overriding the gradient for '${kernelName}'`);
    }
  }
  gradRegistry.set(kernelName, config);
}

/**
 * Removes the kernel function from the registry.
 *
 * @param kernelName The official name of the kernel.
 * @param backendName The official name of the backend.
 */
export function unregisterKernel(kernelName: string, backendName: string): void {
  const key = makeKey(kernelName, backendName);
  if (!kernelRegistry.has(key)) {
    throw new Error(`The kernel '${kernelName}' for backend` +
        `'${backendName}' is not registered`);
  }
  kernelRegistry.delete(key);
}

/**
 * Removes the registered gradient from the global registry.
 *
 * @param kernelName The official name of the kernel.
 */
export function unregisterGradient(kernelName: string): void {
  delete gradRegistry.get(kernelName);
}

/**
 * Finds kernels that have already been registered to a backend and re-registers
 * them for a new backend. Useful for registering custom backends.
 *
 * @param registeredBackendName Already registered backend.
 * @param newBackendName New backend.
 */
export function copyRegisteredKernels(registeredBackendName: string, newBackendName: string): void {
  const
```javascript
kernels = getKernelsForBackend(registeredBackendName);
kernels.forEach(kernelConfig => {
  const newKernelConfig = Object.assign({}, kernelConfig,
    (backendName: newBackendName));
registerKernel(newKernelConfig);
});

function makeKey(kernelName: string, backendName: string) {
  return `${backendName}_${kernelName}`;
}

function noConversionNeeded(a: TensorLike, dtype: DataType): boolean {
  return (a instanceof Float32Array && dtype === 'float32') ||
    (a instanceof Int32Array && dtype === 'int32') ||
    (a instanceof Uint8Array && dtype === 'bool');
}

export function toTypedArray(a: TensorLike, dtype: DataType): TypedArray {
  if (dtype === 'string') {
    throw new Error('Cannot convert a string[] to a TypedArray');
  }
  if (Array.isArray(a)) {
    a = base.flatten(a);
  }

  if (env().getBool('DEBUG')) {
    base.checkConversionForErrors(a as number[], dtype);
  }
  if (noConversionNeeded(a, dtype)) {
    return a as TypedArray;
  }
  if (dtype == null || dtype === 'float32' || dtype === 'complex64') {
    return new Float32Array(a as number[]);
  } else if (dtype === 'int32') {
    return new Int32Array(a as number[]);
  } else if (dtype === 'bool') {
    const bool = new Uint8Array((a as number[]).length);
    for (let i = 0; i < bool.length; ++i) {
      if (Math.round((a as number[])[i]) !== 0) {
        bool[i] = 1;
      }
    }
    return bool;
  } else {
    throw new Error(`Unknown data type ${dtype}`);
  }
}
```

import {BackendTimer, BackendTimingInfo} from './backends/backend';
import {env} from './environment';
import {Tensor} from './tensor';
import {NamedTensorMap} from './tensor_types';
import {DataType, DataTypeMap, TypedArray} from './types';
import * as util from './util';

export type KernelProfile = {
  kernelName: string,
  outputs: Tensor[],
  inputs: NamedTensorMap,
  timeMs: Promise<number|{error: string}>,
  extraInfo: Promise<string>
};

export class Profiler {
  constructor(private backendTimer: BackendTimer, private logger?: Logger) {
    if (logger == null) {
      this.logger = new Logger();
    }
  }

  profileKernel(kernelName: string, inputs: NamedTensorMap, f: () => Tensor[]): KernelProfile {
    let outputs: Tensor[];
    const holdResultWrapperFn = () => {
      outputs = f();
    };
    let timer: Promise<BackendTimingInfo>;
    const start = util.now();
    if (this.backendTimer.timerAvailable()) {
      timer = this.backendTimer.time(holdResultWrapperFn);
    } else {
      holdResultWrapperFn();
      outputs.map(output => output.dataSync());
      timer = Promise.resolve({kernelMs: util.now() - start});
    }
    if (env().getBool('CHECK_COMPUTATION_FOR_ERRORS')) {
      for (let i = 0; i < outputs.length; i++) {
        const output = outputs[i];
        // Dangling promise here because we don't want to propagate up // asynchronicity.
        output.data().then(tensorVals => {
          checkComputationForErrors(tensorVals, output.dtype, kernelName);
        });
      }
    }

    const kernelProfile = {
      kernelName,
      outputs,
      inputs,
      timeMs: timer.then(timing => timing.kernelMs),
      extraInfo: timer.then(timing => timing.getExtraProfileInfo != null ?
          timing.getExtraProfileInfo() : '')
    };
    return kernelProfile;
  }

  logKernelProfile(kernelProfile: KernelProfile): void {
    const {kernelName, outputs, timeMs, inputs, extraInfo} = kernelProfile;

    outputs.forEach(result => {
      Promise.all([result.data(), timeMs, extraInfo]).then(valueContainer => {
        this.logger.logKernelProfile(
            kernelName, result, valueContainer[0], valueContainer[1], inputs, valueContainer[2]);
      });
    });

    function checkComputationForErrors<D extends DataType>(vals: DataTypeMap[D], dtype: D, kernelName: string): boolean {
      if (dtype !== 'float32') {
        return false;
      }
      for (let i = 0; i < vals.length; i++) {
        const num = vals[i] as number;
        if (isNaN(num) || !isFinite(num)) {
          console.warn(`Found ${num} in the result of '${kernelName}'`);
          return true;
        }
      }
      return false;
    }

    export class Logger {
      logKernelProfile(name: string, result: Tensor, vals: TypedArray,
                      timeMs: number|{error: string}, inputs: NamedTensorMap,
                      extraInfo?: string) {
        const time = typeof timeMs === 'number' ?
          util.rightPad(`${timeMs}ms`, 9) :
                                              timeMs['error'];
        const paddedName = util.rightPad(name, 25);
        const rank = result.rank;
        const size = result.size;
        const shape = util.rightPad(result.shape.toString(), 14);
        let inputShapesDescription = '';
        for (const name in inputs) {
          const input = inputs[name];
          if (input != null) {
            // The input might be a non-tensor (e.g HTMLImageElement), in which case
            // we claim the output shape as input shape.
            const inputShape = input.shape || result.shape;
            const inputRank = inputShape.length;
            inputShapesDescription +=
              `${name}: ${inputRank}D ${inputRank > 0 ? inputShape : ''} `;
          }
        }

        console.log(
            `%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',
            'color: green', 'color: steelblue', 'color: orange',
            'color: black', 'color: black', 'color: orange',
            'color: black', 'color: steelblue', 'color: orange',
            'color: black', 'color: black', 'color: orange',
            'color: black', 'color: black', 'color: orange',
            'color: black', 'color: black', 'color: orange',
            'color: black', 'color: black', 'color: orange',
        );
      }
    }
  }
This page contains code examples demonstrating the use of tensors and their operations. The code is written in TypeScript, showing how to create and manipulate tensors, including tensor accumulation and gradient computation.

```typescript
import { DataType, TypedArray } from './types';
import { computeStrides, isString, rightPad, sizeFromShape } from './util';

// Maximum number of first and last values to show when displaying a, b,...,y.
const FORMAT_LIMIT_NUM_VALS = 20;

// Number of significant digits to show.
const FORMAT_NUM_SIG_DIGITS = 7;

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, padPerCol);
  const lines = [/* Tensor */];
  if (verbose) {
    lines.push(`  dtype: ${dtype}`);
    lines.push(`  rank: ${rank}`);
    lines.push(`  shape: [${shape}]`);
    lines.push(`  values:`);
  }
  lines.push(valsLines.map(l => '    ' + l).join('\n'));
  return lines.join('\n');
}

function computeMaxSizePerColumn(
    vals: TypedArray|string[], shape: number[], dtype: DataType,
    strides: number[]) {
  const n = sizeFromShape(shape);
  const numCols = strides[strides.length - 1];
  const padPerCol = new Array(numCols).fill(0);
  const valuesOrTuples = dtype === 'complex64' ? createComplexTuples(vals) : vals;

  if (rank > 1) {
    for (let row = 0; row < n / numCols; row++) {
      const offset = row * numCols;
      for (let j = 0; j < numCols; j++) {
        padPerCol[j] = Math.max(padPerCol[j],
          valToString(valuesOrTuples[offset + j], 0, dtype).length);
      }
    }
  }
  return padPerCol;
}

function valToString(
    val: number|string|[number, number], pad: number, dtype: DataType) {
  let valStr: string;
  if (Array.isArray(val)) {
    valStr = ` ${parseFloat(val[0].toFixed(FORMAT_NUM_SIG_DIGITS))} + ` +
      ` ${parseFloat(val[1].toFixed(FORMAT_NUM_SIG_DIGITS))}j`;
  } else if (isString(val)) {
    valStr = `'${val}'`;
  } else if (dtype === 'bool') {
    valStr = boolNumToString(val);
  } else {
    valStr = parseFloat(val.toFixed(FORMAT_NUM_SIG_DIGITS)).toString();
  }

  return rightPad(valStr, pad);
}

function boolNumToString(v: number): string {
  return v === 0 ? 'false' : 'true';
}

function subTensorToString(
    vals: TypedArray|string[], shape: number[], dtype: DataType,
    padPerCol: number[], isLast: boolean) {
  const storagePerElement = dtype === 'complex64' ? 2 : 1;

  const size = shape[0];
  const strides = computeStrides(shape);

  if (size > FORMAT_LIMIT_NUM_VALS) {
    const firstValsSize = FORMAT_LIMIT_NUM_VALS;
    const lastValsSize = FORMAT_LIMIT_NUM_FIRST_LAST_VALS - firstValsSize;

    const firstVals = vals.slice(0, firstValsSize);
    const lastVals = vals.slice(size - lastValsSize);

    return [firstVals.map((x, i) => valToString(x, padPerCol[i], dtype)) + '. ...', lastVals.map((x, i) => valToString(x, padPerCol[size - FORMAT_LIMIT_NUM_FIRST_LAST_VALS + i], dtype)) + ']
  } else {
    return vals.map(valToString, padPerCol)
  }
}
```

This code is part of an open-source project used in Cisco Meeting Server (formerly Acano Server) 3.5. It demonstrates the use of tensors in computations involving gradients and accumulated values, which are fundamental in machine learning and deep learning applications. The code is released under the Apache License, Version 2.0, allowing its use in commercial and non-commercial projects with appropriate attribution. To view the full license terms, visit the official site at www.apache.org/licenses/LICENSE-2.0.
valToString(x, padPerCol[i], dtype))\n          .join(', ') +
      ']'
    ];

  // The array is rank 2 or more.
  const subshape = shape.slice(1);
  const substrides = strides.slice(1);
  const stride = strides[0] * storagePerElement;
  const lines: string[] = [];
  if (size > FORMAT_LIMIT_NUM_VALS) {
    for (let i = 0; i < FORMAT_NUM_FIRST_LAST_VALS; i++) {
      const start = i * stride;
      const end = start + stride;
      const lines.push(...subTensorToString(vals.slice(start, end), subshape, dtype, substrides, padPerCol, false /* isLast */));
      if (i + 1 < size - 1) { lines.push('...'); }
    }
    for (let i = size - FORMAT_NUM_FIRST_LAST_VALS; i < size; i++) {
      const start = i * stride;
      const end = start + stride;
      const lines.push(...subTensorToString(vals.slice(start, end), subshape, dtype, substrides, padPerCol, true /* isLast */));
    }
  } else {
    for (let i = 0; i < size; i++) {
      const start = i * stride;
      const end = start + stride;
      lines.push(...subTensorToString(vals.slice(start, end), subshape, dtype, substrides, padPerCol, false /* isLast */));
    }
  }
  return lines;
}

function createComplexTuples(vals: Array<{}|TypedArray>): Array<[number, number]> {
  const complexTuples: Array<[number, number]> = [];
  for (let i = 0; i < vals.length; i += 2) {
    complexTuples.push([vals[i], vals[i + 1]] as [number, number]);
  }
  return complexTuples;

}
Error(msg);

let index = locs[locs.length - 1];

for (let i = 0; i < locs.length - 1; ++i) {
  index += this.strides[i] * locs[i];
}

return this.values[index] as SingleValueMap[D];

}

locToIndex(locs: number[]): number {

let index = locs[locs.length - 1];

for (let i = 0; i < locs.length - 1; ++i) {
  index += this.strides[i] * locs[i];
}

return index;

}

indexToLoc(index: number): number[] {

const locs: number[] = new Array(this.shape.length);

for (let i = 0; i < locs.length - 1; ++i) {
  locs[i] = Math.floor(index / this.strides[i]);
  index -= locs[i] * this.strides[i];
}

locs[locs.length - 1] = index;

return locs;

}

get rank() {
  return this.shape.length;
}

/**
 * Creates an immutable `tf.Tensor` object from the buffer.
 * @param {*} values - The values to store in the tensor.
 * @param {number[]} shape - The shape of the tensor.
 * @param {string} dtype - The data type of the tensor.
 * @returns {Tensor} A new tensor.
 */

const trackerFn = () => TensorTracker;

const opHandler: OpHandler = null;

/**
 * Sets the deprecation warning function to be used by this file. This way a tensor consumer can register itself as the tensor tracker. This way we can notify the tracker for every tensor created and disposed.
 * @param {() => TensorTracker} fn - The new tensor tracker function.
 */

setTensorTracker(fn: () => TensorTracker) {
  trackerFn = fn;
}

/**
 * Sets the op handler to be used by chaining methods to call into ops.
 * @param {OpHandler} handler - The new op handler.
 */

setOpHandler(handler: OpHandler) {
  opHandler = handler;
}

/**
 * Sets the dataId to be used by the tensor.
 * @param {DataId} dataId - The new dataId.
 */

setDataId(dataId: DataId) {
  dataId;
}

/**
 * Creates a new tensor.
 * @param {R} rank - The rank of the tensor.
 * @param {D} dtype - The data type of the tensor.
 * @returns {Tensor} A new tensor.
 */

const tensorFn = (rank: R, dtype: D) => {
  return trackerFn().makeTensor(values, shape, dtype) as Tensor<R>;
};
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5

6070
classListCheck before the constructor body is run.

```typescript
classListCheck before the constructor body is run.

```
backend. *

```typescript
export type BackendValues = Float32Array|Int32Array|Uint8Array|Uint8Array;

export type FlatVector = boolean|number|TypedArray;

export type RegularArray<T> = T|T[]|T[][]|T[][]|T[][]|T[][]|T[][]|T[][]|T[][]|T[][]|T[][]|T[][];`
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.
  const iterable = container;
  for (const k in iterable) {
    const val = iterable[k];
    if (!seen.has(val)) {
      seen.add(val);
      walkTensorContainer(val, list, seen);
    }
  }
}

function isIterable(obj: any): boolean {
  return Array.isArray(obj) || typeof obj === 'object';
}

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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 {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 {backpropagateGradients, getFilteredNodesXToY, TapeNode} from './tape';
import {DataId, setTensorTracker, Tensor, TensorTracker, Variable} from './tensor';
import {GradSaveFunc, NamedTensorMap, NamedVariableMap, TensorContainer} from './tensor_types';
import {getTensorsInContainer} from './tensor_util';
import {BackendValues, DataType, DataValues} from './types';
import * as util from './util';
import {bytesFromStringArray, makeOnesTypedArray, now, sizeFromShape} from './util';

export type ForwardFunc<T> = (backend: KernelBackend, save?: GradSaveFunc) => T;

export type CustomGradientFunc<T extends Tensor> =
  (...inputs: Array<Tensor|GradSaveFunc>) => {
    value: T;
    gradFunc: (dy: T, saved: Tensor[]) => T;
  };

export type MemoryInfo = {
  numTensors: number;
  numDataBuffers: number;
  numBytes: number;
  unreliable?: boolean;
  reason?: string;
}

export type KernelInfo = {
  name: string;
  bytesAdded: number;
  totalBytesSnapshot: number;
  tensorsAdded: number;
  totalTensorsSnapshot: number;
  inputShapes: number[];
  outputShapes: number[];
  kernelTimeMs: number | {error: string} |
  extraInfo: string | Promise<string>;
};

export type ProfileInfo = {
  newBytes: number;
  newTensors: number;
  peakBytes: number;
  kernels: KernelInfo[];
  result: TensorContainer;
};

export interface TimingInfo extends BackendTimingInfo {
  wallMs: number;
}

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[]) => T;
  inputs: I;
  attrs?: NamedAttrMap;
  function isRegisteredKernelInvocation<T extends Tensor|Tensor[],
  I extends NamedTensorMap> {
    return (kernelInvocation as RegisteredKernelInvocation<T, I>).isRegisteredKernelInvocation;
  }
}
RegisteredKernelInvocation<1>), kernelName != null;\n}\n\nclass EngineState {
  // Public since optimizers will use it.\n  registeredVariables: NamedVariableMap = {};\n  nextTapeNodeId = 0;\n  numBytes = 0;\n  numTensors = 0;\n  numStringTensors = 0;\n  numDataBuffers = 0;\n  activeTape: TapeNode[];\n  // Number of nested tf.grad() statements when computing higher-order gradients. E.g. 1 for first-order gradients and 2 for second-order gradients. Used to track if the tape should be removed after a backprop.\n  gradientDepth = 0;\n  // Number of nested kernel calls. When kernel depth is greater than 1, we turn off the tape.\n  kernelDepth = 0;\n  // Keep Tensors that parallel the tapes.\n  activeScope: ScopeState;\n  scopeStack: ScopeState[] = [];\n  /**\n   * Keeps track of the number of data moves during a kernel execution. We\n   * maintain a stack since kernels can call other kernels, recursively.\n   *\n   * *\n   * @private\n   */\n  numDataMovesStack: number[] = [];\n
  nextScopeId = 0;\n  tensorInfo = new WeakMap<DataId, {\n    backend: KernelBackend,\n    bytes: number,\n    dtype: DataType,\n    shape: number[]\n  }>();\n
  profiling = false;
  activeProfile: ProfileInfo = {
    newBytes: 0,
    newTensors: 0,
    peakBytes: 0,
    kernels: [],
    result: null,
    get kernelNames(): string[] {
      return Array.from(new Set(this.kernels.map(k => k.name))).\n    }\n  };

  dispose() {
    for (const variableName in this.registeredVariables) {
      this.registeredVariables[variableName].dispose();
    }
  }
}

export class Engine implements TensorTracker, DataMover {
  state: EngineState;
  backendName: string;
  registry: {[id: string]: KernelBackend} = {};
  registryFactory: {[id: string]: {
    factory: () => KernelBackend |\n    Promise<KernelBackend>,\n    priority: number\n  }} = {};

  constructor(public ENV: Environment) {
    this.state = new EngineState();
  }

  async ready(): Promise<void> {
    if (this.pendingBackendInit != null) {
      return this.pendingBackendInit.then(() => {});
    }
    if (this.backendInstance == null) {
      const sortedBackends = this.getSortedBackends();
      for (let i = 0; i < sortedBackends.length; i++) {
        const backendName = sortedBackends[i];
        const success = await this.initializeBackend(backendName).success;
        if (success) {
          await this.setBackend(backendName);
          return;
        }
      }
      throw new Error(`Could not initialize any backends, all backend initializations failed.`);
    }
    this.backendInstance = this.registry[backendName];
    this.setupRegisteredKernels();
    // Reset the profiler.
  }

this.profiler = new Profiler(this.backendInstance);

private setupRegisteredKernels(): void {
  const kernels = getKernelsForBackend(this.backendInstance);
  kernels.forEach(kernel => {
    if (kernel.setupFunc != null) {
      kernel.setupFunc(this.backendInstance);
    }
  });
}

private disposeRegisteredKernels(backendName: string): void {
  const kernels = getKernelsForBackend(backendName);
  kernels.forEach(kernel => {
    if (kernel.disposeFunc != null) {
      kernel.disposeFunc(this.registry[backendName]);
    }
  });
}

/**
 * Initializes a backend by looking up the backend name in the factory registration and calling the factory method. Returns a boolean representing whether the initialization of the backend succeeded. Throws an error if there is no backend in the factory registry.
 * @param backendName The name of the backend to initialize.
 * @returns {Promise<boolean>} A promise that resolves to true if the initialization was successful, or false otherwise.
 */
private initializeBackend(backendName: string): Promise<boolean> {
  const registryFactoryEntry = this.registryFactory[backendName];
  if (registryFactoryEntry == null) {
    throw new Error(`Cannot initialize backend ${backendName}, no registration found.`);
  }

  try {
    const backend = registryFactoryEntry.factory();
    // Test if the factory returns a promise.
    if (promiseId < this.pendingBackendInitId) {
      return false;
    }
    this.registry[backendName] = backend;
    this.pendingBackendInit = true;
    return true;
  } catch (err) {
    console.warn(`Initialization of backend ${backendName} failed`);
    console.warn(err.stack || err.message);
    return false;
  }
}

removeBackend(backendName: string): void {
  if (!(backendName in this.registryFactory)) {
    throw new Error(`${backendName} backend not found in registry`);
  }
  if (this.backendName === backendName && this.pendingBackendInit != null) {
    // There is a pending promise of the backend we want to remove. Make it obsolete.
    this.pendingBackendInitId++;
  }

  if (backendName in this.registry) {
    this.disposeRegisteredKernels(backendName);
    this.registry[backendName].dispose();
    delete this.registry[backendName];
  }

  delete this.registryFactory[backendName];

  // Unset the backend if it is active.
  if (this.backendName === backendName) {
    this.pendingBackendInit = null;
    this.backendName = null;
  }
}

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) => {
    return this.registryFactory[b].priority - this.registryFactory[a].priority;
  });
}

initializeBackendsAndReturnBest(): {name: string, asyncInit: boolean} {
  const sortedBackends = this.getSortedBackends();
  for (let i = 0; i < sortedBackends.length; i++) {
    const backendName = sortedBackends[i];
    const success = this.initializeBackend(backendName);
    if (success) {
      return {name: backendName, asyncInit: true};
    }
  }
  throw new Error('Could not initialize any backends, all backend initializations failed.');
}

moveData(backend: KernelBackend, dataId: DataId) {
  const info = this.state.tensorInfo.get(dataId);
  const srcBackend = info.backend;
  const values = this.readSync(dataId);
  const refCount = srcBackend.refCount(dataId);
  // Delete the tensor from the old backend and move it to the new.
  srcBackend.disposeData(dataId, true);
  info.backend = backend;
  backend.move(dataId, values, info.shape, info.dtype, refCount);
  if (this.shouldCheckForMemLeaks()) {
    // Track the number of moves during a kernel execution to correctly

// backend.
// TODO(pyu10055): This is currently used by makeVariable method, to increase
// refCount on the backend for the dataId. It can potentially be replaced with
// Identity op instead of calling backend directly.
incRef(a: Tensor, backend: KernelBackend): void {
  this.trackTensor(a, backend);
}

removeDataId(dataId: DataId, backend: KernelBackend): void {
  if (this.state.tensorInfo.has(dataId) &
      this.state.tensorInfo.get(dataId).backend === backend) {
    this.state.tensorInfo.delete(dataId);
    this.state.numDataBuffers--; // Don't count bytes for complex
    numbers as they are counted by their
    // components.
    this.state.numStringTensors--; // Don't count bytes for complex
    numbers as they are counted by their
    // components.
    this.state.numBytes -= info.bytes;
  }
}

disposeTensor(a: Tensor): void {
  if (!this.state.tensorInfo.has(a.dataId)) {
    return;
  }
  const info = this.state.tensorInfo.get(a.dataId);
  this.state.tensorInfo.delete(a.dataId);
  this.state.numDataBuffers--; // Don't count bytes for complex
  numbers as they are counted by their
  // components.
  if (a.dtype === 'string') {
    this.state.numBytes -= a.size * util.bytesPerElement(a.dtype);
  }
  // Remove the reference to dataId if backend dispose the data successfully
  if (info.backend.disposeData(a.dataId)) {
    this.removeDataId(a.dataId, info.backend);
  }
}

memory(): MemoryInfo {
  const info = this.backend.memory() as MemoryInfo;
  info.numTensors = this.state.numTensors;
  info.numDataBuffers = this.state.numDataBuffers;
  info.numBytes = this.state.numBytes;
  info.numStringTensors = this.state.numStringTensors;
  info.numBytes -= info.reasons.reduce((a, b) => a + b);
  info.unreliable = true;
  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.peakBytes = Math.max(...
      this.state.activeProfile.kernels.map(d => d.totalBytesSnapshot));
    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;
    }
    this.state.activeProfile.result = await query();
    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, attrs, gradientsConfig:
  };
  if (gradientsConfig != 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 this.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); //
      } return this.state.activeTape.push(tapeNode);
    }
  } return 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;
    }
    return this.return this.state.gradientDepth > 0 &
      & this.state.kernelDepth === 0;
  }
  return this.state.nextTapeId++;
}

private endTape() {
  this.state.gradientDepth--;
  this.state.nextTapeId++;
}

/**
 * Start a scope. Use this with endScope() to
 * achieve the same functionality
 * as scope() without the need for a function closure.
 * @param name
 */
private openScope(name?: string) {
  const scopeInfo: ScopeState = {
    track: [],
    name: 'unnamed scope',
    id: this.state.nextScopeId++;
  } return this.scopeInfo.name = name;
}

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```javascript
//... (code snippet continues)
```
import {DataType, TensorLike} from '../types';
import assert, {flatten, inferDtype, isTypedArray, toTypedArray} from '../util';

export 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 [];
  }

  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[] = []):

function assertDtype(
    expectedDtype: DataType|'numeric'|'string_or_numeric',
    actualDType: DataType, argName: string, functionName: string) {
  if (expectedDtype === 'string_or_numeric') {
    return;
  }
  if (expectedDtype
      && expectedDtype !== 'numeric' && expectedDtype !== 'string') {
    throw new Error(`Argument '${argName}' passed to '${functionName}' must ` +
        `be a ${expectedDtype} tensor, but got ${actualDType} tensor`);
  }

  if ((x == null) ||
      (!isTypedArray(x) && !Array.isArray(x) && typeof x !== 'number' &&
       typeof x !== 'boolean' && typeof x !== 'string')) {
    throw new Error(`Argument '${argName}' passed to '${functionName}' must ` +
        `be a TensorLike, but got '${typeof x}'`);
  }

  if (x.constructor.name !== 'TensorLike') {
    throw new Error(`Argument '${argName}' passed to '${functionName}' must ` +
        `be a TensorLike, but got '${x.constructor.name}'`);
  }

  return ENGINE.makeTensor(x as number[], shape, dtype);
}

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;
  }

  const inferredDtype = inferDtype(x);
  // If the user expects a bool/int/float, use that info to update
  // inferredDtype when it is not a string.

  if (inferDtype !== 'numeric' && inferDtype !== 'string') {
    throw new Error('Expected dtype cannot be null.');
  }

  let values = inferShape(x, inferredDtype);
  if (!isTypedArray(x) && !Array.isArray(x)) {
    x = [x] as number[];
  }

  const inferredShape = inferShape(x, inferredDtype);
  if (inferDtype !== 'numeric' && inferDtype !== 'string') {
    throw new Error(`Argument '${argName}' passed to '${functionName}' must ` +
        `be a TensorLike, but got '${inferDtype}'`);
  }

  const tensors = x as T|

  return ENGINE.makeTensor(values, inferredShape, inferredDtype) as T;
}

export function convertToTensorArray<T extends Tensor>(
    arg: Array<T|TensorLike>, argName: string, functionName: string,
    parseAsDtype: DataType|'numeric'|'string_or_numeric' = 'numeric'): T[] {
  if (!Array.isArray(arg)) {
    throw new Error(`Argument '${argName}' passed to '${functionName}' must be a ` +
        `Array<T|TensorLike>`);
  }

  const tensors = x as T|

  return arg.map((t, i) =>
      convertToTensor(t, `${argName}[${i}]`, functionName, parseAsDtype));
}

export function doScope<T extends Tensor>(
    function: (arg: T) => void, arg: T, argName: string, functionName: string) {
  if (function instanceof Scope) {
    return function.handleScope(arg);
  }

  return function(arg, argName, functionName);
}
wrapped in a named scope that cleans all * memory usage after the function is done.

```javascript
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];
  if (isPromise(result)) {
    console.error('Cannot return a Promise inside of tidy.');
  }
  return result;
}
```

The License for the specific language governing permissions and * limitations under the License.

```javascript
import {ENGINE} from '../engine';
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 
 * \([r_0, i_0, r_1, i_1]\), where r represents the real part
 * and i represents the imag part.
 *
 * The input tensors `real` and `imag` must have the same shape.
 *
 * ```js
 * const real = tf.tensor1d([2.25, 3.25]);
 * const imag = tf.tensor1d([4.75, 5.75]);
 * const complex = tf.complex(real, imag);
 *
 * complex.print();
 * ```
 *
 * @doc {heading: 'Tensors', subheading: 'Creation'}

```javascript
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_});
```
passed to tensor(values) must be a number/boolean/string or `+\n    an array of numbers/booleans/strings, or a
typedArray);` Rn `\n    if (shape != null) { Rn `\n      assertNonNegativeIntegerDimensions(shape);` Rn `\n    const providedSize = sizeFromShape(shape);` Rn `\n    const inferredSize = sizeFromShape(inferredShape);` Rn `\n    assert(Rn `\n      providedSize === inferredSize;` Rn `\n    ) => `Rn `\n      Based on the provided shape, `{shape}`, the tensor should have `+\n      `size`[providedSize] values but has size`[inferredSize];` Rn `\n      for (let i = 0; i < inferredShape.length; ++i) `Rn `\n        `{const inferred = inferredShape[i];` Rn `\n        const flatDimsDon'tMatch = i === inferredShape.length - 1` Rn `\n        ? inferred !== sizeFromShape(shape.slice(i)) :` Rn `\n        true;` Rn `\n    assert(inferred.indexOf(inferredShape[i] !== shape[i]));` Rn `\n
    if (shape != null) {` Rn `\n      assertNonNegativeIntegerDimensions(shape);` Rn `\n      const providedSize = sizeFromShape(shape);` Rn `\n      const inferredSize = sizeFromShape(inferredShape);` Rn `\n      assert(inferredSize === providedSize;` Rn `\n      true;` Rn `\n
    let index = -1;` Rn `\n    for (let i = 0; i < inferredShape.length; ++i) {` Rn `\n      let inferred = inferredShape[i];` Rn `\n      let flatDimsDon'tMatch = index === inferredShape.length - 1` Rn `\n        ? inferred !== sizeFromShape(shape.slice(i)) :` Rn `\n        true;` Rn `\n      assert(inferredShape[i] === shape[i] ||` Rn `\n        !flatDimsDon'tMatch,` Rn `\n      () => `Rn `\n        `Error creating a new Tensor. Inferred shape `+\n        `size`[inferredShape] does not match the provided` Rn `\n        shape`[shape].` Rn `\n    ) => `Rn `\n      `Based on the provided shape, `{shape}`, the tensor should have `+\n      `size`[providedSize] values but has size`[inferredSize];` Rn `\n      for (let i = 0; i < inferredShape.length; ++i) `Rn `\n        `{const inferred = inferredShape[i];` Rn `\n        const flatDimsDon'tMatch = i === inferredShape.length - 1` Rn `\n        ? inferred !== sizeFromShape(shape.slice(i)) :` Rn `\n        true;` Rn `\n      assert(inferred.indexOf(inferredShape[i] !== shape[i]));` Rn `\n
      if (!isTypedArray(values) && !Array.isArray(values)) {` Rn `\n        values = [values] as number;` Rn `\n    }

    shape = shape || inferredShape;
    values = dtype !== 'string' ?
        toTypedArray(values, dtype) :
        flatten(values as string, [], true) as string;
    return
    ENGINE.makeTensor(values as TypedArray, shape, dtype);
}
","/**
 * @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
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 * 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.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */

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. Can be nested array of numbers,
 * or a flat array, or a 'TypedArray'. If
 * the values are strings, they will be encoded as utf-8 and kept as `Uint8Array`.
 * @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>;
}
the file system.

paths: string

weights: WeightsManifestEntry[]

group: Group

type WeightGroup = 'model'|'optimizer'

Name of the weight, e.g., Dense_1/bias

weight: WeightsManifestEntry

name: string

shape: number[]

dtype: string

weights: WeightsManifestEntry[]

Group to which the weight belongs.

'optimizer': Weight

from a stateful optimizer.

'float32'|'int32'|'bool'|'string'|'complex64'

Optional. The value 'optimizer' indicates the weight belongs to an optimizer

(i.e., used only during model training and not during inference).

group?: WeightGroup

Information for dequantization of the weight.

scale?: number

min?: number

dtype: string

The (possibly nudged) minimum weight to add.

dtype: 'uint16'|'uint8'|'float16'

HTTP responses from the server that handled the model-saving request.

trainableOnly?: boolean

includeOptimizer?: boolean

Stamp for when the model is saved.

dateSaved: Date

TODO (cais,yassogba)

Keras JSON config (human-readable, e.g.,

GraphDef as GraphDefs now come in a JSON format and none of our IOHandlers support a non json format. We could consider replacing this with 'Binary' if we want to allow future handlers to save to non json formats (though they will probably want more information than 'Binary').

Type of the model topology.

Possible values:

- JSON: JSON config (human-readable, e.g.,

- GraphDef: TensorFlow protocol buffer (binary).

Size of model topology (Keras JSON or GraphDef).

in bytes.

Size of weight specification or manifest, in bytes.

in bytes.

Size of weight value data, in bytes.

Model training configuration.

Optimizer used for the model training.

 Widens: Weight

for the tfjs-core.

Tighten the typing once the Keras spec is available to tfjs-core.

String

For Keras-style `tf.Model`s, this is a JSON object.

For TensorFlow-style models (e.g., `SavedModel`), this is the JSON encoding of the `GraphDef` protocol buffer.

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Hard-coded format name for models saved from TensorFlow.js or converted by TensorFlow.js Converter.

* `format?: string;` * What library is responsible for originally generating this artifact. * `*` * Used for debugging purposes. E.g., TensorFlow.js v1.0.0,
* `generatedBy?: string;` * What library or tool is responsible for converting the original model to this format, applicable only if the model is output by a converter.

* `userDefinedMetadata?: {};` * User-defined metadata about the model.

* `modelInitializer?: {};` * Initializer for the model.

* `WeightsManifestConfig;` * Weights manifest.

* `save?: SaveHandler;` * Saves the model artifacts.

* `load?: LoadHandler;` * Loads the model artifacts.

* `ModelStoreManager;` * A model store.

* `OnProgressCallback;` * Callback for the progress of a long-running action such as an HTTP request.

* `RequestInit;` * Options for HTTP requests.

onProgress?: OnProgressCallback;

/**
   * A function used to override the `window.fetch` function.
   */

fetchFunc?: Function;

/**
   * Strict loading model: whether extraneous weights or missing
   * weights should trigger an 'Error'.
   */

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.
   */

fromTFHub?: boolean;

/**
   * An async function to convert weight file name to URL. The weight file
   * names are stored in model.json's weightsManifest.paths field. By default we
   * consider weight files are colocated with the model.json file. For example:

- model.json URL: https://www.google.com/models/1/model.json
- group1-shard1of2.bin URL: https://www.google.com/models/1/group1-shard1of2.bin

With this func you can convert the weight file name to any URL.

 */

weightUrlConverter?: (weightFileName: string) => Promise<string>;

/**
 * Additional options for Platform.fetch
 */

export interface RequestDetails {

/**
   * Is this request for a binary file (as opposed to a json file)
   */

isBinary?: boolean;

}

''
// Force coersion to uint32. This will also coerce falsey/NaN values to 0.\n end >>>= 0\n start >>>= 0\n\n if (end
<= start) {\n return ''\n }\n\n if (!encoding) encoding = 'utf8'\n\n while (true) {\n switch (encoding) {\n
case
'hex':\n
return hexSlice(this, start, end)\n\n
case 'utf8':\n
case 'utf-8':\n
return utf8Slice(this, start,
end)\n\n case 'ascii':\n
return asciiSlice(this, start, end)\n\n
case 'latin1':\n
case 'binary':\n
return
latin1Slice(this, start, end)\n\n
case 'base64':\n
return base64Slice(this, start, end)\n\n
case 'ucs2':\n
case 'ucs-2':\n
case 'utf16le':\n
case 'utf-16le':\n
return utf16leSlice(this, start, end)\n\n
default:\n
if
(loweredCase) throw new TypeError('Unknown encoding: ' + encoding)\n
encoding = (encoding +
'').toLowerCase()\n
loweredCase = true\n }\n }\n}\n\n// The property is used by `Buffer.isBuffer` and `isbuffer` (in Safari 5-7) to detect\n// Buffer instances.\nBuffer.prototype._isBuffer = true\n\nfunction swap (b, n, m)
{\n var i = b[n]\n b[n] = b[m]\n b[m] = i\n}\n\nBuffer.prototype.swap16 = function swap16 () {\n var len =
this.length\n if (len % 2 !== 0) {\n throw new RangeError('Buffer size must be a multiple of 16-bits')\n }\n for
(var i = 0; i < len; i += 2) {\n swap(this, i, i + 1)\n }\n return this\n}\n\nBuffer.prototype.swap32 = function
swap32 () {\n var len = this.length\n if (len % 4 !== 0) {\n throw new RangeError('Buffer size must be a multiple
of 32-bits')\n }\n for (var i = 0; i < len; i += 4) {\n swap(this, i, i + 3)\n swap(this, i + 1, i + 2)\n }\n return
this\n}\n\nBuffer.prototype.swap64 = function swap64 () {\n var len = this.length\n if (len % 8 !== 0) {\n throw
new RangeError('Buffer size must be a multiple of 64-bits')\n }\n for (var i = 0; i < len; i += 8) {\n swap(this, i, i
+ 7)\n swap(this, i + 1, i + 6)\n swap(this, i + 2, i + 5)\n swap(this, i + 3, i + 4)\n }\n return
this\n}\n\nBuffer.prototype.toString = function toString () {\n var length = this.length | 0\n if (length === 0) return
''\n if (arguments.length === 0) return utf8Slice(this, 0, length)\n return slowToString.apply(this,
arguments)\n}\n\nBuffer.prototype.equals = function equals (b) {\n if (!Buffer.isBuffer(b)) throw new
TypeError('Argument must be a Buffer')\n if (this === b) return true\n return Buffer.compare(this, b) ===
0\n}\n\nBuffer.prototype.inspect = function inspect () {\n var str = ''\n var max =
exports.INSPECT_MAX_BYTES\n if (this.length > 0) {\n str = this.toString('hex', 0, max).match(/.{2}/g).join('
')\n if (this.length > max) str += ' ... '\n }\n return '<Buffer ' + str + '>'\n}\n\nBuffer.prototype.compare = function
compare (target, start, end, thisStart, thisEnd) {\n if (!Buffer.isBuffer(target)) {\n throw new
TypeError('Argument must be a Buffer')\n }\n\n if (start === undefined) {\n start = 0\n }\n if (end ===
undefined) {\n end = target ? target.length : 0\n }\n if (thisStart === undefined) {\n thisStart = 0\n }\n if
(thisEnd === undefined) {\n thisEnd = this.length\n }\n\n if (start < 0 || end > target.length || thisStart < 0 ||
thisEnd > this.length) {\n throw new RangeError('out of range index')\n }\n\n if (thisStart >= thisEnd && start
>= end) {\n return 0\n }\n if (thisStart >= thisEnd) {\n return -1\n }\n if (start >= end) {\n return 1\n }\n\n
start >>>= 0\n end >>>= 0\n thisStart >>>= 0\n thisEnd >>>= 0\n\n if (this === target) return 0\n\n var x =
thisEnd - thisStart\n var y = end - start\n var len = Math.min(x, y)\n\n var thisCopy = this.slice(thisStart,
thisEnd)\n var targetCopy = target.slice(start, end)\n\n for (var i = 0; i < len; ++i) {\n if (thisCopy[i] !==
targetCopy[i]) {\n
x = thisCopy[i]\n
y = targetCopy[i]\n
break\n }\n }\n\n if (x < y) return -1\n if (y <
x) return 1\n return 0\n}\n\n// Finds either the first index of `val` in `buffer` at offset >= `byteOffset`,\n// OR the last
index of `val` in `buffer` at offset <= `byteOffset`.\n//\n// Arguments:\n// - buffer - a Buffer to search\n// - val - a
string, Buffer, or number\n// - byteOffset - an index into `buffer`; will be clamped to an int32\n// - encoding - an
optional encoding, relevant is val is a string\n// - dir - true for indexOf, false for lastIndexOf\nfunction
bidirectionalIndexOf (buffer, val, byteOffset, encoding, dir) {\n // Empty buffer means no match\n if (buffer.length
=== 0) return -1\n\n // Normalize byteOffset\n if (typeof byteOffset === 'string') {\n encoding = byteOffset\n
byteOffset = 0\n } else if (byteOffset > 0x7fffffff) {\n byteOffset = 0x7fffffff\n } else if (byteOffset < 0x80000000) {\n byteOffset = -0x80000000\n }\n byteOffset = +byteOffset // Coerce to Number.\n if
(isNaN(byteOffset)) {\n // byteOffset: it it's undefined, null, NaN, \"foo\", etc, search whole buffer\n byteOffset
= dir ? 0 : (buffer.length - 1)\n }\n\n // Normalize byteOffset: negative offsets start from the end of the buffer\n if
(byteOffset < 0) byteOffset = buffer.length + byteOffset\n if (byteOffset >= buffer.length) {\n if (dir) return -1\n
else byteOffset = buffer.length - 1\n } else if (byteOffset < 0) {\n if (dir) byteOffset = 0\n else return -1\n }\n\n
// Normalize val\n if (typeof val === 'string') {\n val = Buffer.from(val, encoding)\n }\n\n // Finally, search
either indexOf (if dir is true) or lastIndexOf\n if (Buffer.isBuffer(val)) {\n // Special case: looking for empty

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16le':

```javascript
return ucs2Write(this, string, offset, length) 

function toISOString() {
  return { type: 'Buffer', data: 
    Array.prototype.slice.call(this, 0, length) }
}

function base64Slice(buf, start, end) {
  var length = buf.length
  var lowerCase = false
  var encoding = 'utf8'

  if (lowerCase)
    throw new TypeError('Unknown encoding: ' + encoding)
  encoding = ('' + encoding).toLowerCase()

  var codePoint = null
  var bytesPerSequence = (firstByte > 0xEF) ? 4
    : (firstByte > 0xDF) ? 3
    : (firstByte > 0xBF) ? 2
    : 1

  if (i + bytesPerSequence <= end) {
    var secondByte, thirdByte, fourthByte,
    tempCodePoint

    switch (bytesPerSequence) {
      case 1:
        if (firstByte < 0x80) {
          codePoint = firstByte
        }
        break
      case 2:
        secondByte = buf[i + 1]
        if ((secondByte & 0xC0) === 0x80) {
          tempCodePoint = (firstByte & 0x1F) << 0x6 | (secondByte & 0x3F)
          if (tempCodePoint > 0x7F) {
            codePoint = tempCodePoint
          }
        }
        break
      case 3:
        secondByte = buf[i + 1]
        thirdByte = buf[i + 2]
        if ((secondByte & 0xC0) === 0x80 && (thirdByte & 0xC0) === 0x80) {
          tempCodePoint = (firstByte & 0xF) << 0xC | (secondByte & 0x3F) << 0x6 |
          (thirdByte & 0x3F)
          if (tempCodePoint > 0x110000) {
            codePoint = tempCodePoint
          }
        }
        break
      case 4:
        secondByte = buf[i + 1]
        thirdByte = buf[i + 2]
        fourthByte = buf[i + 3]
        if ((secondByte & 0xC0) === 0x80 && (thirdByte & 0xC0) === 0x80 &&
          (fourthByte & 0xC0) === 0x80) {
          tempCodePoint = (firstByte & 0xF) << 0x12 | (secondByte & 0x3F) << 0xC |
          (thirdByte & 0x3F) << 0x6 |
          (fourthByte & 0x3F)
          if (tempCodePoint < 0x10000) {
            codePoint = tempCodePoint
          }
        }
    }
  }

  if (codePoint === null) {
    // we did not generate a valid codePoint so insert a'n' replacement char (U+FFFD) and advance only 1 byte
    codePoint = 0xFFFD
    bytesPerSequence = 1
  } else if (codePoint > 0xFFFF) {
    // encode to utf16 (surrogate pair dance)
    codePoint -= 0x10000
    res.push(codePoint >>> 10 & 0x3FF | 0xD800)
    codePoint = 0xDC00 | codePoint & 0x3FF
  }

  res.push(codePoint)
  return decodeCodePointsArray(res)
}

function asciiSlice(buf, start, end) {
  var ret = ''
  end = Math.min(buf.length, end)

  for (var i = start; i < end; ++i) {
    ret += String.fromCharCode(buf[i] & 0x7F)
  }
  return ret
}

function latin1Slice(buf, start, end) {
  var ret = ''
  end = Math.min(buf.length, end)

  for (var i = start; i < end; ++i) {
    ret += String.fromCharCode(buf[i])
  }
  return ret
}

function hexSlice(buf, start, end) {
  var len = buf.length

  if (!start || start < 0) start = 0
  if (!end || end < 0 || end > len)
    end = len

  var out = ''
  for (var i = start; i < end; ++i) {
    out += toHex(buf[i])
  }
  return out
}

function utf8Slice(buf, start, end) {
  end = Math.min(buf.length, end)

  var res = ''
  var i = start
  while (i < end) {
    var firstByte = buf[i] var codePoint = null
    var bytesPerSequence = (firstByte > 0xEF) ? 4
      : (firstByte > 0xDF) ? 3
      : (firstByte > 0xBF) ? 2
      : 1

    if (i + bytesPerSequence <= end) {
      var secondByte, thirdByte, fourthByte,
      tempCodePoint

      switch (bytesPerSequence) {
        case 1:
          if (firstByte < 0x80) {
            codePoint = firstByte
          }
          break
        case 2:
          secondByte = buf[i + 1]
          if ((secondByte & 0xC0) === 0x80) {
            tempCodePoint = (firstByte & 0x1F) << 0x6 | (secondByte & 0x3F)
            if (tempCodePoint > 0x7F) {
              codePoint = tempCodePoint
            }
          }
          break
        case 3:
          secondByte = buf[i + 1]
          thirdByte = buf[i + 2]
          if ((secondByte & 0xC0) === 0x80 &&
            (thirdByte & 0xC0) === 0x80) {
            tempCodePoint = (firstByte & 0xF) << 0xC | (secondByte & 0x3F) << 0x6 |
            (thirdByte & 0x3F)
            if (tempCodePoint > 0x110000) {
              codePoint = tempCodePoint
            }
          }
          break
        case 4:
          secondByte = buf[i + 1]
          thirdByte = buf[i + 2]
          fourthByte = buf[i + 3]
          if ((secondByte & 0xC0) === 0x80 &&
            (thirdByte & 0xC0) === 0x80 &&
            (fourthByte & 0xC0) === 0x80) {
            tempCodePoint = (firstByte & 0xF) << 0x12 | (secondByte & 0x3F) << 0xC |
            (thirdByte & 0x3F) << 0x6 |
            (fourthByte & 0x3F)
            if (tempCodePoint < 0x10000) {
              codePoint = tempCodePoint
            }
          }
      }
    }

    if (codePoint === null) {
      // we did not generate a valid codePoint so insert a'n'
      // replacement char (U+FFFD) and advance only 1 byte
      codePoint = 0xFFFD
      bytesPerSequence = 1
    } else if (codePoint > 0xFFFF) {
      // encode to utf16 (surrogate pair dance)
      codePoint -= 0x10000
      res.push(codePoint >>> 10 & 0x3FF | 0xD800)
      codePoint = 0xDC00 | codePoint & 0x3FF
    }

    res.push(codePoint)
    i += bytesPerSequence
  }

  return decodeCodePointsArray(res)
}

function toString(buf, start, end) {
  return String.fromCharCode.apply(String, buf.slice(start, end))
}
```

---

*Need to make sure that buffer isn't trying to write out of bounds.*
not uint})
if (offset + ext > length) throw new RangeError('Trying to access beyond buffer
length')

Buffer.prototype.readUIntLE = function readUIntLE (offset, byteLength, noAssert) {
  offset = offset | 0
  byteLength = byteLength | 0
  if (noAssert) checkOffset(offset, byteLength, this.length)
  var val = this[offset]
  var mul = 1
  var i = 0
  while (++i < byteLength && (mul *= 0x100)) {
    var val += this[offset + i] * mul
  }
  return val
}

Buffer.prototype.readUIntBE = function readUIntBE (offset, byteLength, noAssert) {
  offset = offset | 0
  byteLength = byteLength | 0
  if (noAssert) checkOffset(offset, byteLength, this.length)
  var val = this[offset + byteLength - 1]
  var mul = 1
  while (byteLength > 0 && (mul *= 0x100)) {
    val += this[offset + byteLength - 1 - i] * mul
    i++
  }
  return val
}

Buffer.prototype.readUInt8 = function readUInt8 (offset, noAssert) {
  if (!noAssert) checkOffset(offset, 1, this.length)
  return this[offset]
}

Buffer.prototype.readUInt16LE = function readUInt16LE (offset, noAssert) {
  if (!noAssert) checkOffset(offset, 2, this.length)
  return ((this[offset]) | (this[offset + 1] << 8))
}

Buffer.prototype.readUInt16BE = function readUInt16BE (offset, noAssert) {
  if (!noAssert) checkOffset(offset, 2, this.length)
  return ((this[offset + 1]) | (this[offset] << 8))
}

Buffer.prototype.readUInt32LE = function readUInt32LE (offset, noAssert) {
  if (!noAssert) checkOffset(offset, 4, this.length)
  return ((this[offset]) | (this[offset + 1] << 8) | (this[offset + 2] << 16) |
      (this[offset + 3] << 24))
}

Buffer.prototype.readUInt32BE = function readUInt32BE (offset, noAssert) {
  if (!noAssert) checkOffset(offset, 4, this.length)
  return ((this[offset] << 24) | (this[offset + 1] << 16) |
      (this[offset + 2] << 8) | (this[offset + 3])
}

function checkInt (buf, value, offset, ext, max, min) {
  if (Buffer.isBuffer(buf)) throw new TypeError('"buffer" argument must be a
Buffer instance')
  if (value > max || value < min) throw new RangeError('"value" argument is out of bounds')
  if (offset + ext > buf.length) throw new RangeError('Index out of range')
}

Buffer.prototype.writeUIntLE = function writeUIntLE (value, offset, byteLength, noAssert) {
  value = +value
  offset = offset | 0
  byteLength = byteLength | 0
  if (noAssert) {
    var valueInBytes = Math.pow(2, 8 * byteLength) - 1
    var i = 0
    while (value > valueInBytes) {
      value /= 0x100
    }
    var multiplyValue = 0x1
    while (value * multiplyValue <= valueInBytes) {
      multiplyValue *= 0x100
    }
    value %= valueInBytes
    value = Math.pow(2, 8 * byteLength) - value
    value /= multiplyValue
    var i = 0
    var bufferLength = offset + byteLength
    while (i < bufferLength) {
      buf[offset + i] = value & 0xff
      value >>= 8
      i++
    }
  } else {
    checkInt(buf, value, offset, byteLength, max, min)
  }
}
encoding).toString()\n|\n| var len = bytes.length\n| for (i = 0; i < end - start; ++i) \n| this[i + start] = bytes[i % len]\n| } \n| return this;\n
// HELPER FUNCTIONS\n
/**
 * @license
 * Copyright 2018 Google LLC. All Rights Reserved.
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 * "License"); you may not use this file except in compliance with the License.
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 * limitations under the License.
 *
 *=============================================================================

*/

import {complex} from '../ops/complex';

import {tensor} from '../ops/tensor';
import {NamedTensor, NamedTensorMap} from '../tensor_types';
import {TypedArray} from '../types';
import {sizeFromShape} from '../util';

import {DTYPE_VALUE_SIZE_MAP, ModelArtifacts, ModelArtifactsInfo, WeightGroup, WeightsManifestEntry} from './types';

/** Number of bytes reserved for the length of the string. (32bit integer). */
const NUM_BYTES_STRING_LENGTH = 4;

/**
 * Encode a map from names to weight values as an ArrayBuffer, along with an
 * `Array` of `WeightsManifestEntry` as specification of the encoded weights.
 *
 * This function does not perform sharding.\n
 * @param tensors A map ("dict") from names to tensors.\n * @param group Group to which the weights belong (optional)\n
 */

export function encodeWeights(tensors, group) {
  let manifest = [...tensors.values()].filter(t => t instanceof NamedTensor);
  manifest = manifest.map(t => t.manifest);

  let manifestBytes = [];
  manifest.forEach(m => manifestBytes.push(m.encode());

  let manifestArrayBuffer = new ArrayBuffer(manifestBytes.length * 4);
  for (let i = 0; i < manifestBytes.length; i++) {
    let dataView = new DataView(manifestArrayBuffer, i * 4);
    dataView.setUint32(i, manifestBytes[i].length * 4);
  }

  let lengthBytes = new Uint8Array(4);
  lengthBytes.set([0, 0, 0, manifestBytes.length * 4]);

  let encodedWeights = new ArrayBuffer(lengthBytes.length + manifestArrayBuffer.byteLength);
  let dataView = new DataView(encodedWeights);
  lengthBytes.copyTo(dataView);\n
  manifestBytes.forEach(b => dataView.setBigint(b, lengthBytes.length, 4));

  return encodedWeights;
}
*`@returns` A Promise of a flat `ArrayBuffer` with all the binary values of the `Tensor`'s
 * concatenated.

*`- An `Array` of `WeightManifestEntry`s, carrying information including:
 * tensor names,
 * `dtype`s and shapes.
 * @throws Error: on unsupported tensor `dtype`.

`encodeWeights` function:

```typescript
export async function encodeWeights(
    tensors: NamedTensorMap|NamedTensor[], group?: WeightGroup): Promise<{data:
    ArrayBuffer, specs: WeightsManifestEntry[]} {`n

```
const specs: WeightsManifestEntry[] = [];
```

```typescript
const dataPromises: Array<Promise<TypedArray>> = [];
```

```typescript
const names: string[] = `n
```

```typescript
for (let i = 0; i < names.length; ++i) {`n`n
```

```typescript
const spec: WeightsManifestEntry = {name, shape, t.dtype: t.dtype};`n`n
```

```typescript
if (t.dtype !== 'float32' && t.dtype !== 'int32' && t.dtype !== 'bool' &&
    t.dtype !== 'string') {`n`n
```

```typescript
const utf8bytes = new Promise<TypedArray>(async resolve => {
    const vals = await t.bytes() as Uint8Array[];
    const totalNumBytes = vals.reduce((p, c) => p + c.length, 0) +
NUM_BYTES_STRING_LENGTH * vals.length;
    const bytes = new Uint8Array(totalNumBytes);
    let offset = 0;
    for (let i = 0; i < vals.length; i++) {
      const val = vals[i];
      const bytesOfLength = new Uint8Array(new Uint32Array([val.length]).buffer);
      bytes.set(bytesOfLength, offset);
      offset += val.length;
    }
    resolve(bytes);
  }) as Uint8Array;
```

```typescript
const tensorValues = await Promise.all(dataPromises);
return {data: concatenateTypedArrays(tensorValues), specs};
```

```typescript
```

```typescript
```typescript
```

```typescript
```

```typescript
const float16Decode: (buffer: Uint16Array) => Float32Array | undefined;
```

```typescript
let offset = 0;
for (const spec of specs) {`n`n
```

```typescript
if (quantization.dtype === 'uint8' || quantization.dtype === 'uint16') {
```

```typescript
const quantizedArray = (quantization.dtype === 'uint8') ?
    new Uint8Array(byteBuffer) :
    new Uint16Array(byteBuffer);
```

```typescript
if (dtype !== 'float32') {
```

```typescript`
throw new Error(`Weight ${spec.name} is quantized with ${quantization.dtype} ` +
    `which only supports weights of type float32 not ${dtype}.`);
```}
```

```typescript
```

```typescript`
ProjPass()`
```
into one.

```typescript
@returns Result of concatenating `buffers` in order.

export function concatenateArrayBuffers(buffers: ArrayBuffer[]): ArrayBuffer {
  if (buffers.length === 1) {
    return buffers[0];
  }

  let totalByteLength = 0;
  buffers.forEach((buffer: ArrayBuffer) => {
    totalByteLength += buffer.byteLength;
  });

  const temp = new Uint8Array(totalByteLength);
  let offset = 0;
  buffers.forEach((buffer: ArrayBuffer) => {
    temp.set(new Uint8Array(buffer), offset);
    offset += buffer.byteLength;
  });
  return temp.buffer;
}

/**
 * Get the basename of a path. * Behaves in a way analogous to Linux's basename command.
 * @param path
 * @returns Result of getting the basename.
 */
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[items.length - 1];
}

/**
 * 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) {
    throw new Error('Expected JSON model topology, received ArrayBuffer.');
  }

  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 :
      modelArtifacts.weightData.byteLength,
  };
}

/**
 * Computes mantissa table for casting Float16 to Float32
 *
 * @returns Uint32Array, 2048 mantissa lookup values.
 */
function computeFloat16MantisaTable(): Uint32Array {
  const convertMantissa = (i: number): number => {
    let m = i << 13;
    let e = 0;

    while ((m & 0x00800000) === 0) {
      e -= 0x00800000;
      m <<= 1;
    }
    m &= ~0x00800000;
    e += 0x38800000;

    return m | e;
  }

  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;
}

/**
 * Computes exponent table for casting Float16 to Float32
 *
 * @returns Uint32Array, 64 exponent lookup values.
 */
function computeFloat16ExponentTable(): Uint32Array {
  const exponentTable = new Uint32Array(64);

  for (let i = 0; i < 64; i++) {
    exponentTable[i] = 1024;
  }
  exponentTable[0] = exponentTable[32] = 0;
  exponentTable[31] = 0x47800000;
  exponentTable[32] = 0x80000000;
  exponentTable[63] = 0x78000000;

  for (let i = 1; i < 32; i++) {
    exponentTable[i] = i << 13;
  }

  return exponentTable;
}

/**
 * Computes offset table for casting Float16 to Float32
 *
 * @returns Uint32Array, 64 offset lookup values.
 */
function computeFloat16OffsetTable(): Uint32Array {
  const offsetTable = new Uint32Array(64);

  for (let i = 0; i < 64; i++) {
    offsetTable[i] = 1024;
  }

  return offsetTable;
}

/**
 * Computes Float16 decoder which will decode a ByteArray of Float16 values to a Float32Array.
 * @returns Function (buffer: Uint16Array) => Float32Array which decodes the Uint16Array of Float16
 *        bytes to a Float32Array.
 */
export function getFloat16Decoder(): (buffer: Uint16Array) => Float32Array {
  // Algorithm is based off of

  const mantisaTable = computeFloat16MantisaTable();
  const exponentTable = computeFloat16ExponentTable();
  const offsetTable = computeFloat16OffsetTable();

  return (buffer: Uint16Array) => {
    const float16Values = new Uint16Array(buffer);
    const float32Values = new Float32Array(buffer.byteLength);

    for (let i = 0; i < buffer.length; i++) {
      const float16Value = float16Values[i];
      const float32Value =
        mantisaTable[off] +
        exponentTable[off] +
        offsetTable[off];

      float32Values[i] = float32Value;
    }

    return float32Values;
  };
```

### License

```
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```
import {IOHandler, LoadOptions} from './types';
export type IORouter = (url: string|string[], loadOptions?: LoadOptions) => IOHandler;
export class IORouterRegistry {
  private static instance: IORouterRegistry;
  private saveRouters: IORouter[];
  private loadRouters: IORouter[];

  constructor() {
    this.saveRouters = [];
    this.loadRouters = [];
  }

  static getInstance(): IORouterRegistry {
    if (IORouterRegistry.instance == null) {
      IORouterRegistry.instance = new IORouterRegistry();
    }
    return IORouterRegistry.instance;
  }

  static registerSaveRouter(saveRouter: IORouter) {
    this.saveRouters.push(saveRouter);
  }

  static registerLoadRouter(loadRouter: IORouter) {
    this.loadRouters.push(loadRouter);
  }

  static getSaveHandlers(url: string|string[]): IOHandler[] {
    return this.getHandlers(url, 'save');
  }

  static getLoadHandlers(url: string|string[], loadOptions?: LoadOptions): IOHandler[] {
    return this.getHandlers(url, 'load', loadOptions);
  }

  private static getHandlers(url: string|string[], handlerType: 'save'|'load', loadOptions?: LoadOptions): IOHandler[] {
    const validHandlers: IOHandler[] = [];
    const routers = handlerType === 'load' ? this.loadRouters : this.saveRouters;
    routers.forEach(router => {
      const handler = router(url, loadOptions);
      if (handler !== null) {
        validHandlers.push(handler);
      }
    });
    return validHandlers;
  }
}

export const registerSaveRouter = (saveRouter: IORouter) => IORouterRegistry.registerSaveRouter(saveRouter);
export const registerLoadRouter = (loadRouter: IORouter) => IORouterRegistry.registerLoadRouter(loadRouter);
export const getSaveHandlers = (url: string|string[]) => IORouterRegistry.getSaveHandlers(url);
export const getLoadHandlers = (url: string|string[], loadOptions?: LoadOptions) => IORouterRegistry.getLoadHandlers(url, loadOptions);
binary), byte size of the topology, byte
size of the weights, etc.\n
//    size of the weights, etc.
const INFO_STORE_NAME = 'model_info_store';

 /**
 * Delete the entire database for tensorflow.js, including the models store.
 */
export async function deleteDatabase(): Promise<void> {
  const idbFactory = getIndexedDBFactory();

  return new Promise<void>((resolve, reject) => {
    const deleteRequest = idbFactory.deleteDatabase(DATABASE_NAME);

    deleteRequest.onsuccess = () => resolve();
    deleteRequest.onerror = error => reject(error);
  });
}

function getIndexedDBFactory(): IDBFactory {
  if (!env().getBool('IS_BROWSER')) {
    // TODO(cais): Add more info about what IOHandler subtypes are available.
    // Maybe point to a doc page on the web and/or automatically determine // the available
    IOHandlers and print them in the error message.
    throw new Error('Failed to obtain IndexedDB factory because the current environment' +
        ' is not a web browser.');
  }
  // tslint:disable-next-line:no-any
  const theWindow: any = typeof window === 'undefined' ? self : window;
  const factory = theWindow.indexedDB || theWindow.mozIndexedDB ||
      theWindow.webkitIndexedDB || theWindow.msIndexedDB ||
      theWindow.shimIndexedDB;
  if (factory == null) {
    throw new Error('The current browser does not
appear to support IndexedDB.');
  }
  return factory;
}

/**
 * Perform database action to put model artifacts into or read model artifacts
 * from IndexedDB object store.\n * Whether the action is put or get depends on whether `modelArtifacts` is
 * specified. If it is
 * specified, the action will be put; otherwise the action will be get.\n * @param modelPath A unique string
 * path for the model.
 * @param modelArtifacts If specified, it will be the model artifacts to be
 *   stored in
 * IndexedDB.\n * @returns A `Promise` of `SaveResult`, if the action is put, or a `Promise`
 * of
 * `ModelArtifacts`, if the action is get.
 */
private databaseAction(modelPath: string, modelArtifacts?: ModelArtifacts):
    Promise<ModelArtifacts|SaveResult> {
  return new Promise<ModelArtifacts|SaveResult>((resolve, reject) => {
    const openRequest = thisindexedDB.open(DATABASE_NAME, DATABASE_VERSION);

    openRequest.onupgradeneeded = () =>
        setUpDatabase(openRequest);

    openRequest.onsuccess = () => {
      const db = openRequest.result;

      if (modelArtifacts == null) {
        // Read model out from object store.
        const modelTx = db.transaction(MODEL_STORE_NAME, 'readonly');
        const modelStore = modelTx.objectStore(MODEL_STORE_NAME);
        const getRequest = modelStore.get(this.modelPath);

        getRequest.onsuccess = () => {
          if (getRequest.result == null) {
            db.close();
            return reject(new Error('Cannot find model with path ' +
                this.modelPath) +
              ' in IndexedDB.');
          } else {
            resolve(getRequest.result.modelArtifacts);
          }
        };

        getRequest.onerror = error => {
          db.close();
          return reject(getRequest.error);
        };

        modelTx.oncomplete = () =>
            db.close();
      } else {
        // Put model into object store.
        const modelArtifactsInfo: ModelArtifactsInfo =
            getModelArtifactsInfoForJSON(modelArtifacts);

        // First, put ModelArtifactsInfo into info store.
        const infoStore = db.transaction(INFO_STORE_NAME, 'readwrite');
        let infoRequest = infoStore.objectStore(INFO_STORE_NAME);

        infoRequest.put(modelArtifactsInfo);
putInfoRequest.onsuccess = () => {\n
// Second, put model data into model store.\n
modelTx =
db.transaction(MODEL_STORE_NAME, 'readwrite');\n
const modelStore =
modelTx.objectStore(MODEL_STORE_NAME);\n
const putModelRequest = modelStore.put({\n
modelPath: this.modelPath,\n
modelArtifacts,\n
modelArtifactsInfo\n
});\n
putModelRequest.onsuccess = () => resolve({modelArtifactsInfo});\n
putModelRequest.onerror = error =>
{\n
// If the put-model request fails, roll back the info entry as\n
// well.\n
infoStore =
infoTx.objectStore(INFO_STORE_NAME);\n
const deleteInfoRequest =
infoStore.delete(this.modelPath);\n
deleteInfoRequest.onsuccess = () => {\n
db.close();\n
return reject(putModelRequest.error);\n
};\n
deleteInfoRequest.onerror = error => {\n
db.close();\n
return reject(putModelRequest.error);\n
};\n
};\n
};\n
putInfoRequest.onerror = error => {\n
db.close();\n
return reject(putInfoRequest.error);\n
};\n
infoTx.oncomplete = () => {\n
if (modelTx == null) {\n
db.close();\n
} else {\n
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 =

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```javascript
infoTx.objectStore(INFO_STORE_NAME);
const getInfoRequest = infoStore.get(path);
let modelTx;

if (getInfoRequest.result == null) {
  db.close();
  reject(new Error(`Cannot find model with path ${path}`));
} else {
  // First, delete the entry in the info store.
  infoStore.delete(path);
  const deleteModelData = () => {
    // Second, delete the entry in the model store.
    modelTx = db.transaction(MODEL_STORE_NAME, 'readwrite');
    const modelStore = modelTx.objectStore(MODEL_STORE_NAME);
    deleteModelRequest = modelStore.delete(path);
    deleteModelRequest.onsuccess = () =>
      resolve(getInfoRequest.result.modelArtifactsInfo);
    deleteModelRequest.onerror = error =>
      reject(getInfoRequest.error);
  };
  deleteInfoRequest.onsuccess = deleteModelData;
  deleteInfoRequest.onerror = error => {
    deleteModelData();
    db.close();
    return reject(getInfoRequest.error);
  };

  modelTx.oncomplete = () => db.close();
}

getInfoRequest.onerror = error => {
  db.close();
  return reject(getInfoRequest.error);
}

infoTx.oncomplete = () => {
  if (modelTx == null) {
    db.close();
  } else {
    modelTx.oncomplete = () => db.close();
  }
}

openRequest.onerror = error =>
  reject(openRequest.error);
```

---

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 */

---

* export purgeLocalStorageArtifacts:
* 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_SEPARATOR;
    if (key.startsWith(prefix) && key.length > prefix.length) {
      LS.removeItem(key);
      const modelName = key.slice(prefix.length);
      if (purgedModelPaths.indexOf(modelName) === -1) {
        purgedModelPaths.push(modelName);
      }
    }
  }
  return purgedModelPaths;
}
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 documentation to `browserLocalStorage` for further 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') ||
        typeof window === 'undefined' ||
        typeof window.localStorage === 'undefined') {
      throw new Error(
          'The current environment does not support local storage.');
    }
    this.LS = 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 =
          getModelKeys(this.modelPath);

    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.weightData,
          arrayBufferToBase64String(modelArtifacts.weightData));
      const result: ModelArtifacts = {
        format: modelArtifacts.format,
        generatedBy: modelArtifacts.generatedBy,
        convertedBy: modelArtifacts.convertedBy,
      };
      if (modelArtifacts.signature != null) {
        result.signature = modelArtifacts.signature;
      }
      if (modelArtifacts.userDefinedMetadata != null) {
        result.userDefinedMetadata = modelArtifacts.userDefinedMetadata;
      }
      if (modelArtifacts.modelInitializer != null) {
        result.modelInitializer = modelArtifacts.modelInitializer;
      }
      this.LS.setItem(this.keys.modelMetadata, JSON.stringify(result));
      return result;
    } catch (err) {
      // If saving failed, clean up all items saved so far.
      this.LS.removeItem(this.keys.info);
      this.LS.removeItem(this.keys.topology);
      this.LS.removeItem(this.keys.weightSpecs);
      this.LS.removeItem(this.keys.weightData);
      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.
   */
  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}'`);
    }

    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.`);
    }

    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}' ` +
          `is missing.`);
    }

    return {modelArtifactsInfo};
  }
}
In local storage, the weight specs of model `${this.modelPath}` are missing.

In local storage, the binary weight values of model `${this.modelPath}` are missing.

For each model's saved artifacts, four items are saved to local storage:
- `${PATH_SEPARATOR}/${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.
- `${PATH_SEPARATOR}/${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.

@returns An instance of `IOHandler`, which can be used with, e.g., `Model.save`.

BrowserLocalStorage(modelPath)

assert(env().getBool('IS_BROWSER'), () => 'Current environment is not a web browser');

assert(env().getBool('IS_BROWSER'), () => 'Current browser does not appear to support localStorage');

Listing all models:

for (let i = 0; i < this.LS.length; ++i) {
  const key = this.LS.key(i);
  if (key.startsWith('${PATH_SEPARATOR}') && key.endsWith(INFO_SUFFIX)) {
    const modelPath = getModelPathFromKey(key);
    try {
      const info = JSON.parse(this.LS.getItem(key)) as ModelArtifactsInfo;
      console.log(`Found model at path: '${modelPath}'`);
      // Use the info here...
    } catch (error) {
      console.error(`Error getting info for path: '${modelPath}'`);
    }
  }
}

Remove a model:

const path = 'modelPath';

const prefixedPath = PREFIX + path;

const modelArtifactsInfo = this.LS.getItem(prefixedPath);

if (modelArtifactsInfo) {
  const key = this.LS.key(0);
  this.LS.removeItem(prefixedPath);
  this.LS.removeItem('${PATH_SEPARATOR}' + this.LS.getItem(key));
  this.LS.removeItem('${PATH_SEPARATOR}' + this.LS.getItem(key));
  this.LS.removeItem('${PATH_SEPARATOR}' + this.LS.getItem(key));
  try {
    delete this.LS[key]; // Remove the key
  } catch (error) {
    console.error(`Error removing key: ${key}`);
  }
}

BrowserLocalStorage(modelPath)

BrowserLocalStorage(modelPath)

input[type="submit"]

input[type="file"]

textarea

select

button
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*
=============================================================================
*/

/**
 * Classes and functions for model management across multiple storage mediums.
 * - Listing models on all registered storage mediums.
 * - Remove model by URL from any registered storage mediums, by using URL
 * string.
 * - Moving or copying model from one path to another, by using URL strings.
 * Supported
 * client actions:
 * - Listing models on all registered storage mediums.
 * - Remove model by URL from any registered storage mediums, by using URL
 * string.
 * - Moving or copying model from one path to another, by using URL strings.
 */

import {assert} from '../util';

import {IORouterRegistry} from './router_registry';
import {ModelArtifactsInfo, ModelStoreManager} from './types';

const URL_SCHEME_SUFFIX = '://';

export class ModelStoreManagerRegistry {
  // Singleton instance.
  private static instance: ModelStoreManagerRegistry;

  private managers: {[scheme: string]: ModelStoreManager};

  private constructor() {
    this.managers = {};
  }

  private static getInstance(): ModelStoreManagerRegistry {
    if (ModelStoreManagerRegistry.instance == null) {
      ModelStoreManagerRegistry.instance = new ModelStoreManagerRegistry();
    }
    return ModelStoreManagerRegistry.instance;
  }

  /**
   * Register a save-handler router.
   *
   * @param saveRouter A function that maps a URL-like string onto an instance
   * of `IOHandler` with the `save` method
   * defined or `null`. *
   */
  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 '${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 '${scheme}'.`);
    }
    return manager;
  }

  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 ${sourceURL}.`);
  assert(
      loadHandlers.length < 2,
      () => `Copying failed because more than one
      (${loadHandlers.length}) ` +
          `load handlers for source URL ${sourceURL}.`);
  const loadHandler = loadHandlers[0];

  const saveHandlers = IORouterRegistry.getSaveHandlers(destURL);
  assert(
      saveHandlers.length > 0,
      () => `Copying failed because no save handler is found for destination` +
      `URL ${destURL}.`);
  assert(
      saveHandlers.length < 2,
      () => `Copying failed because more than one
      (${saveHandlers.length}) ` +
          `save handlers for destination URL ${destURL}.`);
  const saveHandler = saveHandlers[0];

  const sourceScheme = parseURL(sourceURL).scheme;
  const sourcePath = parseURL(sourceURL).path;
  const sameMedium = sourceScheme === parseURL(sourceURL).scheme;
  const modelArtifacts = await loadHandler.load();
  // If moving within the same storage medium, remove the old
  model as soon as the loading is done. Without doing this, it is possible that the combined
  size of the two models will cause the cloning to fail.
  if (deleteSource &
      & sameMedium) {
    await ModelStoreManagerRegistry.getManager(sourceScheme)
        .removeModel(sourcePath);
    return;
  }
  const saveResult = await saveHandler.save(modelArtifacts);
  // If moving between mediums, the deletion is done after
  the save succeeds.
  // This guards against the case in which saving to the destination medium
  // fails.
  if
(deleteSource && !sameMedium) { return saveResult.modelArtifactsInfo; }

async function listModels(): Promise<{
    url: string;
}[]> {
  const schemes = ModelStoreManagerRegistry.getSchemes();
  const out: {
      url: string;
      modelArtifactsInfo: ModelArtifactsInfo;
    }[] = [];
  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;
}

/**
 * Copy a model from one URL to another.
 *
 * This function supports:
 * 1. Copying within a storage medium, e.g.,
 *    `tf.io.copyModel('localstorage://model-1',
 * 'localstorage://model-2')`
 * 2. Copying between two storage mediums, e.g.,
 *    `tf.io.copyModel('localstorage://model-1',
 * 'indexeddb://model-1')`
 *
 * @param sourceURL Source URL of copying.
 * @param destURL Destination URL of copying.
 * @returns ModelArtifactsInfo of the copied model.
 * @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.
 *
 * This function supports:
 * 1. Moving within a storage medium, e.g.,
 *    `tf.io.moveTo('localstorage://model-1',
 * 'localstorage://model-2')`
 * 2. Moving between two storage mediums, e.g.,
 *    `tf.io.moveTo('localstorage://model-1',
 * 'indexeddb://model-1')`
 *
 * @param sourceURL Source URL of moving.
 * @param destURL Destination URL of moving.
 * @returns ModelArtifactsInfo of the moved model.
 * @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 = true;
  return cloneModelInternal(sourceURL, destURL, deleteSource);
}
```
`tf.io.moveModel('localstorage://model-1', 'localstorage://model-2')`

* 2. Moving between two storage mediums, e.g.,
*    `tf.io.moveModel('localstorage://model-1', 'indexeddb://model-1')`
*
* ```js
* // First create and save
* 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()));
* await tf.io.moveModel('localstorage://demo/management/model1');
* // Move the model, from Local Storage to IndexedDB.
* await tf.io.moveModel('localstorage://demo/management/model1');
* await tf.io.moveModel('indexeddb://demo/management/model1');
* // List models again.
* console.log(JSON.stringify(await tf.io.listModels()));
* ```
*
* @param sourceURL Source URL of moving.
* @param destURL Destination URL of moving.
* @returns ModelArtifactsInfo of the copied model
* @throws Error if moving fails, e.g., if no model exists at
*    `sourceURL`, or fn * if `oldPath` and `newPath` are identical.
* fn * @param sourceURL Source URL of moving.
* fn * @param destURL Destination URL of moving.
* fn * @returns ModelArtifactsInfo of the copied model
* fn * @throws Error if moving fails, e.g., if no model exists at
* fn *    `sourceURL`, or fn * if `oldPath` and `newPath` are identical.
* fn *
* ```js
* // First create and save
* 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()));
* await tf.io.moveModel('localstorage://demo/management/model1');
* ```
*
* @param sourceURL Source URL of moving.
* @param destURL Destination URL of moving.
* @returns ModelArtifactsInfo of the copied model
* @throws Error if moving fails, e.g., if no model exists at
*    `sourceURL`, or fn * if `oldPath` and `newPath` are identical.
* fn */
```
object so it can be stubbed by Jasmine.\nexport const getNodeFetch = {\n  // tslint:disable-next-line:no-require-imports\n  importFetch: () => require('node-fetch')\n};\n\n\nexport const FetchFn = {\n  // tslint:disable-next-line:no-require-imports\n  importFetch: () => require('node-fetch')\n};\n\n\ntype FetchFn = (url: string, init?: RequestInit) => Promise<Response>\n\nlet systemFetch: FetchFn;\n\n\nfunction resetSystemFetch() {\n  systemFetch = null;\n}\n\nfunction setSystemFetch(fetchFn: FetchFn) {\n  systemFetch = fetchFn;\n}\n\nfunction getSystemFetch(): FetchFn {\n  return systemFetch;\n}\n\n\n\nexport class PlatformNode implements Platform {\n  private textEncoder: TextEncoder;\n  \n  constructor() {\n    \n  }\n\n  \n  fetch(path: string, requestInits?: RequestInit): Promise<Response> {\n    if (env().global.fetch != null) {\n      return env().global.fetch(path, requestInits);\n    }\n    \n    if (systemFetch == null) {\n      systemFetch = getNodeFetch.importFetch();\n    }\n    return systemFetch(path, requestInits);\n  }\n\n  \n  now(): number {\n    const time = process.hrtime();\n    return time[0] * 1000 + time[1] / 1000000;\n}\n\n  \n  encode(text: string, encoding: string): Uint8Array {\n    if (encoding !== 'utf-8' & encoding !== 'utf8') {\n      throw new Error(\n          `Node built-in encoder only supports utf-8, but got ${encoding}`);\n    }\n    return this.textEncoder.encode(text);\n  }\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\nif (env().get('IS_NODE')) {\n  env().setPlatform('node', new PlatformNode());\n}\n
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 * limitations under the License.
 */

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
 * `dtype`.
 *
 * The values are stored in CPU as `TypedArray`. Fill the buffer using `buffer.set()`,
 * or by modifying directly `buffer.values`. When done, call `buffer.destroy()` to get
 * an immutable `tf.Tensor`.
 *
 * ```js
 * // Create a buffer with shape [2, 3] and value [1, 2, 3, 4, 5, 6].
 * const buffer = tf.buffer([2, 3]);\n * buffer.set(0, 0, 1);
 * buffer.set(1, 0, 2);
 * buffer.set(0, 1, 3);
 * buffer.set(1, 1, 4);
 * buffer.set(0, 2, 5);
 * buffer.set(1, 2, 6);
 * ```
 *
 * @param shape An array of integers defining the output tensor shape.
 * @param dtype The data type of the buffer. For tensors:
 * `tf.float32` or `tf.float64`.
 * For indices: `tf.int64`.
 * @param values The values of the buffer as `TypedArray`
 * Defaults to all zeros.
 *
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
export function buffer<R extends Rank, D extends DataType = 'float32'>(shape: ShapeMap[R], dtype: D, values?: TensorLike): TensorBuffer<R, D> {\n  return new TensorBuffer<R, D>(shape, dtype, values, values);\n}
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}`);
  }
  if (dtype === 'string' && $x.dtype !== 'string' || dtype !== 'string' && $x.dtype === 'string') {
    throw new Error('Only strings can be casted to strings');
  }
  const inputs: CastInputs = {x: $x};
  const attrs: CastAttrs = {dtype};
  return ENGINE.runKernel(
    Cast,
    inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap);
}

export const cast = op({cast_});

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, return ENGINE.runKernel(Identity, inputs as {} as NamedTensorMap);
  return ENGINE.runKernel(Identity, inputs as {} as NamedTensorMap);
}

export const clone = op({clone_});
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`//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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 */

/**
 * IOHandlers related to files, such as browser-triggered file downloads, user-selected files in browser.
 */

import '../flags';
import {env} from '../environment';

import {basename, 
concatenateArrayBuffers, getModelArtifactsInfoForJSON} from './io_utils';
import {IORouter, IORouterRegistry} 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);
}

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')) {
      // TODO(cais): Provide info on what IOHandlers are available under the current environment
      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,
        modelTopologyAndWeightManifest: weightsManifestConfig([
          {paths: ['.' + this.weightDataFileName], weights: modelArtifacts.weightSpecs}])
      };
      const
      modelTopologyAndWeightManifestURL = window.URL.createObjectURL(new Blob([JSON.stringify(modelTopologyAndWeightManifest)]));

      // If anchor elements are not provided, create them without attaching them to parents, so that the downloaded file names can be controlled.
      const jsonAnchor = this.jsonAnchor ?? document.createElement('a');
      jsonAnchor.href = modelTopologyAndWeightManifestURL
      // Trigger downloads by evoking a click event on the download
```
// When multiple downloads are started synchronously, Firefox will only
// save the last one.
await defer(() => jsonAnchor.dispatchEvent(new MouseEvent('click')));

if (modelArtifacts.weightData != null) {
  const weightDataAnchor = this.weightDataAnchor == null ?
    document.createElement('a') : this.weightDataAnchor;
  weightDataAnchor.href = weightsURL;
  await defer(() => weightDataAnchor.download = weightsFileName);
  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, ` +
        `but received ${files}`);
    }
    this.files = files;
  }

  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) => {
        // tslint:disable-next-line:no-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}`));
        }

        if (weightFiles.length === 0) {
          resolve({ modelTopology });
        }

        const weightsManifest = modelJSON.weightsManifest;
        if (weightsManifest == null) {
          reject(new Error(`weightManifest field is missing from file ${jsonFile.name}`));
        }

        let pathToFile: { [path: string]: File };
        try {
          pathToFile = this.checkManifestAndWeightFiles(weightsManifest, weightFiles);
        } catch (err) {
          reject(err);
        }

        const weightSpecs: WeightsManifestEntry[] = [];
        const paths: string[] = [];
        const perFileBuffers: ArrayBuffer[] = [];
        weightsManifest.forEach(weightsGroup => {
          weightsGroup.paths.forEach(path => {
            paths.push(path);
            perFileBuffers.push(null);
          });
          weightSpecs.push(...weightsGroup.weights);
        });

        weightsManifest.forEach(weightsGroup => {
          weightsGroup.paths.forEach(path => {
            const weightFileReader = new FileReader();
            weightFileReader.onload = (event: Event) => {
              // tslint:disable-next-line:no-any
              const weightData = (event.target as any).result as ArrayBuffer;
              const index = paths.indexOf(path);
              perFileBuffers[index] = weightData;
              if (perFileBuffers.indexOf(null) === -1) {
                const result: ModelArtifacts = {
                  modelTopology,
                  weightSpecs,
                  weightData: concatenateArrayBuffers(perFileBuffers),
                  format: modelJSON.format,
                  generatedBy: modelJSON.generatedBy,
                  convertedBy: modelJSON.convertedBy
                };
                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);
    });
  }

  /**
   * Check the compatibility between weights manifest and
   * weight files.
   */
  private checkManifestAndWeightFiles(
    manifest: WeightsManifestConfig, files: File[]): { [path: string]: File } {
    const basenames: string[] = [];
    const fileNames = files.map(file =>
      basename(file.name));
    const pathToFile: { [path: string]: File } = {};
    for (const group of manifest) {
      group.paths.forEach(path => {
        const pathBasename = basename(path);
        if (basenames.indexOf(pathBasename) !== -1) {
          throw new Error(`Duplicate file basename found in
          weights manifest: '${path}'.`);
        }
        basenames.push(pathBasename);
        if (fileNames.indexOf(pathBasename) === -1) {
          throw new Error(`Weight file with basename
          '${pathBasename}' is not provided.`);
        }
      });
    }
    return pathToFile;
  }

  /**
   * Concatenate an arbitrary number of ArrayBuffer objects.
   */
  private concatenateArrayBuffers(arrayBuffers: ArrayBuffer[]) {
    return Buffer.concat(arrayBuffers);
files[fileName.indexOf(pathBasename)];
    
    if (basenames.length !== files.length) {
      throw new Error(`Mismatch in the number of files in weights manifest ${files.length} and the number of weight files provided ${basenames.length}.`);
    }
}

export const browserDownloadsRouter: IORouter = (url: string|string[]) => {
  if (!env().getBool('IS_BROWSER')) {
    return null;
  } else {
    if (!Array.isArray(url) && url.startsWith(BrowserDownloads.URL_SCHEME)) {
      return browserDownloads(url.slice(BrowserDownloads.URL_SCHEME.length));
    } else {
      return null;
    }
  }
}

IORouterRegistry.registerSaveRouter(browserDownloadsRouter);

/**
 * 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.
 *
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 * methods such as `tf.Model.save` and supports only saving.
 * The returned `IOHandler` instance can be used as model exporting
 * methods such as `tf.Model.save` and supports only saving.
 */
export function browserDownloads(fileNamePrefix: string = 'model'): IOHandler {
  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.
 * When used in conjunction with `tf.loadLayersModel`, an instance of `tf.LayersModel` (Keras-style) can
 * be constructed from the loaded artifacts.
 * The function supports only loading from files that contain
 * Keras-style models (i.e., `tf.Model`s), for
 * which an `Array` of `File`s is expected (in that order):
 * - A JSON file containing the model topology and weight manifest.
 * - Optionally, one or more binary files containing the binary weights.
 * These files must have names that match the paths in the `weightsManifest` contained by
 * the aforementioned JSON file, or errors will be thrown during loading. These weights files have the same
 * format as the ones generated by `tensorflowjs_converter` that comes with the `tensorflowjs` Python PIP
 * package. If no weights files are provided, only the model topology will be loaded from the JSON file above.
 * @returns An instance of `Files` `IOHandler`.
 */
export function browserFiles(files: File[]): IOHandler {
  return new BrowserFiles(files);
}

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 */

import {assert} from '../util';

import {OnProgressCallback} from './types';

/**
 * Monitor Promise.all
 */

export const browserDownloadsRouter: IORouter = (url: string|string[]) => {
  if (!env().getBool('IS_BROWSER')) {
    return null;
  } else {
    if (!Array.isArray(url) && url.startsWith(BrowserDownloads.URL_SCHEME)) {
      return browserDownloads(url.slice(BrowserDownloads.URL_SCHEME.length));
    } else {
      return null;
    }
  }
}

IORouterRegistry.registerSaveRouter(browserDownloadsRouter);

/**
 * 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.
 *
 * Creates an IOHandler that triggers file downloads from the browser.
 */
export function browserDownloads(fileNamePrefix: string = 'model'): IOHandler {
  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.
 * When used in conjunction with `tf.loadLayersModel`, an instance of `tf.LayersModel` (Keras-style) can
 * be constructed from the loaded artifacts.
 * The function supports only loading from files that contain
 * Keras-style models (i.e., `tf.Model`s), for
 * which an `Array` of `File`s is expected (in that order):
 * - A JSON file containing the model topology and weight manifest.
 * - Optionally, one or more binary files containing the binary weights.
 * These files must have names that match the paths in the `weightsManifest` contained by
 * the aforementioned JSON file, or errors will be thrown during loading. These weights files have the same
 * format as the ones generated by `tensorflowjs_converter` that comes with the `tensorflowjs` Python PIP
 * package. If no weights files are provided, only the model topology will be loaded from the JSON file above.
 * @returns An instance of `Files` `IOHandler`.
 */
export function browserFiles(files: File[]): IOHandler {
  return new BrowserFiles(files);
}
```javascript
/**
 * @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;
  let resolvedPromise = 0;
  const registerMonitor = (promise: Promise<{}>) => {
    promise.then(value => {
      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 non empty array');
  }

  function checkFraction(startFraction: number, endFraction: 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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 * limitations under the License.
 *
 *=============================================================================
 */

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 that resolves to 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 promises = promises.map(
      promise => promise.then(value => {
        const fraction = fetchStartFraction +
            ++resolvedPromise / promises.length *
            (fetchEndFraction - fetchStartFraction);
        // pass fraction as parameter to callback function.
        onProgress(fraction);
        return value;
      }));

  return Promise.all(promises.map(checkPromises));
}

/**
 * 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.
 *     Defaults to the empty string.
 * @returns A promise that resolves to an Array of `NamedTensorMap`.
 */
export async function loadWeights(
    manifest: WeightsManifestConfig,
    filePathPrefix: string = '') {
  const promises = promises.map(
      promise => promise.then(value => {
        const fraction = fetchStartFraction +
            ++resolvedPromise / promises.length *
            (fetchEndFraction - fetchStartFraction);
        // pass fraction as parameter to callback function.
        onProgress(fraction);
        return value;
      }));

  return Promise.all(promises.map(checkPromises));
}
```

filePathPrefix = '',
    weightNames?: string[],
    requestInit?: RequestInit): Promise<NamedTensorMap> {
  // Note: Groups are currently fetched atomically. If you need a single weight from a group, the whole
group will be fetched. At a future date, we should support fetching only the individual shards within a
group that are needed to reconstruct the requested weight.

  const fetchWeights = weightsLoaderFactory(fetchWeights);

  return loadWeights(manifest,

        filePathPrefix, weightNames);
}

/**
 * Creates a function, which reads a weights manifest JSON
 * configuration, fetches the weights using the specified function and returns them as an object.
 *
 * ```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[]): Promise<ArrayBuffer> =>
 *     Promise.all(filePaths.map((filePath) => fs.readFileSync(filePath).buffer));
 *
 * const loadWeights = tf.io.weightsLoaderFactory(fetchWeightsFromDisk);
 *
 * const manifest = JSON.parse(fs.readFileSync('./my_model-weights_manifest'));
 * const weightMap = await loadWeights(manifest);
 * ```
 * @param fetchWeightsFunction The function used for fetching the weight files.
 * @returns Weight loading function.
 */
export function weightsLoaderFactory(
    fetchWeightsFunction: (fetchUrls: string[]) => Promise<ArrayBuffer[]>)
    : (manifest: WeightsManifestConfig,
       filePathPrefix?: string,
       weightNames?: string[]) => Promise<NamedTensorMap> {
  return async (manifest, filePathPrefix = '',
               weightNames?: string[]): Promise<NamedTensorMap> => {
    // Collect all the groups, weights, and their relative offsets to be fetched.
    const groupIndicesToFetchMap = manifest.map(() => false);
    const groupWeightsToFetch: {
        [group: number]: Array<{
            manifestEntry: WeightsManifestEntry; groupOffset: number;
            sizeBytes: number;
        }>
    } = {};
    const weightsFound = weightNames != null ? weightNames.map(() => false)
        : [];
    const allManifestWeightNames = manifest.map((manifestGroupConfig, groupIndex) =>
        manifestGroupConfig.weights.map(weightsEntry => weightsEntry.name)).
    let groupOffset = 0;
    manifest.forEach((manifestGroupConfig, groupIndex) => {
      manifestGroupConfig.weights.forEach(weightsEntry => {
        const rawDtype = weightsEntry.dtype;

        const weightsBytes = DTYPE_VALUE_SIZE_MAP[rawDtype] *
            util.sizeFromShape(weightsEntry.shape);

        const enqueueWeightsForFetchingFn = () => {
            groupIndicesToFetchMap[groupIndex] = true;
            if (groupWeightsToFetch[groupIndex] == null) {
              groupWeightsToFetch[groupIndex] = [];
            }

            groupWeightsToFetch[groupIndex].push({
              manifestEntry: weightsEntry,
              groupOffset,
              sizeBytes: weightsBytes
            });
        };

        if (weightNames != null) {
          weightNames.forEach((weightName, weightIndex) => {
            if (weightName === weightsEntry.name) {
              enqueueWeightsForFetchingFn();
              weightsFound[weightIndex] = true;
            }
          });
        } else {
          enqueueWeightsForFetchingFn();
        }

        allManifestWeightNames.push(weightsEntry.name);
        groupOffset += weightsBytes;
      });
    });

    if (!weightsFound.every((found) => found)) {
      const weightsNotFound = weightsNames.filter((_, i) => !weightsFound[i]);

      throw new Error(`Could not find weights in manifest with names: ` +
          `{${weightsNotFound.join(', ')}.` +
          `Manifest JSON has weights with names: ` +
          `{${allManifestWeightNames.join(', ')}.` +
          `// Convert the one-hot boolean groupId => shouldFetch map to a list of group ID` +
          `// IDs.`
      )
    }

    for (let i = 0; i < manifest.length; i++) {
      const manifestEntry = manifest[i].weights;

      if (manifestEntry.length === 0) {
        continue;
      }

      const bufferIndexOffset = 0;
      const manifestBuffer = new ArrayBuffer(manifest[i].length);
      const numBuffers = manifest[i].length;
      const buffers = Array(numBuffers);

      for (let i = 0; i < numBuffers; i++) {
        buffers[i] = new ArrayBuffer(manifest[i].byteLength);
      }

      // Create a buffer for the whole group.
      const groupBuffer = new ArrayBuffer(groupByBytes);
      const groupBytes = 0;
      const groupByteBuffer = new Uint8Array(groupBuffer);
      const

      // Collect all the groups, weights, and their relative offsets to be fetched.
    });
    const groupWeightsToFetch: {
        [group: number]: Array<{
            manifestEntry: WeightsManifestEntry; groupOffset: number;
            sizeBytes: number;
        }>
    } = {};
    const weightsFound = weightNames != null ? weightNames.map(() => false)
        : [];
    const allManifestWeightNames = manifest.map((manifestGroupConfig, groupIndex) =>
        manifestGroupConfig.weights.map(weightsEntry => weightsEntry.name)).
    let groupOffset = 0;
    manifest.forEach((manifestGroupConfig, groupIndex) => {
      manifestGroupConfig.weights.forEach(weightsEntry => {
        const rawDtype = weightsEntry.dtype;

        const weightsBytes = DTYPE_VALUE_SIZE_MAP[rawDtype] *
            util.sizeFromShape(weightsEntry.shape);

        const enqueueWeightsForFetchingFn = () => {
            groupIndicesToFetchMap[groupIndex] = true;
            if (groupWeightsToFetch[groupIndex] == null) {
              groupWeightsToFetch[groupIndex] = [];
            }

            groupWeightsToFetch[groupIndex].push({
              manifestEntry: weightsEntry,
              groupOffset,
              sizeBytes: weightsBytes
            });
        };

        if (weightNames != null) {
          weightNames.forEach((weightName, weightIndex) => {
            if (weightName === weightsEntry.name) {
              enqueueWeightsForFetchingFn();
              weightsFound[weightIndex] = true;
            }
          });
        } else {
          enqueueWeightsForFetchingFn();
        }

        allManifestWeightNames.push(weightsEntry.name);
        groupOffset += weightsBytes;
      });
    });

    if (!weightsFound.every((found) => found)) {
      const weightsNotFound = weightsNames.filter((_, i) =>
          !weightsFound[i]);

      throw new Error(`Could not find weights in manifest with names: ` +
          `{${weightsNotFound.join(', ')}.` +
          `Manifest JSON has weights with names: ` +
          `{${allManifestWeightNames.join(', ')}.` +
          `// Convert the one-hot boolean groupId => shouldFetch map to a list of group ID` +
          `// IDs.`
      )
    }

    for (let i = 0; i < manifest.length; i++) {
      const manifestEntry = manifest[i].weights;

      if (manifestEntry.length === 0) {
        continue;
      }

      const bufferIndexOffset = 0;
      const manifestBuffer = new ArrayBuffer(manifest[i].length);
      const numBuffers = manifest[i].length;
      const buffers = Array(numBuffers);

      for (let i = 0; i < numBuffers; i++) {
        buffers[i] = new ArrayBuffer(manifest[i].byteLength);
      }

      // Create a buffer for the whole group.
      const groupBuffer = new ArrayBuffer(groupByBytes);
      const groupBytes = 0;
      const groupByteBuffer = new Uint8Array(groupBuffer);
      const
groupBufferOffset = 0;
for (let i = 0; i < numBuffers; i++) {
  const buffer = new Uint8Array(buffers[bufferIndexOffset + i]);
  groupBufferOffset += buffer.byteLength;
}

const weightsEntries = groupWeightsToFetch[i];
for (const weightsEntry of weightsEntries) {
  const byteBuffer = weightsEntry.buffer.slice(0, weightsEntry.size);
  const nameToTensorMap = decodeWeights(byteBuffer, weightsEntry.manifest);
  for (const name in nameToTensorMap) {
    weightsTensorMap[name] = nameToTensorMap[name];
  }
}

bufferIndexOffset += numBuffers;
}

return weightsTensorMap;

/**
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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';

// General constants.
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.' +
        'fetch(see ' +
        'https://developer.mozilla.org/en-US/docs/Web/API/Fetch_API);\n
        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 || {};

    this.assert(path.length !== 2, () => 'URL path for http must not be null, undefined or ' +
      'empty.');

    if (Array.isArray(path)) {
      this.assert(path.length !== 2, () => 'URL paths for http must have a length of 2, ' +
        'and are not compatible with this request.');
    }

    // Must pass a function that matches the signature of fetch(see ' +
    this.fetch = loadOptions.fetchFunc;
  }

  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);

    const weightManifest: WeightsManifestConfig = [{}];

    const weights = modelArtifacts.weights;

    for (const weightsEntry of weightsEntries) {
      const byteBuffer = weightsEntry.buffer.slice(0, weightsEntry.size);
      const nameToTensorMap = decodeWeights(byteBuffer, weightsEntry.manifest);
      for (const name in nameToTensorMap) {
        weightsTensorMap[name] = nameToTensorMap[name];
      }
    }

    return weightsTensorMap;
  }
}
modelArtifacts.userDefinedMetadata;
 } if (modelArtifacts.modelInitializer != null) {
 modelTopologyAndWeightManifest=modelArtifacts.modelInitializer;
 }

init.body.append('model.json', new Blob(
  JSON.stringify(modelTopologyAndWeightManifest)), {type: JSON_TYPE});

if (modelArtifacts.weightData != null) {
  init.body.append('model.weights.bin', new
  Blob(modelArtifacts.weightData), {type: OCTET_STREAM_MIME_TYPE});
}

init.body.append('model.json', new Blob(
  JSON.stringify(modelArtifacts.modelInitializer), {type: JSON_TYPE}));

async load(): Promise<ModelArtifacts> {
  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 ' +
      response.status);
  }

  let modelConfig: ModelJSON;
  try {
    modelConfig = await modelConfigRequest.json();
  } catch (e) {
    let message = 'Failed to parse model JSON of response from ' +
      modelConfigRequest.status. Please verify this URL points to ' +
      'the model JSON of the model to load.: ' +
      this.fetch(this.path, this.requestInit);
  }

  if (modelConfig == null || modelConfig.weightsManifest == null) {
    throw new Error('The JSON from HTTP path ' +
      this.path + ' contains neither model topology or manifest for weights.');
  }

  const results = await this.loadWeights(weightsManifest);
  const weightSpecs = results[0], weightData = results[1];

  const artifacts: ModelArtifacts = {
    modelTopology,
    weightSpecs,
    weightData,
    generatedBy,
    convertedBy,
    format
  };

  if (signature != null) {
    artifacts.signature = signature;
  }
  if (userDefinedMetadata != null) {
    artifacts.userDefinedMetadata = userDefinedMetadata;
  }

  const initializer = modelConfig.modelInitializer;
  if (initializer) {
    artifacts.modelInitializer = initializer;
  }

  return artifacts;
}

private async loadWeights(weightsManifest: WeightsManifestEntry[]): Promise<[WeightsManifestEntry[], ArrayBuffer]> {
  const weightPath = ArrayBuffer;
  if (weightsManifest == null) {
    return await new Error('BrowserHTTPRequest.save() failed due to HTTP response status ' +
      response.status);
  }

  const results = await loadWeights(weightsManifest);[
    weightsSpecs, weightData = results;
  ]

  const weightSpecs: WeightsManifestEntry[] = [];
  if (weightSpecs == null) {
    throw new Error('The JSON from HTTP path ' +
      this.path + ' contains neither model topology or manifest for weights.');
  }

  const weightPath = ArrayBuffer;
  if (weightPath == null) {
    return await new Error('BrowserHTTPRequest.save() failed due to HTTP response status ' +
      response.status);
  }

  const weightSpecs = weightPath;[
    const [prefix, suffix] = parseUrl(weightPath);
  ]

  const prefix = weightPathPrefix;
  const weightSpecs = weightPathPrefix;

  const_buffers = await loadWeightsAsArrayBuffer(weightPath, {
    requestInit: this.requestInit,
    fetchFunc: this.fetch,
    onProgress: this.onProgress
  })

  return [weightSpecs, weightData];
}

function parseUrl(url) {
  return [prefix, suffix];
}

function loadWeightsAsArrayBuffer(url, options) {
  return new Promise<[ArrayBuffer, ArrayBuffer]>((resolve, reject) => {
    const urlPromises = ArrayPromise[string] = ArrayPromise[...options];
    for (const weightsGroup of weightsManifest) {
      const_buffers = await loadWeightsAsArrayBuffer(fetchURLs, {
        requestInit: this.requestInit,
        fetchFunc: this.fetch,
        onProgress: this.onProgress
      })
    }

    return [weightSpecs, weightData];
  });
}

function loadWeightsAsArrayBuffer(url, options) {
  return new Promise<[ArrayBuffer, ArrayBuffer]>((resolve, reject) => {
    const urlPromises = ArrayPromise[string] = ArrayPromise[...options];
    for (const weightsGroup of weightsManifest) {
      const_buffers = await loadWeightsAsArrayBuffer(fetchURLs, {
        requestInit: this.requestInit,
        fetchFunc: this.fetch,
        onProgress: this.onProgress
      })
    }

    return [weightSpecs, weightData];
  });
}
export function parseUrl(url: string): [string, string] {
  const lastSlash = url.lastIndexOf('/');
  const lastSearchParam = url.lastIndexOf('?', lastSlash);
  const suffix = lastSearchParam > lastSlash ? url.substring(lastSearchParam) : '';
  return [url.substring(0, lastSlash) + '/', suffix];
}

export function isHTTPScheme(url: string): boolean {
  return url.match(HTTPRequest.URL_SCHEME_REGEX) != null;
}

export function httpRouter: IORouter =
    (url: string, loadOptions?: LoadOptions) => {
      if (typeof fetch === 'undefined' &&
          (loadOptions == null || loadOptions.fetchFunc == null)) {
        // `http` uses `fetch` or `node-fetch`, if one wants to use it in
        // an environment that is not the browser or node they have to
        // setup a
        return null;
      } else {
        let isHTTP = true;
        if (Array.isArray(url)) {
          isHTTP = url.every(urlItem => isHTTPScheme(urlItem));
        } else {
          isHTTP = isHTTPScheme(url);
        }
        if (isHTTP) {
          return http(url, loadOptions);
        }
      }
      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 `*` blobs (files) exist in the form-data:
 * - `modelTopology` and `weightsManifest`. In the case of Keras-style `tf.Model`, two
 *   `*` blobs (files) exist in the 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) on `*` The following code snippet
 *     exemplifies the client-side code that uses this `*` function:
 *     `*` const model = tf. sequential();
 *     `*` tf.layers.dense({ units: 1, inputShape: [100], activation: 'sigmoid' });
 *     `*` model.save(tf.io.http(`*` 'http://localhost:8000/upload', `*` {requestInit: {method: 'PUT'}}));
 *     `*` const saveResult = await model.save('http://localhost:8000/upload');
 *     `*` The following Github Gist
 * to receive the request. Upon receiving the model artifacts via the
 * the request, this particular server reconsitutes instances of 
 * [Keras `*` Models](https://keras.io/models/model/) in
 * memory.on `*` Can be an absolute HTTP URL (e.g., `*` http://localhost:8000/model-upload) or a relative path (e.g., `*` ./model-upload). `*` @param requestInit
 * Request configurations to be used when sending HTTP request to server using `*` fetch`. It can contain fields
 * such as `*` method`, `*` credentials`, `*` headers`, `*` mode`, etc. See `*` https://developer.mozilla.org/en-US/docs/Web/API/Request/Request
 * for more information. `*` requestInit must not have a body, because the
 * body will be set by TensorFlow.js. File blobs representing the model's topology (filename: `*` model.json) and
 * the weights of the model (filename: `*` model.weights.bin) will be appended to the body. If `*` requestInit has an
 * `*` body`, an Error will be thrown.
 * @param requestInit 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 on the server.
 * - `*` fetchFunc Optional, custom `*` fetch` function. E.g., in Node.js, the
 * - `*` fetch` from node-fetch can be used here.
 * - `*` onProgress Optional, progress callback function, fired
 * periodically before the load is completed.
 * - `*` @returns An instance of `*` IOHandler`.
 * @param requestInit 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 on the server.
 * - `*` fetchFunc Optional, custom `*` fetch` function. E.g., in Node.js, the
 * - `*` fetch` from node-fetch can be used here.
 * - `*` onProgress Optional, progress callback function, fired
 * periodically before the load is completed.
 * - `*` @returns An instance of `*` IOHandler`.
 * @param requestInit 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 on the server.
 * - `*` fetchFunc Optional, custom `*` fetch` function. E.g., in Node.js, the
 * - `*` fetch` from node-fetch can be used here.
 * - `*` onProgress Optional, progress callback function, fired
 * periodically before the load is completed.
 * - `*` @returns An instance of `*` IOHandler`.
 * @param requestInit 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 on the server.
 * - `*` fetchFunc Optional, custom `*` fetch` function. E.g., in Node.js, the
 * - `*` fetch` from node-fetch can be used here.
 * - `*` onProgress Optional, progress callback function, fired
 * periodically before the load is completed.
 * - `*` @returns An instance of `*` IOHandler`.
 * @param requestInit 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 on the server.
 * - `*` fetchFunc Optional, custom `*` fetch` function. E.g., in Node.js, the
 * - `*` fetch` from node-fetch can be used here.
 * - `*` onProgress Optional, progress callback function, fired
 * periodically before the load is completed.
 * - `*` @returns An instance of `*` IOHandler`.
 * @param requestInit 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 on the server.
 * - `*` fetchFunc Optional, custom `*` fetch` function. E.g., in Node.js, the
 * - `*` fetch` from node-fetch can be used here.
 * - `*` onProgress Optional, progress callback function, fired
 * periodically before the load is completed.
 * - `*` @returns An instance of `*` IOHandler`.
 * @param requestInit 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 on the server.
 * - `*` fetchFunc Optional, custom `*` fetch` function. E.g., in Node.js, the
 * - `*` fetch` from node-fetch can be used here.
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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): Promise<SaveResult> {
    return this.saveHandler(modelArtifacts);
  }
}

/**
 * Creates an IOHandler that loads model artifacts from memory.
 *
 * When used in conjunction with `tf.loadLayersModel`, an instance of a `tf.LayersModel` (Keras-style) can be constructed from the loaded artifacts.
 *
 * ```js
 * const model = await tf.loadLayersModel(tf.io.fromMemory(modelArtifacts));
 * ```
 *
 * @param modelArtifacts a object containing model topology (i.e., parsed from the JSON format).
 * @param weightSpecs An array of `WeightsManifestEntry` objects describing the model's names, shapes, types, and quantization of the weight data.
 * @param weightData A single `ArrayBuffer` containing the weight data, concatenated in the order described by the weightSpecs.
 * @param trainingConfig Model training configuration. Optional.
 * @returns A passthrough `IOHandler` that simply loads the provided data.
 */
export function fromMemory(modelArtifacts: {}|ModelArtifacts, weightSpecs?: WeightsManifestEntry[], weightData?: ArrayBuffer, trainingConfig?: TrainingConfig): IOHandler {
  if (arguments.length === 1) {
    const isModelArtifacts = (modelArtifacts as ModelArtifacts).modelTopology != null || (modelArtifacts as ModelArtifacts).weightSpecs != null; if (isModelArtifacts) {
      return new PassthroughLoader(modelArtifacts as ModelArtifacts);
    } else {
      // Legacy support: with only modelTopology. // TODO(cais): Remove this deprecated API.
      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.);
      return new PassthroughLoader({modelTopology: modelArtifacts as {}});
    } else {
      // Legacy support. // TODO(cais): Remove this deprecated API.
      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.);
      return new PassthroughLoader({modelTopology: modelArtifacts as {}}, weightSpecs, weightData, trainingConfig as {});}
}

/**
 * Creates an IOHandler that passes saved model artifacts to a callback.
 *
 * ```js
 * function handleSave(artifacts) {
 *   // ... do something with the artifacts ...
 *   return {modelArtifactsInfo: {...}, ...};
 * }
 *
 * const saveResult = model.save(tf.io.withSaveHandler(handleSave));
 * ```
 *
 * @param saveHandler A function that accepts a `ModelArtifacts` and returns a
 *     `SaveResult`.
 */
export function withSaveHandler(saveHandler: (artifacts: ModelArtifacts) =>
        Promise<SaveResult>): IOHandler {
  return new PassthroughSaver(saveHandler);
}

// Importing local_storage and indexed_db is necessary for the routers to be registered.

import './indexed_db';
import './local_storage';
import browserFiles from './browser_files'

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```javascript
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';

export {copyModel, listModels, moveModel, removeModel} from './model_management';
export {
  browserFiles,
  browserHTTPRequest,
  concatenateArrayBuffers,
  decodeWeights,
  encodeWeights,
  fromMemory,
  getLoadHandlers,
  getModelArtifactsInfoForJSON,
  getSaveHandlers,
  http,
  IOHandler,
  isHTTPScheme,
  IOHandler,
  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 '../tensor_types';
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.
 *
 * ```js
 * const a = tf.tensor2d([1, 2], [1, 2]);
 * const b = tf.tensor2d([1, 2, 3, 4], [2, 2]);
 *
 * a.matMul(b).print();
 * ```
 * @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');
  let [sa, sb] = makeTypesMatch(a, b);
  const inputs: BatchMatMulInputs = {a: sa, b: sb};
  const attrs: BatchMatMulAttrs = {transposeA, transposeB};
  return ENGINE.runKernel(BatchMatMul, inputs as {}, attrs as {});
}

export const matMul = op({matMul_});

/**
 * Creates a one-hot `tf.Tensor`. The locations represented by `indices`
 * take `onValue` (defaults to 1), while all other locations take `offValue`
 * (defaults to 0). If `indices` is rank `R`, the output has rank `R+1` with the last axis of size `depth`.
 * @param indices The indices to create a one-hot tensor from.
 * @param onValue The value to use at indices.
 * @param offValue The value to use elsewhere.
 * @param axis The axis along which to create the one-hot tensor.
 * @doc {heading: 'Operations', subheading: 'Matrices'}
 */
function oneHot_<T extends Tensor>(indices: Tensor|TensorLike, onValue: number, offValue: number, axis: number): T {
  let indices = convertToTensor(indices, 'indices', 'oneHot');
  let onValue = tf.tensor(onValue);
  let offValue = tf.tensor(offValue);
  let depth = indices.shape[axis];
  let bs = offValue.shape.length;
  let [indices, onValue, offValue] = makeTypesMatch(indices, onValue, offValue);
  let inputs: OneHotInputs = {indices, onValue, offValue};
  let attrs: OneHotAttrs = {axis};
  return ENGINE.runKernel(OneHot, inputs as {}, attrs as {});
}

export const oneHot = op({oneHot_});
```

tf.oneHot(tf.tensor1d([0, 1], 'int32'), 3).print();

const a = tf.tensor2d([[1, 2, 3, 4, 5, 6], [2, 3]], [2, 3]);
const out = tf.math.confusionMatrix(a, predictions, numClasses);

const labels = tf.tensor1d([0, 1, 2, 1, 0], 'int32');
const predictions = tf.tensor1d([0, 2, 2, 1, 0], 'int32');
const numClasses = 3;

const confusionMatrix = tf.math.confusionMatrix(labels, predictions, numClasses);

confusionMatrix.print();
Expected output matrix:

```
\[
\begin{bmatrix}
2 & 0 & 0 \\
0 & 1 & 1 \\
0 & 0 & 1 \\
\end{bmatrix}
\]
```

```javascript

### confusionMatrix

```javascript
export function confusionMatrix_(
    labels: Tensor1D|TensorLike,
    predictions: Tensor1D|TensorLike,
    numClasses: number): Tensor2D {
  const $labels = convertToTensor(labels, 'labels',
      'confusionMatrix');
  const $predictions =
      convertToTensor(predictions, 'predictions', 'confusionMatrix');

  util.assert(
      numClasses == null || numClasses > 0 && Number.isInteger(numClasses),
      () => `If provided, numClasses must be a positive integer, ` +
          `but got ${numClasses}`);
  util.assert(
      $labels.rank ===
          1,
      () => `Expected the rank of labels to be 1, but got ${$labels.rank}`);
  util.assert(
      $predictions.rank
          === 1,
      () => `Expected the rank of predictions to be 1, ` +
          `but got ${$predictions.rank}`);
  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');
}
```

```javascript
export const confusionMatrix = op({confusionMatrix_});
```
TensorLike3D: shape?: [number, number, number],\n    dtype?: DataType): Tensor3D {\n  assertNonNull(values);
  if (shape != null & & shape.length !== 3) {\n    throw new Error('tensor3d() requires shape to have three numbers');\n  }\n  const inferredShape = inferShape(values, dtype);\n  if (inferredShape.length !== 3 & & inferredShape.length !== 1) {\n    throw new Error('tensor3d() requires values to be number[[]][[]] or flat/TypedArray');\n  }\n  if (inferredShape.length !== 1 & & shape == null) {\n    throw new Error('tensor3d() requires shape to be provided when `values` are a flat array');\n  }\n  function makeTensor(values, shape, inferredShape, dtype) as Tensor3D

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 */

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
 * supported image types are all 4-channel. You can also pass in an image
 * object with
 * following attributes:
 * `{data: Uint8Array; width: number; height: number}`
 * @param numChannels The
 * number of channels of the output tensor. A numChannels value less than 4 allows you to ignore channels.
 * Defaults to 3 (ignores alpha channel of input image).
 * @param dtype\n
 * @doc {heading: 'Browser', namespace: 'browser',
 * ignoreCI: true}
 */
function fromPixels_(
    pixels:\n        PixelData|ImageData|HTMLImageElement|HTMLCanvasElement|HTMLVideoElement|ImageBitmap,\n    numChannels = 3): Tensor3D {
  // Sanity checks.
  if (numChannels > 4) {\n    throw new Error('Cannot
    construct Tensor with more than 4 channels from pixels.');\n  }\n  if (pixels == null) {\n    throw new Error('pixels
    passed to tf.browser.fromPixels() can not be null');\n  }\n  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' \n      && pixels instanceof ImageData) {
    isImageData = true;
  } else if ((pixels as
      HTMLImageElement).data instanceof Uint8Array) {
    isImageData = true;
  } else if (\n      typeof (HTMLVideoElement) !== 'undefined' \n      && pixels instanceof HTMLVideoElement) {
    isVideo = true;
  } else if ((pixels as any).getContext != null) {\n    isCanvasLike = true;
  } else if (\n      typeof (ImageBitmap) !== 'undefined' \n      && pixels instanceof ImageBitmap) {
    isImageBitmap = true;
  } else {\n    throw new Error('pixels
    passed to tf.browser.fromPixels() cannot be null');\n  }\n  if (isVideo) {
    const HAVE_CURRENT_DATA_READY_STATE = 2;
    if (isVideo & & pixels
      as HTMLVideoElement).readyState !== HAVE_CURRENT_DATA_READY_STATE) {\n      throw new Error('The video element has not loaded data yet. Please wait '
        +
        'for the `loadeddata` event on the
        <video> element');\n    }\n  }\n  if (isImageData) {\n    const kernel = getKernel(FromPixels, ENGINE.backendName);
    if (kernel != null) {\n      const inputs: FromPixelsInputs = {pixels};\n      const attrs: FromPixelsAttrs =

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return ENGINE.runKernel(fromPixels, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap)

const [width, height] = isVideo ? (pixels as HTMLVideoElement).videoWidth : (pixels as HTMLImageElement).naturalWidth;

let vals: Uint8ClampedArray | Uint8Array = 
  isCanvasLike ? 
    
    (pixels as any).getContext('2d').getImageData(0, 0, width, height).data as any 
  : 
  isImageData || isPixelData ? 
    
    (pixels as ImageData | PixelData).data as any 
  : 
  isImage || isVideo ? 
    
    namedImageMap.get('data') as any 
  : null

let depth = 1;

if (depth === 1) {
  throw new Error('Unsupported type for toPixels. Use float32 or int32 tensors.');
}

const canvas = document.createElement('canvas');

const imageData = new ImageData(bytes, width, height);

ctx.putImageData(imageData, 0, 0);
software

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

*/

import {TensorInfo} from './kernel_registry';
import {computeStrides, sizeFromShape} from './util';

/**
* Validate gather nd inputs.
* @param tensor The tensor contains the source values.
* @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}.`);
    return [ [ ] ];
  }
  if (indicesRank < 1) { throw new Error(`tf.gatherND() expects the indices to be rank 1 or higher, ` + `but the rank was ${indicesRank}.`);
    return [ [ ] ];
  }
  if (indices.dtype !== 'int32') { throw new Error(`tf.gatherND() expects the indices to be int32 type, ` + `but the dtype was ${indices.dtype}.`);
    return [ [ ] ];
  }

  const indicesShape = indices.shape.slice();
  const sliceRank = indicesShape[indicesShape.length - 1];
  const inputShape = tensor.shape;

  let nResult = 1;
  for (let i = 0; i < indicesShape.length - 1; ++i) {
    nResult *= indicesShape[i];
  }

  let sliceSize = 1;
  for (let i = sliceRank; i < tensorRank; ++i) {
    sliceSize *= inputShape[i];
    const strides =

```typescript
  [ ...computeStrides(inputShape).map(stride => stride / sliceSize),
   1].slice(0, sliceRank);

  return
```

```typescript
  [resultShape, nResult, sliceSize, strides];
}

export interface ScatterShapeInfo {
```
sliceRank: number;
numUpdates: number;
sliceSize: number;
strides: number[];
outputSize:
number[];

/* Validate scatter nd inputs */
@param update The tensor contains the update values.
@param shape The shape of the output tensor.

export function validateInput(
    updates: Tensor, indices: Tensor, shape: number[]);

if (indices.rank < 1) {
  throw new Error('tf.scatterND() expects the indices to be rank 1 or higher, ' +
    'but the rank was ${indices.rank}');
  return;
}
if (update.rank < 1) {
  throw new Error('tf.scatterND() expects the updates to be rank 1 or higher, ' +
    'but the rank was ${update.rank}');
  return;
}
if (indices.dtype !== 'int32') {
  throw new Error('The dtype of indices should be int32, but got dtype: ${
    indices.dtype}');
}
if (shape.length < 1) {
  throw new Error('tf.scatterND() Output rank must be greater or equal to 1, but got shape: ' +
    '{$(shape)}');
  return;
}
if (shape.length === 0) {
  if (indices.size === 0) {
    throw new Error('Indices specified for empty output. indices shape: ' +
      '{$(indices.shape)}');
  }
  if (updates.size === 0) {
    throw new Error('Updates specified for empty output. updates shape: ' +
      '{$(updates.shape)}');
  }
}
validateUpdateShape(shape, indices, updates);
}

/**
 * Calculate the shape information for the output.
 * @param updates TensorInfo
 * @param indices TensorInfo
 * @param shape number[]
 * @returns ScatterShapeInfo
 */
export function calculateShapes(
    updates: TensorInfo, indices: TensorInfo,
    shape: number[]): ScatterShapeInfo {
  // Calculate the number of dimensions in indices
  const indicesRank = indices.shape.length;
  const sliceRank = (indicesRank > 1) ? indices.shape[indicesRank - 1] : 1;

  // Calculate the number of elements that make up each slice of our updated tensor
  const totalNd = shape.length;
  let sliceSize = 1;
  for (let i = sliceRank; i < totalNd; ++i) {
    sliceSize *= shape[i];
  }
  const safeSliceDim = (sliceRank < 1) ? 1 : sliceRank;
  const numUpdates = sizeFromShape(indices.shape) / safeSliceDim;

  // Slices are 1
  const strides = [...computeStrides(shape.slice(0, sliceRank)), 1];
  const outputSize = sizeFromShape(shape);
  return {sliceRank, numUpdates, sliceSize, strides, outputSize};
}

/** Converts a binary mask to an array of axes. Used in stridedSlice(). */
export function maskToAxes(mask: number): number[] {
  const axes = [];
  let axis = 0;
  while (mask > 0) {
    if (mask & 1) {
      axes.push(axis);
    }
    mask /= 2;
    axis++;
  }
  return axes;
}

/** Computes the output shape given the strided slice params. */
export function stridesWithElidedDims(
    strides: number[], ellipsisInsertionIndex: number,
```javascript
numElidedAxes: number,
inputShape: number[]): number[] {
  const newStrides = [...strides];
  for (let i = numStrides.length; i < inputShape.length; i++) {
    newStrides.push(1);
  }
  for (let i = numElidedAxes; i < numStrides.length; i++) {
    if (i === 0) {
      newStrides[ellipsisInsertionIndex] = 1;
    } else {
      newStrides.splice(ellipsisInsertionIndex, 0 /* num elements to delete */);
      if (i > 1) {
        newStrides.pop();
      }
    }
  }
  return newStrides;
}

function unnormalizeAxis(ellipsisInsertionIndex: number, numElidedAxes: number, normalizedAxis: number): number {
  if (normalizedAxis <= ellipsisInsertionIndex) {
    return normalizedAxis;
  }
  return normalizedAxis - (numElidedAxes - 1);
}

function getElidedAxes(numElidedAxes: number, ellipsisInsertionIndex: number) {
  const elidedAxes = [
    ...getElidedAxes(normalizedAxis: number, inputShape: number[])
  ];

  return elidedAxes;
}

// Normalize the start, end and strides.

export function getNormalizedAxes(
  inputShape: number[], ellipsisAxes: number[],
  numInterpolatedAxes: number, begin: number[], end: number[], strides: number[], beginMask: number,
  endMask: number,
  ellipsisMask: number): {
  begin: number[],
  end: number[],
  strides: number[]
} {
  const inputRank = inputShape.length;
  let normalizedBegin = new Array(inputRank),
      normalizedEnd = new Array(inputRank),
      normalizedStrides = 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.
    const numElidedAxes = numInterpolatedAxes + 1;
    normalizedBegin = startIndicesWithElidedDims(beginMask, fullIndex, numElidedAxes, begin,
        inputShape);
    normalizedEnd = stopIndicesWithElidedDims(endMask, fullIndex, numElidedAxes, end,
        inputShape);
    normalizedStrides = stridesWithElidedDims(strides, fullIndex, numElidedAxes, inputShape);
  } else {
    for (let axis = 0; axis < inputRank; axis++) {
      normalizedBegin[axis] = startForAxis(beginMask, begin, strides, inputShape, axis, ellipsisMask);
      normalizedEnd[axis] = stopForAxis(endMask, end, strides, inputShape, 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 the ellipsis mask, override the current start value. Otherwise, insert.

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. Otherwise, insert.

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++) {
    const originalAxis = unnormalizeAxis(ellipsisInsertionIndex, numElidedAxes, axis);
    let originalValue = originalEnd[originalAxis];
    if (endMask & 1 << originalAxis) {
      originalValue = 0;
    }
    newIndices[axis] = originalValue;
  }
  for (let i = 0; i < newIndices.length; i++) {
    // Handle negative indices
    const axisSize = inputShape[i];
    if (newIndices[i] > newIndices[i]) {
      newIndices[i] = util.clamp(0, newIndices[i], inputShape[i]);
      return newIndices;
    }
  }
  return newIndices;
}

export function stridesForAxis(strides: number[], axis: number): number {
  return strides[axis];
}
```

masked axes, or the begin index is not set\n // for the axis.\n if (beginMask & 1 << axis || ellipsisMask & 1 << axis
|| start == null) {\n if (stride > 0) {\n
// Forward iteration - use the first element. These values will get\n
//
clamped below (Note: We could have set them to 0 and axis_size-1, but\n
// use lowest() and max() to maintain
symmetry with StopForAxis())\n
start = Number.MIN_SAFE_INTEGER;\n } else {\n
// Backward iteration
- use the last element.\n
start = Number.MAX_SAFE_INTEGER;\n }\n }\n\n // Handle negative indices\n
const axisSize = inputShape[axis];\n if (start < 0) {\n start += axisSize;\n }\n\n // Clamping\n start =
util.clamp(0, start, axisSize - 1);\n\n return start;\n}\n\nexport function stopForAxis(\n endMask: number,
stopIndices: number[], strides: number[],\n inputShape: number[], axis: number, ellipsisMask: number): number
{\n // Begin with the specified index\n let stop = stopIndices[axis];\n const stride = strides[axis] || 1;\n\n // Check
the axis bit from right of masked axes, or if the stop index is not\n // set for this axis.\n if (endMask & (1 << axis) ||
ellipsisMask & (1 << axis) || stop == null) {\n if (stride > 0) {\n
// Forward iteration - use the last element.
These values will get\n
// clamped below\n
stop = Number.MAX_SAFE_INTEGER;\n } else {\n
//
Backward iteration - use the first element.\n
stop = Number.MIN_SAFE_INTEGER;\n }\n }\n\n // Handle
negative indices\n const axisSize = inputShape[axis];\n if (stop < 0) {\n stop += axisSize;\n }\n\n // Clamping\n
// Because the end index points one past the last element, we need slightly\n // different clamping ranges depending
on the direction.\n if (stride > 0) {\n // Forward iteration\n stop = util.clamp(0, stop, axisSize);\n } else {\n //
Backward iteration\n stop = util.clamp(-1, stop, axisSize - 1);\n }\n\n return stop;\n}\n\n/**\n * Returns true if the
slice occupies a continous set of elements in the\n * 'flat' space.\n */\nexport function isSliceContinous(\n shape:
number[], begin: number[], size: number[]) {\n // Index of the first axis that has size > 1.\n let firstNonOneAxis =
size.length;\n for (let i = 0; i < size.length; i++) {\n if (size[i] > 1) {\n
firstNonOneAxis = i;\n
break;\n }\n
}\n\n for (let i = firstNonOneAxis + 1; i < size.length; i++) {\n if (begin[i] > 0 || size[i] !== shape[i]) {\n
return
false;\n }\n }\n return true;\n}\n\nexport function computeFlatOffset(begin: number[], strides: number[]): number
{\n let flatOffset = begin.length > 0 ? begin[begin.length - 1] : 1;\n for (let i = 0; i < begin.length - 1; i++) {\n
flatOffset += begin[i] * strides[i];\n }\n return flatOffset;\n}\n\nexport function parseSliceParams(\n x:
TensorInfo, begin: number|number[], size?: number|number[]) {\n // The following logic allows for more
ergonomic calls.\n let begin_: number[];\n const xRank = x.shape.length;\n if (typeof begin === 'number') {\n
begin_ = [begin, ...new Array(xRank - 1).fill(0)];\n } else if (begin.length < xRank) {\n begin_ =
begin.concat(new Array(xRank - begin.length).fill(0));\n } else {\n begin_ = begin.slice();\n }\n
begin_.forEach(d => {\n util.assert(\n
d !== -1, () => 'slice() does not support negative begin indexing.');\n
});\n let size_: number[];\n if (size == null) {\n size_ = new Array(xRank).fill(-1);\n } else if (typeof size ===
'number') {\n size_ = [size, ...new Array(xRank - 1).fill(-1)];\n } else if (size.length < xRank) {\n size_ =
size.concat(new Array(xRank - size.length).fill(-1));\n } else {\n size_ = size;\n }\n size_ = size_.map((d, i) =>
{\n if (d >= 0) {\n
return d;\n } else {\n
util.assert(\n
d === -1,\n
() => `Negative size values
should be exactly -1 but got ` +\n
`${d} for the slice() size at index ${i}.`);\n
return x.shape[i] begin_[i];\n }\n });\n return [begin_, size_];\n}\n\nexport function sliceInfo(\n xShape: number[], begin:
number[], end: number[], strides: number[],\n beginMask: number, endMask: number, ellipsisMask: number,\n
newAxisMask: number, shrinkAxisMask: number): SliceInfo {\n // make a copy because it may be modified further
down.\n let $begin = begin.slice();\n let $end = end.slice();\n let $strides = strides;\n\n if (strides == null) {\n
$strides = new Array($begin.length);\n }\n\n const ellipsisAxes = maskToAxes(ellipsisMask);\n if
(ellipsisAxes.length > 1) {\n throw new Error('Multiple ellipses in slice is not allowed.');\n }\n\n if (ellipsisMask
!== 0 && newAxisMask !== 0) {\n throw new Error(\n
'Using both ellipsisMask and newAxisMask is not yet
supported.');\n }\n\n if (ellipsisMask !== 0 && shrinkAxisMask !== 0) {\n throw new Error(\n
'Using both
ellipsisMask and shrinkAxisMask is not yet supported.');\n }\n\n const numInterpolatedAxes = xShape.length $begin.length;\n\n // Expand the dims of x based on the newAxisMask.\n const expandAxes =
maskToAxes(newAxisMask);\n const newShape = xShape.slice();\n expandAxes.forEach(axis => {\n
$begin[axis] = 0;\n $end[axis] = 1;\n newShape.splice(axis, 0, 1);\n });\n\n const {\n begin:
normalizedBegin,\n end: normalizedEnd,\n strides: normalizedStrides\n } =\n
getNormalizedAxes(\n
newShape, ellipsisAxes, numInterpolatedAxes, $begin, $end, $strides,\n
beginMask, endMask,

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Internally ConfigDict's use camelCase keys and values where the * values are class names to be instantiated. On the python side, these * will be snake_case. Internally we allow Enums into the values for better * type safety, but these need to be converted to raw primitives (usually * strings) for round-tripping with python. * toConfig returns the TS-friendly representation.  model.toJSON() returns * the pythonic version as that's the portable format. If you need to * python-ify a non-model level toConfig output, you'll need to use * convertTSToPythonic from serialization_utils in -Layers. * * /n * 

### Import Asserts

```javascript
import {assert} from './util';
```

### Types to Support JSON-esque Data Structures Internally

```javascript
export declare type ConfigDictValue = boolean | number | string | null | ConfigDictArray | ConfigDict;
```

### Interface ConfigDict

```javascript
export declare interface ConfigDict {
  [key: string]: ConfigDictValue;
}
```

### Interface ConfigDictArray

```javascript
export declare interface ConfigDictArray extends Array<ConfigDictValue> {}
```

### Type to Represent the Class-type of Serializable Objects

```javascript
export declare type SerializableConstructor<T extends Serializable> = {
  // tslint:disable-next-line:no-any
  new (...args: any[]): T; className: string; fromConfig: FromConfigMethod<T>;
};
```

### From Config Method

```javascript
export declare type FromConfigMethod<T extends Serializable> = (cls: SerializableConstructor<T>, config: ConfigDict) => T;
```

### Serializable Interface

```javascript
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
   * would have returned. However, the class name needs to be robust
   * against minification for serialization/deserialization to work properly. *
   * There's also places such as initializers.VarianceScaling, where enum
   * implementation details between different languages led to different
   * class hierarchies and a non-leaf node is used for serialization purposes.
   */
  getClassName(): string {
    return (this.constructor as
               SerializableConstructor<Serializable>)
        .className;
  }

  /**
   * Return all the non-weight state needed to serialize this object.
   */
  get() {
    return this.constructor as
               SerializableConstructor<Serializable>.
  }

  /**
   * Return the class name of the class type that this
   * class is instantiated from.
   */
  getClass(): string {
    return this.constructor as
               SerializableConstructor<Serializable>.
  }

  /**
   * Create an instance of T from a ConfigDict.
   *
   * This works for most descendants of Serializable. A few need to provide
   * special handling.
   */
  @param cls
  fromConfigMethod<T extends Serializable>(cls: SerializableConstructor<T>, config: ConfigDict): T {
    return new cls(config);
  }
}
```

### Serialization Map

```javascript
export class SerializationMap {
  private static instance: SerializationMap;
  classNameMap: {
    [className: string]:
        [SerializableConstructor<Serializable>, FromConfigMethod<Serializable>]
  };

  private constructor() {
    this.classNameMap = {};
  }

  static getMap(): SerializationMap {
    if (SerializationMap.instance == null) {
      SerializationMap.instance
```

---

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following properties:

- `numBytes`: Number of bytes allocated (undisposed) at this time.
- `numDataBuffers`: Number of unique data buffers allocated (undisposed) at this time, which is the number of tensors (e.g. `a.reshape(newShape)` makes a new Tensor that shares the same data buffer with `a`).
- `numTensors`: True if the memory usage is unreliable. See 'reasons' when `unreliable` is true.
- `reasons`: `string[]`, reasons why the memory is unreliable, present if `unreliable` is true.
- `webGLProperties`: Number of bytes allocated (undisposed) in the GPU only at this time.
- `exportFunctionMemoryInfo`: `MemoryInfo` that executes the provided function `f()` and returns a promise that resolves with information about the function's memory use: `newBytes` and `newTensors`.

### WebGL Properties
- `numBytesInGPU`: Number of bytes allocated (undisposed) in the GPU only at this time.

```javascript
export function memory(): MemoryInfo {
  return ENGINE.memory();
}
```

### Profile
- `newBytes`: the number of new bytes allocated at the exit of `f()`.
- `newTensors`: the peak number of bytes allocated at the exit of `f()`.

```javascript
export function profile(f: () => (TensorContainer | Promise<TensorContainer>)):
  Promise<ProfileInfo> {
    return ENGINE.profile(f);
}
```

### Dispose
- `dispose(container: TensorContainer)`: Disposes any `tf.Tensor`s found within the provided object.

```javascript
export function dispose(container: TensorContainer) {
  const tensors = getTensorsInContainer(container);
  tensors.forEach(tensor => tensor.dispose());
}
```

### Keep
- `keep(result: T extends Tensor)`: Keeps a `tf.Tensor` generated inside a `tf.tidy` from being disposed automatically.

```javascript
export function keep<T extends Tensor>(result: T): T {
  return ENGINE.keep(result);
}
```

### Tidy
- `tidy(nameOrFn: string|ScopeFn<T>, fn?: ScopeFn<T>): T`: Provides a `tf.Tensor` found within the provided object.

```javascript
export function tidy<T extends TensorContainer>(
  nameOrFn: string|ScopeFn<T>, fn?: ScopeFn<T>): T {
  return ENGINE.tidy(nameOrFn, fn);
}
```

### Export
- `exportFunctionMemoryInfo`: `MemoryInfo` that executes the provided function `f()` and returns a promise that resolves with information about the function's memory use: `newBytes` and `newTensors`.

```javascript
export function memory(): MemoryInfo {
  return ENGINE.memory();
}
```
The result is an object with the following properties:

- `wallMs`: Wall execution time.
- `kernelMs`: Kernel execution time, ignoring data transfer. If using the `webgl` backend and the query timer extension is not available, this will return an error object.
- `on 'WebGL'`: The following additional properties exist:
  - `uploadWaitMs`: CPU blocking time on texture uploads.
  - `downloadWaitMs`: CPU blocking time on texture downloads.

```js
const x = tf.randomNormal([20, 20]);
const time = await tf.time(() => x.matMul(x));
```

```js
console.log(`kernelMs: ${time.kernelMs}, wallTimeMs: ${time.wallMs}`);
```

@doc {heading: 'Performance', subheading: 'Timing'}

```js
export function time(f: () => void): Promise<TimingInfo> {
  return ENGINE.time(f);
}
```

```js
export function setBackend(backendName: string): Promise<boolean> {
  return ENGINE.setBackend(backendName);
}
```

```js
export function ready(): Promise<void> {
  return ENGINE.ready();
}
```

```js
export function getBackend(): string {
  return ENGINE.backendName;
}
```

```js
export function removeBackend(name: string): void {
  ENGINE.removeBackend(name);
}
```

```js
export function findBackend(name: string): KernelBackend {
  return ENGINE.findBackend(name);
}
```

```js
export function findBackendFactory(name: string): () => KernelBackend | Promise<KernelBackend> {
  return ENGINE.findBackendFactory(name);
}
```

```js
export function registerBackend(name: string, factory: () => KernelBackend | Promise<KernelBackend>, priority = 1): boolean {
  return ENGINE.registerBackend(name, factory, priority);
}
```

```js
export function backend(): KernelBackend {
  return ENGINE.backend;
}
```

```js
export function setPlatform(platformName: string, platform: Platform) {
  env().setPlatform(platformName, platform);
}
```

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```javascript
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 {op} from './operation';

/**
 * Adds two `tf.Tensor`'s element-wise, A + B. Supports broadcasting.
 *
 * ```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)
 * ```
 * @param a The first `tf.Tensor`.
 * @param b The second `tf.Tensor`.
 * @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');

  const inputs: AddInputs = {a: $a, b: $b};

  return ENGINE.runKernel(Add, inputs as {} as NamedTensorMap);
}

export const add = op({add_});
```

```javascript
import {ENGINE} from '../engine';
import {FloorDiv, FloorDivInputs} 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';

/**
 * Divides two `tf.Tensor`'s element-wise, A / B. Supports broadcasting.
 * The result is rounded with floor function.
 *
 * ```js
 * const a = tf.tensor1d([1, 4, 9, 16]);
 * const b = tf.tensor1d([1, 2, 3, 4]);
 * a.floorDiv(b).print();  // or tf.floorDiv(a, b)
 * ```
 * @param a The first tensor as the numerator.
 * @param b The second tensor as the denominator.
 * @doc {heading: 'Operations', subheading: 'Arithmetic'}
 */
function floorDiv_<T extends Tensor>(a: Tensor|TensorLike, b: Tensor|TensorLike): T {
  let $a = convertToTensor(a, 'a', 'floorDiv');
  let $b = convertToTensor(b, 'b', 'floorDiv');

  const inputs: FloorDivInputs = {a: $a, b: $b};

  return ENGINE.runKernel(FloorDiv, inputs as {} as NamedTensorMap);
}

export const floorDiv = op({floorDiv_});
```

```javascript
import {ENGINE} from '../engine';
import {RealDiv, RealDivInputs} 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 {floorDiv} from './floorDiv';
import {op} from './operation';

/**
 * Divides two `tf.Tensor`'s element-wise, A / B. Supports broadcasting.
 * The result is rounded with floor function.
 *
 * ```js
 * const a = tf.tensor1d([1, 4, 9, 16]);
 * const b = tf.tensor1d([1, 2, 3, 4]);
 * a.div(b).print();  // or tf.div(a, b)
 * ```
 * @param a The first tensor as the numerator.
 * @param b The second tensor as the denominator.
 * @doc {heading: 'Operations', subheading: 'Arithmetic'}
 */
function div_<T extends Tensor>(a: Tensor|TensorLike, b: Tensor|TensorLike): T {
  let $a = convertToTensor(a, 'a', 'realDiv');
  let $b = convertToTensor(b, 'b', 'realDiv');

  const inputs: RealDivInputs = {a: $a, b: $b};

  return ENGINE.runKernel(RealDiv, inputs as {} as NamedTensorMap);
}

export const div = op({div_});
```
@doc {heading: 'Operations', subheading: 'Arithmetic'}

```typescript
function div_<T extends Tensor>(a: Tensor|TensorLike, b: Tensor|TensorLike): T {
  let $a = convertToTensor(a, 'a', 'div');
  let $b = convertToTensor(b, 'b', 'div');
  [ $a, $b ] = makeTypesMatch($a, $b);
  if ($a.dtype === 'int32' && $b.dtype === 'int32') {
    return floorDiv($a, $b);
  }
  const inputs: RealDivInputs = {a: $a, b: $b};
  const attrs = {};
  return ENGINE.runKernel(RealDiv, inputs as {} as NamedTensorMap, attrs) as T;
}

export const div = op({div_});
```

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 */

```typescript
import {ENGINE} from './engine';
import {Multiply, MultiplyInputs} from './kernel_names';
import {Tensor} from './tensor';
import {NamedTensorMap} from './tensor_types';
import {convertToTensor} from './tensor_util';
import {op} from './operation';

function mul_<T extends Tensor>(a: T|TensorLike, b: T|TensorLike): T {
  const $a = convertToTensor(a, 'a', 'mul');
  const $b = convertToTensor(b, 'b', 'mul');
  [ $a, $b ] = makeTypesMatch($a, $b);
  const inputs: MultiplyInputs = {a: $a, b: $b};
  return ENGINE.runKernel(Multiply, inputs as {} as NamedTensorMap);
}

export const mul = op({mul_});
```

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 */

```typescript
import {ENGINE} from './engine';
import {Abs, AbsInputs, ComplexAbs, ComplexAbsInputs} from './kernel_names';
import {Tensor} from './tensor';
import {NamedTensorMap} from './tensor_types';

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, attrs) as T;
  } else {
    const inputs: AbsInputs = {x: $x};
    return ENGINE.runKernel(Abs, inputs as {} as NamedTensorMap, attrs) as T;
  }
}

export const abs = op({abs_});
```

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```javascript
import {ENGINE} from '../engine';
import {Acos, AcosInputs} 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 acos of the input `tf.Tensor` element-wise: `acos(x)`
 *
 * ```js
 * const x = tf.tensor1d([0, 1, -1, 0.7]);
 *
 * x.acos().print();  // or tf.acos(x)
 * ```
 * @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_});
```

---

```javascript
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)`
 *
 * ```js
 * const x = tf.tensor1d([10, 1, 3, 5.7]);
 *
 * x.acosh().print();  // or tf.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_});
```

---

```javascript
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.
 *
 * ```js
 * const a = tf.tensor1d([1, 2]);
 * const b = tf.tensor1d([3, 4]);
 * const c = tf.tensor1d([5, 6]);
 *
 * tf.addN([a, b, c]).print();
 * ```
 * @param tensors A list of tensors with the same shape and dtype.
 * @doc {heading: '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];
  $tensors.forEach(t => {
    if (t.dtype !== firstTensor.dtype) {
      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_});
```
```javascript
import {ENGINE} from '../engine';
import {All, AllAttrs, AllInputs} 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 logical and 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. `tf.all` returns `true` if all elements along `axes` are `true`; otherwise it returns `false`. The `tf.all` operation is equivalent to tensorflow.all.
 *
 * ```js
 * const x = tf.tensor([true, false, true, true]);
 *
 * x.all().print(); // or tf.all(x)
 * ```
 *
 * @param x The input tensor. Must be of dtype bool.
 * @param axis The dimension(s) to reduce. By default it reduces all dimensions.
 * @param keepDims If true, retains reduced dimensions.
 *
 * @doc {heading: 'Operations', subheading: 'Reduction'}
 */
function all_<T extends Tensor>(
    x: Tensor|TensorLike, axis: number|number[] = null, keepDims = false): T {
  const $x = convertToTensor(x, 'x', 'all', 'bool');

  const inputs: AllInputs = {x: $x};
  const attrs: AllAttrs = {axis, keepDims};

  return ENGINE.runKernel(
      All, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap);
}

export const all = op({all_});
```
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*/

import {ENGINE} from '../engine';
import {ArgMax, ArgMaxAttrs, ArgMaxInputs} 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 indices of the maximum values along an `axis`. *
 * The result has the same shape as `input` with the dimension along `axis` removed.
 * * `axn * `jn * const x = tf.tensor1d([1, 2, 3]);axn * x.argMax().print(); // or tf.argmax(x)axn * `jn *
 * * `jn * const x = tf.tensor2d([1, 2, 3, 2, 2]);axn * @param axis The dimension to reduce. Defaults to 0 (outer-most dimension).
 * * `jn *
 * * `jn * @param x The input tensor.
 * * @param axis The dimension to reduce. Defaults to 0 (outer-most dimension).
 * * `jn *
 * * `jn *
 * * `jn * @doc {heading: 'Operations', subheading: 'Reduction'}
 */
function argMax_<T extends Tensor>(x: Tensor|TensorLike, axis = 0): T {
  const $x = convertToTensor(x, 'x', 'argMax');

  const inputs: ArgMaxInputs = {x: $x};
  const attrs: ArgMaxAttrs = {axis};

  return ENGINE.runKernel(
    ArgMax, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap);
}

export const argMax = op({argMax_});

*/

import {ENGINE} from '../engine';
import {Asin, AsinInputs} 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
asinh of the input `tf.Tensor` element-wise: `asinh(x)`

```js
const x = tf.tensor1d([0, 1, -1, .7]);
x.asinh().print(); // or tf.asinh(x)
```

* inverse hyperbolic sin of the input `tf.Tensor` element-wise:

```js
const x = tf.tensor1d([0, 1, -1, .7]);
x.asinh().print(); // or tf.asinh(x)
```

* atan of the input `tf.Tensor` element-wise:

```js
const x = tf.tensor1d([0, 1, -1, .7]);
x.atan().print(); // or tf.atan(x)
```

* atan2 of `tf.Tensor`s a / b element-wise:

```js
const a = tf.tensor1d([1.0, 1.0, -1.0, .7]);
const b = tf.tensor1d([2.0, 13.0, 3.5, .21]);
tf.atan2(a, b).print()
```

* atan of the input `tf.Tensor` element-wise:

```js
const x = tf.tensor1d([0, 1, -1, .7]);
x.atan().print(); // or tf.atan(x)
```

* atan2 of `tf.Tensor`s a / b element-wise:

```js
const a = tf.tensor1d([1.0, 1.0, -1.0, .7]);
const b = tf.tensor1d([2.0, 13.0, 3.5, .21]);
tf.atan2(a, b).print()
```
Must have the same dtype as `a`; 

```
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
export function computeDilation2DInfo(
    inputShape: [number, number, number, number],
    filterShape: [number, number, number, number],
    strides: number[],
    pad: 'same'|'valid'|number,
    dataFormat: 'NHWC' = 'NHWC',
    dilations: number[])

/**
 * Computes the information for a forward pass of a pooling3D operation.
 */
export function computeConv2DInfo(
    inShape: [number, number, number, number],
    filterShape: [number, number, number, number],
    strides: number[],
    pad: 'same'|'valid'|number,
    dataFormat: 'channelsFirst'|'channelsLast' = 'channelsLast')

/**
 * Computes the information for a forward pass of a convolution/pooling
 * operation.
 */
export function computeConv3DInfo(
    inShape: [number, number, number, number, number],
    filterShape: [number, number, number, number, number],
    strides: number[],
    pad: 'same'|'valid'|number,
    dataFormat: 'NDHWC'|'NCDHW' = 'NDHWC')
```

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```javascript
/**
 * Information about the forward pass of a 3D convolution/pooling operation.
 * It includes input and output shape, strides, filter size and padding.
 */
export type Conv3DInfo = {
  batchSize: number,
  inDepth: number,
  inHeight: number,
  inWidth: number,
  inChannels: number,
  outDepth: number,
  outHeight: number,
  outWidth: number,
  outChannels: number,
  inDataFormat: 'channelsFirst'|'channelsLast',
  strideDepth: number,
  strideHeight: number,
  strideWidth: number,
  dilationDepth: number,
  dilationHeight: number,
  dilationWidth: number,
  filterDepth: number,
  filterHeight: number,
  filterWidth: number,
  effectiveFilterDepth: number,
  effectiveFilterHeight: number,
  effectiveFilterWidth: number,
  padInfo: PadInfo3D,
  inShape: [number, number, number, number, number],
  outShape: [number, number, number, number, number],
  filterShape: [number, number, number, number, number],
  strides: number[],
  dilations: number[],
  padding: number,
  dataFormat: 'channelsFirst'|'channelsLast',
  roundingMode: 'floor'|'round'|'ceil',
}

/**
 * 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[],
  dilations: number|number[],
  padding: number|
  'same'|'valid',
  depthwise = false,
  dataFormat: 'channelsFirst'|'channelsLast' = 'channelsLast',
  roundingMode?: 'floor'|'round'|'ceil'): Conv3DInfo {
  let [batchSize, inDepth, inHeight,
     inWidth, inChannels] = [-1, -1, -1, -1, -1];
  if (dataFormat === 'channelsLast') {
    [batchSize, inDepth,
     inHeight, inWidth, inChannels] = inShape;
  } else if (dataFormat === 'channelsFirst') {
    [batchSize, inChannels, inDepth, inHeight, inWidth] = inShape;
  } else {
    throw new Error(`Unknown dataFormat ${dataFormat}`);
  }

  const [filterDepth, filterHeight, filterWidth, , filterChannels] = filterShape;
  const [strideDepth, strideHeight, strideWidth] = parse3TupleParam(strides);
  const [dilationDepth, dilationHeight, dilationWidth] =
      parse3TupleParam(dilations);

  const effectiveFilterDepth =
      getEffectiveFilterSize(filterDepth, dilationDepth);
  const effectiveFilterHeight =
      getEffectiveFilterSize(filterHeight, dilationHeight);
  const effectiveFilterWidth =
      getEffectiveFilterSize(filterWidth, dilationWidth);

  const outShape: [number, number, number, number, number];
  if (dataFormat === 'channelsFirst') {
    outShape = [batchSize, outChannels, outHeight, outWidth];
  } else if (dataFormat === 'channelsLast') {
    outShape = [batchSize, outDepth, outHeight, outWidth, outChannels];
  } else {
    outShape = [batchSize, outChannels, outHeight, outWidth];
  }

  return {
    batchSize,
    dataFormat,
    inDepth,
    inHeight,
    inWidth,
    inChannels,
    outDepth,
    outHeight,
    outWidth,
    outChannels,
    outDataFormat: 'channelsFirst'|'channelsLast',
    strideDepth,
    strideHeight,
    strideWidth,
    dilationDepth,
    dilationHeight,
    dilationWidth,
    filterDepth,
    filterHeight,
    filterWidth,
    effectiveFilterDepth,
    effectiveFilterHeight,
    effectiveFilterWidth,
    padInfo: PadInfo3D,
    inShape: [number, number, number, number, number],
    outShape: [number, number, number, number, number],
    filterShape: [number, number, number, number, number],
    strides: number[],
    dilations: number[],
    padding: number,
    dataFormat: 'channelsFirst'|'channelsLast',
    roundingMode: 'floor'|'round'|'ceil');
}

function computeOutputShape2D(
    inShape: [number, number], fieldSize: number, stride: number,
    zeroPad?: number, roundingMode?: 'floor'|'round'|'ceil'): [number, number] {
  if (zeroPad == null) {
    zeroPad = computeDefaultPad(inShape, fieldSize, stride);
  }
  const inputRows = inShape[0];
  const inputCols = inShape[1];

  const outRows =
      round((inputRows - fieldSize + 2 * zeroPad) / stride + 1, roundingMode);

  const outCols =
      round((inputCols - fieldSize + 2 * zeroPad) / stride + 1, roundingMode);

  return [outRows, outCols];
}

function computeOutputShape4D(
    inShape: [number, number, number, number], fieldSize: number, stride: number,
    zeroPad?: number, roundingMode?: 'floor'|'round'|'ceil'): [number, number, number, number] {
  if (zeroPad == null) {
    zeroPad = computeDefaultPad(inShape, fieldSize, stride);
  }
  const inputRows = inShape[0];
  const inputCols = inShape[1];

  const outRows =
      round((inputRows - fieldSize + 2 * zeroPad) / stride + 1, roundingMode);

  const outCols =
      round((inputCols - fieldSize + 2 * zeroPad) / stride + 1, roundingMode);

  return [outRows, outCols];
}
```
round((inputCols - fieldSize + 2 * zeroPad) / stride + 1, roundingMode); return [outputDepths, outputRows, outputCols, outChannels]:

getEffectiveFilterSize(filterSize, dilation); return Math.floor((inputShape[0] * (stride - 1) - stride + effectiveFieldSize) / 2); function parseTupleParam(param: [number, number]): {number, number, number, number} {
  if (typeof param === 'number') {
    return [param, param, param, 1];
  } else if (param.length === 2) {
    return [param[0], param[1], 1];
  }
}

parse3TupleParam(param: [number, number, number]): [number, number, number] {
  return typeof param === 'number' ? [param, param, param] : param;
}

/* See https://www.tensorflow.org/api_docs/python/tf/nn/atrous_conv2d */
Atrous convolution is equivalent to standard convolution with upsampled filters with effective_filter_height = filter_height + (filter_height - 1) * (dilation - 1) * and effective_filter_width = filter_width + (filter_width - 1) * (dilation - 1) produced by inserting 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.

getEffectiveFilterSize(filterSize: number, dilation: number) {
  if (dilation <= 1) {
    return filterSize;
  }
  return filterSize + (filterSize - 1) * (dilation - 1);
}

getPadAndOutInfo(pad: 'same' | 'valid' | number | ExplicitPadding, inHeight: number, inWidth: number, strideHeight: number, strideWidth: number, roundingMode: 'floor' | 'round' | 'ceil', dataFormat: 'channelsFirst' | 'channelsLast'): {padInfo: PadInfo, outHeight: number, outWidth: number} {
  let padInfo: PadInfo;
  let outHeight: number;
  let outWidth: number;

  if (typeof pad === 'number') {
    const padType = (pad === 0) ? 'VALID' : 'NUMBER';
    padInfo = {top: pad, bottom: pad, left: pad, right: pad, type: padType};
    const outShape = computeOutputShape2D([inHeight, inWidth], filterHeight, strideHeight, pad, roundingMode);
    outHeight = outShape[0];
    outWidth = outShape[1];
  } else if (pad === 'same') {
    outHeight = Math.ceil(inHeight / strideHeight);
    outWidth = Math.ceil(inWidth / strideWidth);
    const padAlongHeight = Math.max(0, (outHeight - 1) * strideHeight - inHeight);
    const padAlongWidth = Math.max(0, (outWidth - 1) * strideWidth - inWidth);
    const top = Math.floor(padAlongHeight / 2);
    const bottom = padAlongHeight - top;
    const left = Math.floor(padAlongWidth / 2);
    const right = padAlongWidth - left;
    padInfo = {top, bottom, left, right, type: 'SAME'};
  } else if (pad === 'valid') {
    const top = Math.ceil(inHeight / strideHeight);
    const bottom = Math.ceil(inWidth / strideWidth);
    const right = dataFormat === 'channelsLast' ? pad[1][1] : pad[2][1];
    const left = dataFormat === 'channelsLast' ? pad[2][0] : pad[3][0];
    const right = dataFormat === 'channelsLast' ? pad[2][1] : pad[3][1];
    const padType = (top === 0 && bottom === 0 && left === 0 && right === 0) ? 'VALID' : 'NUMBER';
    padInfo = {top, bottom, left, right, type: padType};
    outHeight = Math.ceil(inHeight / strideHeight);
    outWidth = Math.ceil(inWidth / strideWidth);
  } else {
    throw Error(`Unknown padding parameter: ${pad}`);
  }
  return {padInfo, outHeight, outWidth};
}

get3DPadAndOutInfo(pad: 'same' | 'valid' | number, inDepth: number, inHeight: number, inWidth: number, strideDepth: number, strideHeight: number, strideWidth: number, roundingMode?: 'floor' | 'round' | 'ceil', dataFormat?: 'channelsFirst' | 'channelsLast'): {
  padInfo: PadInfo3D, outDepth: number, outHeight: number, outWidth: number} {
  let padInfo: PadInfo3D;
  let outDepth: number;
  let outHeight: number;
  let outWidth: number;

  if (typeof pad === 'number') {
    const padType = (pad === 0) ? 'VALID' : 'NUMBER';
    padInfo = {top: pad, bottom: pad, left: pad, right: pad, front: pad, back: pad, type: padType};
    const outShape = computeOutputShape4D([inDepth, inHeight, inWidth, 1], filterDepth, 1, strideDepth, pad, roundingMode);
    outDepth = outShape[0];
    outHeight = outShape[1];
    outWidth = Math.ceil(inDepth / strideDepth);
  } else if (pad === 'same') {
    const outShape = computeOutputShape4D([inDepth, inHeight, inWidth, 1], filterDepth, 1, strideDepth, pad, roundingMode);
    outDepth = outShape[0];
    outHeight = outShape[1];
    outWidth = Math.ceil(inDepth / strideDepth);
  } else {
    throw Error(`Unknown padding parameter: ${pad}`);
  }
  return {padInfo, outDepth, outHeight, outWidth};
}
let padAlongDepth = (outDepth - 1) * strideDepth + filterDepth - inDepth;
const padAlongHeight = (outHeight - 1) * strideHeight + filterHeight - inHeight;
const padAlongWidth = (outWidth - 1) * strideWidth + filterWidth - inWidth;
const front = Math.floor(padAlongDepth / strideDepth);
const back = padAlongDepth - front;
const top = Math.floor(padAlongHeight / strideHeight);
const bottom = padAlongHeight - top;
const left = Math.floor(padAlongWidth / strideWidth);
const right = padAlongWidth - left;

const padInfo = {top, bottom, left, right, front, back, type: 'SAME'};
else if (pad === 'valid') {
  padInfo = {
    top: 0,
    bottom: 0,
    left: 0,
    right: 0,
    front: 0,
    back: 0,
    type: 'VALID'
  };
  outDepth = Math.ceil((inDepth - filterDepth + 1) / strideDepth);
  outHeight = Math.ceil((inHeight - filterHeight + 1) / strideHeight);
  outWidth = Math.ceil((inWidth - filterWidth + 1) / strideWidth);
}
else {
  throw Error(`Unknown padding parameter: ${pad}`);
}
return {padInfo, outDepth, outHeight, outWidth};
}

/**
 * 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?: 'ceil'|'round'|'floor') {
  if (!roundingMode) {
    return Math.trunc(value);
  }
  switch (roundingMode) {
    case 'round':
      // used for Caffe Conv
      return Math.round(value);
    case 'ceil':
      // used for Caffe Pool
      return Math.ceil(value);
    case 'floor':
      return Math.floor(value);
    default:
      throw new Error(`Unknown roundingMode: ${roundingMode}`);
  }
}

export function tupleValuesAreOne(param: number|number[]): boolean {
  const [dimA, dimB, dimC] = parseTupleParam(param);
  return dimA === 1 && dimB === 1 && dimC === 1;
}

export function eitherStridesOrDilationsAreOne(
    strides: number|number[], dilations: number|number[]): boolean {
  return tupleValuesAreOne(strides) || tupleValuesAreOne(dilations);
}

/**
 * Convert Conv2D dataFormat from 'NHWC'|'NCHW' to 'channelsLast'|'channelsFirst'
 * @param dataFormat
 * @return dataFormat in 'channelsLast'|'channelsFirst' mode
 * @throws unknown dataFormat
 */
export function convertConv2DDataFormat(dataFormat: 'NHWC'|'NCHW'):
    'channelsLast'|'channelsFirst' {
  if (dataFormat === 'NHWC') {
    return 'channelsLast';
  } else if (dataFormat === 'NCHW') {
    return 'channelsFirst';
  } else {
    throw new Error(`Unknown dataFormat: ${dataFormat}`);
  }
}

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';

/**
 * Reshapes a `tf.Tensor` to a given shape.
 *
 * Given an input tensor, returns a new tensor with shape `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 A tf.Tensor to a given shape.
 * @return The input tensor to be reshaped.
 * @throws unknown dataFormat
 */
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: shape};

  return ENGINE.runKernel('Reshape', inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap);
}
export const reshape = op({reshape_});

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 */

/*
 * Import ENGINE from './engine';
 */
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 ENGINE from './engine';
 */
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```javascript
import {ENGINE} from './engine';
import {AvgPool, AvgPoolAttrs, AvgPoolInputs} 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 {cast} from './cast';
import * as conv_util from './conv_util';
import {op} from './operation';
import {reshape} from './reshape';

/**
 * Computes the 2D average pooling of an image.
 * @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 filterSize The filter size: [filterHeight, filterWidth]. If n * `filterSize` is a single number, then `filterHeight == filterWidth`. n * @param strides The strides of the pooling: [strideHeight, strideWidth]. If n * `strides` is a single number, then `strideHeight == strideWidth`. n * @param pad The type of padding algorithm:
 *    - `same` and stride 1: output will be of same size as input, n * regardless of filter size.
 *    - `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: 'ceil', 'round', 'floor'. If none is provided, it will default to truncate.
 * An 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');
 *   let x4D = $x as Tensor4D;
 *   let reshapedTo4D = false;
 *   if ($x.rank === 3) {
 *     reshapedTo4D = true;
 *     x4D = reshape($x, [1, $x.shape[0], $x.shape[1], $x.shape[2]]);
 *   }
 *   let util.assert($x.rank === 4,
 *     () => `Error in avgPool: x must be rank 4 but got rank ${x4D.rank}`);
 *   if (dimRoundingMode != null) {
 *     util.assert(
 *         util.isInt(pad as number),
 *         () => `Error in avgPool: pad must be an integer when using, ` +
 *             `dimRoundingMode ${dimRoundingMode} but got pad ${pad}.`);
 *   }
 *   let inputs: AvgPoolInputs = {x: x4D};
 *   let 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;
 *   let res = cast(res, $x.dtype);
 *   return res;
 * }
 * export const avgPool = op(avgPool_);
 */
```

---

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`<</cast>;\nimport {op} from `./operation`;\nimport {reshape} from `./reshape`;\n
/**
 * Computes the 3D average pooling.
 *
 * ```js
 * const x = tf.tensor5d([1, 2, 3, 4, 5, 6, 7, 8], [1, 2, 2, 2, 1]);
 * const result = tf.avgPool3d(x, 2, 1, 'valid');
 * result.result().print();
 * ```
 *
 * If `filterSize` is a single number, then `filterDepth == filterHeight == filterWidth`.
 * @param x The input tensor, of rank 5 or rank 4 of shape `[* batch, depth, height, width, inChannels]`.
 * @param filterSize The filter size: `[* filterDepth, filterHeight, filterWidth]`.
 * @param strides The strides of the pooling: `[* strideDepth, strideHeight, strideWidth]`.
 * If `strides` is a single number, then `strideDepth == strideHeight == strideWidth`.
 * @param pad The type of padding algorithm:
 * - `same`: output will be of same size as input, regardless of filter size.
 * - `valid`: output will be smaller than input if filter is larger.
 * - 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 avgPool3d_<T extends Tensor4D|Tensor5D>(
    x: T|TensorLike, filterSize: [number, number, number],
    strides: [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) {
    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 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, dimRoundingMode ${dimRoundingMode} 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_});

/**
 * Concatenates a list of `tf.Tensor`s along a given axis.
 *
 * The tensors ranks and types must match, and their sizes must match in all
 * dimensions except `axis`.
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 * limitations under the License.
 */
import {ENGINE} from '../engine';
import {Concat, ConcatAttrs, ConcatInputs} from
    '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {assert} from '../util';

import {clone} from './clone';
import {op} from './operation';

/**
 * Concatenates a list of `tf.Tensor`s along a given axis.
 *
 * The tensors ranks and types must match, and their sizes must match in all
 * dimensions except `axis`.
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 * OF ANY KIND, either express or implied. See the License for the specific language
 * governing permissions and limitations under the License.
 *=============================================================================
 */

const b = tf.tensor2d([[3, 4], [30, 40]]); const axis = 1; const tensors = [a, b]; axis.print();

const axis = 1; tf.concat([a, b], axis).print();

```
@doc {heading: 'Tensors', subheading: 'Slicing and Joining'}

function concat_<T extends Tensor>(tensors: Array<T|TensorLike>, axis = 0): T {
  assert(tensors.length >= 1, () => 'Pass at least one tensor to concat');

  const $tensors = convertToTensorArray(tensors, 'tensors', 'concat', 'string_or_numeric');
  if ($tensors.length === 1) {
    return clone($tensors[0]);
  }

  const inputs: ConcatInputs = $tensors;
  const attr: ConcatAttrs = {axis};

  return ENGINE.runKernel('Concat', inputs as {} as NamedTensorMap, attr as {} as NamedAttrMap);
}

export const concat = op({concat_});
```
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, attrs);
}

export const slice = op({slice});

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 * limitations under the License.
 */

import {ENGINE} from '../engine';
import {Tanh, TanhInputs} 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 hyperbolic tangent of the input `tf.Tensor` element-wise: `tanh(x)`
 *
 * ```js
 * const x = tf.tensor1d([0, 1, -1, 70]);
 *
 * x.tanh().print();  // or tf.tanh(x)
 * ```
 * @param x The input tensor.
 *
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function tanh_(x: Tensor|TensorLike): Tensor {
  const $x = convertToTensor(x, 'x', 'tanh');

  const inputs: TanhInputs = {x: $x};

  return ENGINE.runKernel(Tanh, inputs);
}
export const tanh = op({tanh});

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 */

import {Scalar, Tensor1D, Tensor2D} from '../tensor';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {add} from './add';
import {concat} from './concat';
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_<T extends Tensor>(
    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');
  const $lstmKernel = convertToTensor(lstmKernel, 'lstmKernel');
  const $lstmBias = convertToTensor(lstmBias, 'lstmBias');
  const $data = convertToTensor(data, 'data');
  const $c = convertToTensor(c, 'c', 'basicLSTMCell');
  const $h = convertToTensor(h, 'h', 'basicLSTMCell');
  const $combined = matMul(combined, $lstmKernel);
  const $res = Tensor2D.add($weighted, $lstmBias);
  const $input_gate = sigmoid($input_gate);
  const $output_gate = sigmoid($output_gate);
  const $newCell = $input_gate * $newCell + $output_gate * $prevCell;
  const $prevCell = $input_gate * $newCell + $output_gate * $prevCell;

  return [$newCell, $prevCell];
}

export const basicLSTMCell = op({basicLSTMCell});

---

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 */

import {ENGINE} from '../engine';
import {FusedBatchNorm, FusedBatchNormAttrs, FusedBatchNormInputs} from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor, Tensor1D, Tensor4D} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {Rank, TensorLike} from '../types';
import * as util from '../util';

import {xAs4D} from './batchnorm_util';
import {op} from './operation';
import {reshape} from './reshape';

/**
 * Batch normalization.
 *
 * As described in
 *
 * Mean, variance, scale, and offset can be of two shapes:
 * - The same shape as the input. This is the common case, the depth dimension is the last dimension of x, so
 *   the values would be an `tf.Tensor1D` of shape `[depth]`.
 * - If the input's rank is 4 or higher, then the values would be a
 * Also available are stricter rank-specific methods with the same signature:
 * - `tf.batchNorm2D` for 2D inputs
 * - `tf.batchNorm3D` for 3D inputs
 * - `tf.batchNorm4D` for 4D inputs
 *
 * @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.
 *
 * @doc {heading: 'Operations', subheading: 'Normalization'}
 */
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');
  const $scale = convertToTensor(scale, 'scale', 'batchNorm');
  const $offset = convertToTensor(offset, 'offset', 'batchNorm');
  const $x4D = xAs4D($x);
  const $inputs: FusedBatchNormInputs = {
    x: $x4D,
    scale: $scale,
    offset: $offset,
    mean: $mean,
    variance: $variance
  };
  const $attrs: FusedBatchNormAttrs = {varianceEpsilon};
  const $res = ENGINE.runKernel(
      FusedBatchNorm,
      $inputs as {} as NamedTensorMap,
      $attrs as {} as NamedAttrMap)
  .as<Tensor<R>>();
  return reshape($res, $x.shape);
}

export const batchNorm = op({batchNorm_});
```
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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 {batchNorm} from './batchnorm';
import {op} from './operation';

/**
 * Batch normalization, strictly for 2D. 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.
 */
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:
  if (scale != null) {
    $scale = convertToTensor(scale, 'scale', 'batchNorm');
  }
  let
  $offset: Tensor2D|Tensor1D;
  if (offset != null) {
    $offset = convertToTensor(offset, 'offset', 'batchNorm');
  }

  util.assert($x.rank === 2,
      () => `Error in batchNorm2D: x must be rank 2 but got rank ` +
      `${$x.rank}.`);
  util.assert($mean.rank === 2 || $mean.rank === 1,
      () => `Error in batchNorm2D: mean must be rank 2 or rank 1 but ` +
      `got rank $($mean.rank).`);
  util.assert($variance.rank === 2 || $variance.rank === 1,
      () => `Error in batchNorm2D: variance must be rank 2 or rank 1 ` +
      `but got rank $($variance.rank).`);
  if ($scale != null) {
    util.assert($scale.rank === 2 || $scale.rank === 1,
        () => `Error in batchNorm2D: scale must be rank 2 or rank 1 ` +
        `but got rank $($scale.rank).`);
  }

  return batchNorm($x, $mean, $variance, $offset, $scale, varianceEpsilon);
}

export const batchNorm2d = op({batchNorm2d_});

=============================================================================
*/
import {Tensor1D, Tensor3D} 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 3D. 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.
 */
function batchNorm3d_(x: Tensor3D|TensorLike, mean: Tensor3D|Tensor1D|TensorLike,
    variance: Tensor3D|Tensor1D|TensorLike, offset?: Tensor3D|Tensor1D|TensorLike,
    scale?: Tensor3D|Tensor1D|TensorLike, varianceEpsilon?: number):
    Tensor3D {
  const $x = convertToTensor(x, 'x', 'batchNorm');
  const $mean = convertToTensor(mean, 'mean', 'batchNorm');
  const $variance = convertToTensor(variance, 'variance', 'batchNorm');
  let $scale:
  if (scale != null) {
    $scale = convertToTensor(scale, 'scale', 'batchNorm');
  }
  let
  $offset: Tensor3D|Tensor1D;
  if (offset != null) {
    $offset = convertToTensor(offset, 'offset', 'batchNorm');
  }

  util.assert($x.rank === 3,
      () => `Error in batchNorm3D: x must be rank 3 but got rank ` +
      `${$x.rank}.`);
  util.assert($mean.rank === 3 || $mean.rank === 1,
      () => `Error in batchNorm3D: mean must be rank 3 or rank 1 but ` +
      `got rank $($mean.rank).`);
  util.assert($variance.rank === 3 || $variance.rank === 1,
      () => `Error in batchNorm3D: variance must be rank 3 or rank 1 ` +
      `but got rank $($variance.rank).`);
  if ($scale != null) {
    util.assert($scale.rank === 3 || $scale.rank === 1,
        () => `Error in batchNorm3D: scale must be rank 3 or rank 1 ` +
        `but got rank $($scale.rank).`);
  }

  return batchNorm($x, $mean, $variance, $offset, $scale, varianceEpsilon);
}

export const batchNorm3d = op({batchNorm3d_});

=============================================================================
@param size Non-negative integer.

*\n* @doc {heading: 'Operations', subheading: 'Reduction'}
* *\n* @function bincount_<T extends Tensor1D>(x: T|TensorLike, weights: T|TensorLike, size: number): T
* *\n* const $x = convertToTensor(x, 'x', 'bincount');
* const $weights = convertToTensor(weights, 'weights', 'bincount');
* *\n* util.assert($x.dtype === 'int32', () => 'Error in bincount: input `x` dtype must be int32, but got ${$x.dtype}.';
* util.assert(size >= 0, () => 'size must be non-negative, but got ${size}.';
* *\n* $weights.size === $x.size || $weights.size === 0,
* () => 'Error in bincount: weights must have the same size as input or `+in 0-length, but got input shape: ${$x.shape}, weights shape: ` +
* `{$weights.shape}.';
* *\n* const inputs: BincountInputs = {x: $x, weights: $weights};
* const attrs: BincountAttrs = {size};
* *\n* return ENGINE.runKernel(Bincount, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap);
* *\n* export const bincount = op({bincount_});
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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 {NamedTensorMap} from '../tensor_types';
import {clone} from './clone';
import {op} from './operation';
import {reshape} from './reshape';

/**
 * Broadcast an array to a compatible shape NumPy-style.
 * *\n* * @param input The tensor that is to be broadcasted.
* * @param shape The input is to be broadcast to this shape.
* * @doc {heading: 'Tensors', subheading: 'Transformations'}
*/
function broadcastTo_<R extends Rank>(x: Tensor|TensorLike, shape: ShapeMap[R]): Tensor<R> {
  let input = convertToTensor(x, 'broadcastTo', 'x');
  const xShape = input.shape;

  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]) {
      throw new Error(`broadcastTo(): \[${shape}\] cannot broadcast to \[${xShape}\].`);
    }
  }

  const axes = reps.map((n, i) => n > 1 ? i : -1).filter(i => i >= 0);
  if (axes.length === 0) {
    return clone(input) as Tensor<R>;
  }

  // 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);
}
import {NamedTensorMap} from '../tensor';
import {NamedAttrMap} from '../kernel_registry';
import {Engine} from '../engine';
import {Tensor} from '../tensor';
import {op} from './operation';

/**
 * Computes ceiling of input `tf.Tensor` element-wise: `ceil(x)`
 * @param x The input Tensor.
 * @return The ceiling of each element of the input Tensor.
 */
function ceil_<T extends Tensor>(x: T|TensorLike): T {
  return ENGINE.runKernel(Tensor, {x}, {x: x.ceil()});
}

export const ceil = op({ceil_});

/**
 * Clips values element-wise. `max(min(x, clipValueMax), clipValueMin)`
 * @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.
 * @return The clipped tensor.
 */
function clipByValue_<T extends Tensor>(
    x: T|TensorLike, clipValueMin: number, clipValueMax: number): T {
  return ENGINE.runKernel(
      ClipByValue, {x: x.clipByValue(clipValueMin, clipValueMax)}, {x: x.clipByValue(clipValueMin, clipValueMax)});
}

export const clipByValue = op({clipByValue_});

/**
 * Concatenates a list of `tf.Tensor1D`s along an axis. See `concat` for details.
 * @param tensors A list of `tf.Tensor1D`s to concatenate.
 * @return The concatenated array.
 */
function concat1d_(tensors: Array<Tensor1D|TensorLike>): Tensor1D {
  return concat(tensors, 0 /* axis */);
}

export const concat1d = op({concat1d_});

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 */
/*\nimport {Tensor2D} from '../tensor';\nimport {TensorLike} from '../types';\nimport {concat} from './concat';\nimport {op} from '../operation';\n
/**
 * Concatenates a list of tf.Tensor2D's along an axis. See 'concat' for details.\n * For example, if: A: shape(2, 3) = | r1, g1, b1 | n * C = if axis = 0 * C: shape(4, 3) = | r1, g1, b1 | n * | r2, g2, b2 | n * B: r4, g4, b4 | n * C = tf.concat2d([A, B], axis); axis\n * if axis = 0 * C: B = | r3, g3, b3 | n * r3, g3, b3 | n * | r4, g4, b4 | n * if axis = 1 * C = shape(2, 6) = | r1, g1, b1, r3, g3, b3 | n * | r2, g2, b2, r4, g4, b4 | n * if axis = 1:

 * tensors A list of tf.Tensor's to concatenate.\n * @param axis The axis to concatenate along.\n * @return The concatenated array.\n */\nfunction concat2d_(tensors: Array<Tensor2D|TensorLike>, axis: number): Tensor2D {
  return concat(tensors, axis);
}

export const concat2d = op({concat2d_});

*/

import {Tensor3D} from '../tensor';\nimport {TensorLike} from '../types';\n
import {concat} from './concat';\nimport {op} from './operation';\n
/**
 * Concatenates a list of tf.Tensor3D's along an axis. See 'concat' for details.\n * For example, if: A: shape(2, 1, 3) = | r1, g1, b1 | n * C = if axis = 0 * C: shape(2, 1, 3) = | r1, g1, b1 | n * B: r4, g4, b4 | n * C = tf.concat3d([A, B], axis); axis\n * if axis = 0 * C = shape(2, 2, 3) = | r1, g1, b1, r3, g3, b3 | n * | r2, g2, b2, r4, g4, b4 | n * if axis = 2:

 * tensors A list of tf.Tensor's to concatenate.\n * @param axis The axis to concatenate along.\n * @return The concatenated array.\n */\nfunction concat3d_(tensors: Array<Tensor3D|TensorLike>, axis: number): Tensor3D {
  return concat(tensors, axis);
}

export const concat3d = op({concat3d_});

*/

import {Tensor4D} from '../tensor';\nimport {TensorLike} from '../types';\n
import {concat} from './concat';\nimport {op} from './operation';\n
/**
 * Concatenates a list of tf.Tensor4D's along an axis. See 'concat' for details.\n * For example, if: A: shape(2, 1, 3) = | r1, g1, b1 | n * C = if axis = 0 * C: shape(2, 1, 3) = | r1, g1, b1 | n * B: r4, g4, b4 | n * C = tf.concat4d([A, B], axis); axis\n * if axis = 0 * C = shape(2, 2, 3) = | r1, g1, b1, r3, g3, b3 | n * | r2, g2, b2, r4, g4, b4 | n * if axis = 2:

 * tensors A list of tf.Tensor's to concatenate.\n * @param axis The axis to concatenate along.\n * @return The concatenated array.\n */\nfunction concat4d_(tensors: Array<Tensor4D|TensorLike>, axis: number): Tensor4D {
  return concat(tensors, axis);
}

export const concat4d = op({concat4d_});

*/

import {ENGINE} from '../engine';\nimport {Conv2D, Conv2DAttrs, Conv2DInputs} from '../kernel_names';\nimport {NamedAttrMap} from '../kernel_registry';\nimport {Tensor3D, Tensor4D} from

"*/
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'): T {
  const $x = convertToTensor(x, 'x', 'conv2d');
  const $filter = convertToTensor(filter, 'filter', 'conv2d');

  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 conv2d: input must be rank 4, but got rank ${x4D.rank}.`);
  util.assert(
      $filter.rank === 4,
      () => `Error in conv2d: filter must be rank 4, but got rank ${$filter.rank}.`);
  if (dimRoundingMode != null) {
    util.assert(
        util.isInt(pad as number),
        () => `Error in conv2d: pad must be an integer when using, ` +
        `dimRoundingMode ${dimRoundingMode} but got pad ${pad}.`);
  }

  const inDepth = dataFormat === 'NHWC' ? x4D.shape[3] : x4D.shape[1];
  util.assert(
      inDepth === $filter.shape[2],
      () => `Error in conv2d: input depth for filter ${$filter.shape[2]}.`);

  const inputs: Conv2DInputs = {x: x4D, filter: $filter};
  const attrs:
      Conv2DAttrs = {strides, pad, dataFormat, dilations,
                      dimRoundingMode};

  // tslint:disable-next-line: no-unnecessary-type-assertion
  const res = ENGINE.runKernel(
                  Conv2D, 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 conv2d = op({conv2d_});

/**
 * Computes a 2D convolution over the input x.
 * @param x The input tensor, of rank 4 or rank 3, of shape $n * @param x The input tensor, of rank 4 or rank 3, of shapeLong
 * @param filter The filter, rank 4, of shapeLong
 * @param strides The strides of the convolution: $n * @param pad The type of padding algorithm: $n * - `same` and stride 1: output will be of same size as input, $n * regardless of filter size:
 * @param pad The type of padding algorithm: $n * - `valid`: output will be smaller than input if filter is larger $n * than 1x1, $n * - 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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rank 2, of shape
*    `[batch, width, inChannels]`. If rank 2, batch of 1 is assumed.
* @param filter The filter, rank 3, of shape
*    `[filterWidth, inDepth, outDepth]`. @param stride The stride
*    of entries by which the filter is moved right at
*    each step. @param pad The type of padding algorithm.
*    - `same`: 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)

If rank 2, batch of 1 is assumed. If rank 3, batch of 1 is assumed. If rank 2, batch of 1 is assumed.
* @param dataFormat An optional string from
*    `"NWC", "NCW"`. Defaults to `"NWC"`. In * the data is stored in the order of [batch, in_width, in_channels].
* Only
*    `"NWC"` is currently supported @param dilation The dilation rate in which we sample input values.
* in*n* atrous convolution. Defaults to `1`. If it is greater than 1, then
*    @param dimRoundingMode A string from: `ceil`, `round`, `floor`. If none is
*    provided, it will default to truncate.
* @doc {heading: 'Operations', subheading: 'Convolution'}
*/
function conv1d_<T extends
  Tensor2D|Tensor3D>(
    x: T|TensorLike, filter: Tensor3D|TensorLike, stride: number, 
    pad: 'valid'|'same'|number|conv_util.ExplicitPadding,
    dataFormat: 'NWC'|'NCW' = 'NWC', dilation = 1,
    dimRoundingMode?: 'floor'|'round'|'ceil'): T {
  const $x = convertToTensor(x, 'x', 'conv1d');
  const $filter = convertToTensor(filter, 'filter', 'conv1d');
  let x3D = $x as Tensor3D;
  let reshapedTo3D = false;
  if ($x.rank === 2) {
    reshapedTo3D = true;
    x3D = reshape(x, [1, x.shape[0], x.shape[1]]);
  }

  util.assert(
      x3D.rank === 3,
      () => `Error in conv1d: input must be rank 3, but got rank ${x3D.rank}.`);
  util.assert(
      $filter.rank === 3,
      () => `Error in conv1d: filter must be rank 3, but got rank ${$filter.rank}.`);
  let $filter.rank = 3,
      () => `Error in conv1d: filter must be rank 3, but got rank` +
      ` ${$filter.rank}.`;
  if (dimRoundingMode !== 'valid') {
    util.assert(
        util.isInt(pad as number),
        () => `Error in conv1d: pad must be an integer when using, ` +
        `dimRoundingMode ${dimRoundingMode} but got pad ${pad}.`);
  }

  util.assert(
      x3D.shape[2] === $filter.shape[1],
      () => `Error in conv1d: depth of input` +
      ` (${x3D.shape[2]}) must match` +
      ` depth for filter ${$filter.shape[1]}.`);
  util.assert($filter.rank === 3,
      () => `Error in conv1d: filter must be rank 3, but got rank` +
      ` (filter.rank).`);

  const filter4D = reshape($filter, [1, $filter.shape[0], $filter.shape[1], $filter.shape[2]]);
  const input4D = reshape(x3D, [x3D.shape[0], 1, x3D.shape[1], x3D.shape[2]]);

  const conv2dDataFormat = 'NHWC';

  const res = conv2d((input4D as Tensor4D), (filter4D as Tensor4D), strides, dilations,
      conv2dDataFormat, dimRoundingMode, pad, $filter.rank === 3,
      () => `Error in conv1d: filter must be rank 3, but got rank` +
      ` $filter.rank.`) as T;

  return reshape(res, [res.shape[0], res.shape[2], res.shape[3]]) as T;
}

export const conv1d = op({conv1d_});

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 * License.
 */

import {ENGINE} from '../engine';
import {Conv2DBackpropInput, Conv2DBackpropInputAttrs,
    Conv2DBackpropInputInputs} from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor3D, Tensor4D} from '../tensor';
import {NamedTensorMap} from '../tensor_types';

import * as util from '../util';
import * as conv_util from './conv_util';
import {op} from './operation';

/**
 * Computes the derivative of the input of a 2D convolution.
 * @param xShape The shape of the input: [batch, height, width, inDepth]. @param x in
 * If length of 3, batch of 1 is assumed. @param dy The derivative of the output, of rank 4 or rank 3 of shape
* [batch, outHeight, outWidth, outDepth]. If rank 3, batch of 1 is assumed. @param x filter The
* filter, rank 4, of shape
*    `[filterHeight, filterWidth, inDepth, outDepth]`. If length of 3, batch of 1 is assumed.
@param strides The strides of the convolution: `[strideHeight, strideWidth]`. 
@param pad The type of padding algorithm used: `same` - same and stride 1: output will be of same size as input, `valid` - 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.`

`@param dimRoundingMode: dimRoundingMode function conv2DBackpropInput <T extends Tensor3D|Tensor4D> xShape: [number, number, number, number], pad: ['same'|'valid'], strides: [number, number, number, number], dy: T, filter: Tensor4D, strides: [number, number, number, number], dy: T, strides: [number, number]`
function conv5d_<T extends Tensor4D|Tensor5D>(
    x: T|TensorLike, filter: Tensor5D|TensorLike,
    strides: [number, number, number, number],
    pad: 'valid'|'same'|number, dimRoundingMode?:
        'floor'|'round'|'ceil'): T {
  const $x = convertToTensor(x, 'x', 'conv5d');
  const $filter = convertToTensor(filter, 'filter', 'conv5d');
  return conv5DBackpropInput(
      outputShape, $x, $filter, strides, pad, 'NHWC', dimRoundingMode);}

export const conv5d = op({conv5d_});

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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. The input tensor, of rank 5 or
 * rank 4, of shape [batch, depth, height, width, channels]. If rank 4, batch of 1 is assumed.
 * @param x The input tensor, of rank 5 or rank 4, of shape [batch, depth, height, width, channels]. If rank 4, batch of 1 is assumed.
 * @param filter The filter, rank 5, of shape [inChannels, 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.
 *    - \"valid\": output will be smaller than input if filter is larger than 1x1.
 *    - \"same\": output will be of same size as input, regardless of filter size.
 * @param dataFormat: An optional string from: \"NDHWC\", \"NCDHW\". Defaults to \"NDHWC\". Specify the data format of the input and output data.
 *    - \"NDHWC\": 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]. inChannels must match between input and filter. Strides of the convolution: [dilateDepth, dilateHeight, \n *    - \"same\": output will be of same size as input, regardless of filter size.
 *    - \"valid\": output will be smaller than input if filter is larger than 1x1.
 *    - \"same\": output will be of same size as input, regardless of filter size.
 *    - \"valid\": output will be smaller than input if filter is larger than 1x1.
 *    - \"same\": output will be of same size as input, regardless of filter size.
 *    - \"valid\": output will be smaller than input if filter is larger than 1x1.
 */
function conv5d_<T extends Tensor4D|Tensor5D>(
    x: T|TensorLike, filter: Tensor5D|TensorLike,
    strides: [number, number, number, number],
    pad: 'valid'|'same'|number, dimRoundingMode?:
        'floor'|'round'|'ceil'): T {
  const $x = convertToTensor(x, 'x', 'conv5d');
  const $filter = convertToTensor(filter, 'filter', 'conv5d');

  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($x.rank === 5,
      () => `Error in conv5d: input must be rank 5, but got rank ${$x.rank}.`);
  util.assert($filter.rank === 5,
      () => `Error in conv5d: filter must be rank 5, but got rank ${$filter.rank}.`);

  const inputs: Conv3DInputs = {$x, $filter};

  const attrs: Conv3DAttrs = {
    strides, pad, dataFormat, dilations};

  // tslint:disable-next-line: no-unnecessary-type-assertion
  const res =
import {ENGINE} from '../engine';
import {Conv3DBackpropInputV2, Conv3DBackpropInputV2Attrs, Conv3DBackpropInputV2Backprop} from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {NamedTensorMap} from '../tensor_types';
import * as util from '../util';

import {op} from './operation';
import {reshape} from './reshape';

/**
 * 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, inDepth, outDepth].
 * @param strides The strides of the convolution: [strideDepth, strideHeight, strideWidth].
 * @param pad The type of padding algorithm used: 'valid': output will be smaller than input if filter is larger than 1x1.
 */
function conv3DBackpropInput_<T extends Tensor4D|Tensor5D>(xShape: number[], dy: T, dy5D: Tensor5D, filter: Tensor5D, strides: number[], pad: 'valid'|'same'): T {
  util.assert(dxShape.length === dy.rank,
      () => `Length of inShape (${dxShape.length}) and rank of dy (${dy.rank}) must match`);
  let xShape5D = xShape as number[];
  let dy5D = dy5D as Tensor5D;
  let reshapedTo5D = false;
  if (dy5D.rank === 4) {
    reshapedTo5D = true;
    dy5D = reshape(dy5D, [1, dy5D.shape[0], dy5D.shape[1], dy5D.shape[2], dy5D.shape[3]]);
    xShape5D = [1, xShape[0], xShape[1], xShape[2], xShape[3]];
  }

  const inDepth = xShape5D[4];
  const outDepth = dy5D.shape[4];
  util.assert(inDepth === outDepth,
      () => `Error in conv3dDerInput: depth of input (${inDepth}) must match depth of output (${outDepth})`);

  const inputs: Conv3DBackpropInputV2BackpropInputs = {dy: dy5D, filter: filter} as Conv3DBackpropInputV2BackpropInputs;
  const attrMap = {inDepth: inDepth, outDepth: outDepth} as Conv3DBackpropInputV2BackpropAttrs;

  // tslint:disable-next-line: no-unnecessary-type-assertion
  const res = ENGINE.runKernel(Conv3DBackpropInputV2, inputs as {} as NamedTensorMap,
      attrs as {} as NamedAttrMap) as T;

  if (reshapedTo5D) {
    return reshape(res, [res.shape[1], res.shape[2], res.shape[3], res.shape[4]] as number[]) as T;
  }
  return res;
}

export const conv3DBackpropInput = op({conv3DBackpropInput_});

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 */
import {Tensor4D, Tensor5D} from '../tensor';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {conv3DBackpropInput} from './conv3d_backprop_input';
import {op} from './operation';

/**
 * Computes the transposed 3D convolution of a volume, also known as an *
 * deconvolution.
 * @param x The input image, of rank 5 or rank 4, of shape `\[batch, depth, height, width, inDepth\]`. If rank 4, batch of 1 is assumed.
 * @param filter The filter, rank 4, of shape `\[depth, filterHeight, filterWidth, outDepth, inDepth\]`. `inDepth` must match `inDepth` in `\[x, \]`. `outDepth` must match `outShape`
 * shape, of rank 5 or rank 4:
 * `\[batch, depth, height, width, outDepth\]`. If rank 3, batch of 1 is assumed.
 * @param strides The strides of the original convolution:`\[\]`, `\[strideDepth, strideHeight, strideWidth\]`.
 * @param pad The type of padding algorithm used in the non-transpose version:
 * of the op.
 * @doc
 */
function conv3dTranspose_<T extends Tensor4D|Tensor5D>(
    x: T|TensorLike, filter: Tensor5D|TensorLike,
    outputShape: [number, number, number, number, number],
    strides: [number, number, number, number, number],
    pad: 'valid'|'same'): T {
  const $x = convertToTensor(x, 'x', 'conv3dTranspose');
  const $filter = convertToTensor(filter, 'filter', 'conv3dTranspose');

  return conv3DBackpropInput(outputShape, $x, $filter, strides, pad);
}
export const conv3dTranspose = op({conv3dTranspose_});

/**
 * 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)
 * ```
 * @param x The input tensor.
 *
 * @doc {heading: 'Operations', 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.tensor1d([0, 1, -1, .7]);
 *
 * x.cosh().print();  // or tf.cosh(x)
 * ```
 * @param x The input tensor.
 *
 * @doc {heading: 'Operations', 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_});


import {ENGINE} from '../engine';
import {Cumsum, CumsumAttrs, CumsumInputs} 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 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. Default: 0.
 * @param exclusive Whether to perform exclusive cumulative sum. Optional.
 * @param reverse Whether to reverse the direction of summing. Optional.
 *
 * @doc
 */
function cumsum_<T extends Tensor>(
    x: Tensor|TensorLike,
    axis = 0, exclusive = false, reverse = false): T {
  const $x = convertToTensor(x, 'x', 'cumsum');

  const inputs: CumsumInputs = {x: $x};
  const attrs: CumsumAttrs = {axis, exclusive, reverse};

  return
      ENGINE.runKernel(
          Cumsum, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap);
}

export const cumsum = op({cumsum_});

import {ENGINE} from '../engine';
import {DenseBincount, DenseBincountAttrs, DenseBincountInputs} 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 * as util from '../util';

import {op} from './operation';

/**
 * 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 in `x` outside of the range [0, size) are ignored.
 *
 * @param x The input int tensor, rank 1 or rank 2.
 * @param weights The weights tensor, must have the same shape as x, or a length-0 Tensor, in which case it acts as all weights equal to 1.
 * @param binaryOutput Optional. Whether the kernel should count the appearance of a value or number of occurrences. Default: false.
 *
 * @doc
 */
function denseBincount_<T extends Tensor1D|Tensor2D>(
    x: T|TensorLike, weights: T|TensorLike, size: number,
    binaryOutput = false): T {
  const $x = convertToTensor(x, 'x', 'denseBincount');
  const $weights = convertToTensor(weights, 'weights', 'denseBincount');

  util.assert($x.dtype === 'int32', () => `Error in denseBincount: input ` + `dtype must be int32, but got ${$x.dtype}`);
  util.assert($x.rank === 1 || $x.rank === 2, () => `Error in denseBincount: input ` + `must be rank 1 or 2, but got ` + `$x.rank`);

  const $weightsSize = convertToTensor(size, 'size', 'denseBincount');
  util.assert($weightsSize.rank === 0, () => `Error in denseBincount: weightsSize must be rank 0, but got ` + `$weightsSize.rank`);

  const $weights = convertToTensor(weights, 'weights', 'denseBincount');
  util.assert($weights.rank === 0, () => `Error in denseBincount: weights must be rank 0, but got ` + `$weights.rank`);

  const $size = convertToTensor(size, 'size', 'denseBincount');
  util.assert($size.rank === 0, () => `Error in denseBincount: size must be rank 0, but got ` + `$size.rank`);

  const $xShape = convertToTensor($x.shape, 'xShape', 'denseBincount');
  util.assert($xShape.rank === 0, () => `Error in denseBincount: xShape must be rank 0, but got ` + `$xShape.rank`);

  const $weightsShape = convertToTensor($weights.shape, 'weightsShape', 'denseBincount');
  util.assert($weightsShape.rank === 0, () => `Error in denseBincount: weightsShape must be rank 0, but got ` + `$weightsShape.rank`);

  const $inputs = DenseBincountInputs = {x: $x, weights: $weights};

  return
      ENGINE.runKernel(
          DenseBincount, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap);}
DenseBincount, inputs as {} as NamedTensorMap,
attr as {} as NamedAttrMap;

export const denseBincount = op((denseBincount_));

export const
  denseBincount = op({denseBincount_});

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 * limitations under the License.
 */

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 {TensorLike4D} from '../types';
import * as util from '../util';

import {op} from './operation';

/**
 * 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 in spatial blocks to the 'height' and 'width'
dimensions.
 * The attr 'blockSize' indicates the input block size and how the data is moved.
 * Chunks of data of size 'blockSize * blockSize' from depth are rearranged into non-overlapping blocks of size 'blockSize x blockSize'
 * The 'dataFormat' attr specifies the layout of the input and output tensors
 * with the following options: 
 * "NHWC": [batch, height, width, channels]
 * "NCHW": [batch, channels, height, width]
 * 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);
 * y.print();
 * ```
 * @param x The input tensor of rank 4
 * @param blockSize  An int that is `>= 2`. The size of the spatial block
 * @param dataFormat An optional string from: "NHWC", "NCHW". Defaults to "NHWC"
 * @doc {heading: 'Tensors', subheading: 'Transformations'}
 */
function depthToSpace_(x: Tensor4D|TensorLike4D,
  blockSize: number,
  dataFormat: 'NHWC'|'NCHW' = 'NHWC'): Tensor4D {
  const $x = convertToTensor(x, 'x',
    'depthToSpace') as Tensor4D;

  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];

  util.assert(
    inputHeight * blockSize >= 0,
    () => `Negative dimension size caused by overflow when multiplying
    ${inputHeight} and ${blockSize} for depthToSpace with input shape
    ${$x.shape}`);

  util.assert(
    inputWidth * blockSize >= 0,
    () => `Negative dimension size caused by overflow when multiplying
    ${inputWidth} and ${blockSize} for depthToSpace with input shape
    ${$x.shape}`);

  util.assert(
    (inputDepth % (blockSize * blockSize) === 0),
    () => `Dimension size must be evenly divisible by ${blockSize * blockSize} but is ${inputDepth}
    for depthToSpace with input shape ${$x.shape}`);

  const inputs: DepthToSpaceInputs = {x: $x};
  const attrs: DepthToSpaceAttrs = {blockSize, dataFormat: dataFormat === 'NHWC' ? 'NHWC' : 'NCHW'};

  return ENGINE.runKernel(DepthToSpace, inputs as {} as NamedTensorMap,
    attrs as {} as NamedAttrMap);
}

export const depthToSpace = op({depthToSpace_});
DepthwiseConv2dNativeInputs} from './kernel_names';
import {NamedAttrMap} from './Kernel_registry';
import {Tensor3D, Tensor4D} from './Tensor';
import {NamedTensorMap} from './tensor';
import {TensorLike} from './types';

import {convertToTensor} from './util';
import {reshape} from './reshape';

/**
 * Depthwise 2D convolution.
 *
 * 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 `channelMultiplier` channels.
 *
 * See
 * https://www.tensorflow.org/api_docs/python/tf/nn/depthwise_conv2d

 * for more details. 

 * @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`. 
 * If strides is `\[1, 1\]`, then all values of 'strides' must be 1, regardless of filter size. If `\* \* \* \* 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/tf/nn#Convolution
 */
function depthwiseConv2d_<T extends Tensor3D|Tensor4D>(
    x: T|TensorLike, filter:
    Tensor4D|TensorLike,
    strides: 
    [number, number]|number,
    pad: 'valid'|'same'|number,
    dataFormat: 'NHWC'|'NCHW' = 'NHWC',
    dilations: [number, number]|number = [1, 1],
    dimRoundingMode?: 'floor'|'round'|'ceil'):
    T {
      const $x = convertToTensor(x, 'x', 'depthwiseConv2d');
      const $filter = convertToTensor(filter, 'filter', '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]]);
      }

      util.assert(
          x4D.rank === 4,
          () => `Error in depthwiseConv2d: input must be rank 4, but got rank ${x4D.rank}.`);
      util.assert(
          $filter.rank === 4,
          () => `Error in depthwiseConv2d: filter must be rank 4, but got rank ${$filter.rank}.`);

      const x4Drank = 4;
      const filterrank = 4;

      if ($filter.rank !== filterrank) {
        throw new Error(`Filter rank mismatch. Expected ${filterrank}, got ${$filter.rank}.`);
      }

      util.assert(
          x4D.shape[3] === $filter.shape[2],
          () => 'Error in depthwiseConv2d: channel dimensions must match. Got
          expected: ${x4D.shape[3]}, actual: ${$filter.shape[2]}.');

      const strides: [number, number] = [1, 1];

      let out = ENGINE.runKernel(
          DepthwiseConv2dNative, inputs as {} as NamedTensorMap,
          attrs as {} as NamedAttrMap) as T;

      if (reshapedTo4D) {
        return reshape(out, [out.shape[1], out.shape[2], out.shape[3]]).as<T>();
      }
      return out;
    }

export const depthwiseConv2d =
    op({depthwiseConv2d_});

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 */

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

import {ENGINE} from './engine';
import {Diag, DiagInputs} from './kernel_names';
import {Tensor} from './tensor';
import {NamedTensorMap} from './tensor_types';
import {convertToTensor} from './tensor_util_env';

import {op} from './operation';

/**
 * Returns a diagonal tensor with a given diagonal values.
 * Given a diagonal, this operation returns a tensor with the diagonal and everything else padded with zeros.
 * Assume the input has dimensions `[D1,..., Dk]`, then the output is a tensor of rank 2k with dimensions `[D1,..., Dk, D1,..., Dk]`.
 */

function diag_(x: Tensor): Tensor {
  const $x = convertToTensor(x, 'x', 'diag');

  const inputs: DiagInputs = {x: $x};

  return ENGINE.runKernel(Diag, inputs as {} as NamedTensorMap);
}

export const diag = op({diag_});

import {ENGINE} from './engine';
import {Dilation2D, Dilation2DAttrs, Dilation2DInputs} 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';

/**
 * Computes the grayscale dilation over the input `x`.
 */

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}.`);

  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};
  const strides: [number, number] = util.assert(3 || x4D.rank === 4,
      () => 'Error in dilation2d: input must be rank 3 or 4, but got rank ` +
      `${x4D.rank}.`);

  const filter = convertToTensor(filter, 'filter', 'dilation2d');
  const strides: [number, number] = util.assert(3 || filter.rank === 4,
      () => 'Error in dilation2d: filter must be rank 3, but got rank ` +
      `${filter.rank}.`);

  const dataFormat = 'NHWC';
  const dilations: [number, number] = util.assert(3 || dataFormat === 'NHWC',
      () => 'Error in dilation2d: Only NHWC is currently supported."

  if (dilations[0] * dilations[1] > 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) @param dataFormat Specify the data format of the input and output data.

  Defaults to `NHWC`. Only `NHWC` is currently supported. With the default format `\"NHWC\"`, the data is stored in the order of: `[batch, height, width, channels]`.

  The dilation rate: `[dilationHeight, dilationWidth]` in which we sample input values across the height and width dimensions for atrous morphological dilation. Defaults to `[1, 1]`. If dilations `\*` is a single number, then `dilationHeight == dilationWidth`. If it is a greater than 1, then all values of `\*strides\*` must be 1.\* @doc [heading: 'Operations', subheading: 'Convolution']

  ```
  Tensor3D[Tensor4D]>\n  x: \n    TensorLike, filter: \n    Tensor3D[Tensor4D],
    strides: \n    [number, number],
    pad: \n    \'valid\'\*same,\n    dilations: \n    [number, number],
    dataFormat: \n    \'NHWC\'
  ```

  T x 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 || $filter.rank === 4,
      () => 'Error in dilation2d: filter must be rank 3, but got rank ` +
      `${$filter.rank}.`);

  util.assert(dataFormat === 'NHWC',
      () => 'Error in dilation2d: Only NHWC is currently supported."

  let x4D = $x as Tensor4D;
  let reshapedTo4D = false;
  if (x.rank === 4) {
    x4D = reshape($x, [1, $x.shape[0], $x.shape[1], $x.shape[2]]);
    reshapedTo4D = true;
  }

  const inputs: Dilation2DInputs = {x: x4D, filter:
$filter};
 const attrs: Dilation2DAtrs = {strides, pad, dilations};

 const res = ENGINE.runKernel
 Dilation2D, inputs as [], as NamedTensorMap,
 attr as {} as NamedAttrMap
 as T;

 if (reshapedTo4D) {
  return reshape(res, [res.shape[1], res.shape[2],
  res.shape[3]]); as T;
}

 return res;

 unexport const dilation2d = op(getDilation2DAttrs());


  return ENGINE.runKernel(
                  Dilation2D, inputs as {} as NamedTensorMap,

  // tslint:disable-next-line: no-unnecessary-
  type-assertion
  const res = ENGINE.runKernel(
                  Dilation2D, inputs as {} as NamedTensorMap,

  return ENGINE.runKernel(Equal, inputs as [] as NamedTensorMap);
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=============================================================================

* "\n */

import {Tensor} from './tensor';
import {makeTypesMatch} from './tensor_util';
import {convertToTensor} from './tensor_util';
import {TensorLike} from './types';
import {div} from './div';
import {equal} from './equal';
import {op} from './operation';
import {where} from './where';
import {zerosLike} from './zeros_like';

/**
 * Divides two tf.Tensor's element-wise, A / B. Supports broadcasting. Return 0 if denominator is 0.
 * For scalar denominator, return 0 if denominator is 0.
 * Denominator can be broadcast to numerator.
 * ```js
 * const a = tf.tensor1d([1, 2, 3, 4, 5, 6, 7, 8]);
 * const b = tf.tensor1d([2, 2, 2, 2, 2, 2, 2, 2]);
 * const c = tf.tensor1d([1, 2, 3, 4, 5, 6, 7, 8]);
 * a.div(b).print();
 * a.div(c).print();
 * ```
 * @param a The numerator tensor.
 * @param b The denominator tensor. Must have the same dtype as a.
 * @returns {Tensor} The division of a / b.
 */
function divNoNan_<T extends Tensor>(a: Tensor|TensorLike, b: Tensor|TensorLike): T {
  // TODO: Make this into its own kernel.
  $a = convertToTensor(a, 'a', 'div');
  $b = convertToTensor(b, 'b', 'div');
  [$a, $b] = makeTypesMatch($a, $b);

  const divResult = div($a, $b);
  const zeros = zerosLike(divResult);
  const bEqualsZero = equal($b, zeros);
  return where(bEqualsZero, zeros, divResult) as T;
}

export const divNoNan = op({divNoNan_});

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

import {Tensor} from './tensor';
import {convertToTensor} from './tensor_util';
import {TensorLike} from './types';
import {div} from './div';
import {equal} from './equal';
import {op} from './operation';
import {where} from './where';
import {zerosLike} from './zeros_like';

/**
 * Computes the dot product of two matrices and/or vectors, t1 and t2.
 * ```js
 * const a = tf.tensor1d([1, 2, 3, 4, 5, 6]);
 * const b = tf.tensor2d([[1, 2], [3, 4], [5, 6]]);
 * const c = tf.tensor2d([[1, 2], [3, 4], [5, 6]]);
 * a.dot(b).print();
 * b.dot(a).print();
 * b.dot(c).print();
 * ```
 * @param t1 The first tensor in the dot operation.
 * @param t2 The second tensor in the dot operation.
 * @returns {Tensor} The dot product of t1 and t2.
 */
function dot_(t1: Tensor|TensorLike, t2: Tensor|TensorLike): Tensor {
  const $t1 = convertToTensor(t1, 't1', 'dot');
  const $t2 = convertToTensor(t2, 't2', 'dot');

  util.assert($t1.rank === 1 || $t1.rank === 2) && ($t2.rank === 1 || $t2.rank === 2);
  const t1Inner = ($t1.rank === 1 ? $t1.size : $t1.shape[1]);
  const t2Inner = ($t2.rank === 1 ? $t2.size : $t2.shape[0]);
  const t1t2 = matMul($t1, $t2);
  return t1t2;
}

export const dot = op({dot_});

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

import {ENGINE} from '../engine';
import {Elu, EluInputs} 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 linear element-wise: `x > 0 ? e^x - 1 : 0`
 *
 * ```js
 * const x = tf.tensor1d([-1, 1, -3, 2]);
 *
 * x.elu().print(); // or tf.elu(x)
 * ```
 * @param x The input tensor.
 *
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function elu_(x: TensorLike): TensorLike {
  const $x = convertToTensor(x, 'x', 'elu');

  const inputs: EluInputs = {x: $x};
  return ENGINE.runKernel(Elu, inputs as {} as NamedTensorMap);
}

export const elu = op({elu_});

/**
 * Computes Gaussian error function of the input `tf.Tensor` element-wise:
 * `erf(x)`
 *
 * ```js
 * const x = tf.tensor1d([0, .1, -.1, .7]);
 *
 * x.erf().print(); // or tf.erf(x);
 * ```
 *
 * @param x The input tensor.
 *
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function erf_(x: TensorLike): TensorLike {
  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_});

/**
 * Computes exponential of the input `tf.Tensor` element-wise. `e^x`
 *
 * ```js
 * const x = tf.tensor1d([1, 2, -3]);
 *
 * x.exp().print(); // or tf.exp(x)
 * ```
 * @param x The input tensor.
 *
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function exp_(x: TensorLike): TensorLike {
  const $x = convertToTensor(x, 'x', 'exp');

  const inputs: ExpInputs = {x: $x};
  return ENGINE.runKernel(Exp, inputs as {} as NamedTensorMap);
}
export const exp = op({exp_});
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=============================================================================

import {ENGINE} from './engine';
import {ExpandDims, ExpandDimsAttrs, ExpandDimsInputs} from './kernel_names';
import {NamedAttrMap} from './kernel_registry';
import {Tensor} from './tensor';
import {NamedTensorMap} from './tensor_types';
import {convertToTensor} from './tensor_util_env';

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_});

/**
 * 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 tf.expm1(x)
 * ```
 *
 * @param x The input tensor.
 *
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function expm1<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'expm1');

  const inputs: Expm1Inputs = {x: $x};

  return ENGINE.runKernel(Expm1, inputs as {} as NamedTensorMap);
}

export const expm1 = op({expm1_});

/**
 * Constructs a tensor by repeating it the number of times given by reps.
 * The output tensor's i'th dimension has `input.shape[i] * reps[i]` elements, and the values of `input` are replicated `reps[i]` times along the i'th dimension. For example, tiling an array `[a, b, c, d]` by `[2]` produces `[a, b, c, d, a, b, c, d]`.
 */
function tile<T extends Tensor>(x: T|TensorLike, reps: Tensor|TensorLike[]): T {
  const $x = convertToTensor(x, 'x', 'tile');

  const inputs: TileInputs = {x: $x};

  return ENGINE.runKernel(Tile, inputs as {} as NamedTensorMap);
}

export const tile = op({tile_});

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

import {ENGINE} from './engine';
import {Tile, TileAttrs, TileInputs} from './kernel_names';
import {NamedAttrMap} from './kernel_registry';
import {Tensor} from './tensor';
import {NamedTensorMap} from './tensor_types';
import {convertToTensor} from './tensor_util_env';

function tile<T extends Tensor>(x: T|TensorLike, reps: Tensor|TensorLike[]): T {
  const $x = convertToTensor(x, 'x', 'tile');

  const inputs: TileInputs = {x: $x};

  return ENGINE.runKernel(Tile, inputs as {} as NamedTensorMap);
}

export const tile = op({tile_});
```javascript
const a = tf.tensor1d([1, 2]);
a.tile([2]).print();
```

```javascript
const a = tf.tensor2d([[1, 2, 3, 4], [2, 3, 4, 5]], [2, 2]);
a.tile([2]).print();
```

```javascript
const a = tf.tensor2d([[1, 2, 3, 4], [2, 3, 4, 5]], [2, 2]);
a.tile([1, 2]).print();
```

```javascript
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");

  const inputs: TileInputs = {x: $x};
  const attrs: TileAttrs = {reps};

  return ENGINE.runKernel(Tile, inputs as unknown as NamedTensorMap, 
                         attrs as unknown as NamedAttrMap);
}
```

```javascript
export const tile = op({tile_});
```

```
function eye_(numRows: number, numColumns?: number, batchShape?: number[] | [number, 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) {
      // tslint:disable-next-line:no-unnecessary-type-assertion
      return tile(expandDims(expandDims(out, 0), 0), [batchShape[0], batchShape[1], 1]) as Tensor2D;
    } else if (batchShape.length === 3) {
      // tslint:disable-next-line:no-unnecessary-type-assertion
      return tile(expandDims(expandDims(expandDims(out, 0), 0), 0), [batchShape[0], batchShape[1], 1]) as Tensor2D;
    } else if (batchShape.length === 4) {
      // tslint:disable-next-line:no-unnecessary-type-assertion
      return tile(expandDims(expandDims(expandDims(out, 0), 0), 0), [batchShape[0], batchShape[1], batchShape[2], 1]) as Tensor2D;
    } else {
      throw new Error(`eye() currently supports only 1D and 2D ` + `batchShapes, but received 
    $(batchShape as any).length)`;
    }
  }
}
```

```javascript
export const eye = op({eye_});
```

```
function fill_<T extends Tensor>(x: T | TensorLike, value: number, shape: number[], dtype: DataType = 'float32'): T {
  if (value == null) {
    return x;
  }
  const inputs: FillInputs = {x: x,
                             value: value};
  const attrs: FillAttrs = {shape: shape};

  return ENGINE.runKernel(Fill, inputs as unknown as NamedTensorMap, 
                         attrs as unknown as NamedAttrMap);
}
```

```javascript
export const fill = op({fill_});
```

```
class Tensor {
  constructor(x, dtype, name) {
    this.x = x;
    this.dtype = dtype;
    this.name = name;
  }
  ...
}
```

```
function convertToTensor(x, name, attrName, dataType) {
  const $x = x;
  util.assert($x.rank <= 4, () => `Error in transpose: rank of input 
    ${$x.rank} must match the number of dimensions in ` + `operation.
    `);

  const attrs = {name: name, attrName: attrName,
                 dataType: dataType};
  return $x;
}
```

```
const $math = convertToTensor($math, 'math', 'math', 'string_or_numeric');
```

```
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';

function createTensor(name, shape, dtype, attrMap, metaMap) {
  const inputs: TensorMap = {
    name: name,
    shape: shape,
    dtype: dtype,
    attrMap: attrMap,
    metaMap: metaMap,
  }

  return ENGINE.runKernel(Tensor, inputs as unknown as NamedTensorMap, 
                         attrMap as unknown as NamedAttrMap);
}
```

```
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';

```

```javascript
const $math = convertToTensor($math, 'math', 'math', 'string_or_numeric');
```

```
const $math = convertToTensor($math, 'math', 'math', 'string_or_numeric');
```

```
if ($a < b) {
  return true;
}
```

```
if ($a < b) {
  return true;
}
```

```
const $a = tf.tensor1d([1, 2, 3, 4]);
const $b = tf.tensor1d([3, 4, 5]);
```

```
const $a = tf.tensor1d([1, 2, 3, 4]);
const $b = tf.tensor1d([3, 4, 5]);
```

```
const $a = tf.tensor1d([1, 2, 3, 4]);
const $b = tf.tensor1d([3, 4, 5]);
```

```
const $a = tf.tensor1d([1, 2, 3, 4]);
const $b = tf.tensor1d([3, 4, 5]);
```

```
if ($a < b) {
  return true;
}
```

```
if ($a < b) {
  return true;
}
```
the tensor with.

@doc {heading: 'Tensors', subheading: 'Creation'}

//

*

@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};

/**
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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.
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 */

import {ENGINE} from '../engine';
import {Floor, FloorInputs} 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 floor of input `tf.Tensor` element-wise: `floor(x)`.
 *
 * ```js
 * const x = tf.tensor1d([0.6, 1.1, -3.3]);
 *
 * x.floor().print();  // or tf.floor(x)
 * ```
 * @param x The input tensor.
 *
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function floor_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'floor');

  const inputs: FloorInputs = {x: $x};
  return ENGINE.runKernel(Floor, inputs as {} as NamedTensorMap);
}
export const floor = op({floor_});

/**
 * Gather slices from tensor `x`'s axis `axis` according to `indices`.
 *
 * ```js
 * const x = tf.tensor1d([1, 2, 3, 4]);
 * const indices = tf.tensor1d([1, 1, 0], 'int32');
 *
 * x.gather(indices).print();
 * ```
 *
 * ```js
 * const x = tf.tensor2d([1, 2, 3, 4], [2, 2]);
 * const indices = tf.tensor1d([1, 1, 0], 'int32');
 *
 * x.gather(indices).print();
 * ```
 * @param x The input tensor whose slices to be gathered.
 * @param indices The indices of the values to extract.
 * @param axis The axis over which to select values. Defaults to 0.
 * @param batchDims Optional. The number of batch dimensions. It must be less
 *     than or equal to rank(indices). Defaults to 0.
 *     The output tensor will have shape of
 *     `x.shape[:axis] + indices.shape[batchDims:] + x.shape[axis + 1:]`
 * * @doc {heading: 'Tensors', subheading: 'Slicing and Joining'}
 */
function gather_<T extends Tensor>(
    x: T|TensorLike, indices: Tensor|TensorLike, axis = 0,
    batchDims = 0): T {
  const $x = convertToTensor(x, 'x', 'gather', 'int32');
  const $indices = convertToTensor(indices, 'indices', 'gather', 'int32');

  const inputs: GatherV2Inputs = {x: $x,
      indices: $indices,
      axis, batchDims};
  return ENGINE.runKernel(GatherV2, inputs as {} as NamedAttrMap);
```javascript
/**
 * Returns the truth value of (a > b) element-wise. Supports broadcasting.
 *
 * ```js
 * const a = tf.tensor1d([1, 2, 3]);
 * const b = tf.tensor1d([2, 2, 2]);
 * a.greater(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 greater_<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_});
```

---

```javascript
/**
 * Returns the truth value of (a >= b) element-wise. Supports broadcasting.
 *
 * ```js
 * const a = tf.tensor1d([1, 2, 3]);
 * const b = tf.tensor1d([2, 2, 2]);
 *
 * a.greaterEqual(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 greaterEqual_<T extends Tensor>(
    a: Tensor|TensorLike, b: Tensor|TensorLike): 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: $a, b: $b};

  return ENGINE.runKernel(GreaterEqual, inputs as {} as NamedTensorMap);
}

export const greaterEqual = op({greaterEqual_});
```

---

```javascript
/**
 * 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.
 *
 * ```js
 * const x = tf.complex([-2.25, 3.25], [4.75, 5.75]);
 * tf.imag(x).print();
 * ```
 *
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
function imag_<T extends Tensor>(input: T|TensorLike): T {
  const $input = convertToTensor(input, 'input', 'imag');

  const inputs: ImagInputs = {input: $input};

  return ENGINE.runKernel(Imag, inputs as {} as NamedTensorMap);
}
```

---

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---

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Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5 6176

```javascript
const x = tf.tensor1d([NaN, Infinity, -Infinity, 0, 1]);

x.isFinite().print();  // or tf.isNaN(x)
```

*See the License for the specific language governing permissions and limitations under the License.*
import {ENGINE} from '../engine'; import {LeakyRelu, LeakyReluAttrs, LeakyReluInputs} 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 leaky rectified linear element-wise.
 *
 * See
 * 
 * ```js
 * const x = tf.tensor1d([-1, 2, -3, 4]);
 * const y = x.leakyRelu();
 * ```
 * @param x The input tensor.
 * @param alpha The scaling factor for negative values, defaults to 0.2.
 *
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function leakyRelu_<T extends Tensor>(x: T|TensorLike, alpha = 0.2): T {
  const $x = convertToTensor(x, 'x', 'leakyRelu');

  const inputs: LeakyReluInputs = {x: $x};
  const attrs: LeakyReluAttrs = {alpha};

  return ENGINE.runKernel(LeakyRelu, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap);
}

export const leakyRelu = op({leakyRelu_});
value of (a <= b) element-wise. Supports broadcasting.

```js
const a = tf.tensor1d([1, 2, 3]);
const b = tf.tensor1d([2, 2, 2]);
const a_lessEqual = a.lessEqual(b);
```

Supports broadcasting. The first input tensor `a` and the second input tensor `b` must have the same dtype as `a`. Returns a tensor with the same dtype as `a`. The result of broadcasting is the tensor `a_lessEqual`.

```js
const a = tf.tensor1d([1, 2, 3]);
const b = tf.tensor1d([2, 2, 2]);

a.lessEqual(b).print();
```

Example:

```js
const a = tf.tensor1d([1, 2, 3]);
const b = tf.tensor1d([2, 2, 2]);

a.lessEqual(b).print();
```

The function `lessEqual` is used to compare corresponding elements of two tensors `a` and `b`. It returns a tensor of boolean values indicating whether each element of `a` is less than or equal to the corresponding element of `b`.

```
function lessEqual_<T extends Tensor>(a: Tensor|TensorLike, b: Tensor|TensorLike): T {
  let $a = convertToTensor(a, 'a', 'lessEqual');
  let $b = convertToTensor(b, 'b', 'lessEqual');

  assertAndGetBroadcastShape($a.shape, $b.shape);

  const inputs: LessEqualInputs = {a: $a, b: $b};

  return ENGINE.runKernel(LessEqual, inputs as {} as NamedTensorMap);
}
```

The function `linspace` is used to create a sequence of evenly spaced values over a given interval.

```js
tf.linspace(0, 9, 10).print();
```

The function `localResponseNormalization` is used to normalize the activation of a local neighborhood across or within channels.

```
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');

  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};

  return ENGINE.runKernel(LRN, inputs as {} as NamedTensorMap);
}
```
as {} as NamedTensorMap.

  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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 * See the License for the specific language governing permissions and
 * limitations under the License.
 */

import {ENGINE} from '../engine';
import {Log, LogInputs} 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 natural logarithm of the input `tf.Tensor` element-wise: `ln(x)`
 *
 * ```js
 * const x = tf.tensor1d([1, 2, Math.E]);
 *
 * x.log().print();  // or tf.log(x)
 * ```
 * @param x The input tensor.
 *
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function log_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'log');

  const inputs: LogInputs = {x: $x};
  return ENGINE.runKernel(Log, inputs as {} as NamedTensorMap);
}
export const log = op({log_});

/**
 * Computes natural logarithm of the input `tf.Tensor` plus one
 * element-wise: `ln(1 + x)`
 *
 * ```js
 * const x = tf.tensor1d([1, 2, Math.E - 1]);
 *
 * x.log1p().print();  // or tf.log1p(x)
 * ```
 * @param x The input tensor.
 *
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function log1p_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'log1p');

  const inputs: Log1pInputs = {x: $x};
  return ENGINE.runKernel(Log1p, inputs as {} as NamedTensorMap);
}
export const log1p = op({log1p_});

/**
 * Provided `f(x)`, returns another function `g(x, dy?)`, which gives the
 * gradient of `f(x)` with respect to `x`.
 *
 * If `dy` is provided, the gradient of `f(x).mul(dy).sum()` with respect to
 * `x` is computed instead. `f(x)` must take a single tensor `x` and return a
 * single tensor `y`. If `f()` takes multiple inputs, use `tf.gradients` instead.
 * `f(x)` returns another function `g(x, dy?)`, which gives the gradient of `f(x)` with respect to `x`.
 *
 * ```js
 * // f(x) = x ^ 2
 * const f = x => x.square();
 * // f'(x) = 2x
 * const g = tf.gradients(f, x);  // or tf.gradients(f, [x])
 *
 * const x = tf.tensor1d([2, 3]);
 * g(x).print();
 * ```
 */

import {ENGINE} from '../engine';
import {Log, LogInputs} 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 natural logarithm of the input `tf.Tensor` element-wise: `ln(x)`
 *
 * ```js
 * const x = tf.tensor1d([1, 2, Math.E]);
 *
 * x.log().print();  // or tf.log(x)
 * ```
 * @param x The input tensor.
 *
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function log_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'log');

  const inputs: LogInputs = {x: $x};
  return ENGINE.runKernel(Log, inputs as {} as NamedTensorMap);
}
export const log = op({log_});

/**
 * Computes natural logarithm of the input `tf.Tensor` plus one
 * element-wise: `ln(1 + x)`
 *
 * ```js
 * const x = tf.tensor1d([1, 2, Math.E - 1]);
 *
 * x.log1p().print();  // or tf.log1p(x)
 * ```
 * @param x The input tensor.
 *
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function log1p_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'log1p');

  const inputs: Log1pInputs = {x: $x};
  return ENGINE.runKernel(Log1p, inputs as {} as NamedTensorMap);
}
export const log1p = op({log1p_});

/**
 * Provided `f(x)`, returns another function `g(x, dy?)`, which gives the
 * gradient of `f(x)` with respect to `x`.
 *
 * If `dy` is provided, the gradient of `f(x).mul(dy).sum()` with respect to `x` is computed instead. `f(x)` must take a single tensor `x` and return a single tensor `y`. If `f()` takes multiple inputs, use `tf.gradients` instead.
 * `f(x)` returns another function `g(x, dy?)`, which gives the gradient of `f(x)` with respect to `x`.
 *
 * ```js
 * // f(x) = x ^ 2
 * const f = x => x.square();
 * // f'(x) = 2x
 * const g = tf.gradients(f, x);  // or tf.gradients(f, [x])
 *
 * const x = tf.tensor1d([2, 3]);
 * g(x).print();
 * ```
 */

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`.
 *
 * If `dy` is provided, the gradient of `f(x).mul(dy).sum()` with respect to `x` is computed instead. `f(x)` must take a single tensor `x` and return a single tensor `y`. If `f()` takes multiple inputs, use `tf.gradients` instead.
 * `f(x)` returns another function `g(x, dy?)`, which gives the gradient of `f(x)` with respect to `x`.
 *
 * ```js
 * // f(x) = x ^ 2
 * const f = x => x.square();
 * // f'(x) = 2x
 * const g = tf.gradients(f, x);  // or tf.gradients(f, [x])
 *
 * const x = tf.tensor1d([2, 3]);
 * g(x).print();
 * ```
 */
3x ^ 2\n * const g = tf.grad(f);\n * // f''(x) = 6x\n * const gg = tf.grad(g);\n *\n * const x = tf.tensor1d([2, 3]);\n *
gg(x).print();\n * ```\n *\n * @param f The function f(x), to compute gradient for.\n *\n * @doc {heading: 'Training',
subheading: 'Gradients'}\n */\nfunction grad(f: (x: Tensor) => Tensor): (\n x: TensorLike|Tensor, dy?:
TensorLike|Tensor) => Tensor {\n util.assert(\n
util.isFunction(f), () => 'The f passed in grad(f) must be a
function');\n return (x: TensorLike|Tensor, dy?: TensorLike|Tensor): Tensor => {\n // x can be of any dtype, thus
null as the last argument.\n const $x = convertToTensor(x, 'x', 'tf.grad', 'string_or_numeric');\n const $dy: Tensor
=\n
(dy != null) ? convertToTensor(dy, 'dy', 'tf.grad') : null;\n return ENGINE.tidy(() => {\n
const {value,
grads} = ENGINE.gradients(() => f($x), [$x], $dy);\n
if ($dy != null) {\n
util.assertShapesMatch(\n
value.shape, $dy.shape,\n
'The shape of dy passed in grad(f)(x, dy) must match the shape ' +\n
'returned by f(x)');\n
}\n
checkGrads(grads);\n
return grads[0];\n });\n };\n}\n\n/**\n * Provided `f(x1,
x2,...)`, returns another function `g([x1, x2,...], dy?)`,\n * which gives an array of gradients of `f()` with respect to
each input\n * [`x1`,`x2`,...].\n *\n * If `dy` is passed when calling `g()`, the gradient of\n * `f(x1,...).mul(dy).sum()`
with respect to each input is computed instead.\n * The provided `f` must take one or more tensors and return a
single tensor\n * `y`. If `f()` takes a single input, we recommend using `tf.grad` instead.\n *\n * ```js\n * // f(a, b) = a
* b\n * const f = (a, b) => a.mul(b);\n * // df / da = b, df / db = a\n * const g = tf.grads(f);\n *\n * const a =
tf.tensor1d([2, 3]);\n * const b = tf.tensor1d([-2, -3]);\n * const [da, db] = g([a, b]);\n * console.log('da');\n *
da.print();\n * console.log('db');\n * db.print();\n * ```\n *\n * @param f The function `f(x1, x2,...)` to compute
gradients for.\n *\n * @doc {heading: 'Training', subheading: 'Gradients'}\n */\nfunction grads(f: (...args: Tensor[])
=> Tensor): (\n args: Array<Tensor|TensorLike>, dy?: Tensor|TensorLike) => Tensor[] {\n util.assert(\n
util.isFunction(f), () => 'The f passed in grads(f) must be a function');\n return (args: Array<Tensor|TensorLike>,
dy?: Tensor|TensorLike): Tensor[] => {\n util.assert(\n
Array.isArray(args),\n
() => 'The args passed in
grads(f)(args) must be an array ' +\n
'of `Tensor`s or `TensorLike`s');\n // args can be of any dtype, thus null
as the last argument.\n const $args =\n
convertToTensorArray(args, 'args', 'tf.grads', 'string_or_numeric');\n
const $dy: Tensor =\n
(dy != null) ? convertToTensor(dy, 'dy', 'tf.grads') : null;\n return ENGINE.tidy(() =>
{\n
const {value, grads} = ENGINE.gradients(() => f(...$args), $args, $dy);\n
if ($dy != null) {\n
util.assertShapesMatch(\n
value.shape, $dy.shape,\n
'The shape of dy passed in grads(f)([x1,...], dy)
must ' +\n
'match the shape returned by f([x1,...])');\n
}\n
checkGrads(grads);\n
return grads;\n
});\n };\n}\n\n/**\n * Like `tf.grad`, but also returns the value of `f()`. Useful when `f()`\n * returns a metric you
want to show.\n *\n * The result is a rich object with the following properties:\n * - grad: The gradient of `f(x)` w.r.t
`x` (result of `tf.grad`).\n * - value: The value returned by `f(x)`.\n *\n * ```js\n * // f(x) = x ^ 2\n * const f = x =>
x.square();\n * // f'(x) = 2x\n * const g = tf.valueAndGrad(f);\n *\n * const x = tf.tensor1d([2, 3]);\n * const {value,
grad} = g(x);\n *\n * console.log('value');\n * value.print();\n * console.log('grad');\n * grad.print();\n * ```\n *\n *
@doc {heading: 'Training', subheading: 'Gradients'}\n */\nfunction valueAndGrad<I extends Tensor, O extends
Tensor>(f: (x: I) => O): (\n x: I, dy?: O) => {\n value: O;\n grad: I;\n} {\n util.assert(\n
util.isFunction(f),\n
() => 'The f passed in valueAndGrad(f) must be a function');\n return (x: I, dy?: O) => {\n util.assert(\n
x
instanceof Tensor,\n
() => 'The x passed in valueAndGrad(f)(x) must be a tensor');\n util.assert(\n
dy ==
null || dy instanceof Tensor,\n
() => 'The dy passed in valueAndGrad(f)(x, dy) must be a tensor');\n const
{grads, value} = ENGINE.gradients(() => f(x), [x], dy);\n checkGrads(grads);\n return {grad: grads[0] as I,
value};\n };\n}\n\n/**\n * Like `tf.grads`, but returns also the value of `f()`. Useful when `f()`\n * returns a metric
you want to show.\n *\n * The result is a rich object with the following properties:\n * - grads: The gradients of `f()`
w.r.t each input (result of `tf.grads`).\n * - value: The value returned by `f(x)`.\n *\n * ```js\n * // f(a, b) = a * b\n *
const f = (a, b) => a.mul(b);\n * // df/da = b, df/db = a\n * const g = tf.valueAndGrads(f);\n *\n * const a =
tf.tensor1d([2, 3]);\n * const b = tf.tensor1d([-2, -3]);\n * const {value, grads} = g([a, b]);\n *\n * const [da, db] =
grads;\n *\n * console.log('value');\n * value.print();\n *\n * console.log('da');\n * da.print();\n * console.log('db');\n
* db.print();\n * ```\n *\n * @doc {heading: 'Training', subheading: 'Gradients'}\n */\nfunction valueAndGrads<O
extends Tensor>(f: (...args: Tensor[]) => O): (\n args: Tensor[], dy?: O) => {\n grads: Tensor[];\n value: O;\n}
{\n util.assert(\n
util.isFunction(f),\n
() => 'The f passed in valueAndGrads(f) must be a function');\n return
(args: Tensor[], dy?: O) => {\n util.assert(\n
Array.isArray(args) && args.every(arg => arg instanceof

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```js
const f = () => a.mul(x).add(b.mul(x)).sum();
const x = tf.tensor1d([1, 2]);

// f(a, b) = a * x + b * x
const f = () => Scalar
const x = tf.tensor1d([1, 2]);
const dx = tf.grad(x);
```

The shape of dy passed in `valueAndGrads(f)([x1,...], dy)` must match the shape returned by `f([x1,...])`.

The value of the function `f`.

```js
const a = tf.variable(tf.tensor1d([3, 4]));
const b = tf.variable(tf.tensor1d([5, 6]));
```

The list of variables to compute the gradients with respect to. Defaults to all trainable variables. Returns An object with the following keys and values:

- `value`: The value of the function `f`
- `grads`: A map from the names of the variables to the gradients.

If the 'varList' argument is provided explicitly and contains a subset of non-trainable variables, this map in the return value will contain keys

```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.mul(x.abs());
});
```

The f passed in `variableGrads(f)` must be a function.

```js
const a = tf.variable(tf.tensor1d([3, 4]));
const b = tf.variable(tf.tensor1d([5, 6]));
```

The variable passed in `variableGrads(f, varList)` must be an array of variables. If the `save` function passsed to `f` is called, `g` returns `f().value`.

```js
const x = tf.tensor1d([-1, -2, 3]);
const dx = tf.grad(x);
```

The function to execute. `f()` should return a scalar.

```js
const f = () => a.mul(x.square()).add(b.mul(x)).sum();
```

The loss function `y=f(x). Please make sure the operations that use variables are inside the list of

```js
function f passed to minimize().
```
inputs.

*/

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 */

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]);
 *
 * x.neg().print();  // or tf.neg(x)
 * ```
 *
 * @param x The input tensor.
 *
 * @doc {heading: 'Operations', 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_});

/**
 * Computes softplus of the input `tf.Tensor` element-wise: `log(exp(x) + 1)`
 *
 * ```js
 * const x = tf.tensor1d([0, 1, -1, .7]);
 *
 * x.softplus().print();  // or tf.softplus(x)
 * ```
 * @param x The input tensor.
 *
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function softplus_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'softplus');

  const inputs: SoftplusInputs = {x: $x};
  return ENGINE.runKernel(Softplus, inputs as {} as NamedTensorMap);
}
export const softplus = op({softplus_});

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 */

import {customGrad} from '../gradients';
import {Tensor} from '../tensor';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {mul} from './mul';
import {neg} from './neg';
import {op} from './operation';
import {sigmoid} from './sigmoid';
import {softplus} from './softplus';
```
'./softplus';\n'\n\n/**
 * Computes log sigmoid of the input `tf.Tensor` element-wise:\n * `logSigmoid(x)`. For
 * numerical stability, we use `tf.softplus(-x)`:\n * const x = tf.tensor1d([0, 1, -1, 7]);\n * x.logSigmoid().print(); // or tf.logSigmoid(x)\n */\n
/**
 * Computes log sigmoid of the input `tf.Tensor` element-wise:
 * `logSigmoid(x)`. For
 * numerical stability, we use `-tf.softplus(-x)`.
 *
 * ```js
 * const x = tf.tensor1d([0, 1, -1, 7]);
 *
 * x.logSigmoid().print(); // or tf.logSigmoid(x)
 * ```
 *
 * `logSigmoid` returns the log sigmoid of its argument.
 *
 * For a tensor with multiple elements, the output has the same
 * shape as the input.
 *
 * @param x The input tensor.
 *
 * @doc {heading:
 * 'Operations', subheading: 'Basic math'}
 */
function logSigmoid_<T extends Tensor>(x: Tensor): T {
  // We use a custom gradient to maintain previous
  // implementation.
  return x.logSigmoid();
}

/**
 * Computes log sigmoid of the input `tf.Tensor` element-wise:
 * `logSigmoid(x)`. For
 * numerical stability, we use `-tf.softplus(-x)`.
 *
 * ```js
 * const x = tf.tensor1d([0, 1, -1, 7]);
 *
 * x.logSigmoid().print(); // or tf.logSigmoid(x)
 * ```
 *
 * `logSigmoid` returns the log sigmoid of its argument.
 *
 * For a tensor with multiple elements, the output has the same
 * shape as the input.
 *
 * @param x The input tensor.
 *
 * @doc {heading:
 * 'Operations', subheading: 'Basic math'}
 */
function logSigmoid_<T extends Tensor>(x: Tensor): T {
  // We use a custom gradient to maintain previous
  // implementation.
  return x.logSigmoid();
}

```

---

```

```
from.

* @param b The second `tf.Tensor` to be subtracted. Must have the same dtype as
\n* `a`.

* @doc


 */

function sub_<T extends Tensor>(a: Tensor|TensorLike, b: Tensor|TensorLike): T {
  let $a = convertToTensor(a, 'a', 'sub');
  let $b = convertToTensor(b, 'b', 'sub');

  const Inputs = {a: $a, b: $b};

  return ENGINE.runKernel(Sub, Inputs as {} as NamedTensorMap);
}

export const sub = op({sub_});

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 * limitations under the License.
 *=============================================================================

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';
import {sub} from './sub';
import {sum} from './sum';

/**
 * Computes the sum 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. If axes has no entries, all dimensions are reduced, and the
 * `tf.Tensor` with a single element is returned.
 *
 * ```js
 * const x = tf.tensor1d([1, 2, 3]);
 * const y = x.sum().print();
 * // `y` = 6
 * ```
 *
 * ```js
 * const x = tf.tensor2d([1, 2, 3, 4], [2, 2]);
 * const y = x.sum([1]).print();
 * // `y` = [6, 7]
 * ```
 *
 * @param x The input tensor to compute the sum over. If the
 *   dtype is `bool` it will be converted to `int32` and the output dtype will be `int32`.
 * @param axis The
 *   dimension(s) to reduce. By default it reduces all dimensions.
 * @param keepDims If true, retains reduced
 *   dimensions with size 1. If axes has no entries, all dimensions are reduced, and a
 *   `tf.Tensor` with a single element is returned.
 *
 * @doc {heading: 'Operations', subheading: 'Reduction'}
 */

function sum_<T extends Tensor>(
    x: Tensor|TensorLike, axis: number|number[] = null, keepDims = false): T {
  let $x = convertToTensor(x, 'x', 'sum');

  const Inputs = {x: $x};

  return ENGINE.runKernel(Sum, Inputs as {} as NamedTensorMap, axis as {} as NamedAttrMap);
}

export const sum = op({sum_});

/**
 * Computes the log softmax.
 *
 * ```js
 * const logits = tf.tensor1d([1, 2, 3]);
 * const y = logits.logSoftmax().print();
 * ```
 *
 * ```js
 * const logits = tf.tensor2d([1, 2, 3, 4], [2, 2]);
 * const y = logits.logSoftmax().print();
 * ```
 *
 * @param logits The logits array.
 * @param axis The
 *   dimension softmax would be performed on. Defaults to `-1` which indicates the last dimension.
 * @doc

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

from.

* @param b The second `tf.Tensor` to be subtracted. Must have the same dtype as
\n* `a`.

* @doc


 */

function sub_<T extends Tensor>(a: Tensor|TensorLike, b: Tensor|TensorLike): T {
  let $a = convertToTensor(a, 'a', 'sub');
  let $b = convertToTensor(b, 'b', 'sub');

  const Inputs = {a: $a, b: $b};

  return ENGINE.runKernel(Sub, Inputs as {} as NamedTensorMap);
}

export const sub = op({sub_});

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

import {customGrad} from '../gradients';
import {Tensor} from '../tensor';
import {GradSaveFunc} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {cast} from './cast';
import {exp} from './exp';
import {log} from './log';
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 logits = tf.tensor1d([1, 2, 3]);
 * const y = logits.logSoftmax().print();
 * ```
 *
 * ```js
 * const logits = tf.tensor2d([1, 2, 3, 4], [2, 2]);
 * const y = logits.logSoftmax().print();
 * ```
 *
 * @param logits The logits array.
 * @param axis The
 *   dimension softmax would be performed on. Defaults to `-1` which indicates the last dimension.
 * @doc

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

from.

* @param b The second `tf.Tensor` to be subtracted. Must have the same dtype as
\n* `a`.

* @doc


 */

function sub_<T extends Tensor>(a: Tensor|TensorLike, b: Tensor|TensorLike): T {
  let $a = convertToTensor(a, 'a', 'sub');
  let $b = convertToTensor(b, 'b', 'sub');

  const Inputs = {a: $a, b: $b};

  return ENGINE.runKernel(Sub, Inputs as {} as NamedTensorMap);
}

export const sub = op({sub_});

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 * limitations under the License.
 *=============================================================================

import {customGrad} from '../gradients';
import {Tensor} from '../tensor';
import {GradSaveFunc} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

import {cast} from './cast';
import {exp} from './exp';
import {log} from './log';
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 logits = tf.tensor1d([1, 2, 3]);
 * const y = logits.logSoftmax().print();
 * ```
 *
 * ```js
 * const logits = tf.tensor2d([1, 2, 3, 4], [2, 2]);
 * const y = logits.logSoftmax().print();
 * ```
 *
 * @param logits The logits array.
 * @param axis The
 *   dimension softmax would be performed on. Defaults to `-1` which indicates the last dimension.
 * @doc

 *=============================================================================
const forward: ForwardFunc<Tensor> = (backend, save) => {
  //   const keepDims = true;
  //   const xMax =
  //       max(logits, axis, true);
  //   const shifted = sub(logits, xMax);
  //   const value =
  //       sub(shifted, log(sum(exp(shifted), axis, keepDims)));
  //   return value;
  // };

  // Use a custom gradient for numerical stability.
const customOp = customGrad(logits: Tensor, save: 
  //   const keepDims = true;
  //   const xMax =
  //       max(logits, axis, true);
  //   const shifted = sub(logits, xMax);
  //   const value =
  //       sub(shifted, log(sum(exp(shifted), axis, keepDims)));
  //   return value;
  // };

  // Use a custom gradient for numerical stability.
  const customOp = customGrad((logits: Tensor, save:
    const keepDims = true;
    const xMax =
    //       max(logits, axis, true);
    const shifted = sub(logits, xMax);
    const value =
    //       sub(shifted, log(sum(exp(shifted), axis, keepDims)));
    //   return value;
    // };

  const inputs: LogSoftmaxInputs = {logits: $logits};
  const attrs: LogSoftmaxAttrs = {axis};
  return ENGINE.runKernel(
    LogSoftmax, inputs as {} as 
    const axes: number[];
  //   const keepDims = true;
  //   const xMax =
  //       max(logits, axis, true);
  //   const shifted = sub(logits, xMax);
  //   const value =
  //       sub(shifted, log(sum(exp(shifted), axis, keepDims)));
  //   return value;
  // };

  return customOp($logits) as T;

  // TODO Use Engine.runKernel
  // const inputs: LogSoftmaxInputs = {logits: $logits};
  // const attrs: LogSoftmaxAttrs = {axis};
  // return ENGINE.runKernel(
  //            LogSoftmax, inputs as {} as 
  //            NamedTensorMap,
  //            attrs as {} as NamedAttrMap);
}

export const logSoftmax = op({logSoftmax_});

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 */

import * as util from '../util';

/**
 * Returns true if the axis specifies the inner most dimensions of the
 * array.
 * @export function axesAreInnerMostDims(axes: number[], rank: number): boolean {
 *   for (let i = 0; i < axes.length; ++i) {
 *     if (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 = 
 *     combineLocations(outputLoc, reduceLoc, axes);
 *   return loc;
 * }

 * @export function computeOutAndReduceShapes(aShape: number[], axes: number[]): [number[], number[]] {
 *   const outShape = 
 *     computeOutAndReduceShapes(aShape, axes);
 *   return [outShape, aShape.map(dim => aShape[1 - dim])];
 * }

 * @export function expandShapeToKeepDim(shape: number[], axes: number[]): number[] {
 *   return expandShapeToKeepDim(shape, axes);
 * }

 * @export function getAxesPermutation(axes: number[], rank: number): number[] |
 *     null {
 *   if (axesAreInnerMostDims(axes, rank)) {
 *     return null;
 *   }
 *   const result: number[] = 
 *     getAxesPermutation(axes, rank);
 *   return result;
 * }

 * @export function getUndoAxesPermutation(axes: number[]): number[] {
 *   return getUndoAxesPermutation(axes);
 * }

 * @export function getInnerMostAxes(numAxes: number, rank: number): number[] {
 *   const res: number[] = 
 *     getInnerMostAxes(numAxes, rank);
 *   return res;
 * }

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 */

import * as util from '../util';

/**
 * Returns true if the axis specifies the inner most dimensions of the
 * array.
 * @export function axesAreInnerMostDims(axes: number[], rank: number): boolean {
 *   for (let i = 0; i < axes.length; ++i) {
 *     if (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 = 
 *     combineLocations(outputLoc, reduceLoc, axes);
 *   return loc;
 * }

 * @export function computeOutAndReduceShapes(aShape: number[], axes: number[]): [number[], number[]] {
 *   const outShape = 
 *     computeOutAndReduceShapes(aShape, axes);
 *   return [outShape, aShape.map(dim => aShape[1 - dim])];
 * }

 * @export function expandShapeToKeepDim(shape: number[], axes: number[]): number[] {
 *   return expandShapeToKeepDim(shape, axes);
 * }

 * @export function getAxesPermutation(axes: number[], rank: number): number[] |
 *     null {
 *   if (axesAreInnerMostDims(axes, rank)) {
 *     return null;
 *   }
 *   const result: number[] = 
 *     getAxesPermutation(axes, rank);
 *   return result;
 * }

 * @export function getUndoAxesPermutation(axes: number[]): number[] {
 *   return getUndoAxesPermutation(axes);
 * }

 * @export function getInnerMostAxes(numAxes: number, rank: number): number[] {
 *   const res: number[] = 
 *     getInnerMostAxes(numAxes, rank);
 *   return res;
 * }
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=============================================================================

*/

import {Tensor} from '../tensor';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import {parseAxisParam} from '../util';

import {add} from './add';
import {expandShapeToKeepDim} from './axis_util';
import {exp} from './exp';
import {log} from './log';
import {max} from './max';
import {op} from './operation';
import {reshape} from './reshape';
import {sub} from './sub';
import {sum} from './sum';

/**
 * Computes the log(sum(exp(elements across the reduction
 * dimensions))).\n * \n * \n * Reduces the input along the dimensions given in `axis`. Unless `keepDims` is \n * true, the
 * rank of the array is reduced by 1 for each entry in `axis`. If `keepDims` is true, the reduced dimensions
 * are retained with length 1.\n * If `axis` has no entries, all dimensions are reduced, and an array with a single element
 * is returned.\n * \n * @param x The input tensor.\n * @param axis The dimension(s) to reduce. If `null` (the default),\n * \n * @doc {heading: 'Operations', subheading: 'Reduction'}
 */
function logSumExp_<T extends Tensor>(
    x: Tensor|TensorLike, axis: number|number[] = null, keepDims = false): T {
  const $x = convertToTensor(x, 'x', 'logSumExp');

  const axes = parseAxisParam(axis, $x.shape);
  const xMax = max($x, axes, true /* keepDims */);\n  const a = sub($x, xMax);
  const b = exp(a);
  const c = sum(b, axes);

  const d = log(c);
  const res = add(reshape(xMax, d.shape), d);

  if (keepDims) {
    const newShape = expandShapeToKeepDim(res.shape, axes);
    return reshape(res, newShape) as T;
  }
  return res as T;
}

export const logSumExp = op({logSumExp_});

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

*/
import {ENGINE} from '../engine';
import {LogicalAnd, LogicalAndInputs} 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 the truth value of `a AND b` element-wise.
 * Supports broadcasting.\n * \n * @param a The first input\n * @param b The second input tensor. Must be of dtype bool.\n * \n * @doc {heading: 'Operations', subheading: 'Logical'}
 */
function logicalAnd_<T extends Tensor>(
    a: Tensor|TensorLike, b: Tensor|TensorLike): T {
  const $a = convertToTensor(a, 'a', 'logicalAnd', 'bool');
  const $b = convertToTensor(b, 'b', 'logicalAnd', 'bool');\n  assertAndGetBroadcastShape($a.shape, $b.shape);
  const cona = tf.tensor1d([false, false, true, true], 'bool');\n  const conb = tf.tensor1d([false, false, true, true], 'bool');\n
  const a = a.logicalAnd(b);
  const b = b.logicalAnd(a);
  const $a = tf.tensor1d([false, false, true, true], 'bool');\n  const $b = tf.tensor1d([false, false, true, true], 'bool');\n  const c = add($a, $b);
  $a *= a.logicalAnd(b);\n  $b *= b.logicalAnd(a);
  const $inputs = {a: $a, b: $b};\n  return ENGINE.runKernel(LogicalAnd, inputs as {} as NamedTensorMap);
}

export const logicalAnd = op({logicalAnd_});

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

*/
import {ENGINE} from '../engine';
import {LogicalNot, LogicalNotInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';

/**
 * Returns the truth value of 'NOT x' element-wise.
 *
 * ```js
 * const a = tf.tensor1d([false, true], 'bool');
 * a.logicalNot().print();
 * ```
 *
 * @param x The input tensor. Must be of dtype 'bool'.
 * @doc {heading: 'Operations', subheading: 'Logical'}
 */
function logicalNot_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'logicalNot', 'bool');
  const inputs: LogicalNotInputs = {x: $x};
  return ENGINE.runKernel(LogicalNot, inputs as {} as NamedTensorMap);
}

export const logicalNot = op({logicalNot_});

/**
 * Returns the truth value of `a OR b` element-wise.
 * Supports broadcasting.
 *
 * ```js
 * const a = tf.tensor1d([false, false, true, true], 'bool');
 * const b = tf.tensor1d([false, true, false, true], 'bool');
 *
 * a.logicalOr(b).print();
 * ```
 *
 * @param a The first input tensor.
 * @param b The second input tensor.
 * @doc {heading: 'Operations', subheading: 'Logical'}
 */
function logicalOr_<T extends Tensor>(a: Tensor|TensorLike, b: Tensor|TensorLike): T {
  const $a = convertToTensor(a, 'a', 'logicalOr', 'bool');
  const $b = convertToTensor(b, 'b', 'logicalOr', 'bool');
  assertAndGetBroadcastShape($a.shape, $b.shape);

  // x ^ y = (x | y) & ~(x & y)
  return logicalAnd(logicalOr($a, $b), logicalNot(logicalAnd($a, $b)));
}

export const logicalOr = op({logicalOr_});

/**
 * Returns the truth value of `a XOR b` element-wise. Supports broadcasting.
 *
 * ```js
 * const a = tf.tensor1d([false, false, true, true], 'bool');
 * const b = tf.tensor1d([false, true, false, true], 'bool');
 *
 * a.logicalXor(b).print();
 * ```
 *
 * @param a The first input tensor.
 * @param b The second input tensor.
 * @doc {heading: 'Operations', subheading: 'Logical'}
 */
function logicalXor_<T extends Tensor>(a: Tensor|TensorLike, b: Tensor|TensorLike): T {
  const $a = convertToTensor(a, 'a', 'logicalXor', 'bool');
  const $b = convertToTensor(b, 'b', 'logicalXor', 'bool');
  assertAndGetBroadcastShape($a.shape, $b.shape);

  // x ^ y = (x | y) & ~(x & y)
  return logicalAnd(logicalOr($a, $b), logicalNot(logicalAnd($a, $b)));
}

export const logicalXor = op({logicalXor_});
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=============================================================================

*/

import {ENGINE} from '../engine';
import {MaxPool, MaxPoolAttrs, MaxPoolInputs} 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 {op} from './operation';
import {reshape} from './reshape';

/**
 * Computes the 2D max pooling of an image.
 */
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?: 'floor'|'round'|'ceil'};

  // 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_});
import {op} from './operation';
import {reshape} from './reshape';

/**
 * Computes the 3D max pooling.
 *
 * ```js
 * const x = tf.tensor5d([1, 2, 3, 4, 5, 6, 7, 8], [1, 2, 2, 1, 1]);
 * const result = tf.maxPool3d(x, 2, 1, 'valid');
 * result.print();
 * ```
 *
 * @param x The input tensor, of rank 5 or rank 4 of shape
 * `}\n * @param filterSize The filter size:
 * `\n * @param pad The type of padding algorithm:
 * `\n * @param strides The strides of the pooling:
 * `\n * @param dimRoundingMode A string from:
 * `\n * `\n * @param dataFormat An optional string from:
 * `\n * @doc {heading: 'Operations', subheading: 'Convolution'}
 */
function maxPool3d_<T extends Tensor4D|Tensor5D>(
    x: T|TensorLike, filterSize: [number, number, number]|number = [1, 1, 1],
    strides: [number, number, number], pad:
    'valid'|'same'|number,
    dimRoundingMode?: 'floor'|'round'|'ceil',
    dataFormat: 'NDHWC'|'NCDHW' = 'NDHWC') {
  const $x = convertToTensor(x, 'x', 'maxPool3d');

  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 maxPool3d: x must be rank 5 but got rank ${x5D.rank}.`);
  util.assert(
      dataFormat === 'NDHWC',
      () => `Error in maxPool3d: Only NDHWC is currently supported, ` +
          `but got dataFormat of ${dataFormat}`);
  if (dimRoundingMode != null) {
    util.assert(
        util.isInt(pad as number),
        () => `Error in maxPool3d: pad must be an integer when using, ` +
            `dimRoundingMode ${dimRoundingMode} but got pad ${pad}.`);
  }

  const inputs: MaxPool3DInputs = {x: x5D};
  const attrs:
      MaxPool3DAttrs = {filterSize, strides, pad, dimRoundingMode};

  // tslint:disable-next-line: no-unnecessary-type-assertion
  const res = ENGINE.runKernel(
                  MaxPool3D, inputs as {} as NamedTensorMap,
                  attrs as {} as NamedAttrMap) as T;

  if (reshapedTo5D) {
    return reshape(
               res, [res.shape[1], res.shape[2], res.shape[3], res.shape[4]]) as
        T;
  }

  return res;
}

export const maxPool3d = op({maxPool3d_});

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 * implied. * See the License for the specific language governing permissions and limitations under the License.
 */
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 set to 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.
 *
 * ```js
 * const x = tf.tensor1d([1, 2, 3]);
 * const y = x.mean().print(); // or tf.mean(a)
 * const z = tf.tensor1d([1, 2, 3, 4]);
 * const a = tf.mean(y, [1, 2]).print(); // or tf.mean(x, axis) with a single entry
 * ```
 *
 * @param x The input `tf.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 mean_<T extends Tensor>(
    x: Tensor|TensorLike, axis: number|number[] = null, keepDims = false): T {
  const $x = convertToTensor(x, 'x', 'mean');

  const inputs: MeanInputs = {x: $x};
  const attrs: MeanAttrs = {axis, keepDims};

  return ENGINE.runKernel(
      Mean, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap);
}

export const mean = op({mean_});

/**
 * Computes the minimum value from the input.
 *
 * Reduces the input along the dimensions given in 'axes'. Unless 'keepDims' is true, the reduced dimensions are retained with length 1.
 *
 * ```js
 * const x = tf.tensor1d([1, 2, 3]);
 * const y = x.min().print(); // or tf.min(x)
 * ```
 *
 * ```js
 * const x = tf.tensor2d([1, 2, 3, 4], [2, 2]);
 * const axis = 1;
 * const a = tf.min(x, axis).print(); // or tf.min(x, axis)
 * ```
 *
 * @param x The input `tf.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 min_<T extends Tensor>(
    x: Tensor|TensorLike, axis: number|number[] = null, keepDims = false): T {
  const $x = convertToTensor(x, 'x', 'min');

  const inputs: MinInputs = {x: $x};
  const attrs: MinAttrs = {axis, keepDims};

  // tslint:disable-next-line: no-unnecessary-type-assertion
  return ENGINE.runKernel(
      Min, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap) as T;
}

export const min = op({min_});

/**
 * Computes the minimum value from the input.
 *
 * Reduces the input along the dimensions given in 'axes'. Unless 'keepDims' is true, the reduced dimensions are retained with length 1.
 *
 * ```js
 * const x = tf.tensor1d([1, 2, 3]);
 * const y = x.minimum().print(); // or tf.minimum(a)
 * const z = tf.tensor2d([1, 2, 3, 4], [2, 2]);
 * const axis = 1;
 * const a = tf.minimum(y, [1, 2]).print(); // or tf.minimum(x, axis)
 * ```
 *
 * @param x The input `tf.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 minimum_<T extends Tensor>(
    x: Tensor|TensorLike, axis: number|number[] = null, keepDims = false): T {
  const $x = convertToTensor(x, 'x', 'minimum');

  const inputs: MinimumInputs = {x: $x};
  const attrs: MinimumAttrs = {axis, keepDims};

  return ENGINE.runKernel(
      Minimum, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap);
}

export const minimum = op({minimum_});
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```javascript
import {assertAndGetBroadcastShape} from './broadcast_util';
import {cast} from './cast';
import {op} from './operation';

/**
 * Returns the min of a and b (`a < b ? a : b`) element-wise.
 * Supports broadcasting.
 *
 * We also expose `minimumStrict` 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]);
 * a.minimum(b).print();  // or tf.minimum(a, b)
 * ```
 * ```js
 * // Broadcast minimum a with b.
 * const a = tf.tensor1d([2, 4, 6, 8]);
 * const b = tf.scalar(5);
 * a.minimum(b).print();  // or tf.minimum(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 minimum_<T extends Tensor>(a: Tensor|TensorLike, b: Tensor|TensorLike): T {
  const $a = convertToTensor(a, 'a', 'minimum');
  const $b = convertToTensor(b, 'b', 'minimum');
  assertAndGetBroadcastShape($a.shape, $b.shape);

  const inputs: MinimumInputs = {a: $a, b: $b};

  return ENGINE.runKernel(Minimum, inputs as {} as NamedTensorMap);
}

export const minimum = op({minimum_});
```

```javascript
import {ENGINE} from '../engine';
import {MirrorPad, MirrorPadAttrs, MirrorPadInputs} 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';

/**
 * Pads a `tf.Tensor` using mirror padding.
 *
 * This operation implements the `REFLECT` and `SYMMETRIC` modes of pad.
 * ```js
 * const x = tf.range(0, 9).reshape([1, 1, 3, 3]);
 * x.mirrorPad([[0, 0], [0, 0], [2, 2], [2, 2]], 'reflect').print();
 * ```
 * @param x The tensor to pad.
 * @param paddings An array of length `R` (the rank of the tensor), where
 * each element is a length-2 tuple of ints `[padBefore, padAfter]`, specifying how much to pad
 * along each dimension of the tensor. x in `reflect` mode, the padded regions do not include the borders,
 * while in `symmetric` mode the padded regions do include the borders.
 * For example, if the input is `[1, 2, 3]` and paddings is `[0, 2]`,
 * then the output is `[1, 1, 2, 3, 2, 1]` in `reflect` mode, and
 * `[1, 2, 3, 3, 2, 1]` in `symmetric` mode.
 * @param mode String to specify padding mode. Can be `'reflect' | 'symmetric'`
 * @doc {heading: 'Tensors', subheading: 'Transformations'}
 */
/** @doc {heading: 'Operations', subheading: 'Arithmetic'}
 */
function mirrorPad_<T extends Tensor>(x: T|TensorLike, paddings: Array<[number, number]>, mode: 'reflect'|'symmetric'): T {
  const $x = convertToTensor(x, 'x', 'mirrorPad');
  const paddings: Paddings = {
    [0, 0]: paddings[0],
    [1, 1]: paddings[1],
    [2, 2]: paddings[2],
  };
  const inputs: MirrorPadInputs = {
    x: $x,
    paddings,
    mode,
  };

  return ENGINE.runKernel(MirrorPad, inputs as {} as NamedTensorMap);
}
```

$x$;

```javascript
export const mirrorPad = op({mirrorPad_});

```

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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.
 */

```javascript
import {ENGINE} from '../engine';
import {Mod, ModInputs} 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';

```javascript
/**
 * 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).
 * `a * `mod` const a = tf.tensor1d([1, 4, 3, 16]);
 * const b = tf.tensor1d([1, 2, 9, 4]);
 * const x = tf.tensor1d([2, 4, 6, 8]);
 * const y = tf.tensor1d([1, 2, 3, 4]);
 * const z = tf.tensor1d([5, 6, 7, 8]);
 * `mod`_ `mod`_ `mod`_ `mod`_
 * @param a The first tensor.
 * @param b The second tensor. Must have the same type as `a`.
 * @doc {heading: 'Operations', subheading: 'Arithmetic'}
 */
function mod_<T extends Tensor>(a: T|TensorLike, b: T|TensorLike): T {
  let $a = convertToTensor(a, 'a', 'mod');
  let $b = convertToTensor(b, 'b', 'mod');
  [$a, $b] = makeTypesMatch($a, $b);

  const inputs: ModInputs = {a: $a, b: $b};

  return ENGINE.runKernel(Mod, inputs as {} as NamedTensorMap);
}

export const mod = op({mod_});
```

```javascript
/**
 * Computes square of `x` element-wise: `x ^ 2`
 * ```js
 * const x = tf.tensor1d([1, 2, Math.sqrt(2), -1]);
 * x.square().print();  // or tf.square(x)
 * ```
 * @param x The input Tensor.
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function square_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'square');
  const attrs = {};
  return ENGINE.runKernel('Square', {x: $x}, attrs);
}

export const square = op({square_});
```

```javascript
/**
 * Calculates the
 */
```
mean and variance of `x`. The mean and variance are calculated by aggregating the contents of `x` across `axes`. If `x` is a 1-D and `axes = [0]` this is just the mean and variance of a vector. The input tensor, The dimension(s) along with to compute mean and variance. By default it reduces all dimensions. If `param keepDims` If true, the moments have the same dimensionality as the input. An object with two keys: 'mean' and 'variance'. The mean and variance are calculated by aggregating the contents of `x` across `axes`. If `x` is 1-D and `axes = [0]` this is just the mean and variance of a vector.

```javascript
/**
 * @param x The input tensor.
 * @param axis The dimension(s) along with to compute mean and variance. By default it reduces all dimensions.
 * @param keepDims If true, the moments have the same dimensionality as the input.
 * @param return An object with two keys: 'mean' and 'variance'.
 */
function moments_(x: Tensor|TensorLike, axis: number|number[] = null, keepDims = false): {mean: Tensor, variance: Tensor} {
  x = convertToTensor(x, 'x', 'moments');
  const axes = parseAxisParam(axis, x.shape);
  const xMean = mean(x, axes, keepDims);
  let keepDimsShape = xMean.shape;
  if (!keepDims) {
    keepDimsShape = expandShapeToKeepDim(xMean.shape, axes);
  }
  const devSquared =
      square(sub(cast(x, 'float32'), reshape(xMean, keepDimsShape)));
  const variance = mean(devSquared, axes, keepDims);
  return {mean: xMean, variance};
}
```

Export const moments = op({moments_});
```
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 `n * `[batchSize, numSamples]`, depending on the rank of the input.

* @doc {header: `Tensors`, subheader: `Random`}

 */
function multinomial_(
    logits: Tensor1D|Tensor2D|TensorLike, numSamples: number,
    seed?: number, normalized = false): Tensor1D|Tensor2D {
  const $logits = convertToTensor(logits, 'logits', 'multinomial');

  const numOutcomes = $logits.size;
  const origRank = $logits.rank;
  if (numOutcomes < 2) {
    throw new Error(`Error in multinomial: you need at least 2 outcomes, but got ` +
                    `$numOutcomes.`);
  }
  if (origRank > 2) {
    throw new Error(`Rank of probabilities must be 1 or 2, but is ${origRank}`);
  }
  // TODO(lina128): Investigate correct seed behavior. The code seems not allow
  // setting see to 0, but is $seed == seed || Math.random();
  seed = seed || Math.random();

  // The kernel only accepts (and returns) rank 2 tensors.
  const logits2D: Tensor2D =

  origRank === 1 ? reshape($logits, [1, -1]) : $logits as Tensor2D;

  const inputs: MultinomialInputs = {logits: logits2D};
  const attrs: MultinomialAttrs = {numSamples, seed, normalized};

  // tslint:disable-next-line: no-
  // unnecessary-type-assertion
  const res = ENGINE.runKernel(
                  Multinomial, inputs as {} as
          NamedTensorMap,
          attrs as {} as NamedAttrMap) as Tensor2D;

  // tslint:disable-next-line:no-
  // unnecessary-type-assertion
  return origRank === 1 ? reshape($logits, [1, -1]) : $logits as Tensor2D;
}

export const
multinomial = op({multinomial_});

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 * governing permissions and limitations under the License.
 */

import {ENGINE} from '../engine';
import {NotEqual, NotEqualInputs} from '../kernel_names';
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.
 *
 * @doc {header: 'Operations', subheader: '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');

  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 {NotEqual, NotEqualInputs} from '../kernel_names';
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.
 *
 * @doc {header: 'Operations', subheader: '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');

  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_});
element in the resulting tensor. Can
* be `float32`, `int32` or `bool`. Defaults to `float64`.

```javascript
// Tensors, subheading: 'Creation'|'n */
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
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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.
 */
```

```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
 *     'float64'.
 *
 * @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>;
}
```

```javascript
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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.
 */
```

```javascript
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 * 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.tensor1d([1, 2, 3]);
 * const b = tf.tensor1d([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 $v2 = convertToTensor(v2, 'v2', 'outerProduct');
  return matMul($v1, $v2);
}

export const outerProduct = op({outerProduct_});

/**
 * Pads a `tf.Tensor` with a given value and paddings.
 *
 * This operation implements 'CONSTANT' mode. For 'REFLECT' and 'SYMMETRIC',
 * pads a `tf.Tensor` with a given value and paddings.
 *
 * ```js
 * const x = tf.tensor1d([1, 2, 3, 4]);
 * x.pad([[1, 2]]).print();
 * ```
 * @param x The tensor to pad.
 * @param paddings An array of length `R` (the rank of the tensor), where
 * each element is a length-2 tuple of `[[padBefore, padAfter]]`,
 * specifying how much to pad along each dimension of the tensor.
 * @param constantValue The pad value to use. Defaults to 0.
 */
function pad_<T extends Tensor>(x: T|TensorLike, paddings: Array<[number, number]>, constantValue = 0): T {
  throw new Error('pad(scalar) is not defined. Pass non-scalar to pad');
}

export const pad = op({pad_});

/**
 * Pads a `tf.Tensor1D` with a given value and paddings.
 */
function pad1d_(x: Tensor1D|TensorLike, paddings: [number, number], constantValue = 0): Tensor1D {
  return pad(x, [paddings], constantValue);
}

export const pad1d = op({pad1d_});

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

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 {TensorLike} from '../types';

import {op} from './operation';
import {pad} from './pad';

/**
 * Pads a `tf.Tensor1D` with a given value and paddings.
 */
function pad1d_<T extends Tensor1D>(x: T|TensorLike, paddings: [number, number], constantValue = 0): T {
  throw new Error('pad(scalar) is not defined. Pass non-scalar to pad');
}

export const pad1d = op({pad1d_});

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

import {Tensor1D} from '../tensor';
import {TensorLike} from '../types';
import {assert} from '../util';
import {op} from './operation';
import {pad} from './pad';

/**
 * Pads a `tf.Tensor1D` with a given value and paddings.
 */
function pad1d_<T extends Tensor1D>(x: T|TensorLike, paddings: [number, number], constantValue = 0): T {
  throw new Error('pad(scalar) is not defined. Pass non-scalar to pad');
}

export const pad1d = op({pad1d_});

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

*<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5 6197</title>
</head>
<body>
  <h1>Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5 6197</h1>
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  <p>=============================================================================

  <h2>Operations</h2>
  <p>Matrices</p>
  <h3>Outer Product</h3>
  <pre>
  function outerProduct_(v1: Tensor1D|TensorLike, v2: Tensor1D|TensorLike): Tensor2D {
    const $v1 = convertToTensor(v1, 'v1', 'outerProduct');
    const $v2 = convertToTensor(v2, 'v2', 'outerProduct');
    return matMul($v1, $v2);
  }
  </pre>
  <h3>Pad</h3>
  <pre>
  function pad_<T extends Tensor>(x: T|TensorLike, paddings: Array<[number, number]>, constantValue = 0): T {
    const $x = convertToTensor(x, 'x', 'pad');
    if ($x.rank === 0) {
      throw new Error('pad(scalar) is not defined. Pass non-scalar to pad');
    }
    const attrs: PadV2Attrs = {paddings, constantValue};
    const inputs: PadV2Inputs = {x: $x};
    return ENGINE.runKernel(PadV2, inputs as unknown as NamedTensorMap,
                             attrs as unknown as NamedAttrMap);
  }
  </pre>

  <h2>Tensors</h2>
  <h3>Transformations</h3>
  <pre>
  function pad1d_<T extends Tensor1D>(x: T|TensorLike, paddings: [number, number], constantValue = 0): T {
    const $x = convertToTensor(x, 'x', 'pad');
    if ($x.rank === 0) {
      throw new Error('pad(scalar) is not defined. Pass non-scalar to pad');
    }
    const attrs: PadV2Attrs = {paddings, constantValue};
    const inputs: PadV2Inputs = {x: $x};
    return ENGINE.runKernel(PadV2, inputs as unknown as NamedTensorMap,
                             attrs as unknown as NamedAttrMap);
  }
  </pre>

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</body>
</html>
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implied.\n* See the License for the specific language governing permissions and\n* limitations under the License.\n*
=============================================================================

*/
import {Tensor2D} from '../tensor';
import {TensorLike} from '../types';
import {assert} from '../util';
import {op} from '../operation';
import {pad} from '../pad';

/**
 * Pads a tf.Tensor2D with a given value and paddings. See \`pad\` for details.
 */
function pad2d_(x: Tensor2D|TensorLike, paddings: [[number, number],
    [number, number]], constantValue = 0): Tensor2D {
  assert(paddings.length === 2 &&
      paddings[0].length === 2 &
    paddings[1].length === 2, () => 'Invalid number of paddings. Must be
    length of 2 each.');
  return pad(x, paddings, constantValue);
}

export const pad2d = op({pad2d_});

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

*/
import {Tensor3D} from '../tensor';
import {TensorLike} from '../types';
import {assert} from '../util';
import {op} from '../operation';
import {pad} from '../pad';

/**
 * Pads a tf.Tensor3D with a given value and paddings. See \`pad\` for details.
 */
function pad3d_(x: Tensor3D|TensorLike, paddings: [[number, number],
    [number, number], [number, number]], constantValue = 0): Tensor3D {
  assert(paddings.length === 3 &&
      paddings[0].length === 2 &&
    paddings[1].length === 2 &&
    paddings[2].length === 2, () => 'Invalid number of paddings. Must be
    length of 2 each.');
  return pad(x, paddings, constantValue);
}

export const pad3d = op({pad3d_});

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

*/
import {Tensor4D} from '../tensor';
import {TensorLike} from '../types';
import {assert} from '../util';
import {op} from '../operation';
import {pad} from '../pad';

/**
 * Pads a tf.Tensor4D with a given value and paddings. See \`pad\` for details.
 */
function pad4d_(x: Tensor4D|TensorLike, paddings: [[number, number],
    [number, number], [number, number], [number, number]], constantValue = 0): Tensor4D {
  assert(paddings.length === 4 &&
      paddings[0].length === 2 &&
    paddings[1].length === 2 &&
    paddings[2].length === 2 &&
    paddings[3].length === 2, () => 'Invalid number of paddings. Must be
    length of 2 each.');
  return pad(x, paddings, constantValue);
}

export const pad4d = op({pad4d_});

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

*/

import {ENGINE} from '../engine';
import {SpaceToBatchND, SpaceToBatchNDAttrs,
SpaceToBatchNDInputs} 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';

/**
 * This operation divides \`\`Spatial\`\` dimensions [1, ..., M] of the input into \n * a grid of blocks \`\`blockShape\`\`, and interleaves these blocks with \n * the \`\`batch\`\` dimension (0) such that in the output, the spatial \n * dimensions [1, ..., M] correspond to the position within the grid.\n * and the batch dimension combines both the position within a spatial block \n * and the original batch position. Prior to division into blocks,\n * the spatial dimensions of the input are optionally zero padded \n * according to \`\`paddings\`\`. See below for a precise description.\n */

function spaceToBatchND_<T extends Tensor>(\n    x: T|TensorLike, blockShape: number[], paddings: number[][])\n    : 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()} with paddings`);\n
  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_});
rank 4 or rank 3 of shape \( \text{[batch, height, width, inChannels]} \). If rank 3, batch of 1 is assumed. If \( \text{filterSize} \) is a single number, then \( \text{filterHeight} = \text{filterWidth} \). If \( \text{filterSize} \) is a single number, then \( \text{filterHeight} = \text{filterWidth} \).

- \( \text{pad} \): output will be smaller than input if filter is larger than 1x1.

- \( \text{dilationRate} \) is a single number, then \( \text{dilationHeight} = \text{dilationWidth} \). If it is greater than 1, then all values of \( \text{strides} \) must be 1.

- \( \text{strideHeight} = \text{strideWidth} \). If \( \text{strides} \) is a single number, then \( \text{strideHeight} = \text{strideWidth} \).

- \( \text{dilationHeight} = \text{dilationWidth} \) in which we sample input values across the height and width dimensions in dilated pooling. Defaults to \( \text{[1, 1]} \).

- \( \text{strides} \): stride 1: output will be of same size as input, regardless of filter size.

- \( \text{dilations} \): output will be smaller than input if filter is larger than 1x1.

- \( \text{poolingType} \): the type of pooling, either 'max' or 'avg'.

- \( \text{pad} \): padding type:
  - '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.

- \( \text{dilations} \): dilation rates:
  - '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.

- \( \text{strides} \): stride 1: output will be of same size as input.

- \( \text{poolingType} \): the type of pooling, either 'max' or 'avg'.

- \( \text{pad} \): padding type:
  - '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.

- \( \text{dilations} \): dilation rates:
  - '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.

- \( \text{strides} \): stride 1: output will be of same size as input.

- \( \text{poolingType} \): the type of pooling, either 'max' or 'avg'.

- \( \text{pad} \): padding type:
  - '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.
odd, we pad more at end, following the same
// convention as conv2d.
const padExtraStart = padExtraShape.map(s => Math.floor(s / 2));
const padExtraEnd = padExtraShape.map(s, i => s - padExtraStart[i]);
return padExtraShape.map(_, i) => {
  return [padExtraStart[i], padExtraEnd[i]];
};

export const pool = op({pool_});

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 * limitations under the License.
 */
import {ENGINE} from '../engine';
import {Pow, PowInputs} 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 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 one of the `base` and `exp` dtypes.
 * @param base The base `tf.Tensor` to pow element-wise.
 * @param exp The exponent `tf.Tensor` to pow element-wise.
 * @doc {heading: 'Operations', subheading: 'Arithmetic'}
 */
function pow_<T extends Tensor>(base: T|TensorLike, exp: T|TensorLike): T {
  let $base = convertToTensor(base, 'base', 'pow');
  let $exp = convertToTensor(exp, 'exp', 'pow');
  [$base, $exp] = makeTypesMatch($base, $exp);
  const inputs: PowInputs = {a: $base, b: $exp};
  return ENGINE.runKernel(Pow, inputs as {} as NamedTensorMap);
}

export const pow = op({pow_});

/**
 * Computes leaky rectified linear element-wise with parametric alphas.
 * x < 0 ? alpha * x : f(x) = x
 * @param x The input tensor.
 * @param alpha Scaling factor for negative values.
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function prelu_<T extends Tensor>(x: T|TensorLike, alpha: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'prelu');
  const $alpha = convertToTensor(alpha, 'alpha', 'prelu');
  const inputs: PreluInputs = {x: $x, alpha: $alpha};
  return ENGINE.runKernel(Prelu, inputs as {} as NamedTensorMap);
}
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=============================================================================

import {ENGINE} from './engine';
import {Prod, ProdAttrs, ProdInputs} 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 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 within a length 1. If `axes` has no entries, all dimensions are reduced, and an `*` `tf.Tensor` with a single element is returned. 
 * 
 * The output dtype will be `int32`. 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 {ENGINE} from './engine';
import {Prod, ProdAttrs, ProdInputs} 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';

/**
 * Creates a `tf.Tensor` with values sampled from a random number generator function defined by the user.
 * 
 * An array of integers defining the output tensor shape. For each element in the output tensor, a random number generator function which is called for all elements of the output tensor.
 * 
 * The output tensor is defined by the function used to define the output tensor shape. For each element in the output tensor, a random number generator function which is called for all elements of the output tensor.
 * 
 * A port of an algorithm by Johannes Baagøe <baagoe@baagoe.com>, 2010
 * https://github.com/nquinlan/better-random-numbers-for-javascript-mirror
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```javascript
function XorGen(seed) {
  var me = this;

  // Set up generator function.
  me.next = function() {

    // Update xor generator.
    var X = me.x, i = me.i, t, v, w;
    t = X[i];
    v = t ^= (t >>> 7);
    t = X[(i + 1) & 7];
    t = X[(i + 3) & 7];
    t = X[(i + 4) & 7];

    me.x = X;
    me.i = (i + 1) & 7;

    // Discard an initial 256 values.
    for (j = 256; j > 0; --j) {
      me.next();
    }

    init(me, seed);
}

function init(me, seed) {
  var t, v, i, j, w, X = [], limit = 128;
  if (seed === this;
      // String seeds are mixed into v and X one character at a time.
      seed = '' + seed;
      for (j = 0; j < seed.length;

          v ^= t ^ (t >>> 10);
        t = X[(i + 3) & 7];
        v ^= t ^ (t << 3);
        t = X[(i + 4) & 7];
        v ^= t ^ (t >>> 3);
        t = X[(i + 7) & 7];
        v ^= t ^ (t <<< 9);
        t = X[i];

        me.i = i;
        me.x = X;

        me.next = function(me, seed) {
          var j, w, X = [];
          if (seed === (seed | 0)) {
            // Numeric seeds initialize v, which is used to generates X.
            v = seed;
            seed = null;
          } else {
            // String seeds are mixed into v and X one character at a time.
            seed = seed + '\0';
            v = 0;
          }
        }

        // Update xor generator.
        var X = me.x, i = me.i, t, v, w;
        t = X[i];
        v = t ^= (t >>> 7);
        t = X[(i + 1) & 7];
        t = X[(i + 3) & 7];
        t = X[(i + 4) & 7];

        me.x = X;
        me.i = (i + 1) & 7;

        // Discard an initial 256 values.
        for (j = 256; j > 0; --j) {
          me.next();
        }

        init(me, seed);
}
```

This fast non-cryptographic random number generator is designed for use in Monte-Carlo algorithms. It combines a long-period xorshift7 algorithm with a Weyl generator, and it passes all common statistical tests for randomness while consuming only a few nanoseconds per generated random number.
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---

```
//
function flatten(obj, depth) {
  var result = [], typ = (typeof obj), prop;
  if (depth && typ == 'object')
```

---

```
//
// flatten()
// Converts an object tree to nested arrays of
```

---

```
//
// copy()
// Copies internal state of ARC4 to or from a plain object.
//
function copy(f, t) {
```

---

```
This is called RC4-drop[256].
    // See http://google.com/search?q=rsa+fluhrer+response&btnI
```

---

```
1);]
      r = r * width + s[mask & ((s[i] = s[j = mask & (j + t)] + (s[j] = t)) + (s[j] = t))];
    }
    me.i = i; me.j = j;
    return
```

---

```
// Calling convention: what to return as a function of prng, seed, is_math, return (options.pass || callback ||
```
for (prop in obj) {
    try {
      result.push(flatten(obj[prop], depth - 1));
    } catch (e) {
      result.push(prop);
    }
  }
  return result;
}

//
// flatten()
// Takes an object and recursively returns the flattened result.
//
function flatten(obj, depth) {
  if (typeof obj == 'object' && obj != null) {
    var result = [];
    for (prop in obj) {
      try { result.push(flatten(obj[prop], depth - 1)); } catch (e) {}
    }
    return result.length ? result : typ == 'string' ? obj : obj + '\0';
  } else {
    return obj + '\0';
  }
}

//
// seedrandom()
// A library of seedable RNGs implemented in Javascript.
//
// Usage:
//
// var seedrandom = require('seedrandom');
// var random = seedrandom(1); // or any seed.
// var x = random();       // 0 <= x < 1.  Every bit is random.
// var x = random.quick(); // 0 <= x < 1.  32 bits of randomness.

// alea, a 53-bit multiply-with-carry generator by Johannes Baagøe.
// Period: ~2^116
// Reported to pass all BigCrush tests.
var alea = require('./lib/alea');

// xor128, a pure xor-shift generator by George Marsaglia.
// Period: 2^128-1.
// Reported to fail: MatrixRank and LinearComp.
var xor128 = require('./lib/xor128');

// xorwow, George Marsaglia's 160-bit xor-shift combined plus weyl.
// Period: ~2^192
// No systematic BigCrush failures reported.
var xorwow = require('./lib/xorwow');

// xorshift7, by François Panneton and Pierre L'ecuyer, takes a different approach: it adds robustness by allowing more shifts than Marsaglia's original three. It is a 7-shift generator with 256 bits, that passes BigCrush with no systematic failures. Its long period may be useful if you have many generators and need to avoid collisions.
var xorshift7 = require('./lib/xorshift7');

// Tyche-i, by Samuel Neves and Filipe Araujo, is a bit-shifting random number generator derived from ChaCha, a modern stream cipher.
var tychei = require('./lib/tychei');

// The original ARC4-based prng included in this library.
var sr = require('./seedrandom');

sr.alea = alea;
sr.xor128 = xor128;
sr.xorwow = xorwow;
sr.xorshift7 = xorshift7;
sr.tychei = tychei;

module.exports = sr;
import {TypedArray} from '../types';

export interface RandomBase {
  nextValue(): number;
}

export interface RandomGamma {
  nextValue(): number;
}

export interface RandNormalDataTypes {
  float32: Float32Array;
  int32: Int32Array;
}

export interface RandGammaDataTypes {
  float32: Float32Array;
  int32: Int32Array;
}

// https://en.wikipedia.org/wiki/Marsaglia_polar_method
export class MPRandGauss implements RandomBase {
  private mean: number;
  private stdDev: number;
  private nextVal: number;
  private dtype?: keyof RandNormalDataTypes;
  private truncated?: boolean;
  private upper?: number;
  private lower?: number;
  private random: seedrandom.prng;

  constructor(
      mean: number, stdDeviation: number, dtype?: keyof RandNormalDataTypes,
      truncated?: boolean, seed?: number) {
    this.mean = mean;
    this.stdDev = stdDeviation;
    this.dtype = dtype;
    this.thisVal = NaN;
    this.isTruncated = truncated;
    if (this.truncated)
      this.upper = this.mean + this.stdDev * 2;
    this.lower = this.mean - this.stdDev * 2;
    const seedValue = seed ? seed : Math.random();
    this.random = seedrandom.alea(seedValue.toString());
  }

  public nextValue(): number {
    if (!isNaN(this.nextVal))
      return this.nextVal;
    const value = this.nextVal;
    this.nextVal = NaN;
    return value;
  }

  /** 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 next sample from a Gaussian distribution. */
  public nextValue(): number {
    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);
      const resultX = this.mean + this.stdDev * v1 * mul;
      resultY = this.mean + this.stdDev * v2 * mul;
      if (!this.truncated ||
          this.isValidTruncated(resultX)) {
        isValid = true;
      }
    }
    if (this.dtype != null) {
      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);
  }
}

export class RandGamma implements RandomGamma {
  private alpha: number;
  private beta: number;
  private d: number;
  private c: number;
  private dtype?: keyof RandGammaDataTypes;
  private randu: seedrandom.prng;

  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;
    const seedValue = seed ? seed : Math.random();
    this.random = seedrandom.alea(seedValue.toString());
    if (alpha < 1) {
      this.d = alpha + (2 / 3);
    } else {
      this.d = alpha - (1 / 3);
    }
    this.c = 1 / Math.sqrt(9 * this.d);
  }

  public nextValue(): number {
    let x2: number, v0: number, v1: number, x: number, u: number, v: number;
    while (true) {
      x = this.randu.nextValue();
      v = 1 + (this.c * x);
      while (v <= 0) {
        v = v * v;
        x = x * x;
        v0 = 1 - (0.331 * x2 * x2);
        v1 = (0.5 * x2) + (this.d * (1 - v + Math.log(v)));
        u = this.randu();
        if (u < v0) {
          v = (1 / this.beta) * this.d * v;
        } else if (this.alpha < 1) {
          v *= Math.pow(this.randu(), 1 / this.alpha);
        }
      }
      v = (1 / this.beta) * (this.d * v);
      x2 = x * x;
      v0 = 1 - (0.331 * x2 * x2);
      v1 = (0.5 * x2) + (this.d * (1 - v + Math.log(v)));
      u = this.randu();
      if (u < v0) {
        v0 = Math.log(u) < v1) {
          break;
        }
      }
      v = (1 / this.beta) * this.d * v;
      if (this.alpha < 1) {
        v *= Math.pow(this.randu(), 1 / this.alpha);
      }
      return this.convertValue(v);
    }
  }

  /** Handles proper rounding for non-floating-point numbers. */
  private convertValue(value: number): number {
    if (this.dtype == null) {
      return value;
    }
    return Math.round(value);
  }
}

export class UniformRandom implements RandomBase {
  private min: number;
  private range: number;
  private random: seedrandom.prng;

  constructor(
      min = 0, max = 1, dtype?: string|number) {
    this.min = min;
    this.range = max - min;
    this.dtype = dtype;
    if (seed == null) {
      seed = Math.random();
    }
    if (typeof seed !== 'number') {
      throw new Error('The difference between $min - $max <= 1 and dtype is not float');
    }
    this.random = seedrandom.alea(seed);
  }

  public nextValue(): number {
    if (this.dtype == null) {
      return this.convertValue(value);
    }
  }

  /** Handles proper rounding for non-floating-point numbers. */
  private convertValue(value: number): number {
    if (this.dtype == null) {
      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 = kurthosis(values);
  const jb = n / 6 * (Math.pow(s, 2) + 0.25 * Math.pow(k - 3, 2));
  if (jb > CHI_SQUARE_2DEG) {
    throw new Error('Invalid JB: ');
  }
  return Math.sqrt((s / n) * Math.pow((1 / n) * sum4 / Math.pow((1 / n) * sum2, 2), 2));
}

export function
expectArrayInMeanStdRange(actual: TypedArray|number[], expectedMean: number, expectedStdDev: number, epsilon?: number) {
  if (epsilon == null) {
    epsilon = testEpsilon();
  }
  const actualMean = mean(actual);
  expectNumbersClose(actualMean, expectedMean, epsilon);
  expectNumbersClose(standardDeviation(actual, actualMean), expectedStdDev, epsilon);
}

function mean(values: TypedArray|number[]) {
  let sum = 0;
  for (let i = 0; i < values.length; i++) {
    sum += values[i];
  }
  return 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 kurthosis(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 (1 / n) * sum3 / Math.pow((1 / (n - 1)) * sum2, 2);
}

function skewness(values: TypedArray|number[]) {
  const valuesMean = mean(values);
  const n = values.length;
  let sum2 = 0;
  let sum4 = 0;
  for (let i = 0; i < n; i++) {
    const v = values[i] - valuesMean;
    sum2 += v * v;
    sum4 += v * v * v * v;
  }
  return (1 / n) * sum4 / Math.pow((1 / (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.
 *
 * ```js
 * tf.randomGamma([2, 2]).print();
 * ```
 *
 * @param shape An array of integers defining the output tensor shape.
 * @param alpha The shape parameter of the gamma distribution.
 * @param beta The inverse scale parameter of the gamma distribution. Defaults to 1.
 * @param dtype The data type of the output. Defaults to float32.
 * @param seed The seed for the random number generator.
 * @param @doc {heading: 'Tensors', subheading: 'Random'}
 */
function randomGamma_<R extends Rank>(shape: ShapeMap[R], alpha: number, beta = 1, dtype = 'float32', seed?: number): Tensor<R> {
  if (beta == null) {
    beta = 1;
  }
  const rng = new RandGamma(alpha, beta, 1, dtype; 'float32'; int32 = 'float32', seed; number);
  throw new Error('Unsupported data type $dtype$');
  const r = new RandGamma(alpha, beta, dtype, seed, number);
  return buffer(shape, dtype);
  for (let i = 0; i < values.length; i++) {
    values[i] = r.nextValue();
  }
  return res.toTensor();
}

export const randomGamma = op({randomGamma_});

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 * limitations under the License.
 */
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.
 * ```js
 * tf.randomNormal([2]).print();
 * ```
 *
 * @param shape An array of integers defining the output tensor shape.
 * @param mean The mean of the normal distribution.
 * @param stdDev The standard deviation of the normal distribution.
 * @param dtype The data type of the output.
 * @param seed The seed for the random number generator.
 *
 * @doc {heading: 'Tensors', subheading: 'Random'}
 */
function randomNormal(<R extends Rank>(
    shape: ShapeMap[R], mean = 0, stdDev = 1, dtype?: 'float32'|'int32',
    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();
}

export const randomNormal = op({randomNormal_});

/**
 * 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.
 *
 * ```js
 * tf.randomUniform([2]).print();
 * ```
 *
 * @param shape An array of integers defining the output tensor shape.
 * @param minval The lower bound on the range of random values to generate.
 * @param maxval The upper bound on the range of random values to generate.
 * @param dtype The data type of the output tensor. Defaults to 'float32'.
 *
 * @doc {heading: 'Tensors', subheading: 'Random'}
 */
function randomUniform(<R extends Rank>(
    shape: ShapeMap[R],
    minval = 0, maxval = 1, dtype: 'float32',
    seed?: number|string): Tensor<R> {
  const res = buffer(shape, dtype);
  const random = new UniformRandom(minval, maxval, null, seed);
  for (let i = 0; i < res.values.length; i++) {
    res.values[i] = random.nextValue();
  }
  return res.toTensor();
}

export const randomUniform = op({randomUniform_});

/**
 * Creates a new `tf.Tensor1D` filled with the numbers in the range provided.
 *
 * ```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'.
 *
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
export function range(
    start: number, stop: number, step = 1,
    dtype: 'float32'|'int32' = 'float32'): Tensor1D {
  if
  return ranges.toTensor();
}

export const range = op({range_});

/**
 * Creates a new `tf.Tensor2D` filled with the numbers in the range provided.
 *
 * ```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'.
 *
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
export function range(
    start: number, stop: number, step = 1,
    dtype: 'float32'|'int32' = 'float32'): Tensor2D {
  if
  return ranges.toTensor();
}

export const range = op({range_});

/**
 * Creates a new `tf.Tensor3D` filled with the numbers in the range provided.
 *
 * ```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'.
 *
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
export function range(
    start: number, stop: number, step = 1,
    dtype: 'float32'|'int32' = 'float32'): Tensor3D {
  if
  return ranges.toTensor();
}

export const range = op({range_});
(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);}

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 */

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.
 *
 * If the input is real, it simply makes a clone.
 *
 * ```js
 * const x = tf.complex([-2.25, 3.25], [4.75, 5.75]);
 * tf.real(x).print();
 * ```
 *
 *  */

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);
}

export const real = op({real_});

/**
 * Computes reciprocal of x element-wise: `1 / x`
 *
 * ```js
 * const x = tf.tensor1d([0, 1, 2]);
 *
 * x.reciprocal().print();  // or tf.reciprocal(x)
 * ```
 * @param x The input tensor.
 *
 *  */

function reciprocal_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'reciprocal');

  const inputs: ReciprocalInputs = {x: $x};
  return ENGINE.runKernel(Reciprocal, inputs as {} as NamedTensorMap);
}

export const reciprocal = op({reciprocal_});

/**
 * Computes rectified linear element-wise: `max(x, 0)`.
 *
 * ```js
 * const x = tf.tensor1d([-1, 2, -3, 4]);
 *
 * x.relu().print(); // or tf.relu(x)
 * ```
 * @param x The input tensor.
 *
 *  */

function relu_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'relu');

  const inputs: ReluInputs = {x: $x};
  return ENGINE.runKernel(Relu, inputs as {} as NamedTensorMap);
}

export const relu = op({relu_});
```javascript
/**
 * Reverses a `tf.Tensor1D`.
 *
 * @param x The input tensor.
 */
function reverse1d_(x: Tensor1D|TensorLike): Tensor1D {
  const $x = convertToTensor(x, 'x', 'reverse');
  util.assert($x.rank == 1,
    () => 'Error in reverse1D: x must be rank 1 but got rank ${$x.rank}.');
  return reverse($x, 0);
}

export const reverse1d = op({reverse1d_});

/**
 * Reverses a `tf.Tensor2D` along a specified axis.
 *
 * @param x The input tensor.
 * @param axis The set of dimensions to reverse. Must be in the range [-rank(x), rank(x)). Defaults to all axes.
 */
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_});

/**
 * Reverses a `tf.Tensor3D` along a specified axis.
 *
 * @param x The input tensor.
 * @param axis The set of dimensions to reverse. Must be in the range [-rank(x), rank(x)). Defaults to all axes.
 */
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_});

/**
 * Reverses a `tf.Tensor4D` along a specified axis.
 *
 * @param x The input tensor.
 * @param axis The set of dimensions to reverse. Must be in the range [-rank(x), rank(x)). Defaults to all axes.
 */
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_});
```

---

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

*/

import {ENGINE} from '../engine';
import {Round, RoundInputs} 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 round of input `tf.Tensor` element-wise: `round(x)`.
 * It implements banker's rounding.
 *
 * ```js
 * const x = tf.tensor1d([1.6, 1.1, -3.3]);
 * x.round().print();  // or tf.round(x)
 * ```
 * @param x The input tensor.
 *
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function round_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'round');
  const inputs: RoundInputs = {x: $x};

  return ENGINE.runKernel(Round, inputs as {} as NamedTensorMap);
}
export const round = op({round_});

/**
 * Computes reciprocal of square root of the input `tf.Tensor` element-wise:
 * `y = 1 / sqrt(x)`
 *
 * ```js
 * const x = tf.tensor1d([1, 2, 4, -1]);
 * x.rsqrt().print();  // or tf.rsqrt(x)
 * ```
 * @param x The input tensor.
 *
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function rsqrt_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'rsqrt');

  const inputs: RsqrtInputs = {x: $x};

  return ENGINE.runKernel(Rsqrt, inputs as {} as NamedTensorMap);
}
export const rsqrt = op({rsqrt_});

/**
 * Creates rank-0 `tf.Tensor` (scalar) with the provided value and dtype.
 *
 * The same functionality can be achieved with `tf.tensor`, but in general we
 * recommend using `tf.scalar` as it makes the code more readable.
 *
 * ```js
 * tf.scalar(3.14).print();
 * ```
 *
 * @param value The value of the scalar.
 * @param dtype The data type.
 *
 * @doc {heading: 'Tensors', subheading: 'Creation'}
 */
export function scalar(
    value: number|boolean|string|Uint8Array, dtype?: DataType): Scalar {
  if ((isTypedArray(value) && dtype !== 'string') || Array.isArray(value)) {
    throw new Error('Error creating a new Scalar: value must be a primitive ' +
        '(number|boolean|string)');
  }
  if (dtype === 'string' && isTypedArray(value) &&
      !(value instanceof Uint8Array)) {
    throw new Error('When making a scalar from encoded string, ' +
        'the value must be Uint8Array.');
  }
  return makeTensor(value, [], 0, dtype) as Scalar;
}

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

*/

import {ENGINE} from '../engine';
import {Selu, SeluInputs} 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 scaled exponential linear element-wise. 
 * `x < 0 ? scale * alpha * (exp(x) - 1) : x`
 *
 * ```js
 * const x = tf.tensor1d([-1, 2, -3, 4]);
 * x.selu().print(); // or tf.selu(x)
 * ```
 * @param x The input tensor.
 *
 *
 */
function selu_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'selu');

  const inputs: SeluInputs = {x: $x};

  return ENGINE.runKernel(Selu, inputs as {} as NamedTensorMap);
}

export const selu = op({selu_});

/**
 * 2-D convolution with separable filters.
 *
 * Performs a depthwise convolution that acts separately on channels followed by a 
 * pointwise convolution that mixes channels. Note that this isn't separability between dimensions [1, 2] and 3, not spatial separability
 * between dimensions 1 and 2.
 *
 * See
 * 
 * `https://www.tensorflow.org/api_docs/python/tf/nn/separable_conv2d`
 * for more details.
 *
 * @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 depthwiseFilter The depthwise filter tensor, rank 4, of shape `[filterHeight, filterWidth, inChannels, channelMultiplier]`. This is the filter used in the first step with separable filters. Performs a depthwise convolution with separable filters.
 * @param pointwiseFilter The pointwise filter tensor, rank 4, of shape `[1, 1, inChannels * channelMultiplier, outChannels]`. This is the filter used in the second step.
 * @param strides The strides of the convolution: `[strideHeight, strideWidth]`. If strides is a single number, then `strideHeight == strideWidth`. The type of padding algorithm. If `pad` is 'same' and stride 1: output will be of same size as input, regardless of filter size.
 * @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 dilations The dilation rates: `[dilationHeight, dilationWidth]` in which we sample input values across the height and width dimensions.
 *
 * See
 * [https://www.tensorflow.org/api_guides/python/nn#Convolution](https://www.tensorflow.org/api_guides/python/nn#Convolution)
 */
function separableConv2d_<T extends Tensor3D|Tensor4D>(
    x: T|TensorLike,
    depthwiseFilter: Tensor4D|TensorLike,
    pointwiseFilter: Tensor4D|TensorLike,
    strides: [number, number]|number = [1, 1],
    pad: 'same',
    dataFormat:
`NHWC' \| 'NCHW' = 'NHWC'): T {
  const $x = convertToTensor(x, 'x', 'separableConv2d');

  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; only `NHWC' is supported.');
  }

  util.assert(x4D.rank === 4, () => `Error in separableConv2d: input must be rank 4, but got ` + `$x.rank` + `

  $depthwiseFilter.rank === 4, () => `Error in separableConv2d: depthwise filter must be rank 4, but got ` + `$depthwiseFilter.rank` + `

  $pointwiseFilter.rank === 4, () => `Error in separableConv2d: pointwise filter must be rank 4, but got ` + `$pointwiseFilter.rank` + `

  $pointwiseFilter.shape[0] === 1, () => `Error in separableConv2d: the first dimension of pointwise filter must be 1, but got ` + `$pointwiseFilter.shape[0]` + `

  $pointwiseFilter.shape[1] === 1, () => `Error in separableConv2d: the second dimension of pointwise filter must be 1, but got ` + `$pointwiseFilter.shape[1]` + `

  const inChannels = $depthwiseFilter.shape[2];
  const channelMultiplier = $depthwiseFilter.shape[3];

  util.assert($pointwiseFilter.shape[2] === inChannels * channelMultiplier, () => `Error in separableConv2d: the third dimension of pointwise filter must be ${inChannels * channelMultiplier}, but got ` + `$pointwiseFilter.shape[2]` + `

  const depthwise = depthwiseConv2d(x4D, $depthwiseFilter, strides, pad, dataFormat, dilation);

  const pointwiseStride = 1;

  const res = conv2d(depthwise, $pointwiseFilter, pointwiseStride, 'valid', dataFormat);

  if (reshapedTo4D) {
    return reshape(res, [res.shape[1], res.shape[2], res.shape[3]]) as T;
  }
  return res as T;
}

export const separableConv2d = op({separableConv2d_});

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

import {Tensor, TensorBuffer} from '../tensor';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../types';
import * as util from '../util';

/**
 * Computes the difference between two lists of numbers.
 *
 * Given a Tensor `x` and a Tensor `y`, this operation returns a Tensor `out` that represents all values that are in `x` but not in `y`. The returned `Tensor` `out` is sorted in the same order that the numbers appear in `x` (duplicates are preserved). This operation also returns a Tensor indices that is 

 * `out[i] = x[idx[i]]` for i in [0, 1, ..., out.length - 1]
 *
 * ```js
 * const x = [1, 2, 3, 4, 5, 6];
 * const y = [1, 3, 5];
 *
 * const [out, indices] = await tf.setdiff1dAsync(x, y);
 *
 * out.print(); // [2, 4, 6]
 * indices.print(); // [1, 3, 5]
 * ```
 *
 * @param x 1-D Tensor. Values to keep.
 * @param y 1-D Tensor. Must have the same type as x.
 * @returns Promise of Tensor tuple 

 * `out`: Tensor with the same type as x.
 * `indices`: A Tensor of type int32.
 *
 *=============================================================================
 */

async function setdiff1dAsync_(x: Tensor|TensorLike, y: Tensor|TensorLike): Promise<[Tensor, Tensor]> {
  const $x = convertToTensor(x, 'x', 'setdiff1d');
  const $y = convertToTensor(y, 'y', 'setdiff1d');

  util.assert($x.dtype === $y.dtype, () => `x and y should have the same dtype, but got x ($${$x.dtype}) and y ($${$y.dtype}).`);

  util.assert($x.rank === 1, () => `x should be 1D tensor, but got x ($${$x.shape}).`);

  util.assert($y.rank === 1, () => `y should be 1D tensor, but got y ($${$y.shape}).`);

  util.assert(x4D.rank === 4, () => `Error in separableConv2d: input must be rank 4, but got ` + `$x.rank` + `

  util.assert($depthwiseFilter.rank === 4, () => `Error in separableConv2d: depthwise filter must be rank 4, but got ` + `$depthwiseFilter.rank` + `

  util.assert($pointwiseFilter.rank === 4, () => `Error in separableConv2d: pointwise filter must be rank 4, but got ` + `$pointwiseFilter.rank` + `

  util.assert($pointwiseFilter.shape[0] === 1, () => `Error in separableConv2d: the first dimension of pointwise filter must be 1, but got ` + `$pointwiseFilter.shape[0]` + `

  util.assert($pointwiseFilter.shape[1] === 1, () => `Error in separableConv2d: the second dimension of pointwise filter must be 1, but got ` + `$pointwiseFilter.shape[1]` + `

  const inChannels = $depthwiseFilter.shape[2];
  const channelMultiplier = $depthwiseFilter.shape[3];

  util.assert($pointwiseFilter.shape[2] === inChannels * channelMultiplier, () => `Error in separableConv2d: the third dimension of pointwise filter must be ${inChannels * channelMultiplier}, but got ` + `$pointwiseFilter.shape[2]` + `

  const depthwise = depthwiseConv2d(x4D, $depthwiseFilter, strides, pad, dataFormat, dilation);

  const pointwiseStride = 1;

  const res = conv2d(depthwise, $pointwiseFilter, pointwiseStride, 'valid', dataFormat);

  if (reshapedTo4D) {
    return reshape(res, [res.shape[1], res.shape[2], res.shape[3]]) as T;
  }
  return res as T;
}
```javascript
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 * limitations under the License.
 *
 *=============================================================================
 */

import {ENGINE} from '../engine';
import {Sign, SignInputs} 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 an element-wise indication of the sign of a number.
 * `x.sign()` returns a Tensor containing ones wherever this function
 * returns a positive value, `-1` where the value is negative, and `0` where
 * the value is `0` (i.e. for values on the negative half-axis).
 * For example:
 *
 * ```js
 * const x = tf.tensor1d([0, 0.5, -1.2, 1]);
 * x.sign().print();  // [0, 1, -1, 1]
 * ```
 * @param x The input Tensor.
 *
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
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_});

/**
 * Computes sin of the input `tf.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: SignInputs = {x: $x};
  return ENGINE.runKernel(Sign, inputs as {} as NamedTensorMap);
}
export const sin = op({sin_});

/**
 * Computes hyperbolic sin of the input `tf.Tensor` element-wise: `sinh(x)`
 *
 * ```js
 * const x = tf.tensor1d([0, 1, -1, .7]);
 * x.sinh().print();  // or tf.sinh(x)
 * ```
 * @param x The input tensor.
 *
 * @doc {heading: 'Operations', subheading: 'Basic math'}
 */
function sinh_<T extends Tensor>(x: T|TensorLike): T {
  const $x = convertToTensor(x, 'x', 'sinh');
  const inputs: SignInputs = {x: $x};
  return ENGINE.runKernel(Sign, inputs as {} as NamedTensorMap);
}
export const sinh = op({sinh_});
```

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import {ENGINE} from '../../engine';
import {IFFT, IFFTInputs} from '../../kernel_names';
import {Tensor} from '../../tensor';
import {NamedTensorMap} from '../../tensor_types';
import {assert} from '../../util';
import {op} from '../operation';

/**
 * Inverse fast Fourier transform.
 *
 * Computes the inverse 1-dimensional discrete Fourier transform over the inner-most dimension of input.
 * ```js
 * const real = tf.tensor1d([1, 2, 3]);
 * const x = tf.complex(real, imag);
 * const y = x.ifft().print();
 * ```
 * @param input The complex input to compute an ifft over.
 * @returns {Tensor} The inverse fft of the input.
 *
 * @doc {heading: 'Operations', subheading: 'Spectral', namespace: 'spectral'}
 */
function ifft_(input: Tensor): Tensor {
  assert(
    input.dtype === 'complex64',
    () => `The dtype for tf.spectral.ifft() must be complex64 but got ${input.dtype}.`);

  const inputs: IFFTInputs = {input};

  return ENGINE.runKernel(IFFT, inputs as {} as NamedTensorMap);
}

export const ifft = op({ifft_});

import {Tensor, Tensor2D} from '../../tensor';
import {complex} from '../complex';
import {concat} from '../concat';
import {imag} from '../imag';
import {mul} from '../mul';
import {op} from '../operation';
import {real} from '../real';
import {reshape} from '../reshape';
import {reverse} from '../reverse';
import {scalar} from '../scalar';
import {slice} from '../slice';

import {ifft} from './ifft';

/**
 * Inversed real value input fast Fourier transform.
 *
 * Computes the 1-dimensional inversed discrete Fourier transform over the inner-most dimension of the real input.
 * ```js
 * const real = tf.tensor1d([1, 2, 3]);
 * const imag = tf.tensor1d([0, 0, 0]);
 * const x = tf.complex(real, imag);
 * const y = x.irfft().print();
 * ```
 * @param input The real value input to compute an irfft over.
 * @returns {Tensor} The irfft of the input.
 *
 * @doc {heading: 'Operations', subheading: 'Spectral', namespace: 'spectral'}
 */
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 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 = 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), [batch, 2 * (innerDimensionSize - 1)]); // 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 = reverse(slice(imagInput, [0, 1], [batch, innerDimensionSize - 2]), 1);
    const complexInput = reshape(complex(r, i), [outputShape[0], outputShape[1]]);
    const ret = ifft(complexInput);
  }
  ret = real(ret);
  // reshape the result if the input is 3D tensor.
  if (input.rank === 3) {
    const complexInput = reshape(input, [batch, innerDimensionSize]));
    ret = ifft(complexInput);
  } else {
    const length = input.shape[0];
    const outputShape = [length, 2 * (length - 1)];
    const realInput = reshape(real(input), [length, 2 * (length - 1)]);
    const imagInput = reshape(imag(input), [length, 2 * (length - 1)]);
    const complexInput = reshape(complex(realInput, imagInput), [length, 2 * (length - 1)]);
    const ret = ifft(complexInput);
  }
  ret = real(ret);

  return ret;
}

export const irfft = op({irfft_});

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import {ENGINE} from './engine';
import {SplitV, SplitVAttrs, SplitVInputs} 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';

/**
 * Splits a `tf.Tensor` into sub tensors.
 *
 * If `numOrSizeSplits` is a number, splits `x` along dimension `axis` into `numOrSizeSplits` smaller tensors.
 *
 * Requires that `numOrSizeSplits` evenly divides `x.shape[axis]`.
 *
 * @param x The input tensor to split.
 * @param numOrSizeSplits Either an integer indicating the number of splits along the axis or an array of integers containing the sizes of each output tensor along the axis. If a number then it must evenly divide `x.shape[axis]`.
 * @param axis The dimension along which to split. Defaults to 0 (the first `dim`).
 * @doc {heading: 'Tensors', subheading: 'Slicing and Joining'}
 */
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[];
}

export const split = op({split_});

----------

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.
 *
 * ```js
 * const real = tf.tensor1d([1, 2, 3, 4]);
 *
 * real.rfft().print();
 * ```
 * @param input The real value input to compute an rfft over.
 *
 * @doc {heading: 'Operations', subheading: 'Spectral', namespace: 'spectral'}
 */
function rfft_(input: Tensor, fftLength?: number): Tensor {
  assert(input.dtype === 'float32', () => `The dtype for rfft() must be float32 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);
    innerDimensionSize = fftLength;
  } else if (fftLength != null && fftLength > innerDimensionSize) {
    // Need to pad with zeros
    const zerosShape = input.shape.map(v => v);
    zerosShape[input.shape.length - 1] = fftLength - innerDimensionSize;
    adjustedInput = concat([input, zeros(zerosShape)], input.shape.length - 1);
    innerDimensionSize = fftLength;
  } else if (fftLength !== null && innerDimensionSize >= fftLength) {
    // Need to pad with zeros
    const zerosInput = zerosLike(input);
    adjustedInput = concat([input, zerosInput], input.shape.length - 1);
    innerDimensionSize = fftLength;
  } else {
    // Complement the input with zero imaginary numbers.
    const zerosInput = zerosLike(adjustedInput);
    const complexInput =
    reshape(complex(adjustedInput, zerosInput), [batch, innerDimensionSize]);
    const ret = fft(complexInput);
    innerDimensionSize = ret.shape[input.shape.length - 1];
  }

  return ret;
}

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realComplexConjugate = split(realValues, [half, innerDimensionSize - half], realValues.shape.length - 1);
const imagComplexConjugate = split(imagValues, [half, innerDimensionSize - half], imagValues.shape.length - 1);
const outputShape = adjustedInput.shape.slice();
outputShape[adjustedInput.shape.length - 1] = half;

return reshape(complex(realComplexConjugate[0], imagComplexConjugate[0]), outputShape);
}

export const rfft = op({rfft_});

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 */

import {ENGINE} from '../engine';
import {Sqrt, SqrtInputs} 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 square root of the input `tf.Tensor` element-wise: `y = sqrt(x)`
 * Supports broadcasting.
 * ```js
 * const x = tf.tensor1d([1, 2, 4, -1]);
 * x.sqrt().print();  // or tf.sqrt(x)
 * ```
 * @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};
  const attrs = {};
  return ENGINE.runKernel(Sqrt, inputs as unknown as NamedTensorMap, attrs);
}
export const sqrt = op({sqrt_});

/**
 * 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 {ENGINE} from '../engine';
import {SquaredDifference, SquaredDifferenceInputs} from '../kernel_names';
import {Tensor} from '../tensor';
import {NamedTensorMap} from '../tensor_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_});

```javascript
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, 4]]);
 * x.squeeze().print();
 * ```
 *
 * @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
 * an error is an error to squeeze a dimension that is not 1.
 *
 * @doc {heading: 'Tensors', subheading: 'Transformations'}
 */
function squeeze_<T extends Tensor>(x: Tensor|TensorLike, axis?: number[]): T {
  const $x = convertToTensor(x, 'x', 'squeeze');
  return reshape($x, squeezeShape($x.shape, axis).newShape) as T;
}

export const squeeze = op({squeeze_});
```

---

```javascript
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]);
 * tf.stack([a, b, c]).print();
 * ```
 *
 * @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).
 *
 * @doc {heading: 'Tensors', subheading: 'Slicing and Joining'}
 */
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_});
```

---

```javascript
import {ENGINE} from '../engine';
import {Step, StepAttrs, StepInputs} 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 step of the input `tf.Tensor` element-wise: `x > 0 ? 1 : alpha * x`
 *
 * ```js
 * const x = tf.tensor1d([0, 2, -1, -3]);
 * x.step().print();
 * ```
 *
 * @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);
}
```
```
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 {op} from './operation';

/**
 * 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_});

}
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=============================================================================

import {Tensor1D} from './tensor';
import {inferShape} from './tensor_util_env';
import {TensorLike1D} 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` as it makes the code more readable.
 * When using `makeTensor` with a `TensorLike1D` type, it will infer shape from `values`.
 * However, it is recommended to use `inferShape` explicitly to avoid ambiguity.
 */
export function makeTensor(values: TensorLike1D, shape?: number[], dtype?: DataType): Tensor1D {
  assertNonNull(values);
  const inferredShape = inferShape(values, dtype);
  if (inferredShape.length !== 1) {
    throw new Error('makeTensor() requires values to be a flat/TypedArray');
  }
  return makeTensor(values, null, inferredShape, dtype) as Tensor1D;
}

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

import {Tensor2D} from './tensor';
import {inferShape} from './tensor_util_env';
import {TensorLike2D} 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.tensor` as it makes the code more readable.
 * When using `makeTensor` with a `TensorLike2D` type, it will infer shape from `values`.
 * However, it is recommended to use `inferShape` explicitly to avoid ambiguity.
 * It is important to specify the shape when using `makeTensor` with a `TensorLike2D` type.
 */
export function makeTensor(values: TensorLike2D, shape?: [number, number], dtype?: DataType): Tensor2D {
  assertNonNull(values);
  if (shape && shape.length !== 2) {
    throw new Error('makeTensor() requires values to have two numbers');
  }
  const inferredShape = inferShape(values, dtype);
  if (inferredShape.length !== 2) {
    throw new Error('makeTensor() requires values to be flat/TypedArray');
  }
  return makeTensor(values, shape, inferredShape, dtype) as Tensor2D;
}

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

import {Tensor4D} from './tensor';
import {inferShape} from './tensor_util_env';
import {TensorLike4D} 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.tensor` as it makes the code more readable.
 * When using `makeTensor` with a `TensorLike4D` type, it will infer shape from `values`.
 * However, it is recommended to use `inferShape` explicitly to avoid ambiguity.
 * It is important to specify the shape when using `makeTensor` with a `TensorLike4D` type.
 */
export function makeTensor(values: TensorLike4D, shape?: [number, number, number, number], dtype?: DataType): Tensor4D {
  assertNonNull(values);
  if (shape && shape.length !== 4) {
    throw new Error('makeTensor() requires values to have four numbers');
  }
  const inferredShape = inferShape(values, dtype);
  if (inferredShape.length !== 4) {
    throw new Error('makeTensor() requires values to be flat/TypedArray');
  }
  return makeTensor(values, shape, inferredShape, dtype) as Tensor4D;
}
from `tensorflow_ops_util`:

```javascript
/**
 * Creates rank-4 `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.tensor4d` as it makes the code more readable.
 * `tf.tensor4d([[1], [2], [3], [4]])`.
 */

export function tensor4d(values, 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');
  }
  if (inferredShape.length === 1 && shape == null) {
    throw new Error('tensor4d() requires shape to be provided when `values` are a flat array');
  }
  return makeTensor(values, shape, inferredShape, dtype) as Tensor4D;
}
```

```javascript
/**
 * 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.
 * `tf.tensor5d([[1], [2], [3], [4]])`. 
 */

export function tensor5d(values, 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[][][][][] 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;
}
```

```javascript
/**
 * 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.
 * `tf.tensor6d([[1], [2], [3], [4]])`. 
 */

export function tensor6d(values, 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[][][][][][] 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;
}
```
same functionality can be achieved with `tf.tensor`, but in general we recommend using `tf.tensor6d` as it makes
the code more readable. `values * @param shapes TensorLike[
  values: number, number, number, number, number];` & `return makeTensor(values, shape, inferredShape, 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[][][][][][] or +
  `flat/TypedArray');
  }

  if (inferredShape.length === 1 & & shape == null) {
    throw new Error('tensor6d() requires shape to be provided when `values` are a flat array');
  }

  shape = shape || inferredShape as [number, number, number, number, number, number];
  return makeTensor(values, shape, inferredShape, dtype) as Tensor6D;
}

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 */

import {ENGINE} from '../engine';
import {TopK, TopKAttrs, TopKInputs} 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';

/**
 * Finds the values and indices of the `k` largest entries along the last dimension.
 * If the input is a vector (rank=1), finds the k largest entries in the vector and
 * outputs their values and indices as vectors. Thus values[j] is the j-th largest entry in input, and its index is indices[j].
 * For higher rank inputs, computes the top k entries along the last dimension. If two elements are equal, the lower-index element appears first.
 * const [values, indices] = tf.topk(a);
 * values.rank = 1; throws new Error('topk() doesn’t support rank > 1');
 * 
 * @param x 1-D or higher `tf.Tensor` with last dimension being at least `k`.
 * @param k Number of top elements to look for along the last dimension.
 * @param sorted If true, the resulting `k` elements will be sorted by their values in ascending order.
 */
function topk_<T extends Tensor>(x: T|TensorLike, k = 1, sorted = true): {values: T, indices: T} {
  const $x = convertToTensor(x, 'x', 'topk');
  if ($x.rank === 0) {
    throw new Error('topk() expects the input to be of rank 1 or higher');
  }

  const lastDim = $x.shape[$x.shape.length - 1];
  if (k > lastDim) {
    throw new Error('`k` passed to topk() must be <= the last dimension ($)');
  }

  const inputs: TopKInputs = {x: $x, k};
  const attrs: TopKAttrs = {sorted};

  const [values, indices] = ENGINE.runKernel(TopK, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap);

  return {values, indices} as {values: T, indices: T};
}

export const topk = op({topk_});

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 */

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

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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 truncated normal distribution. The generated values follow a normal distribution with specified mean and standard deviation, except that values whose magnitude is more than 2 * standard deviations from the mean are dropped and re-picked.
 * @param shape An array of integers defining the output tensor shape.
 * @param mean The mean of the normal distribution.
 * @param stdDev The standard deviation of the normal distribution.
 * @returns A new MPRandGauss(mean, stdDev, dtype, true /* truncated */, seed)
 * @doc
 *
 * ```js
 * const randGauss = new MPRandGauss(0, 1, 'float32', true /* truncated */, seed);
 * ```
 *
 * ```js
 * // Use the values for further computations.
 * const tensor = randGauss.nextValue();
 * ```
 */
function truncatedNormal_<R extends Rank>(
    shape: ShapeMap[R],
    mean = 0,
    stdDev = 1,
    dtype?: 'float32'|'int32', 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, true /* truncated */, seed);
  const res = buffer(shape, dtype);
  for (let i = 0; i < res.values.length; i++) {
    res.values[i] = randGauss.nextValue();
  }
  return res.toTensor();
}

export const truncatedNormal = op({truncatedNormal_});

/**
 * 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` the same size as the number of the elements in `x` along the `axis` dimension. It contains the index in the unique output `values`.
 * @param x A tensor (int32, string, bool).
 * @param axis The axis of the tensor to find the unique elements.
 * @returns [uniqueElements, indices]
 * @doc
 *
 * ```js
 * // A 1-D tensor
 * const a = tf.tensor1d([1, 0, 0, 2, 4, 4, 7, 8, 8]);
 * const values = tf.unique(a) // [1, 2, 4, 7, 8]
 * ```
 *
 * ```js
 * // A 2-D tensor with axis=0
 * const a = tf.tensor2d([[1, 0, 0], [1, 0, 0], [2, 0, 0]]);
 * const values = tf.unique(a, 0) // [[1, 0, 0], [2, 0, 0]]
 * ```
 */
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_});

*/

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---

*/

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
`./**

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
'./**

import {ENGINE} from `./engine`;import {Unpacked, UnpackedAttrs, UnpackedInputs} from
`./kernel_names`;import {NamedAttrMap} from `./kernel_registry`;import {Tensor, TensorLike} from `./tensor`;
import {DataType, Rank} from `./types`;import {convertToTensor} from `./tensor_util_env`;import
{assert, isInt} from `./util`;import {Operation} from `@tensorflow/tfjs-core`;

*const tf = require(`@tensorflow/tf`);

/**
 * Computes the sum along segments of a `tf.Tensor`. *
 * `\$n * \n * ```js
 * const x = tf.tensor1d([1, 2, 3, 4]);
 * const segmentIds = tf.tensor1d([1, 2, 0, 1], `int32`);
 * const numSegments = 3;
 * ```
 * @param x the `tf.Tensor` that will be summed along its segments.
 * @param segmentIds the `tf.Tensor1D` whose rank is equal to the rank of `x`'s * dimension along the `axis`. Maps each element of `x` to a segment.
 * @param numSegments The number of distinct `segmentIds`. *

*/

/**
 * Unstacks a `tf.Tensor` of rank-`R` into a list of rank-`(R-1)` `tf.Tensor`s.
 *
 * ```js
 * const a = tf.tensor2d(
 *     
 * ```
 * @param x A tensor object.
 * @param axis The axis to unstack along. Defaults to 0 (the first dim).
 *
 * @doc {heading: 'Tensors', subheading: 'Slicing and Joining'}
 */

*/

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*/

*/

import {ENGINE} from `./engine`;import {NamedAttrMap} from `./kernel_registry`;import
{Tensor, Variable} from `./tensor`;import {DataType, Rank} from `./types`;import {convertToTensor} from `./tensor_util_env`;import
{assert, isInt} from `./util`;import {Operation} from `@tensorflow/tfjs-core`;

*const tf = require(`@tensorflow/tf`);
import {Tensor} from './tensor';
import {convertToTensor} from './tensor_util_env';
import {TensorLike} from './types';
import * as util from './util';
import {squeeze} from './squeeze';
import {whereAsync} from './where_async';

/**
 * Apply boolean mask to tensor.
 */

async function booleanMaskAsync_(
    tensor: Tensor|TensorLike, mask: Tensor|TensorLike, axis?: number): Promise<Tensor> {
  const $tensor = convertToTensor(tensor, 'tensor', 'boolMask');
  const $mask = convertToTensor(mask, 'mask', 'boolMask', 'bool');

  const axisFrom = axis == null ? 0 : axis;
  const maskDim = $mask.rank;
  const tensorShape = $tensor.shape;

  util.assert(maskDim > 0, () => 'mask cannot be scalar');
  util.assertShapesMatch(
      tensorShape.slice(axisFrom, axisFrom + maskDim),
      $mask.shape, 'mask's shape must match the first K dimensions of tensor's shape.');

  let leadingSize = 1;
  for (let i = axisFrom; i < axisFrom + maskDim; i++) {
    leadingSize *= tensorShape[i];
  }
  const targetTensorShape =
      tensorShape.slice(0, axisFrom)
          .concat([leadingSize], tensorShape.slice(axisFrom + maskDim));
  const reshapedTensor = reshape($tensor, targetTensorShape);
  const reshapedMask = reshape($mask, [-1]);
  const positivePositions = await whereAsync(reshapedMask);
  const indices = squeeze(positivePositions, [1]);

  const res = gather(reshapedTensor, indices, axisFrom);
  if (tensor !== $tensor) {
    $tensor.dispose();
  }
  if (mask !== $mask) {
    $mask.dispose();
  }
  indices.dispose();
  reshapedTensor.dispose();
  reshapedMask.dispose();
  positivePositions.dispose();

  return res;
}

export const booleanMaskAsync = booleanMaskAsync_;

/**
 * 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).
 *
 * ```js
 * const x = tf.tensor1d([1, 2, 3, 4]);
 *
 * x.norm().print();  // or tf.norm(x)
 * ```
 *
 * @param x The input array.
 * @param ord Optional. Order of the norm. Supported norm types are:
 * ```
 *  | ord        | norm for matrices         | norm for vectors
 *  |------------|---------------------------|---------------------
 *  |'euclidean' |Frobenius norm             |sum(abs(x))
 *  |'fro'       |Frobenius norm	           |
 *  |Infinity    |max(sum(abs(x), axis=1))   |min(abs(x), axis=1))
 *  |1           |max(sum(abs(x), axis=0))   |sum(abs(x))
 *  |2           |                          |
 * @param axis The input array.
 * @param ord Optional. Order of the norm. Supported norm types are:
 * ```
 *  | ord        | norm for matrices         | norm for vectors
 *  |------------|---------------------------|---------------------
 *  |'euclidean' |Frobenius norm             |
 *  |'fro'       |Frobenius norm	           |
 *  |Infinity    |max(sum(abs(x), axis=1))   |
 *  |1           |max(sum(abs(x), axis=0))   |
 * @param axis Optional. If axis is null (the default), the input is an array of values in the Tensor, i.e. norm(x, ord) is equivalent to norm(x, reshape([-1], ord)). If axis is an integer, the input x is considered a batch of vectors, and axis determines the axis in x to which over to compute vector norms. If axis is a 2-tuple of integer it is considered a batch of matrices and axis determines the axes in NDA

---

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

*/

import {ENGINE} from '../engine';
import {ScatterNd, ScatterNdAttrs, ScatterNdInputs} 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';
import * as scatter_nd_util from './scatter_nd_util';

/**
 * Creates a new tensor by applying sparse updates to individual values or slices within a zero tensor of the given shape tensor according to `indices`.
 * This operator is the inverse of the `tf.gatherND` operator which extracts values or slices from a given tensor.
 * @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.
 * @doc {heading: 'Operations', subheading: 'Slicing and Joining'}
 */
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', 'int32');

  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_});

*/

import {Tensor} from '../tensor';

/**
 * Validate sparseToDense inputs.
 *
 * @param sparseIndices A 0-D, 1-D, or 2-D Tensor of type int32.
 * sparseIndices[i] contains the complete index where sparseValues[i] will be placed.
 * @param sparseValues A 0-D or 1-D Tensor. Values corresponding to each row of 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, error will be thrown if it is set.
 * @doc {heading: 'Operations', subheading: 'Slicing and Joining'}
 */
export 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 has incorrect shape ${sparseIndices.shape}, should be [0] or [1]`);
  }

  const numElems = sparseIndices.size;
  if (!((sparseValues.rank === 0) && numValues === numElems)) {
    throw new Error(`sparseValues has incorrect shape, should be [0] or [1]`);
  }

  // but got shape ${sparseValues.shape}.`);
  }

  // throw new Error(`tf.sparseToDense() expects the indices to be int32 type, but the dtype was ${sparseIndices.dtype}.`);
}

*/

===

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import {ENGINE} from '../engine';
import {GatherNd, GatherNdInputs} 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';

/**
 * Gather slices from input tensor into a Tensor with shape specified by `indices`.
 *
 * `indices` is an K-dimensional integer tensor, best thought of as a (K-1)-dimensional tensor of indices into input, where each element defines a slice of input:
 * output[i_0, ..., i_{K-2}] = input[indices[i_0, ..., i_{K-2}]]
 *
 * Whereas in `tf.gather`, `indices` defines slices into the first dimension of input, in `tf.gatherND`, `indices` defines slices into the first N dimensions of input, where N = indices.shape[-1].
 *
 * The last dimension of indices can be at most the rank of input.
 *
 * @param indices A 0-D, 1-D, or 2-D Tensor of type int32.
 * indices[i] contains the complete index where input[i] will be placed.
 * @param input Shape of the output tensor. The type is inferred.
 * @param defaultValue Scalar. Value to set for indices not specified in input.
 *
 * @doc {heading: 'Operations', subheading: 'Normalization'}
 */
function gatherNd_<R extends Rank>(
    indices: Tensor|TensorLike, input: Tensor|TensorLike,
    outputShape: ShapeMap[R],
    defaultValue: Scalar|ScalarLike = 0): Tensor<R> {
  const $indices = convertToTensor(indices, 'indices', 'gatherNd', 'int32');
  const $input = convertToTensor(input, 'input', 'gatherNd');
  const $defaultValue = convertToTensor(defaultValue, 'defaultValue', 'gatherNd');

  gatherNd.validateInput($indices, $input, outputShape, $defaultValue);

  const inputs: GatherNdInputs = {
    indices: $indices,
    input: $input,
    outputShape: outputShape,
    defaultValue: $defaultValue
  };

  const attrs: {} = {
  };

  return ENGINE.runKernel(GatherNd, inputs as {} as NamedTensorMap,
                          attrs as {} as NamedAttrMap);
}

export const gatherNd = op({gatherNd_});
of input
 * indices.shape[-1] <= input.rank
 * The last dimension of `indices` corresponds to elements
 * (if
 * indices.shape[-1] == input.rank) or slices
 * (if indices.shape[-1] < input.rank) along dimension indices.shape[-1]
 * of input
 * The output tensor has shape
 * + input.shape[indices.shape[-1]:]
 * Note
 * on CPU, if an out of bound index is found, an error is returned. On
 * GPU, if an out of bound index is found, a 0 is stored in the corresponding
 * output value.
 * Note
 * indices.shape[-1] == input.rank)

 * The last dimension of `indices` corresponds to elements
 * (if
 * indices.shape[-1] == input.rank) or slices
 * (if indices.shape[-1] < input.rank) along dimension indices.shape[-1]
 * of input
 * The output tensor has shape
 * + input.shape[indices.shape[-1]:]
 * Note
 * on CPU, if an out of bound index is found, an error is returned. On
 * GPU, if an out of bound index is found, a 0 is stored in the corresponding
 * output value.
 * Note
 * indices.shape[-1] == input.rank)

 * The last dimension of `indices` corresponds to elements
 * (if
 * indices.shape[-1] == input.rank) or slices
 * (if indices.shape[-1] < input.rank) along dimension indices.shape[-1]
 * of input
 * The output tensor has shape
 * + input.shape[indices.shape[-1]:]
 * Note
 * on CPU, if an out of bound index is found, an error is returned. On
 * GPU, if an out of bound index is found, a 0 is stored in the corresponding
 * output value.
 * Note
 * indices.shape[-1] == input.rank)
>${\text{x.dtype}} \text{ tensor instead.}
\}
\} util.assert(${\text{rate} >= 0 \&\& rate < 1,\} \} if (rate === 0) \{\n return x instanceof Tensor ? $x.clone() : $x;\} \} const $noiseShape = getNoiseShape($x, noiseShape);\n const keepProb = 1 - rate;\n const multiplier = div($\text{floor(add(randomUniform($noiseShape, 0, 1, 'float32', seed), keepProb))),\} \} keepProb);\n\} \} return mul($x, multiplier);\n\} \} \} return $x instanceof Tensor ? $x.clone() : $x;

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_});
```javascript
[36x36]valAndInd.sort((a, b) => b.value - a.value);

    precision[b] = 0;
    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();
  }

  // Output precision has the same shape as targets.
  return tensor(precision, $targets.shape, 'bool') as U;
}

export const inTopKAsync = inTopKAsync_;
```
/**
 * Computes a 2D convolution over the input x, optionally fusing with adding a bias and applying an activation.
 * @param x The input tensor, of rank 4 or rank 3, of shape `[batch, height, width, inChannels]`. If rank 3, batch
const der: Tensor[] = [xDer, filterDer];

if ($bias != null) {
  const biasDer = getFusedBiasGradient($bias, dyActivation);
  der.push(biasDer);
}

const inputs: FusedConv2DInputs = {
  x: x4D,
  dyActivation,
  $filter.shape,
  strides,
  pad,
  dataFormat,
  dilations,
  $bias
};

const customGrad =
  customGrad((x4D: Tensor4D, dy4D: Tensor4D, filter: Tensor4D, save: GradSaveFunc) => {
    let res: Tensor4D|Tensor3D =
      ENGINE.runKernel(
        FusedConv2D,
        inputs as {} as NamedTensorMap,
        attrs as {} as NamedAttrMap)
    .as
      Tensor4D;

    return {
      value: res, gradFunc: gradFunc$ as T
    };
  });

  return customGrad(x4D, dy4D, $filter) as T;
}

export const conv2d =
  op({fusedConv2d_});

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 *
 */

import {ENGINE} from '../engine';
import {FusedConv2DAttr, FusedConv2DInputs, FusedConv2DOutputs} from '../kernel_names';
import {NamedAttrMap} from '../kernel_registry';
import {Tensor3D, Tensor4D} from '../tensor';

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, number],
  dilations: [number, number, number, number],
  $bias: Tensor|null = null,
  dimRoundingMode: 'floor'|'ceil'|'round':
  Tensor4D {
    let x4D = x as Tensor4D;
    let dy4D = dy as Tensor4D;

    const inputs: DepthwiseConv2dNativeBackpropFilterInputs = {
      x: x4D,
      dy: dy4D,
      filter:
        filter as Tensor4D,
      stride:
        strides,
      dilation:
        dilations,
      $bias
    };
import {ENGINE} from '../engine';
import {DepthwiseConv2dNativeBackpropInput, DepthwiseConv2dNativeBackpropInputAttrs, DepthwiseConv2dNativeBackpropInputInputs} 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 depthwiseConv2dNativeBackpropInput_<T extends Tensor3D|Tensor4D>(
    xShape: number, number, number, number, dy: T, filter: Tensor4D, strides: number, number, number, number, pad: 'valid'|'same'|number, dilations: number, number, number = [1, 1], dimRoundingMode?: 'floor'|'round'|'ceil'): T {
  let dy4D = dy as Tensor4D;
  let reshapedTo4D = false;
  if (dy.rank === 3) {
    reshapedTo4D = true;
    dy4D = reshape(dy, [1, dy.shape[0], dy.shape[1], dy.shape[2]]);
    dy
  }
  const inputs:
      DepthwiseConv2dNativeBackpropInputInputs = {dy: dy4D, filter};
  const attrs:
      DepthwiseConv2dNativeBackpropInputAttrs =
          {strides, pad, dimRoundingMode, dilations, inputShape: xShape};

  const res =
      // tslint:disable-next-line: no-unnecessary-type-assertion
      ENGINE.runKernel(
          DepthwiseConv2dNativeBackpropInput, 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 depthwiseConv2dNativeBackpropInput =
    op({depthwiseConv2dNativeBackpropInput_});

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 */

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 {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 `n` * `channelMultiplier` channels for each), then concatenates the results n * together. The output has `inChannels` * `channelMultiplier` channels.

 * @param obj An object with the following properties:
 * @param x The input tensor, of rank 4 or rank 3, of shape `n` * [batch, height, width, inChannels]. If rank 3, batch of 1 is assumed.
 * @param filter The filter tensor, rank 4, of shape `n` * [filterHeight, filterWidth, inChannels, channelMultiplier].
 * @param pad The type of padding algorithm.
 */

as input, regardless of filter size. 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

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 `rate` is a single number, then `dilationHeight == dilationWidth`. If it is greater than 1, then all values of `strides` must be 1.
- `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

@param dilations The dilation rates:
- `valid` 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 provided, it will default to truncate.
- `param` bias Tensor to be added to the result.
- `param` activation Name of activation kernel (defaults to `linear`).

@returns Tensor of prelu weights to be applied as part of a 'prelu' activation, typically the same shape as `x`.

@returns Tensor of leakyreluAlpha Optional. Alpha to be applied as part of a 'leakyrelu' activation.

fusedDepthwiseConv2d_<T extends Tensor3D|Tensor4D>({ x, filter, strides, pad, dataFormat = 'NHWC', dilations = [1, 1], dimRoundingMode, bias, activation = 'linear', preluActivationWeights, leakyreluAlpha })

T | x | if (shouldFuse(ENGINE.state.gradientDepth, activation) === false) {
let result = unfusedDepthwiseConv2d(<x, filter, strides, pad, dataFormat = 'NHWC', dilations = [1, 1], dimRoundingMode, bias, activation = 'linear', preluActivationWeights, leakyreluAlpha|x); x | return applyActivation(result, activation, preluActivationWeights, leakyreluAlpha); }
return [xDer, filterDer];

const inputs: FusedDepthwiseConv2DInputs = {
  x: x4D,
  filter: $filter,
  bias: $bias,
  preluActivationWeights: $preluActivationWeights,
  strides,
  pad,
  dataFormat,
  dilations,
  dimRoundingMode,
  activation,
  leakyreluAlpha
};

// Depending on the the params passed in we will have different number of \(n\) // inputs and thus a different number of elements in the gradient. \(n\) if (bias == null) {
  const customOp = customGrad((x4D: Tensor4D, filter: Tensor4D, save: GradSaveFunc) => {
    // tslint:disable-next-line: no-unnecessary-type-assertion
    let res: Tensor4D|Tensor3D = ENGINE.runKernel(FusedDepthwiseConv2D, inputs as {} as NamedTensorMap,
      attr as {} as NamedAttrMap); 

    if (reshapedTo4D) {
      // tslint:disable-next-line: no-unnecessary-type-assertion
      res = reshape(res, [res.shape[1], res.shape[2], res.shape[3]]); 
    }

    return {value: res, gradFunc: grad};
  });

  return customOp(x4D, $filter, $bias) as T;
} else {
  const customOpWithBias = customGrad((x4D: Tensor4D, filter: Tensor4D, bias: Tensor, save: GradSaveFunc) => {
    // tslint:disable-next-line: no-unnecessary-type-assertion
    let res: Tensor4D|Tensor3D = ENGINE.runKernel(FusedDepthwiseConv2D, inputs as {} as NamedTensorMap,
      attr as {} as NamedAttrMap); 

    if (reshapedTo4D) {
      // tslint:disable-next-line: no-unnecessary-type-assertion
      res = reshape(res, [res.shape[1], res.shape[2], res.shape[3]]); 
    }

    return {value: res, gradFunc: grad};
  });

  return customOpWithBias(x4D, $filter, $bias) as T;
}

export const depthwiseConv2d = op({fusedDepthwiseConv2d_});

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 *
 *============================================================================
 *
 *import {ENGINE} from './engine';
 *import {customGrad} from './gradients';
 *import {_FusedMatMul, _FusedMatMulAttr, _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 * 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';
 *
 *function fusedMatMul_<T extends Tensor>(
  a: T,
  b: T,
  transposeA = false,
  transposeB = false,
  bias: TensorLike,
  activation: string = 'linear',
  preluActivationWeights: TensorLike,
  leakyreluAlpha: number
): T {
  if (shouldFuse(ENGINE.state.gradientDepth, activation) !== false) {
    let result = unfusedMatMul(a, b, transposeA, transposeB) as T;
    return applyActivation(result, activation, preluActivationWeights, leakyreluAlpha) as T;
  }
  let a = convertToTensor(a, 'a', 'fused matMul');
  let b = convertToTensor(b, 'b', 'fused matMul');
  let [a, b] =
makeTypesMatch($a, $b);

    const innerShapeA =
    const innerShapeB =
        transposeB ? $b.shape[$b.rank - 2] : $b.shape[$b.rank - 1];

    const outerShapeA =
    const outerShapeB =
        transposeB ? $b.shape[$b.rank - 1] : $b.shape[$b.rank - 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);

    util.assert(
        $a.rank >= 2 && $b.rank >= 2 && $a.rank ===
        $b.rank,
        () => `Error in fused matMul: inputs must have the same rank of at `
            `least 2, got ranks
        ${$a.rank} and ${$b.rank}.`);

    util.assert(
        util.arraysEqual(outerDimsA, outerDimsB),
        () => `Error in fused matMul: outer dimensions (${outerDimsA}) and (` +
            `${outerDimsB}) of Tensors with shapes
        ${$a.shape} and ` +
            `${$b.shape} must match.`);

    util.assert(
        innerShapeA === innerShapeB,
        () => `Error in fused matMul: inner shapes (${innerShapeA}) and (` +
            `${innerShapeB}) of Tensors with shapes
        ${$a.shape} and ` +
            `${$b.shape} and transposeA=${transposeA}` +
            ` and
        transposeB=${transposeB} must match.`);

    const outShape = $a.shape.slice(0, -2).concat([outerShapeA,
        outerShapeB]);

    const a3D: Tensor3D = transposeA ?
        reshape($a, [batchDimA, innerShapeA,
            outerShapeA]) :
        reshape($a, [batchDimA, outerShapeA, innerShapeA]);
    const b3D: Tensor3D = transposeB ?
        reshape($b, [batchDimB, outerShapeB, innerShapeB]) :
        reshape($b, [batchDimB, innerShapeB, outerShapeB]);

    const $bias: Tensor;
    if ($bias != null) {
      $bias = convertToTensor($bias,
          'bias', 'fused matMul');
      [[$bias]] = makeTypesMatch($bias, $a);
      broadcast_util.assertAndGetBroadcastShape(outShape, $bias.shape);
    }

    const $preluActivationWeights: Tensor;
    if ($preluActivationWeights != null) {
      $preluActivationWeights = convertToTensor($preluActivationWeights,
          'prelu weights', 'fused matMul');
    }

    const grad = (dy: Tensor3D, saved: Tensor[]) => {
      const [a3D, b3D, y, $bias] = saved;
      // we reshape dy because the result of the forward is not
      // necessarily going to be a 3d tensor due to a reshape done at the end of
      // the customOp.
      const dyActivation =
          getFusedDyActivation(reshape(dy, y.shape), y, activation);
      let aDer: Tensor;
      let bDer: Tensor;
      let aDer = unfusedMatMul(dyActivation, b3D, false, true);
      let bDer = unfusedMatMul(a3D, dyActivation, true, false);
      if ($bias != null) {
        const biasDer = getFusedBiasGradient($bias, dyActivation);
        return [aDer, bDer, biasDer];
      } else {
        return [aDer, bDer];
      }

      const customOp =
          customGrad((a3D: Tensor3D, b3D: Tensor3D, save: GradSaveFunc) => {
            const res =
                // tslint:disable-next-line: no-unnecessary-type-assertion
                ENGINE.runKernel(_FusedMatMul, inputs as {} as NamedTensorMap,
                    attrs as {} as NamedAttrMap) as T;
            save([a3D, b3D, res]);
            return {value: reshape(res, outShape), gradFunc: grad} as {};
          });
      const customOpWithBias = customGradGrad($a, $b) as {};
      const customOpWithBias =
          customGradGrad($a, $b) as {};
      return {
        value: reshape(res, outShape),
        gradFunc: grad} as {};
    };

    export const matMul = op({fusedMatMul_});
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=============================================================================

*/

import {conv2d} from './fused/conv2d';
import {depthwiseConv2d} from './fused/depthwise_conv2d';
import {matMul} from './fused/mat_mul';
import {Activation} from './fused_types';

export {Activation, conv2d, depthwiseConv2d, matMul};

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 */

import {Tensor1D} from '../../tensor';
import {op} from '../operation';
import {cosineWindow} from '../signal_ops_util';

/**
 * Generate a hamming window.
 *
 * See:
 * https://en.wikipedia.org/wiki/Window_function#Hann_and_Hamming_windows
 *
 * ```js
 * tf.signal.hammingWindow(10).print();
 * ```
 * @param The length of window
 *
 * @doc {heading: 'Operations', subheading: 'Signal', namespace: 'signal'}
 */
function hammingWindow_(windowLength: number): Tensor1D {
  return cosineWindow(windowLength, 0.54, 0.46);
}
export const hammingWindow = op({hammingWindow_});

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 */

import {Tensor, Tensor1D} from '../../tensor';
import {concat} from '../concat';
import {fill} from '../fill';
import {op} from '../operation';
import {reshape} from '../reshape';
import {slice} from '../slice';
import {tensor2d} from '../tensor2d';

/**
 * Expands input into frames of frameLength. Slides a window size with frameStep.
 * @param input The input tensor to be expanded
 * @param frameLength Length of each frame
 * @param frameStep The frame hop size in samples.
 * @param padEnd Whether to pad the end of signal with padValue.
 * @param padValue An number to use where the input signal does not exist when padEnd is True.
 */

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'Signal', namespace: 'signal'}

function frame_(signal: Tensor1D, frameLength: number, frameStep: number, padEnd = false, padValue = 0): Tensor {
  const signalLength = signal.shape[0];
  const outputLength = Math.ceil((signalLength - frameLength) / frameStep) + 1;
  let output = Tensor.fromShape([outputLength, frameLength], padValue);

  let start = 0;
  const outputLengthWithPadEnd = outputLength + (padEnd ? 1 : 0);
  while (start < signalLength) {
    const slice = signal.slice(start, Math.min(start + frameLength, signalLength));
    if (slice.length === 0) continue;
    output.data[start] = frame(slice, frameLength, frameStep, padEnd, padValue);
    start += frameStep;
  }

  return output;
}

function stft_(signal: Tensor1D, frameLength: number, frameStep: number, fftLength?: number, windowFn: (length: number) => Tensor1D = hannWindow): Tensor {
  const windowedSignal = windowFn(frameLength);
  const output: Tensor[] = [];
  for (let i = 0; i < signal.shape[0]; i++) {
    const slice = signal.slice([i, 0], [1, frameLength]);
    const windowedSlice = windowedSignal.slice([i, 0], [1, frameLength]);
    output.push(rfft(slice, fftLength));
  }
  return concat(output);
}

function cropAndResize(image: Tensor1D, boxes: Tensor2D, boxInd: Tensor1D, cropSize: Tensor1D): Tensor1D {
  const cropHeight = cropSize[0];
  const cropWidth = cropSize[1];
  const output = Tensor.fromShape([image.shape[1], image.shape[2], cropHeight, cropWidth], 0);
  for (let i = 0; i < boxes.shape[0]; i++) {
    const box = boxes.slice([i, 0], [1, 4]);
    const boxInd = boxInd.slice([i, 0], [1, 1]);
    const crop = image.slice(box, box + [0, 0, cropHeight, cropWidth]);
    const resized = crop.resize([cropHeight, cropWidth], 'bilinear');
    output = output.add_(resized, {dim: [1, 2]});
  }
  return output;
}
specifying the size to which all crops are resized to.

* * @param method Optional string from `'bilinear' | 'nearest'`, defaults to bilinear, which specifies the sampling method for resizing.
* @param extrapolationValue A threshold for deciding when to remove boxes based on score. Defaults to 0.
* @return A 4D tensor of the shape `[numBoxes,cropHeight,cropWidth,depth]`.

```javascript
function cropAndResize_(image: Tensor4D|TensorLike, boxes: Tensor2D|TensorLike, boxInd: Tensor1D|TensorLike, cropSize: [number, number], method: 'bilinear'|'nearest' = 'bilinear', extrapolationValue = 0, )
{
  const $image = convertToTensor(image, 'image', 'cropAndResize');
  const $boxes = convertToTensor(boxes, 'boxes', 'cropAndResize', 'float32');
  const $boxInd = convertToTensor(boxInd, 'boxInd', 'cropAndResize', 'int32');

  const numBoxes = $boxes.shape[0];

  util.assert($image.rank === 4, () => 'Error in cropAndResize: image must be rank 4.');
  util.assert($boxes.rank === 2 && $boxes.shape[1] === 4, () => `Error in cropAndResize: boxes must have size [numBoxes, 4]`);
  util.assert($boxInd.rank === 1 && $boxInd.shape[0] === numBoxes, () => `Error in cropAndResize: boxInd must have size [numBoxes]`);
  util.assert(cropSize.length === 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 CropAndResizeInputs = {image: $image, boxes: $boxes, boxInd: $boxInd};
  const CropAndResizeAttrs = {method, extrapolationValue, cropSize};
  const res = ENGINE.runKernel('cropAndResize', CropAndResizeInputs as {} as NamedTensorMap,
                                 CropAndResizeAttrs as {} as NamedAttrMap);
  return res as Tensor4D;
}

export const cropAndResize = op({cropAndResize_});
```

---

```javascript
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($image.rank === 4, () => 'Error in flipLeftRight: image must be rank 4.');
  util.assert($image.shape[2] >= 1, () => `Error in flipLeftRight: image height must be at least 1`);
  util.assert($image.shape[3] >= 1, () => `Error in flipLeftRight: image width must be at least 1`);

  const flipLeftRightInputs = {image: $image, boxInd: $boxInd};
  const flipLeftRightAttributes = {method, extrapolationValue, cropSize};
  const flipLeftRightRes = ENGINE.runKernel('flipLeftRight', flipLeftRightInputs as {} as NamedTensorMap,
                                             flipLeftRightAttributes as {} as NamedAttrMap);
  return flipLeftRightRes as Tensor4D;
}

export const flipLeftRight = op({flipLeftRight_});
```

---

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

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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, and 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 `0.5` (rotates the image around its center).
 */
function rotateWithOffset_(image: Tensor4D|TensorLike, radians: number, fillValue: number|[number, number, number] = 0, center: number|[number, number] = 0.5): 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 = {radians, fillValue, center};
  const res = ENGINE.runKernel(RotateWithOffset, inputs as {} as NamedTensorMap, attrs as {} as NamedAttrMap);
  return res as Tensor4D;
}

export const rotateWithOffset = op({rotateWithOffset_});

function nonMaxSuppSanityCheck(boxes: Tensor2D, scores: Tensor1D, maxOutputSize: number, iouThreshold: number, scoreThreshold: number, softNmsSigma?: number): {
  maxOutputSize: number,
  iouThreshold: number,
  scoreThreshold: number,
  softNmsSigma: number
} {
  if (iouThreshold == null) {
    iouThreshold = 0.5;
  }
  if (scoreThreshold == null) {
    scoreThreshold = Number.NEGATIVE_INFINITY;
  }
  if (softNmsSigma == null) {
    softNmsSigma = 0.0;
  }

  const numBoxes = boxes.shape[0];
  maxOutputSize = Math.min(maxOutputSize, numBoxes);

  util.assert(boxes.rank === 2, () => `boxes must be a 2D tensor, but was of rank ` + boxes.rank);
  util.assert(boxes.shape[1] === 4, () => `boxes must have 4 columns, but 2nd dimension was ` + boxes.shape[1]);

  util.assert(scores.rank === 1, () => `scores must be a 1D tensor`);

  return {scores: scores, scoreThreshold: scoreThreshold, softNmsSigma: softNmsSigma, maxOutputSize: maxOutputSize, iouThreshold: iouThreshold};
}

export {nonMaxSuppSanityCheck};
import {ENGINE} from '../engine';
import {NonMaxSuppressionV3} from '../kernel_names';
import {Tensor1D, Tensor2D} from '../types';
import {convertToTensor} from '../tensor_util_env';
import {TensorLike} from '../tensor';

import {nonMaxSuppSanityCheck} from '../nonmax_util';
import {op} from '../operation';

/**
 * 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 a box.
 * @param scores a 1d tensor providing the 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 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.
 */
function nonMaxSuppression_(boxes: Tensor2D|TensorLike, scores: Tensor1D|TensorLike, maxOutputSize: number, iouThreshold: number, scoreThreshold: number): Tensor1D {
  const inputs = nonMaxSuppSanityCheck(boxes, scores, maxOutputSize, iouThreshold, scoreThreshold);
  maxOutputSize = inputs.maxOutputSize;
  iouThreshold = inputs.iouThreshold;
  scoreThreshold = inputs.scoreThreshold;
  const attrs = {maxOutputSize, iouThreshold, scoreThreshold};
  return ENGINE.runKernel(NonMaxSuppressionV3, {boxes: boxes, scores: scores}, attrs);
}

export const nonMaxSuppression = op({nonMaxSuppression_});

/**
 * 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.
 * @param arr The array to modify.
 * @param element The element to insert.
 * @param comparator Optional. If no comparator is
 * specified, elements are compared using array_util.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,
 * or a positive number.
 * @param arr The array to be searched in.
 * @param target The target to be searched for.
 * @param comparator Should take 2 arguments to compare and return a negative,
 * zero, or a positive number.
 * @return The index of the target value if found, otherwise the insertion point where the target should be inserted, in
 * the form of a negative number, or a positive number.
 */
function binaryInsert<T>(arr: T[], element: T, comparator?: (a: T, b: T) => number) {
  return binarySearch_(arr, target, comparator || defaultComparator);
}

/**
 * Searches the array for the target using binary
 * search, returns the index of the found element, or position to insert if element not found.
 * If no comparator is specified, elements are compared using array_util.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,
 * or a positive number.
 * @param arr The array to be searched in.
 * @param target The target to be searched for.
 * @param comparator Should take 2 arguments to compare and return a negative,
 * zero, or a positive number.
 * @return The index of the target value if found, otherwise the insertion point where the target should be inserted, in
 * the form of a negative number, or a positive number.
 */
function binarySearch<T>(arr: T[], target: T, comparator?: (a: T, b: T) => number) {
  return binarySearch_(arr, target, comparator || defaultComparator);
}

/**
 * Compares its two arguments for order.
 * @param a The first element to be compared.
 * @param b The second element to be compared.
 * @return A negative number, zero, or a positive number.
 */
function defaultComparator<T>(a: T, b: 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) {
    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 keep looking because there may be duplicate.
}

return found ? left : -left - 1;

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 */

import {TypedArray} from '../types';
import {binaryInsert} from './non_max_suppression_util';

/**
 * Implementation of the NonMaxSuppression kernel shared between webgl and cpu.
 */
interface Candidate {
    score: number;
    boxIndex: number;
    suppressBeginIndex: number;
}

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: boolean): NonMaxSuppressionResult {
    return nonMaxSuppressionImpl_(boxes, scores, maxOutputSize, iouThreshold, scoreThreshold, 0 /* softNmsSigma */); /* 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: boolean, padToMaxOutputSize: boolean, returnValidOutputs: boolean) {
    // 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 = [];
    for (let i = 0; i < scores.length; i++) {
        if (scores[i] > scoreThreshold) {
            candidates.push({score: scores[i], boxIndex: i, suppressBeginIndex: 0});
        }
    }
    candidates.sort(ascendingComparator);
    const selectedIndices: number[] = [];
    const selectedScores: number[] = [];
    while (selectedIndices.length < maxOutputSize && candidates.length > 0) {
        const candidate = candidates.pop();
        const {score: originalScore, boxIndex, suppressBeginIndex} = candidate;
        if (originalScore < scoreThreshold) {
            break;
        }
        let ignoreCandidate = false;
        for (let j = candidates.length - 1; j >= suppressBeginIndex; --j) {
            const iou = intersectionOverUnion(boxes, boxIndex, candidates[j].boxIndex, suppressBeginIndex); if (originalScore < scoreThreshold) {
                break;
            } else {
                if (iou >= iouThreshold) {
                    ignoreCandidate = true;
                    break;
                }
            }
        }
        if (!ignoreCandidate) {
            selectedIndices.push(boxIndex);
            selectedScores.push(score);
            candidates.sort(ascendingComparator);
            if (softNmsSigma is 0, the outcome of this algorithm is exactly same as
before: const scale = softNmsSigma > 0 ? (-0.5 / softNmsSigma) : 0.0; const selectedIndices: number[] = [];
            const selectedScores: number[] = [];
            while (selectedIndices.length < maxOutputSize && candidates.length > 0) {
                const candidate = candidates.pop();
                const {score: originalScore, boxIndex, suppressBeginIndex} = candidate;
                if (originalScore < scoreThreshold) {
                    break;
                } else {
                    if (iou >= iouThreshold) {
                        ignoreCandidate = true;
                        break;
                    }
                }
            }
            if (!ignoreCandidate) {
                selectedIndices.push(boxIndex);
                selectedScores.push(score);
                candidates.sort(ascendingComparator);
            }
        } else {
            selectedIndices.push(boxIndex);
            selectedScores.push(score);
            candidates.sort(ascendingComparator);
        }
    }
    // 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;
            break;
        }
    }
    if (!ignoreCandidate) {
        selectedIndices.push(boxIndex);
        selectedScores.push(score);
        candidates.sort(ascendingComparator);
    }
    // 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 end of the selected array. Then we can re-insert the candidate with
    // the

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updated score and suppressBeginIndex back in the candidate list.

    // If on the other hand, `candidate.score` has dropped below the score
    // threshold, we will not add it back to the candidates list.
    if (scoreThreshold > candidate.score) { // Candidate's score is suppressed but is still high enough to be considered, so add back to the candidates list.
      binaryInsert(candidates, candidate, ascendingComparator);
    }
  }

  // NonMaxSuppressionV4 feature: padding output to maxOutputSize.
  const validOutputs = selectedIndices.length;
  const elemsToPad = maxOutputSize - validOutputs;
  if (padToMaxOutputSize && elemsToPad > 0) {
    selectedIndices.push(...new Array(elemsToPad).fill(0));
    selectedScores.push(...new Array(elemsToPad).fill(0.0));
  }

  const result: NonMaxSuppressionResult = {selectedIndices};
  if (returnScoresTensor) {
    result['selectedScores'] = selectedScores;
  }
  if (returnValidOutputs) {
    result['validOutputs'] = validOutputs;
  }
  return result;
}

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 - yminI) * (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);
}

// A Gaussian penalty function, this method always returns values in [0, 1].
// The weight is a function of similarity, the more overlap two boxes are, the
// smaller the weight is, meaning highly overlapping box will be significantly penalized. On the other hand, a non-overlapping box will not be penalized.
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 smaller 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 the TensorFlow python version.
  return (c1.score - c2.score) ||
      ((c1.score === c2.score) && (c2.boxIndex - c1.boxIndex));
}

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 './nonMaxSuppSanityCheck';
import {nonmax_util} from './sensor1d';

/* Performs non maximum suppression of bounding boxes based on iou (intersection over union). This is the async version of the nonMaxSuppression method on a 2d tensor of shape [numBoxes, 4]. Each entry is an IBox with (y1, x1) and (y2, x2) as the corners of the bounding box. The maximum number of boxes to be selected.*/

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threshold for deciding whether \( n \) boxes overlap too much with respect to IOU. Must be between \([0, 1]\). \( n \) Defaults to 0.5 (50% box overlap). \( n \) @param scoreThreshold A threshold for deciding when to remove boxes based on score. Defaults to -inf, which means any score is accepted. \( n \) @return A 1D tensor with the selected box indices. \( n \) * @doc {heading: 'Operations', subheading: 'Images', namespace: 'image'}

```javascript
function nonMaxSuppressionAsync_(
    boxes: Tensor2D|TensorLike, scores: Tensor1D|TensorLike,
    maxOutputSize: number, iouThreshold = 0.5,
    scoreThreshold = Number.NEGATIVE_INFINITY):
  const $boxes = convertToTensor(boxes, 'boxes', 'nonMaxSuppressionAsync');
  const $scores = convertToTensor(scores, 'scores', 'nonMaxSuppressionAsync');
  const inputs = nonMaxSuppSanityCheck($boxes, $scores, maxOutputSize, iouThreshold, scoreThreshold);
  const outputs = nonMaxSuppressionV3Impl($boxes, $scores, inputs.maxOutputSize, inputs.iouThreshold, inputs.scoreThreshold);
  if ($boxes !== boxes) {
    $boxes.dispose();
  }
  if ($scores !== scores) {
    $scores.dispose();
  }
  return tensor1d(outputs.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, Tensor2D, Tensor3D} 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';
```

```
/*
 * @nimport {ENGINE} from './/engine';
 * @nimport {NonMaxSuppressionV5, NonMaxSuppressionV5Attrs, NonMaxSuppressionV5Inputs} from './/kernel_names';
 * @nimport {NamedAttrMap} from './/kernel_registry';
 * @nimport {Tensor, Tensor2D, Tensor3D} from './/tensor';
 * @nimport {NamedTensorMap} from './/tensor_types';
 * @nimport {convertToTensor} from './/tensor_util_env';
 * @nimport {TensorLike} from './/types';
 * @nimport {nonMaxSuppSanityCheck} from './/nonmax_util';
 * @nimport {op} from './/operation';
*/
```
softNmsSigma);\n  maxOutputSize = params.maxOutputSize;\n  iouThreshold = params.iouThreshold;\n  scoreThreshold = params.scoreThreshold;\n  softNmsSigma = params.softNmsSigma;\n\n  const inputs:
  NonMaxSuppressionV5Inputs = {boxes: $boxes, scores: $scores};\n  const attr: NonMaxSuppressionV5Attrs = {\n    maxOutputSize, iouThreshold, scoreThreshold, softNmsSigma};\n\n  // silent: disable-next-line: no-unnecessary-type-assertion\n  const result = ENGINE.runKernel(\n    NonMaxSuppressionV5, inputs as {} as NamedTensorMap, \n    attr as {} as NamedAttrMap) as Tensor;\n  return {selectedIndices: result[0], \n    selectedScores: result[1]};
\nexport const nonMaxSuppressionWithScore = \n  op({nonMaxSuppressionWithScore_});

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 *
 *=============================================================================
 */
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 {tensor1d} from '../tensor1d';

/**
 * Asynchronously performs non maximum suppression of bounding boxes based on \n * iou (intersection over union).
 * This op also supports a Soft-NMS mode (c.f. \n * Bodla et al, https://arxiv.org/abs/1704.04503) where boxes reduce the score \n * of other overlapping boxes, therefore favoring different regions of the image \n * with high scores. To enable this Soft-NMS mode, set the \n * `softNmsSigma` parameter to be larger than 0.\n * @param boxes a 2d tensor of shape `\n * \n * @param scores a 1d tensor providing the box scores of shape  \n * `\n * maxOutputSize: number, iouThreshold = 0.5, \n * scoreThreshold = Number.NEGATIVE_INFINITY, \n * softNmsSigma = 0.0): Promise<NamedTensorMap> { \n * const $boxes = convertToTensor(boxes, 'boxes', 'nonMaxSuppressionAsync');\n * const $scores = convertToTensor(scores, 'scores', 'nonMaxSuppressionAsync');\n * const params = nonMaxSuppSanityCheck($\n *  boxes, $scores, maxOutputSize, iouThreshold, scoreThreshold, \n *  softNmsSigma);\n * maxOutputSize = \n * params.maxOutputSize;\n * iouThreshold = params.iouThreshold;\n * scoreThreshold = params.scoreThreshold;\n * softNmsSigma = params.softNmsSigma;\n *\n * const boxesAndScores = await Promise.all([$boxes.data(), \n * $scores.data()]);\n *\n * const boxesVals = boxesAndScores[0];\n * const scoresVals = boxesAndScores[1];\n *\n * // We call a cpu based impl directly with the typedarray data here rather \n * than a kernel because all kernels are synchronous \n * (and thus cannot await \n * // data());\n *\n * const {selectedIndices, selectedScores} = nonMaxSuppressionV5Impl(\n * boxesVals, scoresVals, maxOutputSize, iouThreshold, scoreThreshold, \n * softNmsSigma);\n *\n * if ($boxes !== boxes) { \n * $boxes.dispose();\n * }\n *\n * if ($scores !== scores) { \n * $scores.dispose();\n * }\n *\n * return { \n * selectedIndices: tensor1d(selectedIndices, 'int32'),\n * selectedScores: tensor1d(selectedScores) \n * } as Tensor;\n *\n * export const nonMaxSuppressionWithScoreAsync = nonMaxSuppressionWithScoreAsync_;\n */

---------------------------------------------------------------

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```
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 * limitations under the License. \n *
=============================================================================

import {ENGINE} from '../../engine';
import {NonMaxSuppressionV4, NonMaxSuppressionV4Attrs, NonMaxSuppressionV4Inputs} 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';

/**
 * Asynchronously performs non maximum suppression of bounding boxes based on
 *iou (intersection over union), with an option to pad results.
 * @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].
 * 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.
 * @param padToMaxOutputSize Defalts to false. If true, size of output
 * is padded to maxOutputSize. Defaults to A map with the following properties:
 * - 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.
 * - nonMaxSuppressionV4Impl: from `.\..\backends\non_max_suppression_impl`;
 * - nonMaxSuppressionV4Inputs: from `.\..\\tensor`;
 * - nonMaxSuppressionV4Attrs: from `.\..\\\tensor_types`;
 * - nonMaxUtil: from `.\..\\nonmax_util`;
 * - scalar: from `.\..\\\scalar`;
 * * Asynchronously performs non maximum suppression of bounding boxes based on
 * iou (intersection over union), with an option to

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**Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5**

Pad results.

```
*@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].

* 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.

* @param padToMaxOutputSize Defals to true. If size of output `n
  `selectedIndices` is padded to maxOutputSize.

* @return A map with the following properties:

  - 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.
```

**Operations**, subheading: `Images`, namespace: `image`
util.assert(\n  size.length === 2, \n  () => 'Error in resizeBilinear: new shape must 2D, but got shape `+\n  `\n  $\{size\}$'.);
util.assert(\n  halfPixelCenters === false || alignCorners === false, \n  () => 'Error in resizeBilinear: If halfPixelCenters is true, `+\n  `\n  `alignCorners must be false.`');\n\nlet batchImages = $images as Tensor4D;\nlet reshapedTo4D = false;\nif ($images.rank === 3) \n  {\n    reshapedTo4D = true;\n    batchImages = reshape($images, [1, $images.shape[0], $images.shape[1], $images.shape[2]]);
  }\n\nconst inputs: ResizeBilinearInputs = {images: batchImages};\nconst attrss: ResizeBilinearAttrss = {alignCorners,\n  halfPixelCenters, size};\n\n// tslint:disable-next-line: no-unnecessary-type-assertion\nconst res =\n  ENGINE.runKernel(\n    'ResizeBilinear', inputs as {} as NamedTensorMap,\n    attrs as {} as NamedAttrMap) as T;
\nif (reshapedTo4D) {
  return reshape(res, [res.shape[1], res.shape[2], res.shape[3]]) as T;
}\nreturn res;

const inputs: ResizeNearestNeighborInputs = {images: batchImages};\nconst attrss: ResizeNearestNeighborAttrss = {alignCorners,\n  halfPixelCenters, size};\n\n// tslint:disable-next-line: no-unnecessary-type-assertion\nconst res =\n  ENGINE.runKernel(\n    'ResizeNearestNeighbor', inputs as {} as NamedTensorMap,\n    attrs as {} as NamedAttrMap) as T;
\nif (reshapedTo4D) {
  return reshape(res, [res.shape[1], res.shape[2], res.shape[3]]) as T;
}\nreturn res;
The text is a mix of English and code comments with some code lines interspersed. It appears to be extracted from a license notice and a function definition related to tensor operations. However, the code is not fully coherent due to the mixed language and formatting issues. This makes it difficult to extract meaningful content without further context or correction.
console.log('Orthogonalized:');

```javascript
console.log('First row direction maintained:');
const data = await y.array();
console.log(data[0][1] / data[0][0]); // should be nearly 2.
```

```javascript
/**
 * @param xs The vectors to be orthogonalized, in one of the two
 *   formats:
 *   - An Array of `tf.Tensor1D`: i.e., a matrix, in which case the
 *     vectors are the rows
 *   - A `tf.Tensor2D`, i.e., in which case the
 *     columns are the vectors.
 *
 * Orthogonalization means that the vectors or the rows of the matrix are
 * orthogonal (zero inner products). Normalization means that each vector
 * or each row of the matrix has an L2 norm that equals 1.
 * @returns
 * The orthogonalized and normalized vectors or
 * matrix.
 */
function gramSchmidt_(xs: Tensor1D[]|Tensor2D): Tensor1D[]|Tensor2D {
  // ... (same code as before)
}

export const gramSchmidt = op({gramSchmidt_});
```

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 */
```
shape of `[..., M, N]`. `* `If `M < N`, `* `Q` has a shape of `[..., M, M]`. `* `R` has a shape of `[..., M, N]`. `*` `@throws` If the rank of `x` is less than `2`. `*` `@doc {heading: 'Operations', `*` subheading: 'Linear Algebra', `*` namespace: 'linalg'} */

```typescript
export enum Reduction {
  NONE,
  MEAN,
  SUM,
  SUM_BY_NONZERO_WEIGHTS
}
```

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 */

export enum Reduction {
  NONE,
  MEAN,
  SUM,
  SUM_BY_NONZERO_WEIGHTS
}
```

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 */
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 */
```

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 * implied.
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 * limitations under the License.
 */
```
/**
 * Computes the absolute difference loss 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 `predictions`, and must be broadcastable to `predictions` (i.e., all dimensions must be either `1`, or the same as the corresponding dimension of `predictions`).
 * @param reduction Type of reduction to apply to loss. Should be of type `Reduction`.
 *
 * @doc {heading: 'Training', subheading: 'Losses', namespace: 'losses'}
 */
function absoluteDifference_<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', 'absoluteDifference');
  const $predictions = convertToTensor(predictions, 'predictions', 'absoluteDifference');
  let $weights: Tensor = null;
  if (weights != null) {
    $weights = convertToTensor(weights, 'weights', 'absoluteDifference');
  }
  assertShapesMatch($labels.shape, $predictions.shape, 'Error in absoluteDifference: ');

  const losses = abs(sub($labels,
    $predictions, $weights, $predictions.size / $weights.size));

  if (reduction === Reduction.MEAN) {
    return div(sum(losses), $predictions.size);
  } else {
    const broadcastFactor = $predictions.size / $weights.size;
    const result = div(sum(losses), sum($weights));
    return broadcastFactor > 1 ? div(result, scalar(broadcastFactor)) : result as O;
  }
}

export const absoluteDifference = op({absoluteDifference_});

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

import {Tensor} from '../../tensor';
import {convertToTensor} from '../../tensor_util_env';
import {TensorLike} from '../../types';
import {assertShapesMatch} from '../../util';
import {abs} from '../abs';
import {Reduction} from '../loss_ops_utils';
import {op} from '../operation';
import {sub} from '../sub';

import {computeWeightedLoss} from './compute_weighted_loss';

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

import {Tensor} from '../../tensor';
import {convertToTensor} from '../../tensor_util_env';
import {TensorLike} from '../../types';
import {assertShapesMatch} from '../../util';
import {abs} from '../abs';
import {Reduction} from '../loss_ops_utils';
import {op} from '../operation';
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/*=============================================================================
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import {abs} from '../abs';
import {Reduction} from '../loss_ops_utils';
import {op} from '../operation';
import {sub} from '../sub';

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

import {Tensor} from '../../tensor';
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import {TensorLike} from '../../types';
import {assertShapesMatch} from '../../util';
import {abs} from '../abs';
import {Reduction} from '../loss_ops_utils';
import {op} from '../operation';
import {sub} from '../sub';

import {computeWeightedLoss} from './compute_weighted_loss';

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

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import {convertToTensor} from '../../tensor_util_env';
import {TensorLike} from '../../types';
import {assertShapesMatch} from '../../util';
import {abs} from '../abs';
import {Reduction} from '../loss_ops_utils';
import {op} from '../operation';
import {sub} from '../sub';

import {computeWeightedLoss} from './compute_weighted_loss';

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

import {Tensor} from '../../tensor';
import {convertToTensor} from '../../tensor_util_env';
import {TensorLike} from '../../types';
import {assertShapesMatch} from '../../util';
import {abs} from '../abs';
import {Reduction} from '../loss_ops_utils';
import {op} from '../operation';
import {sub} from '../sub';

import {computeWeightedLoss} from './compute_weighted_loss';

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

import {Tensor} from '../../tensor';
import {convertToTensor} from '../../tensor_util_env';
import {TensorLike} from '../../types';
import {assertShapesMatch} from '../../util';
import {abs} from '../abs';
import {Reduction} from '../loss_ops_utils';
import {op} from '../operation';
import {sub} from '../sub';

import {computeWeightedLoss} from './compute_weighted_loss';

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

import {Tensor} from '../../tensor';
import {convertToTensor} from '../../tensor_util_env';
import {TensorLike} from '../../types';
import {assertShapesMatch} from '../../util';
import {abs} from '../abs';
import {Reduction} from '../loss_ops_utils';
import {op} from '../operation';
import {sub} from '../sub';

import {computeWeightedLoss} from './compute_weighted_loss';

/*=============================================================================
*/
$predictions));

  return computeWeightedLoss(losses, $weights, reduction);
}

export const absoluteDifference
  = op({absoluteDifference_});

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 */
import {Tensor} from '../../tensor';
import {convertToTensor} from '../../tensor_util_env';
import {TensorLike} from '../../types';
import {assertShapesMatch} from '../../util';
import {Reduction} from '../loss_ops_utils';
import {mul} from '../mul';
import {op} from '../operation';
import {scalar} from '../scalar';
import {sub} from '../sub';
import {sum} from '../sum';

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 predictions The predicted outputs.
 * @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.SUM_BY_NONZERO_WEIGHTS.
 * @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_});

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 */
import {Tensor} from '../../tensor';
import {convertToTensor} from '../../tensor_util_env';
import {TensorLike} from '../../types';
import {assertShapesMatch} from '../../util';
import {Reduction} from '../loss_ops_utils';
import {mul} from '../mul';
import {op} from '../operation';
import {relu} from '../relu';
import {scalar} from '../scalar';
import {sub} from '../sub';

import {computeWeightedLoss} from './compute_weighted_loss';

/**
 * Computes the Hinge loss 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, 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.SUM_BY_NONZERO_WEIGHTS.
 * @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);
  const losses = sub(one, sum(mul($labels, $predictions), axis, true));
  return computeWeightedLoss(losses, $weights, reduction);
}

export const hingeLoss = op({hingeLoss_});
Importing necessary modules...
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```javascript
/**
 * 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 `losses`, and must be broadcastable to `labels` (i.e., all dimensions must be either 1, or the same as the corresponding `losses` dimension). 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 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_});

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 */

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 {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';
```

---

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{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: ');

  /**
   * Implementation Details:
   *
   * For brevity, let `x = logits`, `z = labels`. The logistic loss is
   * \[\text{loss} = z \cdot \log(\frac{1}{1 + \exp(-x)}) + \frac{1}{2} \cdot \log(1 - \exp(-x))\]
   * \[= z \cdot \log(1 + \exp(-x)) + (1 - z) \cdot \log(1 + \exp(-x))\]
   * \[= z \cdot \log(1 + \exp(-x)) + (1 - z) \cdot (x + \log(1 + \exp(-x)))\]
   * \[= (1 - z) \cdot x + \log(1 + \exp(-x))\]
   * \[= x - x \cdot z + \log(1 + \exp(-x))\]
   * \[= \frac{\log(\exp(x)) - x \cdot z + \log(1 + \exp(-x))}{z \cdot \log(1 + \exp(-x)) + (1 - z) \cdot (x + \log(1 + \exp(-x)))}\]
   * For \( x < 0 \), to avoid overflow in \( \exp(-x) \), we reformulate the above
   * \[= \frac{x - x \cdot z + \log(1 + \exp(-x))}{z \cdot \log(1 + \exp(-x)) + (1 - z) \cdot (x + \log(1 + \exp(-x)))}\]
   * Hence, to ensure stability and avoid overflow, the implementation uses
   * this equivalent formulation:
   * \[\text{loss} = x - x \cdot z + \log(1 + \exp(-x))\]
   */
  const maxOutput = relu($logits);
  const outputXTarget =
      mul($logits, $labels);
  const sigmoidOutput = log1p(exp(neg(abs($logits))));

  return add(sub(maxOutput, outputXTarget), sigmoidOutput);
}

/**
 * Computes the sigmoid cross entropy loss between two tensors.
 *
 * If labelSmoothing is nonzero, smooth the labels towards \(1/2\).
 * NewMultiClassLabels = multiClassLabels * (1 - labelSmoothing) + 0.5 * labelSmoothing
 * @param multiClassLabels The ground truth output tensor of shape \([\text{batch} \_ \text{size}, \text{num} \_ \text{classes}]\), same dimensions as 'predictions'.
 * @param logits The predicted outputs.
 * @param weights Tensor whose rank is either 0, or the same rank as 'losses', and must
 * be broadcastable to 'labels' (i.e., all dimensions
 * must be either '1', or the same as the corresponding 'losses' dimension).
 * @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, scalar(1 - labelSmoothing)),
            mul(half, $multiClassLabels, scalar(labelSmoothing)));
  }
  const losses = sigmoidCrossEntropyWithLogits_($multiClassLabels, $logits);

  return computeWeightedLoss(losses, $weights, reduction);
}

export const sigmoidCrossEntropy =
    op({sigmoidCrossEntropy_});

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 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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 * governing permissions and limitations under the License.
 */

import {customGrad} from '../../gradients';
import {Tensor} from '../../tensor';
import {GradSaveFunc} from  
    '../../tensor_types';
import {convertToTensor} from '../../tensor_util_env';
import {TensorLike} from  
    '../../types';
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 {Reduction} from  
    '../loss_ops_utils';
import {mul} from '../mul';
import {neg} from '../neg';
import {op} from  
    '../operation';
import {reshape} from '../reshape';
import {scalar} from '../scalar';
import {sub} from  
    '../sub';
import {computeWeightedLoss} from  
    '../compute_weighted_loss';

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: ');

  /**
   * Implementation Details:
   *
   * For brevity, let `x = logits`, `z = labels`. The logistic loss is
   * \[\text{loss} = z \cdot \log(\frac{1}{1 + \exp(-x)}) + \frac{1}{2} \cdot \log(1 - \exp(-x))\]
   * \[= z \cdot \log(1 + \exp(-x)) + \frac{1}{2} \cdot \log(1 + \exp(-x))\]
   * \[= z \cdot \log(1 + \exp(-x)) + (1 - z) \cdot (x + \log(1 + \exp(-x)))\]
   * \[= (1 - z) \cdot x + \log(1 + \exp(-x))\]
   * \[= x - x \cdot z + \log(1 + \exp(-x))\]
   */
  const maxOutput = relu($logits);
  const outputXTarget =
      mul($logits, $labels);
  const sigmoidOutput = log1p(exp(neg(abs($logits))));

  return add(sub(maxOutput, outputXTarget), sigmoidOutput);
}
* Computes softmax cross entropy between logits and labels.
* Measures the probability error in discrete classification tasks in which \( \text{labels} \) and \( \text{logits} \) 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 \( \text{image} \) can be a dog or a truck, but not both.
* `NOTE`: While the classes are mutually exclusive, their probabilities need not be. All that is required is that each row of labels is a valid \( \text{distribution} \) 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 \( \text{logits} \) internally for efficiency. Do not call this op with the output of \( \text{softmax} \), as it will produce incorrect results.
* Logits and labels must have the same shape, e.g. \([\text{batch size}, \text{num classes}]\) 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.

```typescript
/**
 * 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.
 * `NOTE`: While the classes are mutually exclusive, their probabilities need
 * not be. All that is required is that each row of labels is a valid
 * 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. \([\text{batch size}, \text{num classes}]\) and the same dtype.
 */
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 cross entropy along a non-last dimension is not yet
    supported. Labels / logits was rank ${logits.rank} ` +
    `and dim was ${dim});`);
  }

  // Use a custom gradient for numerical stability.
  const customOp =
    customGrad((labels: Tensor, logits: Tensor, save: GradSaveFunc) => {
      // Reference:
      const keepDims = true;
      const lse = logSumExp(logits, [dim], keepDims);
      const logResult =
        sub(cast(logits, `float32`), lse);
      const saveResult =
        save([labels, logResult]);
      const costVector =
        neg(mul(logResult,
            labels));
      const value: O =
        sum(costVector, [dim]);

      const gradFunc = (dy: O, saved: Tensor[]) => {
        const [labels, logResult] = saved;
        const dyShape = expandShapeToKeepDim(dy.shape, [dim]);

        return [mul(reshape(dy, dyShape),
            sub(cast(labels, `float32`), exp(logResult)))];
      };

      return customOp(labels, logits);
    });

  return customOp(labels, logits);
}

/**
 * Computes the softmax cross entropy
 * loss between two tensors.
 *
 * If labelSmoothing is nonzero, smooth the labels:
 *
 * newOnehotLabels = onehotLabels * (1 - labelSmoothing) +
 * labelSmoothing / numClasses
 *
 * @param onehotLabels One hot encoded labels
 *    \([\text{batch size}, \text{num classes}]\), same dimensions as 'predictions'.
 *    
 * @param logits The predicted outputs.
 * @param weights Tensor whose rank is either 0, or 1, and must be broadcastable to
 *                    'loss' of shape \([\text{batch size}]\).
 * @param labelSmoothing If greater than 0, then smooth the labels. If there is no weight
 *                    tensor, then \( \text{labelSmoothing} \) is a scalar.
 * @param reduction Type of reduction to apply to loss. Should be of type `REDUCTION`.
 *                    `REDUCTION.SUM` will sum the losses, `REDUCTION.SUM_BY_NONZERO_WEIGHTS` will sum the losses
 *                    weighted by the weights tensor.
 *
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 */
```
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```javascript
{slice3d} from './slice3d';
export {slice4d} from './slice4d';
export {softmax} from './softmax';
export {softplus} from './softplus';
export {spaceToBatchND} from './space_to_batch_nd';
export {fft} from './spectral/fft';
export {ifft} from './spectral/ifft';
export {rfft} from './spectral/rfft';
export {split} from './split';
export {sqrt} from './sqrt';
export {square} from './square';
export {squaredDifference} from './squared_difference';
export {squeeze} from './squeeze';
export {stack} from './stack';
export {step} from './step';
export {stridedSlice} from './strided_slice';
export {sub} from './sub';
export {sum} from './sum';
export {tan} from './tan';
export {tanh} from './tanh';
export {tensor} from './tensor';
export {tensor1d} from './tensor1d';
export {tensor2d} from './tensor2d';
export {tensor3d} from './tensor3d';
export {tensor4d} from './tensor4d';
export {tensor5d} from './tensor5d';
export {tensor6d} from './tensor6d';
export {tile} from './tile';
export {topk} from './topk';
export {truncatedNormal} from './truncated_normal';
export {unique} from './unique';
export {unsortedSegmentSum} from './unsorted_segment_sum';
export {unstack} from './unstack';
export {variable} from './variable';
export {where} from './where';
export {whereAsync} from './where_async';
export {zeros} from './zeros';
export {zerosLike} from './zeros_like';

export * from './boolean_mask';
export * from './transpose';
export * from './norm';
export * from './moving_average';
export * from './scatter_nd';
export * from './sparse_to_dense';
export * from './gather_nd';
export * from './dropout';
export * from './signal_ops_util';
export * from './in_top_k';
export * from './operation';
import {rfft} from './spectral/rfft';
import {fft} from './spectral/fft';
import {ifft} from './spectral/ifft';
import {irfft} from './spectral/irfft';
import {hammingWindow} from './signal/hamming_window';
import {hannWindow} from './signal/hann_window';
import {frame} from './signal/frame';
import {stft} from './signal/stft';
import {cropAndResize} from './image/crop_and_resize';
import {flipLeftRight} from './image/flip_left_right';
import {rotateWithOffset} from './image/rotate_with_offset';
import {nonMaxSuppression} from './image/non_max_suppression';
import {nonMaxSuppressionAsync} from './image/non_max_suppression_async';
import {nonMaxSuppressionWithScore} from './image/non_max_suppression_with_score';
import {nonMaxSuppressionWithScoreAsync} from './image/non_max_suppression_with_score_async';
import {nonMaxSuppressionPadded} from './image/non_max_suppression_padded';
import {nonMaxSuppressionPaddedAsync} from './image/non_max_suppression_padded_async';
import {resizeBilinear} from './signal/resize_bilinear';
import {resizeNearestNeighbor} from './signal/resize_nearest_neighbor';
import {bandPart} from './linalg/band_part';
import {gramSchmidt} from './linalg/gram_schmidt';
import {qr} from './linalg/qr';
import {binary_search} from './losses/binary_search';
import {computeLoss} from './losses/compute_loss';
import {cosineDistance} from './losses/cosine_distance';
import {computeWeightedLoss} from './losses/compute_weighted_loss';
import {hingeLoss} from './losses/hinge_loss';
import {huberLoss} from './losses/huber_loss';
import {logLoss} from './losses/log_loss';
import {meanSquaredError} from './losses/mean_squared_error';
import {sigmoidCrossEntropy} from './losses/sigmoid_cross_entropy';
import {softmaxCrossEntropy} from './losses/softmax_cross_entropy';

// Second level exports.
export {image, linalg, losses, spectral, fused, signal};
```

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

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 a variable is related to plus a suffix, e.g., `dense/kernel/momentum`. The name of the `Variable` object itself cannot be used directly due to possible deduplication: Every `Variable` must have a unique name but more than one optimizer objects of the same type may be created for the same model or the same `Variable`.*/

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 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.
   *
   * @param f The function to execute and whose output to minimize.
   * @param returnCost Whether to return the scalar cost value produced by executing `f()`.
   * @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.
   *
   * @doc {heading: 'Training', subheading: 'Optimizers'}
   */
  minimize(f: () => Scalar, returnCost = false, varList?: Variable[]): Scalar | null {
    const {value, grads} = this.computeGradients(f, varList);

    if (varList != null) {
      const gradArray: NamedTensor[] = varList.map(v => ({name: v.name, tensor: grads[v.name]}));
      this.applyGradients(gradArray);
    } else {
      this.applyGradients(grads);
    }

    // Dispose gradients.
    dispose(grads);

    if (returnCost) {
      return value;
    } else {
      value.dispose();
      return null;
    }
  }

  /**
   * 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;
  }

  /**
   * Executes f() and computes the gradient of the scalar output of f() with respect to the list of trainable variables.
   *
   * @param f The function to execute and whose output to use for computing gradients with respect to variables.
   * @param varList An optional list of variables to compute gradients with respect to.
   *
   * @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'}
   */
  abstract applyGradients(variableGradients: NamedTensorMap): void;

  /**
   * Dispose the variables (if any) owned by this optimizer instance.
   *
   * @param weightValues
   * @returns Weight values with the first element consumed and excluded.
   */
  protected async extractIterations(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 &&
  }}

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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 {sqrt} from '../ops/ops';
import {square} from '../ops/square';
import {zerosLike} from '../ops/zeros_like';
import {ConfigDict, registerClass, Serializable, SerializableConstructor} from '../serialization';
import {NamedTensor, NamedVariableMap} from '../tensor_types';

import {Optimizer, OptimizerVariable} from './optimizer';

/**
 * @doclink Optimizer */
export class AdadeltaOptimizer extends Optimizer {
  /** @nocollapse */
  static className = 'Adadelta';  // Name matters for Python compatibility.
  private accumulatedGrads: OptimizerVariable[] = [
  ];
  private accumulatedUpdates: OptimizerVariable[] = [
  ];

  constructor(
      protected learningRate: number, protected rho: number,
      protected epsilon: number = null) {
    super();

    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);

    variableNames.forEach((name, i) => {
      const value = ENGINE.registeredVariables[name];
      const trainable = false;
      if (this.accumulatedGrads[i] == null) {
        this.accumulatedGrads[i] = {
          originalName: `${name}/accum_grad`,
          variable: tidy(() => zerosLike(value).variable(trainable))
        };
      }
      if (this.accumulatedUpdates[i] == null) {
        this.accumulatedUpdates[i] = {
          originalName: `${name}/accum_var`,
          variable: tidy(() => zerosLike(value).variable(trainable))
        };
      }

      const gradient = Array.isArray(variableGradients) ?
          variableGradients[i].tensor :
          variableGradients[name];
      if (gradient == null) {
        return;
      }

      const accumulatedGrad = this.accumulatedGrads[i].variable;
      const accumulatedUpdate = this.accumulatedUpdates[i].variable;

      tidy(() => {
        const newAccumulatedGrad =
            add(mul(accumulatedGrad, this.rho),
                mul(square(gradient), 1 - this.rho));

        const updates =
            mul(div(sqrt(add(accumulatedUpdate,
                       this.epsilon)),
                sqrt(add(accumulatedGrad, this.epsilon))),
                    gradient);

        const newAccumulatedUpdate =
            add(mul(accumulatedUpdate, this.rho),
                mul(square(updates), 1 - this.rho));

        accumulatedGrad.assign(newAccumulatedGrad);
        accumulatedUpdate.assign(newAccumulatedUpdate);

        const newValue = add(mul(updates, -
                 this.learningRate), value);
        value.assign(newValue);
      });
    });
    this.incrementIterations();
  }

  dispose(): void {
    if (this.accumulatedUpdates != null) {
      dispose(this.accumulatedGrads.map(v => v.variable));
      dispose(this.accumulatedUpdates.map(v => v.variable));
    }
  }

  async getWeights(): Promise<NamedTensor[]> {
    // Order matters for Python compatibility.
    const variables: OptimizerVariable[] = [
      ...this.accumulatedGrads, ...	this.accumulatedUpdates];
    return await this.saveIterations();
  }

  async setWeights(weightValues: NamedTensor[]): Promise<void> {
    const variableCount = weightValues.length / 2;
    const trainable = false;
    this.accumulatedGrads =
        weightValues.slice(0, variableCount).map(v => (
            originalName: v.name,
            variable: v.tensor.variable(trainable)
        ));
    this.accumulatedUpdates =
        weightValues.slice(variableCount, variableCount * 2)
            .map(v => (
                originalName: v.name,
                variable: v.tensor.variable(trainable)
            ));
    this.getConfig();
  }

  static fromConfig<T extends Serializable>(
      cls: T): T {
    // Name matters for Python compatibility.
    return new cls();
  }
}

instance.applyGradients != null;

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 {OptimizerVariable} from './optimizer';

export class AdamOptimizer extends Optimizer {
  static className = 'Adam';  // Note: Name matters for Python compatibility.
  private accBeta1: Variable;
  private accBeta2: Variable;
  private accumulatedFirstMoment: OptimizerVariable = [];
  private accumulatedSecondMoment: OptimizerVariable = [];

  constructor(
    protected learningRate: number,
    protected beta1: number,
    protected beta2: number,
    protected epsilon: number = null) {
    super();
    tidy(()
        => {
          // accB* will be updated by batch.
          this.accBeta1 = scalar(beta1).variable();
          this.accBeta2 = scalar(beta2).variable();
        });
    if (epsilon == null) {
      this.epsilon = ENGINE.backend.epsilon();
    }
  }

  applyGradients(variableGradients: NamedVariableMap | NamedTensor[]) {
    const varNames =
        Object.keys(variableGradients) ?
        variableGradients.map(v => v.name) :
        Object.keys(variableGradients);
    tidy(() => {
      const oneMinusAccBeta1 = sub(1, this.accBeta1);
      const oneMinusAccBeta2 = sub(1, this.accBeta2);
      varNames.forEach((name, i) => {
        const value =
            ENGINE.registeredVariables[name];
        const trainable = false;
        if (this.accumulatedFirstMoment[i] == null) {
          this.accumulatedFirstMoment[i] = {
            originalName: `${name}/m`,
            variable: tidy(()
                => zerosLike(value).variable(trainable))
          };
        }
        if (this.accumulatedSecondMoment[i] == null) {
          this.accumulatedSecondMoment[i] = {
            originalName: `${name}/v`,
            variable: tidy(() => 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 secondMoment =
            this.accumulatedSecondMoment[i].variable;

        const newFirstMoment =
            add(mul(firstMoment, this.beta1), mul(gradient, 1 - this.beta1));
        const newSecondMoment =
            add(mul(secondMoment, this.beta2), mul(square(gradient), 1 - this.beta2));

        const biasCorrectedFirstMoment =
            div(newFirstMoment, oneMinusAccBeta1);
        const biasCorrectedSecondMoment =
            div(newSecondMoment, oneMinusAccBeta2);

        firstMoment.assign(biasCorrectedFirstMoment);
        secondMoment.assign(biasCorrectedSecondMoment);

        const newValue =
            add(div(biasCorrectedFirstMoment, add(sqrt(biasCorrectedSecondMoment), this.epsilon)),
                -this.learningRate, value)
            .assign(newValue);
        value.assign(newValue);
      });
      this.accBeta1.assign(mul(this.accBeta1, this.beta1));
      this.accBeta2.assign(mul(this.accBeta2, this.beta2));
    });
    this.incrementIterations();
  }

  dispose(): void {
    this.accBeta1.dispose();
    this.accBeta2.dispose();
    if (this.accumulatedFirstMoment != null) {
      dispose(this.accumulatedFirstMoment.map(v => v.variable));
    }
    if (this.accumulatedSecondMoment != null) {
      dispose(this.accumulatedSecondMoment.map(v => v.variable));
    }
    this.getWeights().then((weights) => {
      this.applyWeights(weights);
    });
  }

  applyWeights(weights: NamedVariableMap | NamedTensor[]) {
    const variableCount = weights.length / 2;
    const trainable = false;
    this.accumulatedFirstMoment =
        weights.slice(0, variableCount).map(v =>
            ({
              originalName: v.name,
              variable: v.tensor.variable(trainable)
            }));
    this.accumulatedSecondMoment =
        weights.slice(variableCount, variableCount * 2).map(v =>
            ({
              originalName: v.name,
              variable: v.tensor.variable(trainable)
            }));

    this.getConfig();
  }

  static getParams(): ConfigDict {
    return {
      'learningRate': this.learningRate,
      'beta1': this.beta1,
      'beta2':
```javascript
{'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'])
}

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 */

import {ENGINE} from '../engine';
import {dispose, tidy} from '../globals';
import {add, mul} from '../ops/mul';
import {Scalar} from '../tensor';
import {NamedVariableMap, NamedTensorMap} from '../tensor_types';

import {OptimizerVariable} from './optimizer';
import {SGDOptimizer} from './sgd_optimizer';

/** @doclink Optimizer */
export class MomentumOptimizer extends Optimizer {
  /**
   * 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<NamedVariableMap> {
    return 
  }

  async setWeights(weightValues: NamedVariableMap): Promise<void> {
    weightValues = await 
  }

  getConfig(): ConfigDict {
    return {'learningRate': this.learningRate};
  }

  /** @nocollapse */
  static fromConfig<T extends Serializable>(
      cls: SerializableConstructor<T>, config: ConfigDict): T {
    return new cls(config['learningRate']);
  }
}
```

---

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 *
@nocollapse */

private static className = 'Momentum'; // Name matters for Python compatibility.

// private m: Scalar;
private accumulations: OptimizerVariable[] = []; // private constructor protected learningRate: number, private momentum: number, private useNesterov = false; (super learningRate));

this.m = scalar(this.momentum);

applyGradients(variableGradients: NamedVariableMap|NamedTensor[])
{
  const variableNames = Array.isArray(variableGradients) ? variableGradients.map(item => item.name) : Object.keys(variableGradients)
  const gradient = Array.isArray(variableGradients) ? variableGradients[i].tensor : variableGradients[variableGradients[i].name].tensor;

  const newMomentum = add(mul(this.c, newAccumulation), value);

  this.accumulations[i] = {
    originalName: `${name}/momentum`,
    variable: tidy(() => zerosLike(value).variable(trainable)),
    accumulation = add(mul(this.m, this.accumulations[i].variable), variableGradients[i].tensor);
  }
}

/**
 * Sets the momentum of the optimizer.
 * @param momentum
 */
setMomentum(momentum: number) {
  this.momentum = momentum;
}

async getWeights(): Promise<NamedTensor[]> {
  return [await this.saveIterations()].concat(this.accumulations.map(v => ({name: v.originalName, tensor: v.variable}))).
}

async setWeights(weightValues: NamedTensor[]): Promise<void> {
  weightValues = await this.extractIterations(weightValues);
  this.accumulations = weightValues.map(v => ({originalName: v.name, variable: v.tensor.variable(trainable)}));
}

getConfig(): ConfigDict {
  return {
    'learningRate': this.learningRate,
    'momentum': this.momentum,
    'useNesterov': this.useNesterov
  };
}

/**@nocollapse*/

static fromConfig<T extends Serializable>(cls: SerializableConstructor<T>, config: ConfigDict): T {
  return new cls(
    config['learningRate'], config['momentum'], config['useNesterov']);
}

registerClass(MomentumOptimizer);

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

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 {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 {NamedTensor, NamedTensorMap} from '../tensor_types';

import {Optimizer, OptimizerVariable} from './optimizer';

/** @doclink Optimizer */
export class RMSPropOptimizer extends Optimizer {
  /** @nocollapse */
  static className = 'RMSProp';  // Note: Name matters for Python compatibility.
  private centered: boolean;

  private accumulatedMeanSquares: OptimizerVariable[] = [];
  private accumulatedMoments: OptimizerVariable[] = [];
  private accumulatedMeanGrads: OptimizerVariable[] = [];

  constructor(
    protected learningRate: number, protected decay = 0.9, protected momentum = 0.0, protected epsilon: number = null, protected useNesterov = false) {
    super();

    this.centered = centered;

    if (epsilon == null) {
      this.epsilon = ENGINE.backend.epsilon();
    }
    if (learningRate == null) {
      throw new Error(`learningRate for RMSPropOptimizer must be defined.`);
    }
  }

  applyGradients(variableGradients: NamedTensorMap|NamedTensor[]) {
    this.accumulatedMeanSquares = new AccumulatedMeanSquares(this.momentum);
    this.accumulatedMoments = new AccumulatedMoments(this.momentum);
    this.accumulatedMeanGrads = new AccumulatedMeanGrads(this.momentum);

    for (let i = 0; i < variableGradients.length; i++) {
      const gradient = variableGradients[i].tensor;
      const gradSquared = square(gradient);

      this.accumulatedMeanSquares[i] = add(mul(this.m, this.accumulatedMeanSquares[i]), gradSquared);
      this.accumulatedMoments[i] = add(mul(this.m, this.accumulatedMoments[i]), gradient);
      this.accumulatedMeanGrads[i] = add(mul(this.m, this.accumulatedMeanGrads[i]), gradient);
    }

    for (let i = 0; i < this.accumulatedMeanGrads.length; i++) {
      const gradSquared = this.accumulatedMeanSquares[i];
      const momentum = this.accumulatedMoments[i];
      const momentumSqrt = sqrt(momentum);

      const newValue = sub(mul(this.c, this.accumulatedMeanGrads[i]), gradSquared);
      const newAccumulation = add(mul(this.m, this.accumulatedMoments[i]), newValue);

      this.accumulatedMoments[i] = newAccumulation;
      this.accumulatedMeanSquares[i] = gradSquared;
      this.accumulatedMeanGrads[i] = newValue;
    }
  }

  dispose(): void {
    // dispose of accumulated values
    for (let i = 0; i < this.accumulatedMeanSquares.length; i++) {
      this.accumulatedMeanSquares[i].dispose();
    }
    for (let i = 0; i < this.accumulatedMoments.length; i++) {
      this.accumulatedMoments[i].dispose();
    }
    for (let i = 0; i < this.accumulatedMeanGrads.length; i++) {
      this.accumulatedMeanGrads[i].dispose();
    }
  }

  getConfig(): ConfigDict {
    return {
      'learningRate': this.learningRate,
      'momentum': this.momentum,
    };
  }

  /**@nocollapse*/
  static fromConfig<T extends Serializable>(cls: SerializableConstructor<T>, config: ConfigDict): T {
    return new cls(
      config['learningRate'], config['momentum'],
      config['useNesterov']);
  }

  registerClass(RMSPropOptimizer);
  /**@nocollapse*/
}

export class RMSPropOptimizer extends Optimizer {
  /** @nocollapse */
  static className = 'RMSProp';  // Note: Name matters for Python compatibility.
  private centered: boolean;

  private accumulatedMeanSquares: OptimizerVariable[] = [];
  private accumulatedMoments: OptimizerVariable[] = [];
  private accumulatedMeanGrads: OptimizerVariable[] = [];

  constructor(
    protected learningRate: number, protected decay = 0.9, protected momentum = 0.0, protected epsilon: number = null, protected useNesterov = false) {
    super();

    this.centered = centered;

    if (epsilon == null) {
      this.epsilon = ENGINE.backend.epsilon();
    }
    if (learningRate == null) {
      throw new Error('learningRate for RMSPropOptimizer must be defined.');
    }

    // applyGradients
    for (let i = 0; i < variableGradients.length; i++) {
      const gradient = variableGradients[i].tensor;
      const gradSquared = square(gradient);

      this.accumulatedMeanSquares[i] = add(mul(this.m, this.accumulatedMeanSquares[i]), gradSquared);
      this.accumulatedMoments[i] = add(mul(this.m, this.accumulatedMoments[i]), gradient);
      this.accumulatedMeanGrads[i] = add(mul(this.m, this.accumulatedMeanGrads[i]), gradient);
    }

    for (let i = 0; i < this.accumulatedMeanGrads.length; i++) {
      const gradSquared = this.accumulatedMeanSquares[i];
      const momentum = this.accumulatedMoments[i];
      const momentumSqrt = sqrt(momentum);

      const newValue = sub(mul(this.c, this.accumulatedMeanGrads[i]), gradSquared);
      const newAccumulation = add(mul(this.m, this.accumulatedMoments[i]), newValue);

      this.accumulatedMoments[i] = newAccumulation;
      this.accumulatedMeanSquares[i] = gradSquared;
      this.accumulatedMeanGrads[i] = newValue;
    }
  }

  dispose(): void {
    // dispose of accumulated values
    for (let i = 0; i < this.accumulatedMeanSquares.length; i++) {
      this.accumulatedMeanSquares[i].dispose();
    }
    for (let i = 0; i < this.accumulatedMoments.length; i++) {
      this.accumulatedMoments[i].dispose();
    }
    for (let i = 0; i < this.accumulatedMeanGrads.length; i++) {
      this.accumulatedMeanGrads[i].dispose();
    }
  }

  getConfig(): ConfigDict {
    return {
      'learningRate': this.learningRate,
      'momentum': this.momentum,
    };
  }

  /**@nocollapse*/
  static fromConfig<T extends Serializable>(cls: SerializableConstructor<T>, config: ConfigDict): T {
    return new cls(
      config['learningRate'], config['momentum'],
      config['useNesterov']);
  }

  registerClass(RMSPropOptimizer);
  /**@nocollapse*/
}
Array.isArray(variableGradients) ?
variableGradients.map(item => item.name) : 
Object.keys(variableGradients).forEach((name, i) => {
  const trainable = false;
  if (this.accumulatedMeanSquares[i] == null)
    {this.accumulatedMeanSquares[i] = {originalName: `${name}/rms`, variable: tidy() =>
      zerosLike(value).variable(trainable)}}
  if (this.accumulatedMoments[i] == null)
    {this.accumulatedMoments[i] = {originalName: `${name}/momentum`, variable: tidy() =>
      zerosLike(value).variable(trainable)}}
  if (this.accumulatedMeanGrads[i] == null &&
      this.centered)
    {this.accumulatedMeanGrads[i] = {originalName: `${name}/mg`, variable: tidy() =>
      zerosLike(value).variable(trainable)}}
}));
const gradient =
Array.isArray(variableGradients) ?
  variableGradients[i].tensor :
  variableGradients[i];
if (gradient == null) {
  return;
}
const accumulatedMeanSquare =
this.accumulatedMeanSquares[i].variable;
const accumulatedMoments =
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 newAccumulatedMeanGrad =
         add(mul(accumulatedMeanGrad, this.decay),
             mul(gradient, 1 - this.decay));
     const newAccumulatedMoments =
         add(mul(accumulatedMoments, this.momentum),
             div(mul(gradient, this.learningRate),
                 sqrt(mul(gradient, this.epsilon))));
     accumulatedMeanGrad.assign(newAccumulatedMeanGrad);
     accumulatedMoments.assign(newAccumulatedMoments);
     const newValue = sub(value,
       newAccumulatedMoments);
     value.assign(newValue);
    } else {
      // Plain gradient
      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.accumulatedMoments != null) {
    dispose(this.accumulatedMoments.map(v => v.variable));
  }
  if (this.accumulatedMeanGrads != null &&
      this.centered)
    {dispose(this.accumulatedMeanGrads.map(v => v.variable));
      if (this.centered)
        {return [await this.saveIterations()].concat(
            variables.map(v => ({name: v.originalName, tensor: v.variable}));
          });
        async getWeights(): Promise<NamedTensor[]> {
          // Order matters for Python compatibility:
          const variableCount =
            this.accumulatedMeanSquares.length;
          const trainable =
            false;
          this.accumulatedMeanSquares =
            weightValues.slice(0, variableCount).map(v => {
              ({originalName: v.name,
                variable: v.tensor.variable(trainable)});});
          this.accumulatedMoments =
            weightValues.slice(variableCount, variableCount * 2).map(v => {
              ({originalName: v.name,
                variable: v.tensor.variable(trainable)});});
          this.accumulatedMeanGrads =
            weightValues.slice(variableCount * 2, variableCount * 3).map(v => {
              ({originalName: v.name,
                variable: v.tensor.variable(trainable)});});
        }
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```javascript
// ... (code snippet from TensorFlow)
```
to use 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. @param learningRate The learning rate to use for the Adadelta gradient descent algorithm. @param rho The learning rate decay over each update. @param learningRate The learning rate decay over each update. @param epsilon A constant epsilon used to better condition the grad update. @param decay The learning rate decay over each update. @param initialAccumulatorValue Starting value for the accumulators, must be positive.

```typescript
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 * limitations under the License.
 *
 *=============================================================================
 */

import {AdadeltaOptimizer} from './optimizers/adadelta_optimizer';
import {AdagradOptimizer} from './optimizers/adagrad_optimizer';
import {AdamOptimizer} from './optimizers/adam_optimizer';
import {AdamaxOptimizer} from './optimizers/adamax_optimizer';
import {MomentumOptimizer} from './optimizers/momentum_optimizer';
import {OptimizerConstructors} from './optimizers/optimizer_constructors';
import {RMSPropOptimizer} from './optimizers/rmsprop_optimizer';
import {SGDOptimizer} from './optimizers/sgd_optimizer';

angular.module('optimizerExample').value('train', {sgd: OptimizerConstructors.sgd, adam: OptimizerConstructors.adam, adadelta: OptimizerConstructors.adadelta, adagrad: OptimizerConstructors.adagrad, rmsprop: OptimizerConstructors.rmsprop, adamax: OptimizerConstructors.adamax});

// So typings can propagate.
```
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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
})();

/**
 * Returns a promise that resolve when a requestAnimationFrame has completed.
 *
 * On Node.js this uses setImmediate instead of requestAnimationFrame.
 *
 * This is simply a sugar method so that users can do the following:
 * `await tf.nextFrame();`
 *
 * @doc {heading: 'Performance', subheading: 'Timing'}
 */
function nextFrame(): Promise<void> {
  return new Promise<void>(resolve => delayCallback(() => resolve()));
}

export {nextFrame};

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

*/

import * as util from '../util';

export function assertParamsConsistent(shapes: number[][], axis: number) {
  const rank = shapes[0].length;
  shapes.forEach((shape, i) => {
    util.assert(
        shape.length === rank,
        () =>
            `Error in concat${rank}D: rank of tensors[${i}] must be the same ` +
            `as the rank of the rest (${rank})`);
  });

  util.assert(
      axis >= 0 && axis < rank,
      () => `Error in concat${rank}D: axis must be between 0 and ${rank - 1}.`);

  const firstShape = shapes[0];
  shapes.forEach((shape, i) => {
    for (let r = 0; r < rank; r++) {
      util.assert(
          (r === axis) || (shape[r] === firstShape[r]),
          () => `Error in concat${rank}D: Shape of tensors[${i}] (${shape}) ` +
              `does not match the shape of the rest (${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;
}

export function computeOptimalWindowSize(inSize: number): number {
  if (inSize <= PARALLELIZE_THRESHOLD)
  { return inSize; }
  return nearestDivisor(inSize, Math.floor(Math.sqrt(inSize)));}

const PARALLELIZE_THRESHOLD = 30;

export interface ReduceInfo {
  windowSize: number;
  batchSize: number;
  inSize: number;
  outSize: number;
}

export function ReduceInfo {windowSize: number} windowSize: number

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

*/

import {nearestDivisor} from '../util';

export const PARALLELIZE_THRESHOLD = 30;

export interface ReduceInfo {windowSize: number} windowSize: number

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

*/

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// Returns the image center in pixels.
export function getImageCenter(
  center: number | [number, number],
  imageHeight: number, imageWidth: number): [number, number] {
  const centerX = typeof center === 'number' ? center : center[0];
  const centerY = typeof center === 'number' ? center : center[1];
  return [centerX, centerY];
}

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 */

/**
 * Gets the new shape of the input Tensor after it's been reshaped to:
 * \[ blockShape[0], \ldots, blockShape[M-1], \text{batch} / \text{prod(blockShape)}, \text{inputShape}[1], \ldots, \text{inputShape}[N-1] \]
 * See step 1: https://www.tensorflow.org/api_docs/python/tf/batch_to_space
 */
export function getReshaped(
  inputShape: number[],
  blockShape: number[],
  prod: number,
  batchToSpace = true): number[] {
  let reshaped: number[] = [];
  if (batchToSpace) {
    reshaped = reshaped.concat(blockShape.slice(0));
    reshaped.push(inputShape[0] / prod);
    if (batchToSpace) {
      reshaped = reshaped.concat(blockShape.slice(0));
    } else {
      reshaped = reshaped.concat(\text{inputShape}[1] / blockShape[0], \ldots, \text{inputShape}[M] / blockShape[M-1], \text{inputShape}[M+1], \ldots, \text{inputShape}[N-1]);
    }
  } else {
    const spatialLength = blockShape.length;
    for (let i = 0; i < spatialLength; ++i) {
      reshaped.push(\text{inputShape}[i] / blockShape[0], blockShape[0]);
    }
  }
  return reshaped;
}

/**
 * Gets the permutation that will transpose the dimensions of the reshaped tensor to shape:
 * \[ \text{inputShape}[1], blockShape[0], \ldots, blockShape[M], blockShape[M+1], \ldots, \text{inputShape}[N-1] \]
 * See step 2: https://www.tensorflow.org/api_docs/python/tf/batch_to_space
 */
export function getPermuted(
  reshapedRank: number,
  blockShapeRank: number,
  batchToSpace = true): number[] {
  const permuted = [];
  if (batchToSpace) {
    permuted.push(blockShapeRank);
    for (let i = blockShapeRank + 1; i < reshapedRank; ++i) {
      if (i <= 2 * blockShapeRank) {
        permuted.push(i);
        permuted.push(i + (blockShapeRank + 1));
      } else {
        permuted.push(i);
      }
    }
  } else {
    const permutedBeforeBatch = [];
    const permutedAfterBatch = [];
    for (let i = 1; i < reshapedRank; ++i) {
      if (i >= blockShapeRank * 2 + 1 || i % 2 === 1) {
        permutedAfterBatch.push(i);
      } else {
        permutedBeforeBatch.push(i);
      }
    }
    permuted.push(...permutedBeforeBatch);
    permuted.push(0);
    permuted.push(...permutedAfterBatch);
  }
  return permuted;
}

/**
 * Gets the shape of the reshaped and permuted input Tensor before any cropping is applied. The new shape will be:
 * \[ \text{inputShape}[1] * blockShape[0], \ldots, \text{inputShape}[M] * blockShape[M], \text{inputShape}[M+1], \ldots, \text{inputShape}[N-1] \]
 * See step 3: https://www.tensorflow.org/api_docs/python/tf/batch_to_space
 */
export function getReshapedPermuted(
  inputShape: number[],
  blockShape: number[][],
  prod: number,
  batchToSpace = true): number[] {
  const reshapedPermuted = [];
  if (batchToSpace) {
    reshapedPermuted.push(inputShape[0] / prod);
  } else {
    reshapedPermuted.push(inputShape[0] * prod);
  }
  for (let i = 1; i < inputShape.length; ++i) {
    if (i <= blockShape.length) {
      if (batchToSpace) {
        reshapedPermuted.push(blockShape[i - 1] * inputShape[i]);
      } else {
        reshapedPermuted.push(blockShape[i - 1] / blockShape[0], blockShape[i]);
      }
    } else {
      reshapedPermuted.push(inputShape[i] / blockShape[i - 1]);
    }
  }
  return reshapedPermuted;
}

/**
 * Converts the crops argument into the beginning coordinates of a slice operation.
 */
export function getSliceBeginCoords Tüm kod örnekleri ve kaynakları Creative Commons izin altında bulunuyor (https://creativecommons.org/licenses/by-sa/4.0/).
export function getSliceSize(
    uncroppedShape: number[],
    crops: number[][],
    blockShape: number): number[] {
  const sliceSize = uncroppedShape.slice(0, 1);
  for (let i = 0; i < blockShape.length; ++i) {
    sliceSize.push(uncroppedShape[i + 1] - crops[i][0] - crops[i][1]);
  }
  return sliceSize;
}

export const SELU_SCALEALPHA = 1.7580993408473768599402175208123;
export const SELU_SCALE = 1.0507009873554804934193349852946;

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;

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, im: Float32Array): Float32Array {
  if (real.length !== im.length) {
    throw new Error(`Cannot merge real and imag arrays of different lengths. real: 
        ${real.length}, imag: ${im.length}.`);
  }

  const length = real.length;
  const result = new Float32Array(length * 2);
  for (let i = 0; i < length; ++i) {
    result[i * 2] = real[i];
    result[i * 2 + 1] = im[i];
  }

  return result;
}
export function splitRealAndImagArrays(complex: Float32Array): 
    {real: Float32Array, imag: Float32Array} {
  const real = new Float32Array(complex.length / 2);
  const imag = new Float32Array(complex.length / 2);
  for (let i = 0; i < complex.length; i += 2) {
    real[i / 2] = complex[i];
    imag[i / 2] = complex[i + 1];
  }
  return {real, imag};
}

/**
 * Splits a complex Float32Array into real and imag parts.
 * The memory layout is interleaved as follows:
 * complex: [r0, i0, r1, i1, r2, i2]
 * real: [r0, r1, r2]
 * imag: [i0, i1, i2]
 * This is the inverse of mergeRealAndImagArrays.
 */
export function mergeRealAndImagArrays(real: Float32Array, imag: Float32Array): 
    Float32Array {
  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;
}

/**
 * Splits a complex Float32Array into real and imag parts.
 * The memory layout is interleaved as follows:
 * complex: [r0, i0, r1, i1, r2, i2]
 * real: [r0, r1, r2]
 * imag: [i0, i1, i2]
 * This is the inverse of mergeRealAndImagArrays.
 */
export function splitRealAndImagArrays(complex: Float32Array): 
    {real: Float32Array, imag: Float32Array} {
  const real = new Float32Array(complex.length / 2);
  const imag = new Float32Array(complex.length / 2);
  for (let i = 0; i < complex.length; i += 2) {
    real[i / 2] = complex[i];
    imag[i / 2] = complex[i + 1];
  }
  return {real, imag};
}

/**
 * Splits a complex Float32Array into real and imag parts.
 * The memory layout is interleaved as follows:
 * complex: [r0, i0, r1, i1, r2, i2]
 * real: [r0, r1, r2]
 * imag: [i0, i1, i2]
 * This is the inverse of mergeRealAndImagArrays.
 */
export function mergeRealAndImagArrays(real: Float32Array, imag: Float32Array): 
    Float32Array {
  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;
}

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 */
import {TensorInfo} from '../kernel_registry';
import {Tensor} from '../tensor';
import {assert} from '../util';

export function assignToTypedArray(data: TypedArray, real: number, imag: number, index: number) {
  data[index * 2] = real;
  data[index * 2 + 1] = imag;
}

export function exponent(k: number, n: number, inverse: boolean): {real: number, imag: number} {
  const x = (inverse ? 2 : -2) * Math.PI * (k / n);
  const real = Math.cos(x);
  const imag = Math.sin(x);
  return {real, imag};
}

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.');
  } else {
    const numOfNegs = numOrSizeSplits.reduce((count, value) => {
      if (typeof (numOrSizeSplits) === 'number') {
        assert(value % numOrSizeSplits === 0, () => 'Number of splits must evenly divide the axis.');
      } else {
        const numOfNegs = numOrSizeSplits.reduce((count, value) => {
          if (value === -1) {
            count += 1;
          }
        }, 0);
        assert(numOfNegs <= 1, () => 'There should be only one negative value in split array.');
      }
    }, 0);
    splitSizes = numOrSizeSplits.filter((x, i) => i % Math.ceil(numOfNegs / 2) === 0);
    splitSizes.push(x.shape[axis] / splitSizes.length);
  }
  return splitSizes;
}
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) {
  total = numOrSizeSplits.reduce((a, b) => b > 0 ? a + b : a);
  const total = numOrSizeSplits.reduce((a, b) => a + b);
  total; // The sum of sizes must match the size of the axis dimension.

  splitSizes = numOrSizeSplits;
  // return splitSizes;

  assert(
    x.shape[axis] === numOrSizeSplits.reduce((a, b) => a + b),
    () => 'The sum of sizes must match the size of the axis dimension.'
  );

  splitSizes[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;
}
```
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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 !== 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 canvas.getContext('webgl2', WEBGL_ATTRIBUTES) as WebGLRenderingContext;
}
return canvas.getContext('webgl2', WEBGL_ATTRIBUTES) as WebGLRenderingContext;
}

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 */

import {backend_util, DataId, DataType, env, TensorInfo, util} from '@tensorflow/tfjs-core';

export enum PackingScheme {
  DENSE,
  SHARED_BATCH
}

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:
  // Optional.
  values?: backend_util.BackendValues;
  texture?: WebGLTexture;
  // For complex numbers, the real and imaginary parts are stored as their own
  // individual tensorInfos, with a parent joining the two with the
  // complexTensors field. When this is defined, texture will be null.
  complexTensorInfos?: {real: TensorInfo, imag: TensorInfo};
  /** 
   * [rows, columns] shape of the texture. 
   * @param texture
   * @param texture
   * @return
   * @return
   */
  texShape?: [number, number];
  usage?: TextureUsage;
  isPacked?: boolean;
  refCount: number;

  // Available when the tensor has been sliced.
  slice?: {
    // Offset in the 'flat index' space.
    flatOffset: number;
    // Used for counting how many
    // sliced tensors point to the same texture.
    origDataId: DataId;
  };
}

export function getUnpackedMatrixTextureShapeWidthHeight(rows: number, columns: number): [number, number] {
  return [columns, rows];
}

export function getDenseTexShape(shape: number[]) {
  const size = util.sizeFromShape(shape);
  const texelsNeeded = Math.ceil(size / 4);
  return util.sizeToSquarishShape(texelsNeeded);
}

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 getUnpackedArraySizeFromMatrixShape(rows: number, columns: number): number {
  const [w, h] = getUnpackedMatrixTextureShapeWidthHeight(rows, columns);
  return w * h;
}

export function decodeMatrixFromUnpackedColorRGBArray(unpackedArray: Float32Array, matrix: Float32Array, channels: number) {
  const constSize = Math.ceil(constSize / 4);
  return util.sizeToSquarishShape(constSize);
  return unpackedSize / channelsPerTexture;
}

export function getUnpackedMatrixTextureShapeWidthHeight(rows: number, columns: number): [number, number] {
  return [Math.max(1, Math.ceil(columns / 2)), Math.max(1, Math.ceil(rows / 2))];
}


getPackedMatrixTextureShapeWidthHeight(rows, columns);

export interface TextureConfig {
  internalFormatFloat: number;
  textureFormatFloat: number;
  internalFormatHalfFloat: number;
  internalFormatPackedHalfFloat: number;
  // The format to use during a gl.readPixels call.
  internalFormatPackedFloat: number;
  // How many channels need to be unpacked after a gl.readPixels call.
  downloadUnpackNumChannels: number;
  defaultNumChannels: number;
  textureTypeHalfFloat: number;
  textureTypeFloat: number;
}

export function getTextureConfig(gl: WebGLRenderingContext, textureHalfFloatExtension?: any): TextureConfig {
  const glany = gl as any;
  let internalFormatFloat: number;
  let internalFormatHalfFloat: number;
  let internalFormatPackedHalfFloat: number;
  let internalFormatPackedFloat: number;
  let textureFormatFloat: number;
  let downloadTextureFormat: number;
  let downloadUnpackNumChannels: number;
  let downloadTextureFormat: number;
  let textureTypeFloat: number;
  let defaultNumChannels: number;
  let textureTypeHalfFloat: number;
  let textureTypeFloat: number;

  if (env().getNumber('WEBGL_VERSION') === 2) {
    internalFormatFloat = glany.R32F;
    internalFormatHalfFloat = glany.R16F;
    internalFormatPackedHalfFloat = glany.RGBA16F;
    internalFormatPackedFloat = glany.RGBA32F;
    textureFormatFloat = glany.RED;
    downloadUnpackNumChannels = 4;
    defaultNumChannels = 1;
    textureTypeHalfFloat = glany.HALF_FLOT;
    textureTypeFloat = glany.FLOAT;
  } else {
    internalFormatFloat = gl.RGBA;
    internalFormatHalfFloat = gl.RGBA;
    internalFormatPackedHalfFloat = gl.RGBA;
    internalFormatPackedFloat = gl.RGBA;
    textureFormatFloat = 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
  };
}

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

import {env, TensorInfo, util} from '@tensorflow/tfjs-core';

import {getWebGLContext} from './webgl_util';
import {getTextureConfig} from './tex_util';

export function callAndCheck<T>(gl: WebGLRenderingContext, func: () => T): T {
  const returnValue = func();
  if (env().getBool('DEBUG')) {
    checkWebGLError(gl);
  }
  return returnValue;
}

function checkWebGLError(gl: WebGLRenderingContext) {
  const error = gl.getError();
  if (error !== gl.NO_ERROR) {
    throw new Error('WebGL Error: ' + getWebGLErrorMessage(gl, error));
  }
}

const MIN_FLOAT16 = 5.96e-8;
const MAX_FLOAT16 = 65504;

export function canBeRepresented(num: number): boolean {
  if (env().getBool('WEBGL_RENDER_FLOAT32_ENABLED') ||
    num === 0 ||
    (MIN_FLOAT16 < Math.abs(num) && Math.abs(num) < MAX_FLOAT16)) {
    return true;
  }
  return false;
}

export function getWebGLErrorMessage(gl: WebGLRenderingContext, error: number): string {
  switch (error) {
    case gl.NO_ERROR:
      return 'NO_ERROR';
    case gl.INVALID_ENUM:
      return 'INVALID_ENUM';
    case gl.INVALID_VALUE:
      return 'INVALID_VALUE';
    case gl.INVALID_OPERATION:
      return 'INVALID_OPERATION';
    case gl.OUT_OF_MEMORY:
      return 'OUT_OF_MEMORY';
    case gl.CONTEXT_LOST_WEBGL:
      return 'CONTEXT_LOST_WEBGL';
    default:
      return 'Unknown error code $ {error}';
  }
}
getExtensionOrThrow(gl: WebGLRenderingContext, extensionName: string): {} {
  return throwIfNull<{}>(
      gl, () => gl.getExtension(extensionName),
      "Extension " + extensionName + " not supported on this browser.");
}

export function createVertexShader(gl: WebGLRenderingContext,
     vertexShaderSource: string): WebGLShader {
  return throwIfNull<WebGLShader>(
      gl, () => gl.createShader(gl.VERTEX_SHADER),
      'Unable to create vertex WebGLShader.');
}

callAndCheck(gl, () => gl.createShader(vertexShader, vertexShaderSource));

if (gl.getShaderParameter(vertexShader, gl.COMPILE_STATUS) === false) {
  throw new Error('Failed to compile vertex shader.');
}

return vertexShader;
}

export function createFragmentShader(gl: WebGLRenderingContext,
     fragmentShaderSource: string): WebGLShader {
  return throwIfNull<WebGLShader>(
      gl, () => gl.createShader(gl.FRAGMENT_SHADER),
      'Unable to create fragment WebGLShader.');
}

callAndCheck(gl, () =>
    gl.createShader(fragmentShader));

if (gl.getShaderParameter(fragmentShader, gl.COMPILE_STATUS) ===
    false) {
  throw new Error('Failed to compile fragment shader.');
}

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 {
  return throwIfNull<WebGLBuffer>(
      gl, () =>
    gl.createBuffer(data, gl.STATIC_DRAW));
}

export function createStaticIndexBuffer(gl: WebGLRenderingContext,
     data: Uint16Array): WebGLBuffer {
  return throwIfNull<WebGLBuffer>(
      gl, () =>
    gl.createBuffer(data, gl.STATIC_DRAW));
}

export function getNumChannels(): number {
  if (env().getNumber('WEBGL_VERSION') === 2) {
    return 1;
  }
  return 4;
}

export function createTexture(gl: WebGLRenderingContext): WebGLTexture {
  return throwIfNull<WebGLTexture>(
      gl, () => gl.createTexture(), 'Unable to create WebGLTexture.');
}
throwIfNull<WebGLTexture>(
  gl, () => gl.createTexture(), 'Unable to create WebGLTexture.');

export function validateTextureSize(width: number, height: number) {
  const maxTextureSize = env().getNumber('WEBGL_MAX_TEXTURE_SIZE');
  if ((width <= 0) || (height <= 0)) {
    const requested = `$[width]x$[height]`;
    throw new Error('Requested texture size ' + requested + ' is invalid.');
  } else if ((width > maxTextureSize) || (height > maxTextureSize)) {
    const requested = `$[width]x$[height]`;
    const max = `$[maxTextureSize]x$[maxTextureSize]`;
    throw new Error('Requested texture size ' + requested + ' greater than WebGL maximum on this browser / GPU .');
  }
}

export function createFramebuffer(gl: WebGLRenderingContext): WebGLFramebuffer {
  return throwIfNull<WebGLFramebuffer>(
    gl, () => gl.createFramebuffer(), 'Unable to create WebGLFramebuffer.');
}

export function bindVertexBufferToProgramAttribute(
    gl: WebGLRenderingContext, program: WebGLProgram, attribute: string, buffer: WebGLBuffer,
    arrayEntriesPerItem: number, itemStrideInBytes: number, itemOffsetInBytes: number): boolean {
  const loc = gl.getAttribLocation(program, attribute);
  if (loc === -1) {
    // The GPU compiler decided to strip out this
    // attribute because it's unused,
    // thus no need to bind.
    return false;
  }
  callAndCheck(gl, () => gl.bindBuffer(gl.ARRAY_BUFFER, buffer));
  callAndCheck(gl, () =>
    gl.vertexAttribPointer(loc, arrayEntriesPerItem, gl.FLOAT, false, itemStrideInBytes,
        itemOffsetInBytes));
  callAndCheck(gl, () =>
    gl.enableVertexAttribArray(loc));
  return true;
}

export function bindTextureUnit(
    gl: WebGLRenderingContext, texture: WebGLTexture, textureUnit: number) {
  validateTextureUnit(gl, textureUnit);
  callAndCheck(gl, () => gl.activeTexture(gl.TEXTURE0 + textureUnit));
  callAndCheck(gl, () =>
    gl.bindTexture(gl.TEXTURE_2D, texture));
}

export function unbindTextureUnit(
    gl: WebGLRenderingContext, textureUnit: number) {
  validateTextureUnit(gl, textureUnit);
  callAndCheck(gl, () =>
    gl.activeTexture(gl.TEXTURE0 + textureUnit));
  callAndCheck(gl, () =>
    gl.bindTexture(gl.TEXTURE_2D, null));
}

export function getProgramUniformLocationOrThrow(
    gl: WebGLRenderingContext, program: WebGLProgram,
    uniformName: string): WebGLUniformLocation {
  return throwIfNull<WebGLUniformLocation>(
    gl, () =>
      gl.getUniformLocation(program, uniformName),
        'uniform "' + uniformName + '" not present in program.');
}

export function getProgramUniformLocation(
    gl: WebGLRenderingContext, program: WebGLProgram,
    uniformName: string): WebGLUniformLocation {
  return gl.getUniformLocation(program, uniformName);
}

export function bindTextureToProgramUniformSampler(
    gl: WebGLRenderingContext, texture: WebGLTexture,
    uniformSamplerLocation: WebGLUniformLocation, textureUnit: number) {
  callAndCheck(gl, () =>
    gl.bindTexture(gl.TEXTURE_2D, texture));
  callAndCheck(gl, () =>
    gl.uniform1i(uniformSamplerLocation, textureUnit));
}

export function bindCanvasToFramebuffer(gl: WebGLRenderingContext) {
  callAndCheck(gl, () =>
    gl.viewport(0, 0, gl.canvas.width, gl.canvas.height));
  callAndCheck(gl, () =>
    gl.bindFramebuffer(gl.FRAMEBUFFER, null));
}

export function bindColorTextureToFramebuffer(
    gl: WebGLRenderingContext, texture: WebGLTexture,
    framebuffer: WebGLFramebuffer) {
  callAndCheck(gl, () =>
    gl.bindFramebuffer(gl.FRAMEBUFFER, framebuffer));
  callAndCheck(gl, () =>
    gl.framebufferTexture2D(gl.FRAMEBUFFER, gl.COLOR_ATTACHMENT0, gl.TEXTURE_2D, 0));
}

export function validateFramebuffer(gl: WebGLRenderingContext) {
  const status = gl.checkFramebufferStatus(gl.FRAMEBUFFER);
  if (status !== gl.FRAMEBUFFER_COMPLETE) {
    throw new Error('Error binding framebuffer: ' + getFramebufferErrorMessage(gl, status));
  }
}

export function getFramebufferErrorMessage(gl: WebGLRenderingContext, status: number): string {
  switch (status) {
    case gl.FRAMEBUFFER_INCOMPLETE_ATTACHMENT: return 'FRAMEBUFFER_INCOMPLETE_ATTACHMENT';
  }
}
```javascript
function throwIfNull<T>(
    gl: WebGLRenderingContext, returnTOrNull: () => T | null,
    failureMessage: string): T {
  const tOrNull: T | null = callAndCheck(gl, () => returnTOrNull());
  if (tOrNull == null) {
    throw new Error(failureMessage);
  }
  return tOrNull;
}

function validateTextureUnit(gl: WebGLRenderingContext, textureUnit: number) {
  const maxTextureUnit = gl.MAX_COMBINED_TEXTURE_IMAGE_UNITS - 1;
  const glTextureUnit = textureUnit + gl.TEXTURE0;
  if (glTextureUnit < gl.TEXTURE0 || glTextureUnit > maxTextureUnit) {
    const textureUnitRange = `[gl.TEXTURE0, gl.TEXTURE${maxTextureUnit}]`;
    throw new Error(`textureUnit must be in ${textureUnitRange}.`);
  }
}

export function getBatchDim(shape: number[], dimsToSkip = 2): number {
  return util.sizeFromShape(shape.slice(0, shape.length -
    dimsToSkip));
}

export function getRowsCols(shape: number[]): [number, number] {
  if (shape.length === 0) {
    throw Error('Cannot get rows and columns of an empty shape array.');
  }
  return [shape.length > 1 ? shape.length - 2 : 1, shape.length - 1];
}

export function getTextureShapeFromLogicalShape(logShape: number[], isPacked = false): [number, number] {
  let maxTexSize = env().getNumber('WEBGL_MAX_TEXTURE_SIZE');
  if (isPacked) {
    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 an
    // tensor has 3 rows, we pretend it has 4 rows in order to account
    // for the extra space in the height of the third row.
    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, it means the logical shape
    // is a 2D slice.
    if (logShape.length <= 1) {
      return [1, size];
    } else if (logShape.length <= 2) {
      return logShape as [number, number];
    } else if (logShape.length <= 3) {
      return [logShape[0], logShape[1] * logShape[2]]; // For packed textures size equals the number of channels required to
    // accommodate the texture data. However in order to squarify such that
    // inner dimensions stay even, we rewrite size to equal the number of
    // texels. Then in the return statement we rehydrate the squarified
    // dimensions to channel units.
    const batchDim = getBatchDim(logShape);
    let rows = 2, cols = 2;
    if (logShape.length == 3) {
      rows = logShape[0] * logShape[2];
      cols = logShape[1] * logShape[2];
    } else {
      rows = logShape[0] * logShape[1];
      cols = logShape[0] * logShape[2];
    }
    size = batchDim * (rows / 2) * (cols / 2);
    return util.sizeToSquarishShape(size).map(d => d * 2); // For packed textures size equals the number of channels required to
}

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 {
```

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```javascript
function arraysEqual(shape1, shape2) {
  // One of the shapes is a scalar.
  return true;
}

if (shape1.length != shape2.length) { // One of the shapes is a vector.
  return true;
}

if (shape1[0] === 0 || shape1[1] === 0 || shape2[0] === 0 || shape2[1] === 0) { // One of the shapes is a scalar.
  return true;
}

if (!shape1.length || !shape2.length) { // One of the shapes is a scalar.
  return true;
}

if (shape1[0] === 0 || shape1[1] === 0 || shape2[0] === 0 || shape2[1] === 0) { // One of the shapes is a scalar.
  return true;
}

if (!shape1.length || !shape2.length) { // One of the shapes is a scalar.
  return true;
}

if (isEven(shape1[0]) && isEven(shape2[0]) && (shape1[0] === 1 || shape2[0] === 1)) { return true; }

if (isEven(shape1[1]) && isEven(shape2[1]) && isEven(shape1[0]) && isEven(shape2[0])) { return true; }

// 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:

let MAX_TEXTURE_SIZE: number;

export function getWebGLMaxTextureSize(webGLVersion: number): number {
  if (MAX_TEXTURE_SIZE == null) {
    const gl = getWebGLContext(webGLVersion);
    MAX_TEXTURE_SIZE = gl.getParameter(gl.MAX_TEXTURE_SIZE);
  }
  return MAX_TEXTURE_SIZE;
}

export function resetMaxTextureSize() {
  MAX_TEXTURE_SIZE = null;
}

export function getMaxTexturesInShader(webGLVersion: number): number {
  if (MAX_TEXTURE_SIZE == null) {
    const gl = getWebGLContext(webGLVersion);
    MAX_TEXTURE_SIZE = gl.getParameter(gl.MAX_TEXTURE_IMAGE_UNITS);
  }
  return Math.min(16, MAX_TEXTURE_SIZE);
}

export function hasExtension(gl: WebGLRenderingContext, extensionName: string) {
  const ext = gl.getExtension(extensionName);
  return ext != null;
}

export function isWebGLVersionEnabled(webGLVersion: 1|2) {
  try {
    const gl = getWebGLContext(webGLVersion);
    if (gl != null) {
      return true;
    }
  } catch (e) {
    console.log('Error when getting WebGL context: ', e);
    return false;
  }
  return false;
}

export function isDownloadFloatTextureEnabled(webGLVersion: number): boolean {
  if (webGLVersion === 0) {
    return false;
  }
  const gl = getWebGLContext(webGLVersion);
  if (webGLVersion === 1) {
    if (!hasExtension(gl, 'OES_texture_float')) {
      return false;
    }
    if (!hasExtension(gl, 'WEBGL_color_buffer_float')) {
      return false;
    }
    return false;
  }
  return true;
}

function createFloatTextureAndBindToFramebuffer(gl: WebGLRenderingContext): boolean {
  const texConfig = getTextureConfig(gl);

  const texture =
```
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```javascript
const createHalfFloatTextureAndBindToFramebuffer = (gl, textureHalfFloatExtension) => {
  const texConfig = getTextureConfig(gl, textureHalfFloatExtension);
  const texture = gl.createTexture();
  gl.bindTexture(gl.TEXTURE_2D, texture);

  const width = 1;
  const height = 1;
  gl.texImage2D(
    gl.TEXTURE_2D, 0, texConfig.internalFormatHalfFloat, width, height, 0,
    texConfig.textureFormatFloat, texConfig.textureTypeHalfFloat, null);

  const frameBuffer = gl.createFramebuffer();
  gl.bindFramebuffer(gl.FRAMEBUFFER, frameBuffer);
  gl.framebufferTexture2D(
    gl.FRAMEBUFFER, gl.COLOR_ATTACHMENT0, gl.TEXTURE_2D, texture, 0);

  const isFrameBufferComplete = gl.checkFramebufferStatus(gl.FRAMEBUFFER) ===
    gl.FRAMEBUFFER_COMPLETE;

  gl.bindTexture(gl.TEXTURE_2D, null);
  gl.bindFramebuffer(gl.FRAMEBUFFER, null);
  return isFrameBufferComplete;
};

export function isWebGLFenceEnabled(webGLVersion) {
  if (webGLVersion !== 2) {
    return false;
  }

  const gl = getWebGLContext(webGLVersion);

  const isEnabled = (gl as any).fenceSync != null;
  return isEnabled;
}

export function assertNotComplex(tensor, opName) {
  if (!Array.isArray(tensor)) {
    tensor = [tensor];
  }

  tensor.forEach(t => {
    if (t != null) {
      util.assert(
        t.dtype !== 'complex64',
        () => `${opName} does not support complex64 tensors in the WebGL backend.`);
    }
  });
}
```

---

```
const ENV = env();

/**
 * This file contains WebGL-specific flag registrations.
 */

/**
 * True if WebGL is supported.
 */
ENV.registerFlag('HAS_WEBGL', () => ENV.getNumber('WEBGL_VERSION') > 0);

/** 0: WebGL 1.0, 1: WebGL 2.0. */
ENV.registerFlag('WEBGL_VERSION', () => {
  if (isWebGLVersionEnabled(2)) {
    return 2;
  } else if (isWebGLVersionEnabled(1)) {
    return 1;
  }
  return 0;
});

/** Whether to check for numerical representation problems. */
ENV.registerFlag('WEBGL_CHECK_NUMERICAL_PROBLEMS', () => false);

const ENV = env();

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```
ENV.getBool('WEBGL_PACK'));

/** Whether we will pack the clip op. */
ENV.registerFlag('WEBGL_PACK_CLIP', () => ENV.getBool('WEBGL_PACK'));

/** 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', () => ENV.getBool('WEBGL_PACK'));

/** Whether we will pack unary ops. */
ENV.registerFlag('WEBGL_PACK_UNARY_OPERATIONS', () => ENV.getBool('WEBGL_PACK'));

/** Whether we will pack array ops. */
ENV.registerFlag('WEBGL_PACK_ARRAY_OPERATIONS', () => ENV.getBool('WEBGL_PACK'));

/** Whether we will pack image ops. */
ENV.registerFlag('WEBGL_PACK_IMAGE_OPERATIONS', () => ENV.getBool('WEBGL_PACK'));

/** Whether we will pack reduce ops. */
ENV.registerFlag('WEBGL_PACK_REDUCE', () => ENV.getBool('WEBGL_PACK'));

/** Whether we will pack binary ops. */
ENV.registerFlag('WEBGL_PACK_BINARY_OPERATIONS', () => ENV.getBool('WEBGL_PACK'));

/** Whether we will pack unary ops. */
ENV.registerFlag('WEBGL_PACK_UNARY_OPERATIONS', () => ENV.getBool('WEBGL_PACK'));

/** Whether we will pack array ops. */
ENV.registerFlag('WEBGL_PACK_ARRAY_OPERATIONS', () => ENV.getBool('WEBGL_PACK'));

/** Whether we will pack image ops. */
ENV.registerFlag('WEBGL_PACK_IMAGE_OPERATIONS', () => ENV.getBool('WEBGL_PACK'));

/** Whether we will pack reduce ops. */
ENV.registerFlag('WEBGL_PACK_REDUCE', () => ENV.getBool('WEBGL_PACK'));

/** Whether we will pack binary ops. */
ENV.registerFlag('WEBGL_PACK_BINARY_OPERATIONS', () => ENV.getBool('WEBGL_PACK'));

/** Whether we will pack unary ops. */
ENV.registerFlag('WEBGL_PACK_UNARY_OPERATIONS', () => ENV.getBool('WEBGL_PACK'));

/** Whether we will pack array ops. */
ENV.registerFlag('WEBGL_PACK_ARRAY_OPERATIONS', () => ENV.getBool('WEBGL_PACK'));

/** Whether we will pack image ops. */
ENV.registerFlag('WEBGL_PACK_IMAGE_OPERATIONS', () => ENV.getBool('WEBGL_PACK'));

/** Whether we will pack reduce ops. */
ENV.registerFlag('WEBGL_PACK_REDUCE', () => 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.
 * 0: disabled, 1: EXT_disjoint_timer_query, 2:
 * EXT_disjoint_timer_query_webgl2.
 * In Firefox with WebGL 2.0, * EXT_disjoint_timer_query_webgl2 is not available, so we must use the
 * WebGL 1.0 extension.
 * */
ENV.registerFlag('WEBGL_DISJOINT_QUERY_TIMER_EXTENSION_VERSION', () => {
  const webGLVersion = ENV.getNumber('WEBGL_VERSION');
  if (webGLVersion === 0) {
    return 0;
  }
  return getWebGLDisjointQueryTimerVersion(webGLVersion);
});

/**
 * Whether the timer object from the disjoint_query_timer extension gives
 * timing information that is reliable.
 */
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_ENABLED'));

/**
 * 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 the fence API is available. */
ENV.registerFlag('WEBGL_FENCE_API_ENABLED', () => is WebGLFenceEnabled(ENV.getNumber('WEBGL_VERSION')));

/**
 * Tensors with size <= than this will be uploaded as uniforms, not textures.
 * Use uniform uploads only when 32bit floats are supported. In 16bit environments there are problems with comparing a 16bit texture value // with a 32bit uniform value.
 */
ENV.registerFlag('WEBGL_DELETE_TEXTURE_THRESHOLD', () => {
  return -1;
  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 |);\n`);\n`}";`/*"}* @license\n* Copyright 2018 Google LLC. All Rights Reserved.\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\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 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* "

```javascript
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 {
  let version: string;
  let attribute: string;
  let varyingVs: string;
  let varyingFs: string;
  let texture2D: string;
  let output: string;
  let defineOutput: string;
  let defineSpecialNaN: string;
  let defineSpecialInf: string;
  let defineRound: string;

  if (env().getNumber('WEBGL_VERSION') === 2) {
    version = '#version 300 es';
    attribute = 'in';
    varyingVs = 'out';
    varyingFs = 'in';
    texture2D = 'texture';
    output = 'outputColor';
    defineOutput = 'out vec4 outputColor;';
    defineSpecialNaN = `bvec4 isnan_custom(vec4 val) {
      return bvec4(isnan_custom(val.x),
        isnan_custom(val.y),
        isnan_custom(val.z), isnan_custom(val.w));
    }
    #define isnan(value) isnan_custom(value)`;
    defineSpecialInf = `
      uniform float INFINITY;

      bool isinf(float val) {
        return abs(val) == INFINITY;
      }
      bvec4 isinf(vec4 val) {
        return bvec4(isinf(vec4(val.x),
          isinf(val.y),
          isinf(val.z), isinf(val.w)));}
    `;
    defineRound = `int round(float value) {
      return int(floor(value + 0.5));
    }
    ivec4 round(vec4 value) {
      return ivec4(floor(value + vec4(0.5)));}
    `;
  } else {
    version = ''; 
    attribute = 'attribute';
    varyingVs = 'varying';
    varyingFs = 'varying';
    texture2D = 'texture2D';
    output = 'gl_FragColor';
    defineOutput = ''; 
    defineSpecialNaN = `bvec4 isnan_custom(float val) {
      return bvec4(isnan_custom(val.x),
          isnan_custom(val.y),
          isnan_custom(val.z), isnan_custom(val.w));
    }
    #define isnan(value) isnan_custom(value)`;
    defineSpecialInf = `uniform float INFINITY;

      bool isinf(float val) {
        return abs(val) == INFINITY;
      }
      bvec4 isinf(vec4 val) {
        return bvec4(isinf(vec4(val.x),
          isinf(val.y),
          isinf(val.z), isinf(val.w)));}
    `;
    defineRound = `int round(float value) {
      return int(floor(value + 0.5));
    }
    ivec4 round(vec4 value) {
      return ivec4(floor(value + vec4(0.5)));}
    `;
  }

  return {
    version,
    attribute,
    varyingVs,
    varyingFs,
    texture2D,
    output,
    defineOutput,
    defineSpecialNaN,
    defineSpecialInf,
    defineRound
  };
}
```

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=== strides.length - 1 ?
    `int ${coords[i + 1]} = ${index} - ${coords[i]} * ${stride}` :
    `index -=
        ${coords[i]} * ${stride}`;
  return `${line1}; ${line2};`;
})
  .join('');
}

function buildVec(x: string[]): string {
  if (x.length === 1) {
    return `${x[0]}`;
  }
  return `vec${x.length}(${x.join(',')})`;
}

/**
 * Produces GLSL code that computes the dot product of the input x and
 * y * vectors. Handles splitting inputs into increments of vec4s when necessary.
 * @param {number} x * Vectors to be dotted must be of the same length.
 */
export function dotify(x: string[], y: string[]): string {
  if (x.length !== y.length) {
    throw new Error(`Vectors to be dotted must be of the same length. Got
        [${x.length}] and [${y.length}]`);
  }

  const nearestVec4 = Math.floor(x.length / 4);
  const nearestVec4Remainder = x.length % 4;

  for (let i = 0; i < nearestVec4; i++) {
    const xSlice = x.slice(i * 4, i * 4 + 4);
    const ySlice = y.slice(i * 4, i * 4 + 4);
    slices.push(`(buildVec(xSlice)), (buildVec(ySlice))`);
  }

  if (nearestVec4Remainder !== 0) {
    let xSlice = x.slice(nearestVec4 * 4);
    let ySlice = y.slice(nearestVec4 * 4);
    if (xSlice.length === 1) {
      xSlice = xSlice.map(d => `float(${d})`);
      ySlice = ySlice.map(d => `float(${d})`);
    }
    slices.push(`(buildVec(xSlice)), (buildVec(ySlice))`);
  }

  return slices.map((d, i) => `dot(${d})`).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;
    }
`;
}

export const ENCODE_FLOAT_SNIPPET = `
  const float FLOAT_MAX = 1.70141184e38;
  const float FLOAT_MIN = 1.17549435e-38;

  lowp vec4 encode_float(highp float v) {
    if (isnan(v)) {
      return vec4(255, 255, 255, 255);
    }

    highp float av = abs(v);

    if (av < FLOAT_MIN) {
      return vec4(0.0, 0.0, 0.0, 0.0);
    } else if (v > FLOAT_MAX) {
      return vec4(0.0, 0.0, 128.0, 127.0) / 255.0;
    } else if (v < -FLOAT_MAX) {
      return vec4(0.0, 0.0, 128.0, 255.0) / 255.0;
    }

    highp vec4 c = vec4(0,0,0,0);

    highp float ebias = e + 127.0;
    c[3] = floor(ebias / 2.0);
    ebias -= c[3] * 2.0;
    c[2] += floor(ebias) * 128.0;

    c[3] += 128.0 * step(0.0, -v);

    return c / 255.0;
  }
`;

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.thisUserCode = `
      ivec3 outCoordsFromFlatIndex(int index) {
        ${shader_util.getLogicalCoordinatesFromFlatIndex(['r', 'c', 'd'], outputShape)}
        return ivec3(r, c, d);
      }

      void main() {
        ivec2 resTexRC = ivec2(resultUV.yx * ${texShape[0]} * vec2(0.0, 0.0));
        vec4 result = vec4(0.0, 0.0, 0.0, 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);
        }
      }
    `;
  }
}
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=============================================================================

import {getGlslDifferences} from './glsl_version';

// Code follows.

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) {
      shader_util.getLogicalCoordinatesFromFlatIndex(['r', 'c', 'd'], outputShape)
      return ivec3(r, c, d);
    }

    void main() {
      ivec2 resTexRC = ivec2(resultUV.yx * vec2(${texShape[0]}, ${texShape[1]}));
      int index = 4 * (resTexRC.x * ${texShape[1]} + resTexRC.y);
      vec4 result = vec4(0.);
      for (int i=0; i<4; i++) {
        int flatIndex = index + i;
        ivec3 rc = outCoordsFromFlatIndex(flatIndex);
        result[i] = getChannel(getA(rc.x, rc.y, rc.z), vec2(rc.y, rc.z));
      }
      
      ${glsl.output} = result;
    }
  }
}

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

import {GPGPUProgram} from './gpgpu_math';
import {ENCODE_FLOAT_SNIPPET} from './shader_compiler_util';
import {TextureUsage} from './tex_util';

export class EncodeFloatProgram implements GPGPUProgram {
  variableNames = ['A'];

  userCode: string;
  outputShape: number[];
  outTexUsage = TextureUsage.DOWNLOAD;

  constructor(outputShape: number[]) {
    const glsl = getGlslDifferences();
    this.outputShape = outputShape;
    this.userCode = `float x = getAAtOutCoords();
    ${glsl.output} = encode_float(x);
  }
}

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

import {GPGPUProgram} from './gpgpu_math';
import {ENCODE_FLOAT_SNIPPET} from './shader_compiler_util';
import {TextureUsage} from './tex_util';

export class EncodeFloatPackedProgram implements GPGPUProgram {
  variableNames = ['A'];

  userCode: string;
  packedInputs = true;
  packedOutput = false;
  outTexUsage = TextureUsage.DOWNLOAD;

  constructor(outputShape: [number, number, number]) {
    const glsl = getGlslDifferences();
    this.outputShape = outputShape;
    this.userCode = `ivec3 coords = getOutputCoords();
    float x = getChannel(getAAtOutCoords(), vec2(coords.y, coords.z));
    ${glsl.output} = encode_float(x);
  }
}
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=============================================================================

*/

import {getGlslDifferences} from './glsl_version';
import {GPGPUProgram} from './gpgpu_math';
import * as shader_util from './shader_compiler_util';

export class EncodeMatrixProgram implements GPGPUProgram {
  variableNames = ['A'];
  userCode: string;
  outputShape: number[];
  constructor(outputShape: number[], number, number, number, texShape: number, number, number, number, inputsUnsignedByte = false) {
    const glsl = getGlslDifferences();
    const [height, width] = texShape;
    this.outputShape = outputShape;
    let output = 'result';
    if (inputsUnsignedByte) {
      output = 'floor(result * 255. + 0.5)';
    }
    this.userCode = `\n$\{shader_util.getFlatIndexFrom3D(outputShape)\} \nvoid main() \n{ \n  ivec3 coords = getOutputCoords(); \n  int flatIndex = getFlatIndex(coords); \n  int offset = imod(flatIndex, 4); \n  int flatIndex = idiv(flatIndex, $[width]); \n  int c = imod(flatIndex, $[width]); \n  vec2 uv = (vec2(c, r) + halfCR) / vec2($[width].0, $[height].0); \n  vec4 values = $\{glsl.texture2D\}(A, uv); \n  \n  float result = values[0]; \n  else if(offset == 1) { \n    result = values[1]; \n  } else if(offset == 2) { \n    result = values[2]; \n  } else { \n    result = values[3]; \n  }
  \n  \n  $\{glsl.output\} = vec4(result, 0., 0., 0.);
\n};

*/

import {getGlslDifferences} from './glsl_version';
import {GPGPUProgram} from './gpgpu_math';
import * as shader_util from './shader_compiler_util';

/*
This is how the shader encodes a tensor with shape = [2, 3, 5]
(indices are [batch, row, col]).

000|001   002|003   004|xxx   020|021   022|023   024|xxx
-------   -------   ----   -------   -------   -------
010|011   012|013   014|xxx   xxx|xxx   xxx|xxx   xxx|xxx

100|101   102|103   104|xxx   xxx|xxx   xxx|xxx   xxx|xxx
-------   -------   -------   -------   -------   -------
110|111   112|113   114|xxx   xxx|xxx   xxx|xxx   xxx|xxx

Single texels contain only values from the same batch, and from adjacent rows and columns.

*/

import {getGlslDifferences} from './glsl_version';
import {GPGPUProgram} from './gpgpu_math';
import * as shader_util from './shader_compiler_util';

export class EncodeMatrixPackedProgram implements GPGPUProgram {
  variableNames = ['A'];
  userCode: string;
  outputShape: number[];
  packedInputs = false;
  packedOutput = true;

  constructor(outputShape: number[], number, number, number, number, number, number, number, number, number, number, number, number, number, number, number, inputsUnsignedByte = false) {
    const glsl = getGlslDifferences();
    const [height, width] = texShape;
    this.outputShape = outputShape;
    let mainLoop = '';
    let output = 'result';
    if (inputsUnsignedByte) {
      output = 'floor(result * 255. + 0.5)';
    }
    for (let row = 0; row <= 1; row++) {
      for (let col = 0; col <= 1; col++) {
        const channel = row * 2 + col;
        mainLoop += `\n          localCoords = coords;
          if(localCoords[2] + ${col} < ${outputShape[2]}) {
            if(localCoords[1] + ${row} < ${outputShape[1]}) {
              localCoords[1] += ${row};

              flatIndex = getFlatIndex(localCoords);

              offset = imod(flatIndex, 4); \n              flatIndex = idiv(flatIndex, $[width]); \n              r = flatIndex / $[width]; \n              c = imod(flatIndex, $[width]); \n              uv = (vec2(c, r) + halfCR) / vec2($[width].0, $[height].0); \n
              values = $\{glsl.texture2D\}(A, uv); \n
              \n              result = values[0]; \n              else if(offset == 1) { \n                result = values[1]; \n              } else if(offset == 2) { \n                result = values[2]; \n              } else { \n                result = values[3]; \n              }

              \n              \n              $\{glsl.output\} = vec4(result, 0., 0., 0.);
\n};

*/
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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 {PixelData, TypedArray} from '@tensorflow/tfjs-core';
import {getGlslDifferences} from './glsl_version';
import {TextureConfig} from './tex_util';
import * as webgl_util from './webgl_util';

export function createVertexShader(gl: WebGLRenderingContext): WebGLShader {
  const glsl = getGlslDifferences();
  const vertexShaderSource = `precision highp float;
    vec3 clipSpacePos;
    vec2 uv;
    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(
    // 
    // [x y z u v] * [upper-left, lower-left, upper-right, lower-right]
    // 
    [-1, 1, 0, 0, 1, -1, -1, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 1, 0, 0, 1, 0, 1, 1, 1, -1, 0, 1, 0, 0]);
  return webgl_util.createStaticVertexBuffer(gl, vertexArray);
}

export function createIndexBuffer(gl: WebGLRenderingContext): WebGLBuffer {
  // OpenGL (and WebGL) have "CCW == front" winding
  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 {
  webgl_util.validateTextureSize(width, height);
  const texture = webgl_util.createTexture(gl);

  const tex2d = gl.TEXTURE_2D;
  webgl_util.callAndCheck(gl, () => gl.bindTexture(tex2d, texture));
  webgl_util.callAndCheck(
      gl, () => gl.texParameteri(tex2d, gl.TEXTURE_WRAP_S, gl.CLAMP_TO_EDGE));
  webgl_util.callAndCheck(
      gl, () => gl.texParameteri(tex2d, gl.TEXTURE_WRAP_T, gl.CLAMP_TO_EDGE));
  webgl_util.callAndCheck(
      gl, () => gl.texParameteri(tex2d, gl.TEXTURE_MIN_FILTER, gl.NEAREST));
  webgl_util.callAndCheck(
      gl, () => gl.texParameteri(tex2d, gl.TEXTURE_MAG_FILTER, gl.NEAREST));
  webgl_util.callAndCheck(
      gl, () => gl.texImage2D(tex2d, 0, internalFormat, width, height, 0, textureFormat, textureType, null));
  return webgl_util.createStaticTexture(gl, textureArray, width, height);
}

export function getInternalFormatForFloat32MatrixTexture(
    textureConfig: TextureConfig): number {
  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), textureConfig.format, textureConfig.type, null);
}

export function getInternalFormatForFloat16MatrixTexture(
    textureConfig: TextureConfig): number {
  return textureConfig.internalFormatHalfFloat;
}

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), textureConfig.format, textureConfig.type, null);
}

export function getInternalFormatForUnsignedBytesMatrixTexture(
    textureConfig: TextureConfig): number {
  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), textureConfig.format, textureConfig.type, null);
}
export function getInternalFormatForPackedMatrixTexture(textureConfig) {
  return textureConfig.internalFormatPackedFloat;
}

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.RGBA, gl.FLOAT);
}

export function getInternalFormatForFloat16PackedMatrixTexture(textureConfig) {
  return textureConfig.internalFormatPackedHalfFloat;
}

  const [width, height] = tex_util.getPackedMatrixTextureShapeWidthHeight(rows, columns);
  return 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));
  const success =
      webgl_util.bindVertexBufferToProgramAttribute(gl, program, 'clipSpacePos', vertexBuffer, 3, stride, posOffset);
  return success &&
      webgl_util.bindVertexBufferToProgramAttribute(gl, program, 'uv', vertexBuffer, 2, stride, uvOffset);
}

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 as
            Uint8Array).width, (pixels as
                Uint8Array).height, 0, gl.RGBA,
            texelDataType, (pixels as
                Uint8Array).data));
  } else {
    webgl_util.callAndCheck(gl, () =>
        gl.bindTexture(gl.TEXTURE_2D, texture));
  }

  const bytesPerFloat = 4;
  const valuesPerTexel = 4;
  const bufferSizeBytes = bytesPerFloat * valuesPerTexel * rows * columns;

  webgl_util.callAndCheck(gl, () =>
      gl.bufferData(gl.PIXEL_PACK_BUFFER, buffer));
  // Initialize the buffer to the size of the texture in bytes.
  const bytesPerFloat = 4;
  const bufferSizeBytes = bytesPerFloat * valuesPerTexel * rows * columns;

  webgl_util.callAndCheck(gl, () =>
      gl.bindTexture(gl.TEXTURE_2D, null));

  createBufferFromOutputTexture(gl2: WebGL2RenderingContext, rows: number, columns: number, 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 bufferSizeBytes = bytesPerFloat * valuesPerTexel * rows * columns;

    webgl_util.callAndCheck(gl2, () =>
        gl2.bufferData(gl2.PIXEL_PACK_BUFFER, buffer));

    // 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, textureConfig));

    return buffer;
null 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);

    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 downloadByteEncodedFloatMatrixFromOutputTexture(gl: WebGLRenderingContext, rows: number, columns: number, textureConfig: TextureConfig): Float32Array {
  const [w, h] = tex_util.getUnpackedMatrixTextureShapeWidthHeight(rows, columns);

  const numChannels = 4;
  const downloadTarget = new Uint8Array(tex_util.getUnpackedArraySizeFromMatrixSize(rows * columns, numChannels));

  webgl_util.callAndCheck(gl, () => gl.readPixels(0, 0, w, h, 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);
}

  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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 */

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;

  constructor(gl: WebGLRenderingContext) {
    const glVersion = env().getNumber('WEBGL_VERSION');

    if (glVersion < 2) {
      // WebGL 2.0 enables texture floats without an extension.
      let COLOR_BUFFER_FLOAT = 'WEBGL_color_buffer_float';
    } else {
      this.gl = gl;
      setWebGLContext(glVersion, gl);
    }

    // WebGL 2.0 enables texture floats without an extension.
    let COLOR_BUFFER_FLOAT = 'WEBGL_color_buffer_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 =
webgl_util.getExtensionOrThrow(this.gl, TEXTURE_HALF_FLOAT);
} 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.');
}

this.colorBufferFloatExtension = this.gl.getExtension(COLOR_BUFFER_FLOAT);
if (webgl_util.hasExtension(this.gl, COLOR_BUFFER_HALF_FLOAT)) {
  this.colorBufferHalfFloatExtension =
webgl_util.getExtensionOrThrow(this.gl, COLOR_BUFFER_HALF_FLOAT);
} else if (env().get('WEBGL_FORCE_F16_TEXTURES')) {
  throw new Error('GL context does not support color renderable floats, yet ' +
  'the environment flag WEBGL_FORCE_F16_TEXTURES is set to true.');
}

this.colorBufferHalfFloatExtension =
webgl_util.getExtensionOrThrow(this.gl, COLOR_BUFFER_HALF_FLOAT);
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.');
}

this.vertexBuffer = gpgpu_util.createVertexBuffer(this.gl);
this.indexBuffer = gpgpu_util.createIndexBuffer(this.gl);
this.framebuffer =
webgl_util.createFramebuffer(this.gl);

this.textureConfig =
tex_util.getTextureConfig(this.gl, this.textureHalfFloatExtension);

private get debug(): boolean {
  return env().getBool('DEBUG');
}

public dispose() {
  if (this.disposed) {
    return;
  }
  if (this.program != null) {
    console.warn(
      'Disposing a GPGPUContext that still has a bound WebGLProgram. ' +
      'This is probably a resource leak, delete the program with ' +
      'GPGPUContext.deleteProgram before disposing.');
  }
  if (this.outputTexture != null) {
    console.warn(
      'Disposing a GPGPUContext that still has a bound output matrix ' +
      'texture. This is probably a resource leak, delete the output ' +
      'matrix texture with GPGPUContext.deleteMatrixTexture before ' +
      'disposing.');
  }
  const gl = this.gl;
  gl.finish();
  gl.bindFramebuffer(gl.FRAMEBUFFER, null);
  gl.deleteFramebuffer(this.framebuffer);
  gl.bindBuffer(gl.ARRAY_BUFFER, null);
  gl.deleteBuffer(this.indexBuffer);
  this.disposed = true;
  return;
}

public createFloat32MatrixTexture(rows: number, columns: number): WebGLTexture {
  return gpgpu_util.createFloat32MatrixTexture(rows, columns, this.textureConfig);
}

public createFloat16MatrixTexture(rows: number, columns: number): WebGLTexture {
  return gpgpu_util.createFloat16MatrixTexture(rows, columns, this.textureConfig);
}

public createUnsignedBytesMatrixTexture(rows: number, columns: number): WebGLTexture {
  return gpgpu_util.createUnsignedBytesMatrixTexture(rows, columns, this.textureConfig);
}

public uploadPixelDataToTexture(texture: WebGLTexture, pixels: PixelData|ImageData|HTMLImageElement|HTMLCanvasElement) {
  if (this.throwIfDisposed()) {
    throw new Error('GL context does not support texture upload.' +
    'The environment flag WEBGL_TEXTURE_UPLOAD is set to true.');
  }
  gpgpu_util.uploadPixelDataToTexture(texture, pixels);
}

public uploadDenseMatrixToTexture(texture: WebGLTexture, data: TypedArray) {
  if (this.throwIfDisposed()) {
    throw new Error('GL context does not support dense matrix upload.' +
    'The environment flag WEBGL_TEXTURE_UPLOAD is set to true.');
  }
  gpgpu_util.uploadDenseMatrixToTexture(texture, data);
}

public createPackedMatrixTexture(rows: number, columns: number): WebGLTexture {
  return gpgpu_util.createPackedMatrixTexture(rows, columns, this.textureConfig);
}

public createFloat16PackedMatrixTexture(rows: number, columns: number): WebGLTexture {
  return gpgpu_util.createFloat16PackedMatrixTexture(rows, columns, this.textureConfig);
}
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this.throwIfDisposed();
if (this.outputTexture === texture) {
webgl_util.unbindColorTextureFromFramebuffer(this.gl, this.framebuffer);
this.outputTexture = null;
}
public
downloadByteEncodedFloatMatrixFromOutputTexture(
    texture: WebGLTexture, rows: number, columns: number:
) => Float32Array {
    return this.downloadMatrixDriver(
        texture, () => gpgpu_util.downloadByteEncodedFloatMatrixFromOutputTexture(
            this.gl, rows, columns, this.textureConfig));
}
public
downloadPackedMatrixFromBuffer(
    buffer: WebGLBuffer, batch: number, rows: number, columns: number, physicalRows: number, physicalCols: number):
Float32Array {
    return gpgpu_util.downloadPackedMatrixFromBuffer(
        this.gl, buffer, batch, rows, columns, physicalRows, physicalCols, this.textureConfig);
}
public
createBufferFromTexture(
    texture: WebGLTexture, rows: number, columns: number):
WebGLBuffer {
    this.bindTextureToFrameBuffer(texture);
    const result =
gpgpu_util.createBufferFromOutputTexture(
        this.gl as WebGL2RenderingContext, rows, columns, this.textureConfig);
    this.unbindTextureToFrameBuffer();
    return result;
}

private
vertexAttrsAreBound = false;

createProgram(fragmentShaderSource: string): WebGLProgram {
    this.throwIfDisposed();
    const gl = this.gl;
    const fragmentShader: WebGLShader =
gpgpu_util.createFragmentShader(gl, fragmentShaderSource);
    const vertexShader: WebGLShader =
gpgpu_util.createVertexShader(gl);
    const program: WebGLProgram = webgl_util.createProgram(gl);
    webgl_util.callAndCheck(gl, () => gl.attachShader(program, vertexShader));
    webgl_util.callAndCheck(gl, () => gl.attachShader(program, fragmentShader));
    webgl_util.linkProgram(gl, program);
    if (this.debug) {
        webgl_util.validateProgram(gl, program);
    }
    if (!this.vertexAttrsAreBound) {
        this.setProgram(program);
        this.vertexAttrsAreBound = gpgpu_util.bindVertexProgramAttributeStreams(gl, program);
    }
    return program;
}

deleteProgram(program: WebGLProgram) {
    this.throwIfDisposed();
    if (program === this.program) {
        this.program = null;
    }
    if (program != null) {
        webgl_util.callAndCheck(gl, () => gl.deleteProgram(program));
    }
}

setProgram(program: WebGLProgram) {
    this.throwIfDisposed();
    if (program === this.program) {
        this.program = null;
    }
    if (program != null) {
        webgl_util.callAndCheck(gl, () => this.gl.deleteProgram(program));
    }
    if (this.debug) {
        if (this.vertexAttrsAreBound) {
            this.setProgram(program);
            this.vertexAttrsAreBound = gpgpu_util.bindVertexProgramAttributeStreams(gl, this.program, this.vertexBuffer);
        }
        if (program != null) {
            webgl_util.callAndCheck(gl, () => gl.deleteProgram(program));
        }
    }
}

public
setProgramProgram(program: WebGLProgram, uniformName: string): void {
    if (this.debug) {
        if (this.program != null) {
            webgl_util.callAndCheck(gl, () => this.gl.deleteProgram(program));
        }
    }
}

deleteProgram(program: WebGLProgram) {
    this.throwIfDisposed();
    if (shouldThrow) {
        return webgl_util.deleteProgramUniformLocationOrThrow(this.gl, program, uniformName);
    }
}
program, uniformName);
    }

  public getAttributeLocation(program: WebGLProgram, attribute: string):
      number {
    this.throwIfDisposed();
    return webgl_util.callAndCheck(
        this.gl, () =>
            this.gl.getAttribLocation(program, attribute));
  }

  public getUniformLocationNoThrow(program:
WebGLProgram, uniformName: string):
    WebGLUniformLocation {
    this.throwIfDisposed();
    return
    this.gl.getUniformLocation(program, uniformName);
  }

  public setInputElementTexture(inputElementTexture: WebGLTexture,
    rows: number, columns: number) {
    this.setInputMatrixTexture(inputElementTexture, uniformLocation,
      textureUnit: number);  
  }

  public setOutputMatrixTexture(outputMatrixTexture: WebGLTexture,
    rows: number, columns: number) {
    this.setOutputMatrixTextureDriver(outputMatrixTexture, columns, rows);
  }

  public setInputMatrixTexture(
    inputMatrixTexture: WebGLTexture, uniformLocation: WebGLUniformLocation,
    textureUnit: number) {
    this.throwIfDisposed();
    this.throwIfNoProgram();
    webgl_util.bindTextureToProgramUniformSampler(
        this.gl, inputMatrixTexture, uniformLocation, textureUnit);
  }

  public setOutputMatrixTextureDriver(outputMatrixTexture, columns, rows);

  public setInputPackedMatrixTexture(
    packedMatrixTexture: WebGLTexture, rows: number, columns:
      number) {
    this.setInputMatrixTextureDriver(packedMatrixTexture, columns, rows);
  }

  public setOutputPackedMatrixTexture(outputPackedMatrixTexture: WebGLTexture,
    rows: number, columns: number) {
    this.setOutputMatrixTextureDriver(outputPackedMatrixTexture, columns, rows);
  }

  public setOutputMatrixWriteRegion(
      startRow: number, numRows: number, startColumn: number,
      numColumns: number) {
    this.setOutputMatrixWriteRegionDriver(
        startColumn, startRow, numColumns, numRows);
  }

  public setOutputPackedMatrixWriteRegion(
      startRow: number, numRows: number, startColumn: number,
      numColumns: number) {
    this.setOutputMatrixWriteRegionDriver(
        startColumn, startRow, numColumns, numRows);
  }

  public async waitForQueryAndGetTime(query: WebGLQuery): Promise<number> {
    await util.repeatedTry(
        () =>
            this.disposed ||  // while testing contexts are created / disposed
                                // in rapid succession, so without
            this.isQueryAvailable(
                query, env().getNumber(
                  'WEBGL_DISJOINT_QUERY_TIMER_EXTENSION_VERSION')));
    return this.getQueryTime(
        query, env().getNumber(
            'WEBGL_DISJOINT_QUERY_TIMER_EXTENSION_VERSION'));
  }

  private getQueryTimerExtension(): WebGL1DisjointQueryTimerExtension
          | WebGL2DisjointQueryTimerExtension {
    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 | WebGL2DisjointQueryTimerExtension;
    }
    return
    this.disjointQueryTimerExtension;
  }

  private getQueryTimerExtensionWebGL2(): WebGL2DisjointQueryTimerExtension {
    return this.getQueryTimerExtension();
  }

  private getQueryTimerExtensionWebGL1(): WebGL1DisjointQueryTimerExtension {
    return this.getQueryTimerExtension() as WebGL1DisjointQueryTimerExtension;
  }

  beginQuery(): WebGLQuery {
    if (env().getNumber('WEBGL_DISJOINT_QUERY_TIMER_EXTENSION_VERSION') === 2) {
      const
        gl2 = this.gl as WebGL2RenderingContext;
      const ext = this.getQueryTimerExtensionWebGL2();
      const query = gl2.createQuery();
      gl2.beginQuery(ext.TIME_ELAPSED_EXT, query);
      return query;
    }
    const ext = this.getQueryTimerExtensionWebGL1();
    const query = ext.createQueryEXT() as WebGLQuery;
    ext.beginQueryEXT(ext.TIME_ELAPSED_EXT, query);
    return query;
  }

  endQuery() {
    if (env().getNumber('WEBGL_DISJOINT_QUERY_TIMER_EXTENSION_VERSION') === 2) {
      const
        gl2 = this.gl as WebGL2RenderingContext;
      const query = this.getQueryTimerExtensionWebGL2();
      gl2.endQuery(ext.TIME_ELAPSED_EXT);
      return;
    }
    const query = this.getQueryTimerExtensionWebGL1();
    gl1.endQueryEXT(ext.TIME_ELAPSED_EXT);
    return;
  }

  dispose() {
    this.throwIfDisposed();
    this.gl.deleteProgram(this.program);
    this.program = null;
  }
private getQueryTime(query: WebGLQuery, queryTimerVersion: number): number {
  if (queryTimerVersion === 0) {
    return null;
  } else if (queryTimerVersion === 2) {
    const gl2 = this.gl as WebGL2RenderingContext;
    const timeElapsedNanos = gl2.getQueryParameter(query, gl2.QUERY_RESULT);
    return timeElapsedNanos / 1000000;
  }

  const ext = this.getQueryTimerExtensionWebGL1();
  const timeElapsedNanos = ext.getQueryObjectEXT(query, ext.QUERY_RESULT_EXT);
  return timeElapsedNanos / 1000000;
}

private isQueryAvailable(query: WebGLQuery, queryTimerVersion: number): boolean {
  if (queryTimerVersion === 0) {
    return true;
  } else if (queryTimerVersion === 2) {
    const gl2 = this.gl as WebGL2RenderingContext;
    const ext = this.getQueryTimerExtensionWebGL2();
    const available = gl2.getQueryParameter(query, gl2.QUERY_RESULT_AVAILABLE);
    if (this.disjoint == null) {
      this.disjoint = this.gl.getParameter(ext.GPU_DISJOINT_EXT);
    }
    return available && !this.disjoint;
  } else {
    const ext = this.getQueryTimerExtensionWebGL1();
    const available = ext.getQueryObjectEXT(query, ext.QUERY_RESULT_EXT);
    if (this.disjoint == null) {
      this.disjoint = this.gl.getParameter(ext.GPU_DISJOINT_EXT);
    }
    return available && !this.disjoint;
  }
}

pollFence(fenceContext: FenceContext) {
  return new Promise<void>(resolve => {
    this.addItemToPoll(() => fenceContext.isFencePassed(), () => resolve());
  });
}

private itemsToPoll: PollItem[] = [];

pollItems(): void {
  // Find the last query that has finished.
  const index = linearSearchLastTrue(this.itemsToPoll.map(x => x.isDoneFn));
  // We already have a running loop that polls.
  if (this.polls.length > 1) {
    return;
  }
  // Start a new loop that polls.
  util.repeatedTry(() => {
    this.pollItems();
    // End the loop if no more items to poll.
    return this.itemsToPoll.length === 0;
  });
}

private addItemToPoll(isDoneFn: () => boolean, resolveFn: () => void) {
  this.itemsToPoll.push({isDoneFn, resolveFn});
  if (this.itemsToPoll.length > 1) {
    return;
  }
  // Start a new loop that polls.
  util.repeatedTry(() => {
    this.pollItems();
    // End the loop if no more items to poll.
    return this.itemsToPoll.length === 0;
  });
}

private bindTextureToFrameBuffer(texture: WebGLTexture) {
  this.throwIfDisposed();
  webgl_util.bindColorTextureToFramebuffer(this.gl, texture, this.framebuffer);
  if (this.debug) {
    webgl_util.validateFramebuffer(this.gl);
  }
  this.outputTexture = texture;
  webgl_util.callAndCheck(this.gl, () => this.gl.viewport(0, 0, width, height));
  webgl_util.callAndCheck(this.gl, () => this.gl.scissor(0, 0, width, height));
}

private setOutputMatrixTextureDriver(outputMatrixTextureMaybePacked: WebGLTexture, width: number, height: number) {
  this.throwIfDisposed();
  this.throwIfNoProgram();
  this.gl = this.gl;
  this.outputTexture = outputMatrixTextureMaybePacked;
  this.framebuffer = this.framebuffer;
  this.debug = this.debug;
  this.program = this.program;
  this.bindTextureToFrameBuffer(outputMatrixTextureMaybePacked);
  this.setOutputMatrixWriteRegionDriver(0, 0, width, height);
}

private throwIfDisposed(): void {
  if (this.disposed) {
    throw new Error('Attempted to use disposed GPGPUContext.');
  }
}

private throwIfNoProgram(): void {
  if (this.program == null) {
    throw new Error('No GPU program is currently set.');
  }
}

/**
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 */
export function linearSearchLastTrue(arr: Array<() => boolean>): number {
  let i = 0;
  for (; i < arr.length; ++i) {
    const isDone = arr[i]();
    if (!isDone) {
      break;
    }
  }
  return i - 1;
}
import {backend_util, util} from '@tensorflow/tfjs-core';
const {getBroadcastDims} = backend_util;
import {getGlsIDifferences, GLSL} from '/glsl_version';
const shader_util = require('shader_compiler_util');
export type ShapeInfo = {
  logicalShape: number[],
  texShape: [number, number],
  isUniform: boolean,
  isPacked: boolean,
  flatOffset: number
};

export type InputInfo = {
  name: string,
  shapeInfo: ShapeInfo
};

export function makeShader(
    inputsInfo: InputInfo[],
    outputShape: ShapeInfo,
    userCode: string,
    usesPackedTextures: boolean): string {
    const prefixSnippets: string[] = [];
    inputsInfo.forEach(x => {
      const size = util.sizeFromShape(x.shapeInfo.logicalShape);

      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 outTexShape = outputShape.texShape;
    const glsl = getGlslDifferences();
    const floatTextureSampleSnippet = getFloatTextureSampleSnippet(glsl);
    let outputSamplingSnippet: string;
    let floatTextureSetOutputSnippet: string;
    let shaderPrefix = getShaderPrefix(glsl);

    if (outputShape.isPacked) {
      outputSamplingSnippet = getPackedOutputSamplingSnippet(outputShape.logicalShape, outTexShape);
      floatTextureSetOutputSnippet = getFloatTextureSetRGBASnippet(glsl);
    } else {
      outputSamplingSnippet = getOutputSamplingSnippet(outputShape.logicalShape, outTexShape);
      floatTextureSetOutputSnippet = getFloatTextureSetRSnippet(glsl);
    }

    if (usesPackedTextures) {
      shaderPrefix += SHADER_PACKED_PREFIX;
    }

    const source = shaderPrefix + floatTextureSampleSnippet +
    inputPrefixSnippet + outputSamplingSnippet + inputSamplingSnippet +
    floatTextureSetOutputSnippet + outTexShape + ShaderUtil.makeShader(inputsInfo, outputShape, usesPackedTextures, userCode)
}

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);
    case 4:
      return getPackedSampler4D(inInfo);
    case 5:
      return getPackedSampler5D(inInfo);
    case 6:
      return getPackedSampler6D(inInfo);
    default:
      throw new Error(`${shape.length}-D input sampling is not yet supported.`);
  }
}

function getInputSamplingSnippet(
    x: OutputInfo,
    outputShape: [number, number],
    usesPackedTextures: boolean) {...}
getOutputPacked3DCoords(outShape as [number, number, number], outTexShape): 
  return getOutputPackedNDcoords(outShape, outTexShape):

getOutputSamplingSnippet(gls: GLSL): string 
  return getOutputScalarCoords(): 

getOutput1DCoords(outShape as [number], outTexShape): 
  return getOutput1DCoords(outShape as [number], outTexShape):

getOutput2DCoords(outShape as [number, number], outTexShape): 
  return getOutput2DCoords(outShape as [number, number], outTexShape):

getOutput3DCoords(outShape as [number, number, number], outTexShape): 
  return getOutput3DCoords(outShape as [number, number, number], outTexShape):

getOutput4DCoords(outShape as [number, number, number, number], outTexShape): 
  return getOutput4DCoords(outShape as [number, number, number, number], outTexShape):

getOutput5DCoords(outShape as [number, number, number, number, number], outTexShape): 
  return getOutput5DCoords(outShape as [number, number, number, number, number], outTexShape):

getOutput6DCoords(outShape as [number, number, number, number, number, number], outTexShape): 
  return getOutput6DCoords(outShape as [number, number, number, number, number, number], outTexShape):

getOutputScalarCoords(): 
  return getOutputScalarCoords(): 

getOutputPacked1DCoords(outShape as [number], outTexShape): 
  return getOutputPacked1DCoords(outShape as [number], outTexShape):

getOutputPacked2DCoords(outShape as [number, number], outTexShape): 
  return getOutputPacked2DCoords(outShape as [number, number], outTexShape):

getOutputPacked3DCoords(outShape as [number, number, number], outTexShape): 
  return getOutputPacked3DCoords(outShape as [number, number, number], outTexShape):

getOutputPacked4DCoords(outShape as [number, number, number, number], outTexShape): 
  return getOutputPacked4DCoords(outShape as [number, number, number, number], outTexShape):

getOutputPacked5DCoords(outShape as [number, number, number, number, number], outTexShape): 
  return getOutputPacked5DCoords(outShape as [number, number, number, number, number], outTexShape):

getOutputPacked6DCoords(outShape as [number, number, number, number, number, number], outTexShape): 
  return getOutputPacked6DCoords(outShape as [number, number, number, number, number, number], outTexShape):

getOutputPackedNDCoords(outShape as [number], outTexShape): 
  return getOutputPackedNDCoords(outShape as [number], outTexShape):

getOutputSamplingSnippet(gls: GLSL): string 
  return getOutputSamplingSnippet(gls: GLSL):

getOutput2DCoords(outShape as [number, number], outTexShape): 
  return getOutput2DCoords(outShape as [number, number], outTexShape):

getOutput3DCoords(outShape as [number, number, number], outTexShape): 
  return getOutput3DCoords(outShape as [number, number, number], outTexShape):

getOutput4DCoords(outShape as [number, number, number, number], outTexShape): 
  return getOutput4DCoords(outShape as [number, number, number, number], outTexShape):

getOutput5DCoords(outShape as [number, number, number, number, number], outTexShape): 
  return getOutput5DCoords(outShape as [number, number, number, number, number], outTexShape):

getOutput6DCoords(outShape as [number, number, number, number, number, number], outTexShape): 
  return getOutput6DCoords(outShape as [number, number, number, number, number, number], outTexShape):

getOutputSamplingSnippet(gls: GLSL): string 
  return getOutputSamplingSnippet(gls: GLSL):

getOutput2DCoords(outShape as [number, number], outTexShape): 
  return getOutput2DCoords(outShape as [number, number], outTexShape):

getOutput3DCoords(outShape as [number, number, number], outTexShape): 
  return getOutput3DCoords(outShape as [number, number, number], outTexShape):

getOutput4DCoords(outShape as [number, number, number, number], outTexShape): 
  return getOutput4DCoords(outShape as [number, number, number, number], outTexShape):

getOutput5DCoords(outShape as [number, number, number, number, number], outTexShape): 
  return getOutput5DCoords(outShape as [number, number, number, number, number], outTexShape):

getOutput6DCoords(outShape as [number, number, number, number, number, number], outTexShape): 
  return getOutput6DCoords(outShape as [number, number, number, number, number, number], outTexShape):

getOutputSamplingSnippet(gls: GLSL): string 
  return getOutputSamplingSnippet(gls: GLSL):

getOutput2DCoords(outShape as [number, number], outTexShape): 
  return getOutput2DCoords(outShape as [number, number], outTexShape):

getOutput3DCoords(outShape as [number, number, number], outTexShape): 
  return getOutput3DCoords(outShape as [number, number, number], outTexShape):

getOutput4DCoords(outShape as [number, number, number, number], outTexShape): 
  return getOutput4DCoords(outShape as [number, number, number, number], outTexShape):

getOutput5DCoords(outShape as [number, number, number, number, number], outTexShape): 
  return getOutput5DCoords(outShape as [number, number, number, number, number], outTexShape):

getOutput6DCoords(outShape as [number, number, number, number, number, number], outTexShape): 
  return getOutput6DCoords(outShape as [number, number, number, number, number, number], outTexShape):

getOutputSamplingSnippet(gls: GLSL): string 
  return getOutputSamplingSnippet(gls: GLSL):

getOutput2DCoords(outShape as [number, number], outTexShape): 
  return getOutput2DCoords(outShape as [number, number], outTexShape):

getOutput3DCoords(outShape as [number, number, number], outTexShape): 
  return getOutput3DCoords(outShape as [number, number, number], outTexShape):

getOutput4DCoords(outShape as [number, number, number, number], outTexShape): 
  return getOutput4DCoords(outShape as [number, number, number, number], outTexShape):

getOutput5DCoords(outShape as [number, number, number, number, number], outTexShape): 
  return getOutput5DCoords(outShape as [number, number, number, number, number], outTexShape):

getOutput6DCoords(outShape as [number, number, number, number, number, number], outTexShape): 
  return getOutput6DCoords(outShape as [number, number, number, number, number, number], outTexShape):

getOutputSamplingSnippet(gls: GLSL): string 
  return getOutputSamplingSnippet(gls: GLSL):

getOutput2DCoords(outShape as [number, number], outTexShape): 
  return getOutput2DCoords(outShape as [number, number], outTexShape):

getOutput3DCoords(outShape as [number, number, number], outTexShape): 
  return getOutput3DCoords(outShape as [number, number, number], outTexShape):

getOutput4DCoords(outShape as [number, number, number, number], outTexShape): 
  return getOutput4DCoords(outShape as [number, number, number, number], outTexShape):

getOutput5DCoords(outShape as [number, number, number, number, number], outTexShape): 
  return getOutput5DCoords(outShape as [number, number, number, number, number], outTexShape):

getOutput6DCoords(outShape as [number, number, number, number, number, number], outTexShape): 
  return getOutput6DCoords(outShape as [number, number, number, number, number, number], outTexShape):

getOutputSamplingSnippet(gls: GLSL): string 
  return getOutputSamplingSnippet(gls: GLSL):

getOutput2DCoords(outShape as [number, number], outTexShape): 
  return getOutput2DCoords(outShape as [number, number], outTexShape):

getOutput3DCoords(outShape as [number, number, number], outTexShape): 
  return getOutput3DCoords(outShape as [number, number, number], outTexShape):

getOutput4DCoords(outShape as [number, number, number, number], outTexShape): 
  return getOutput4DCoords(outShape as [number, number, number, number], outTexShape):

getOutput5DCoords(outShape as [number, number, number, number, number], outTexShape): 
  return getOutput5DCoords(outShape as [number, number, number, number, number], outTexShape):

getOutput6DCoords(outShape as [number, number, number, number, number, number], outTexShape): 
  return getOutput6DCoords(outShape as [number, number, number, number, number, number], outTexShape):
```
inputInfo.shapeInfo.texShape

const texNumR = texShape[0];
const texNumC = texShape[1];
const glsl = getGlslDifferences();
if (texShape[0] == null && arrayEqual(shape, texShape)) {
  return `vec4
    ${funcName}(int row, int col) {
      vec2 uv = (vec2(col, row) + halfCR) / vec2(${texNumC}.0, 0);
      return ${glsl.texture2D}(${texName}, uv);
    }
  `;
}

const texNumR = texShape[0];
const texNumC = texShape[1];
const glsl = getGlslDifferences();
if (texShape[0] != null && arrayEqual(shape, texShape)) {
  return `vec4
    ${funcName}(int row, int col) {
      vec2 uv = packedUVfrom2D(${valuesPerRow}, ${texName}, uv);
      return ${glsl.texture2D}(${texName}, uv);
    }
  `;
}

function getSampler2D(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;
  if (texShape[0] != null && arrayEqual(shape, texShape)) {
    return `float
      ${funcName}(int row, int col) {
        vec2 uv = (vec2(col, row) + halfCR) / vec2(${texNumC}.0, 0);
        return sampleTexture(${texName}, uv);
      }
  `;
  }

  const squeezedShape = util.squeezeShape(shape);
  const squeezedShape = newShape;
  if (squeezedShape.length < shape.length) {
    const newInputInfo = squeezeInputInfo(inputInfo, squeezedShape);
    const params = ['row', 'col'];
    return `vec4
      ${funcName}(int row, int col) {
        vec2 uv = vec2(0.5, (row + 0.5) / vec2(${texNumC}.0, 0).
        return ${glsl.texture2D}(${texName}, uv);
      }
  `;
  }

  return `vec4
    ${funcName}(int row, int col) {
      vec2 uv = vec2(0.5, (row + 0.5) / vec2(${texNumC}.0, 0).
      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 squeezedShape = util.squeezeShape(shape);
  const squeezedShape = newShape;
  if (squeezedShape.length < shape.length) {
    const newInputInfo = squeezeInputInfo(inputInfo, squeezedShape);
    const params = ['row', 'col', 'depth'];
    return `vec4
      ${funcName}(int row, int col, int depth) {
        return ${funcName}(${getSqueezedParams(params, keptDims)});
      }
  `;
  }

  if (inputInfo.shapeInfo.isUniform) {
    return `vec4
      ${funcName}(int row, int col) {
        int index = round(dot(vec2(row, col), vec2(${shape[1]}, 1)));
        return sampleTexture(${texName}, uv);
      }
  `;
  }

  return `vec4
    ${funcName}(int row, int col) {
      vec2 uv = uvFromFlat(${texNumR}, ${texNumC}, index);
      return ${glsl.texture2D}(${texName}, uv);
    }
  `;
}
```

```
const flatOffset = inputInfo.shapeInfo.flatOffset;
if (texNumC === stride0 & flatOffset == null) {
  texC is used directly as physical (no risk of float16 overflow).
  return `\n    float ${funcName}(int row, int col, int depth) {\n      int index = round(dot(vec3(row, col, depth), \n        vec3(${stride0}, ${stride1}, 1)));\n      ${getUniformSampler(inputInfo)} \n    } \n  `;
}

if (texNumC === stride1 & flatOffset == null) {
  return sampleTexture(${textureName}, uv);
} \n  `;
}

if (inputInfo.shapeInfo.isUniform) {
  // Uniform arrays will be less than 65505 (no risk of float16 overflow).
  return `\n    float ${funcName}(int row, int col, int depth) {\n      int index = round(dot(vec3(row, col, depth), \n        vec3(${stride0}, ${stride1}, 1)));\n      ${getUniformSampler(inputInfo)} \n    } \n  `;
}

if (flatOffset == null) {
  // texR is used directly as physical (no risk of float16 overflow).
  return `\n    float ${funcName}(int row, int col, int depth) {\n      float texR = dot(vec2(row, col), vec2(${shape[1]}, 1));\n      float texC = float(depth);\n      vec2 uv = (vec2(texC, texR) + halfCR) / vec2(${texNumC}, 0, 0, ${texNumR}).0; \n      return sampleTexture(${textureName}, uv);
    } \n  `;
}

const texShape = inputInfo.shapeInfo.texShape;
const texNumR = texShape[0];
const texNumC = texShape[1];
const flatOffset = inputInfo.shapeInfo.flatOffset;
if (texNumC === stride0 & flatOffset == null) {
  texC is used directly as physical (no risk of float16 overflow).
  return `\n    float ${funcName}(int row, int col, int depth) {\n      float texR = dot(vec2(col, depth), vec2(${shape[1]}, 1));\n      float texC = float(depth);\n      vec2 uv = (vec2(texC, texR) + halfCR) / vec2(${texNumC}, 0, 0, ${texNumR}).0; \n      return sampleTexture(${textureName}, uv);
    } \n  `;
}

const offset = getFlatOffsetUniformName(texName);
return `\n    float ${funcName}(int row, int col, int depth) {\n      float texR = dot(vec2(col, depth), vec2(${shape[1]}, 1));\n      float texC = float(depth);\n      vec2 uv = (vec2(texC, texR) + halfCR) / vec2(${texNumC}, 0, 0, ${texNumR}).0; \n      return sampleTexture(${textureName}, uv);
    } \n  `;
}

if (texNumC === stride1 & flatOffset == null) {
  return `\n    float ${funcName}(int row, int col, int depth) {\n      float texR = dot(vec2(row, col), vec2(${shape[1]}, 1));\n      float texC = float(depth);\n      vec2 uv = (vec2(texC, texR) + halfCR) / vec2(${texNumC}, 0, 0, ${texNumR}).0; \n      return sampleTexture(${textureName}, uv);
    } \n  `;
}

const offset = getFlatOffsetUniformName(texName);
return `\n    float ${funcName}(int row, int col, int depth) {\n      float texR = dot(vec2(col, depth), vec2(${shape[1]}, 1));\n      float texC = float(depth);\n      vec2 uv = (vec2(texC, texR) + halfCR) / vec2(${texNumC}, 0, 0, ${texNumR}).0; \n      return sampleTexture(${textureName}, uv);
    } \n  `;
}

const texShape = inputInfo.shapeInfo.texShape;
const texNumR = texShape[0];
const texNumC = texShape[1];
const flatOffset = inputInfo.shapeInfo.flatOffset;
if (texNumC === stride0 & flatOffset == null) {
  texC is used directly as physical (no risk of float16 overflow).
  return `\n    float ${funcName}(int row, int col, int depth) {\n      float texR = dot(vec2(col, depth), vec2(${shape[1]}, 1));\n      float texC = float(depth);\n      vec2 uv = (vec2(texC, texR) + halfCR) / vec2(${texNumC}, 0, 0, ${texNumR}).0; \n      return sampleTexture(${textureName}, uv);
    } \n  `;
}

const offset = getFlatOffsetUniformName(texName);
return `\n    float ${funcName}(int row, int col, int depth) {\n      float texR = dot(vec2(col, depth), vec2(${shape[1]}, 1));\n      float texC = float(depth);\n      vec2 uv = (vec2(texC, texR) + halfCR) / vec2(${texNumC}, 0, 0, ${texNumR}).0; \n      return sampleTexture(${textureName}, uv);
    } \n  `;
}
```
col, int depth, int depth2) {\n  // Explicitly use integer operations as dot() only works on floats.\n  int index = row * ${stride0} + col * ${stride1} + depth * ${stride2} + depth2;\n  vec2 uv = uvFromFlat(${texNumR}, ${texNumC}, index + ${offset});\n  return sampleTexture(${texName}, uv);\n}\n
function getSampler5D(inputInfo: InputInfo): string {\n  const shape = inputInfo.shapeInfo.logicalShape;\n  const texName = inputInfo.name;\n  const funcName = 'get' + texName.charAt(0).toUpperCase() + texName.slice(1);\n  const stride3 = shape[4];\n  const stride2 = shape[3] * stride3;\n  const stride1 = shape[2] * stride2;\n  const stride0 = shape[1] * stride1;\n  const newShape = util.squeezeShape(shape);\n  if (newShape.length < shape.length) {\n    const newInputInfo = squeezeInputInfo(inputInfo, newShape);\n    const params = ['row', 'col', 'depth', 'depth2', 'depth3'];\n    return `\n      float ${funcName}(int row, int col, int depth, int depth2, int depth3) {\n        return float ${funcName}($getSqueezedParams(params, keptDims));\n      }\n    `;\n  }\n
  if (inputInfo.shapeInfo.isUniform) {\n    // Uniform arrays will be less than 65505 (no risk of float16 overflow).\n    return `\n      float ${funcName}(int row, int col, int depth, int depth2, int depth3) {\n        return float ${funcName}(${getSqueezedParams(params, keptDims)});\n      }\n    `;\n  }\n
  const flatOffset = inputInfo.shapeInfo.flatOffset;\n  const texShape = inputInfo.shapeInfo.texShape;\n  const texNumR = texShape[0];\n  const texNumC = texShape[1];\n  const offset = getFlatOffsetUniformName(texName);\n  return `\n    float ${funcName}(int row, int col, int depth, int depth2, int depth3) {\n      // Explicitly use integer operations as dot() only works on floats.\n      int index = row * ${stride0} + col * ${stride1} + depth * ${stride2} +
        depth2 * ${stride3} + depth3 + ${offset};\n      vec2 uv = uvFromFlat(${texNumR}, ${texNumC}, index + ${offset});\n      return sampleTexture(${texName}, uv);\n    }\n  `;\n}

function getSampler6D(inputInfo: InputInfo): string {\n  const shape = inputInfo.shapeInfo.logicalShape;\n  const texName = inputInfo.name;\n  const funcName = 'get' + texName.charAt(0).toUpperCase() + texName.slice(1);\n
  const {newShape, keptDims} = util.squeezeShape(shape);\n  if (newShape.length < shape.length) {\n    const newInputInfo = squeezeInputInfo(inputInfo, newShape);\n    const params = ['row', 'col', 'depth', 'depth2', 'depth3', 'depth4'];\n    return `\n      float ${funcName}(int row, int col, int depth, int depth2, int depth3, int depth4) {\n        return float ${funcName}(${getSqueezedParams(params, keptDims)});\n      }\n    `;\n  }\n
  if (inputInfo.shapeInfo.isUniform) {\n    // Uniform arrays will be less than 65505 (no risk of float16 overflow).\n    return `\n      float ${funcName}(int row, int col, int depth, int depth2, int depth3, int depth4) {\n        return float ${funcName}(${getSqueezedParams(params, keptDims)});\n      }\n    `;\n  }\n
  const stride4 = shape[5];\n  const stride3 = shape[4] * stride4;\n  const stride2 = shape[3] * stride3;\n  const stride1 = shape[2] * stride2;\n  const stride0 = shape[1] * stride1;\n  const newShape = util.squeezeShape(shape);\n  if (newShape.length < shape.length) {\n    const newInputInfo = squeezeInputInfo(inputInfo, newShape);\n    const params = ['row', 'col', 'depth', 'depth2', 'depth3', 'depth4'];\n    return `\n      float ${funcName}(int row, int col, int depth, int depth2, int depth3, int depth4) {\n        return float ${funcName}(${getSqueezedParams(params, keptDims)});\n      }\n    `;\n  }\n
  if (inputInfo.shapeInfo.isUniform) {\n    // Uniform arrays will be less than 65505 (no risk of float16 overflow).\n    return `\n      float ${funcName}(int row, int col, int depth, int depth2, int depth3, int depth4) {\n        return float ${funcName}(${getSqueezedParams(params, keptDims)});\n      }\n    `;\n  }\n
  const offset = getFlatOffsetUniformName(texName);\n  return `\n    float ${funcName}(int row, int col, int depth, int depth2, int depth3, int depth4) {\n      // Explicitly use integer operations as dot() only works on floats.\n      int index = row * ${stride0} + col * ${stride1} + depth * ${stride2} +
        depth2 * ${stride3} + depth3 * ${offset};\n      vec2 uv = uvFromFlat(${texNumR}, ${texNumC}, index + ${offset});\n      return sampleTexture(${texName}, uv);\n    }\n  `;\n}

function getSampler7D(inputInfo: InputInfo): string {\n  const shape = inputInfo.shapeInfo.logicalShape;\n  const texName = inputInfo.name;\n  const funcName = 'get' + texName.charAt(0).toUpperCase() + texName.slice(1);\n  const stride5 = shape[6];\n  const stride4 = shape[5] * stride5;\n  const stride3 = shape[4] * stride4;\n  const stride2 = shape[3] * stride3;\n  const stride1 = shape[2] * stride2;\n  const stride0 = shape[1] * stride1;\n  const newShape = util.squeezeShape(shape);\n  if (newShape.length < shape.length) {\n    const newInputInfo = squeezeInputInfo(inputInfo, newShape);\n    const params = ['row', 'col', 'depth', 'depth2', 'depth3', 'depth4', 'depth5'];\n    return `\n      float ${funcName}(int row, int col, int depth, int depth2, int depth3, int depth4, int depth5) {\n        return float ${funcName}(${getSqueezedParams(params, keptDims)});\n      }\n    `;\n  }\n
  if (inputInfo.shapeInfo.isUniform) {\n    // Uniform arrays will be less than 65505 (no risk of float16 overflow).\n    return `\n      float ${funcName}(int row, int col, int depth, int depth2, int depth3, int depth4, int depth5) {\n        return float ${funcName}(${getSqueezedParams(params, keptDims)});\n      }\n    `;\n  }\n
  const offset = getFlatOffsetUniformName(texName);\n  return `\n    float ${funcName}(int row, int col, int depth, int depth2, int depth3, int depth4, int depth5) {\n      // Explicitly use integer operations as dot() only works on floats.\n      int index = round(dot($getSqueezedParams(params, keptDims));\n      vec2 uv = uvFromFlat(${texNumR}, ${texNumC}, index + $offset);\n      return sampleTexture(${texName}, uv);\n    }\n  `;\n}

function getSampler8D(inputInfo: InputInfo): string {\n  const shape = inputInfo.shapeInfo.logicalShape;\n  const texName = inputInfo.name;\n  const funcName = 'get' + texName.charAt(0).toUpperCase() + texName.slice(1);\n  const stride6 = shape[7];\n  const stride5 = shape[6] * stride6;\n  const stride4 = shape[5] * stride5;\n  const stride3 = shape[4] * stride4;\n  const stride2 = shape[3] * stride3;\n  const stride1 = shape[2] * stride2;\n  const stride0 = shape[1] * stride1;\n  const newShape = util.squeezeShape(shape);\n  if (newShape.length < shape.length) {\n    const newInputInfo = squeezeInputInfo(inputInfo, newShape);\n    const params = ['row', 'col', 'depth', 'depth2', 'depth3', 'depth4', 'depth5', 'depth6'];\n    return `\n      float ${funcName}(int row, int col, int depth, int depth2, int depth3, int depth4, int depth5, int depth6) {\n        return float ${funcName}(${getSqueezedParams(params, keptDims)});\n      }\n    `;\n  }\n
  if (inputInfo.shapeInfo.isUniform) {\n    // Uniform arrays will be less than 65505 (no risk of float16 overflow).\n    return `\n      float ${funcName}(int row, int col, int depth, int depth2, int depth3, int depth4, int depth5, int depth6) {\n        return float ${funcName}(${getSqueezedParams(params, keptDims)});\n      }\n    `;\n  }\n
  const offset = getFlatOffsetUniformName(texName);\n  return `\n    float ${funcName}(int row, int col, int depth, int depth2, int depth3, int depth4, int depth5, int depth6) {\n      // Explicitly use integer operations as dot() only works on floats.\n      int index = round(dot($getSqueezedParams(params, keptDims));\n      vec2 uv = uvFromFlat(${texNumR}, ${texNumC}, index + $offset);\n      return sampleTexture(${texName}, uv);\n    }\n  `;\n}
```javascript
else if (outRank < 2 && broadcastDims.length >= 1) {
  coordsSnippet = `coords.$map((s, i) => `coords.${fields[i + rankDiff]})
  .join(' ');`;
}

let unpackedCoordsSnippet = "";
if (outRank < 2 && inRank > 0) {
  unpackedCoordsSnippet = 'coords';
}
else {
  unpackedCoordsSnippet = inputInfo.shapeInfo.logicalShape
    .map((s, i) => `coords.${fields[i + rankDiff]})
    .join(', ')`;
}

let unpackedInputInfo = '';
if (outRank < 2 && inRank > 0) {
  unpackedInputInfo = 'coords';
}
else {
  unpackedInputInfo = inputInfo.shapeInfo.logicalShape
    .map((s, i) => `coords.${fields[i + rankDiff]})
    .join(', ')`;
}

return `
  float ${funcName}() {
    ${type} coords = getOutputCoords();
    ${coordsSnippet}
    return
      get${texFuncSnippet}(${unpackedCoordsSnippet});
  }
`;

export function getCoordsDataType(rank: number): string {
  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(
    inInfo: InputInfo, squeezedShape: number[]): InputInfo {
  // Deep copy.
  const 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(', ');
}
```

false); \n if (env().getNumber("WEBGL_VERSION") !== 1) { \n   infLoc = gpgpu.getUniformLocation(webGLProgram, 'INFINITY', false); \n  } \n  // Add user-defined uniforms \n const uniformLocations: {[name: string]: WebGLUniformLocation} = {}; \n  for (let i = 0; i < program.variableNames.length; i++) { \n    const varName = program.variableNames[i]; \n    const shouldThrow = false; \n    uniformLocations[varName] = gpgpu.getUniformLocation(webGLProgram, varName, shouldThrow); \n    uniformLocations[`offset${varName}`] = gpgpu.getUniformLocation(webGLProgram, `offset${varName}`, shouldThrow); \n  } \n  return { \n    program, \n    source, \n    webGLProgram, \n    uniformLocations, \n    inShapeInfos, \n    outShapeInfo, \n    infLoc, \n    nanLoc, \n  }; \n}\n
function validateBinaryAndProgram(\n    inShapeInfos: ShapeInfo[], \n    inputs: TensorData[]\n) { \n  if (inShapeInfos.length !== inputs.length) { \n    throw Error(`Binary was compiled with ${inShapeInfos.length} inputs, but ` + `was executed with ${inputs.length} inputs`); \n  } \n  \n  forEach((s, i) => { \n    const varName = program.variableNames[i]; \n    const shouldThrow = false; \n    uniformLocations[varName] = gpgpu.getUniformLocation(webGLProgram, varName, shouldThrow); \n    uniformLocations[`offset${varName}`] = gpgpu.getUniformLocation(webGLProgram, `offset${varName}`, shouldThrow); \n  }); \n  return { \n    program, \n    source, \n    webGLProgram, \n    uniformLocations, \n    inShapeInfos, \n    outShapeInfo, \n    infLoc, \n    nanLoc, \n  }; \n}\n
export function runProgram<T extends Tensor, K extends Tensor>(\n    gpgpu: GPGPUContext, \n    binary: GPGPUBinary, \n    inputs: TensorData[], \n    output: TensorData, \n    customSetup?: (gpgpu: GPGPUContext, webGLProgram: WebGLProgram) => void\n) { \n  validateBinaryAndProgram(binary.inShapeInfos, inputs); \n  validateBinaryAndProgram([binary.outShapeInfo], [output]); \n  \n  const outTex = output.texData.texture; \n  const outTexShape = output.texData.texShape; \n  if (output.texData.isPacked) { \n    gpgpu.setOutputPackedMatrixTexture(outTex, outTexShape[0], outTexShape[1]); \n  } else { \n    gpgpu.setOutputMatrixTexture(outTex, outTexShape[0], outTexShape[1]); \n  } \n  \n  gpgpu.setProgram(binary.webGLProgram); \n  \n  // Set special uniforms (NAN, INFINITY) \n  \n  if (env().getNumber("WEBGL_VERSION") !== 1) { \n    if (binary.infLoc !== null) { \n      gpgpu.gl.uniform1f(binary.infLoc, Infinity); \n    } \n    if (binary.nanLoc !== null) { \n      gpgpu.gl.uniform1f(binary.nanLoc, NaN); \n    } \n  } \n  \n  \n  inputs.forEach((input, i) => { \n    const varName = binary.program.variableNames[i]; \n    const varLoc = uniformLocations[varName]; \n    const varOffsetLoc = uniformLocations[`offset${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(binary.inShapeInfos[i], input.uniformValues[0]); \n      } else { \n        let vals = input.uniformValues; \n        if (!Array.isArray(vals)) { \n          vals = new Float32Array(vals); \n        } \n        gpgpu.gl.uniform1fv(varLoc, vals); \n      } \n    } \n    \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  \n  gpgpu.executeProgram(); \n  \n}\n
export function makeShaderKey(\n    program: GPGPUProgram, \n    inputs: TensorData[], \n    output: TensorData\n) { \n  let keyInputs = ''; \n  inputs.concat(output).forEach(x => { \n    const hasOffset = x.texData != null && x.texData.slice != null && 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  \n  \n  if (customSetup != null) { \n    customSetup(gpgpu, binary.webGLProgram); \n  } \n
  return keyUserCode + program.constructor.name; \n} \n
// Fast string concat. See https://jsperf.com/string-concatenation/14. \n\n\n
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=============================================================================

*/

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

export function assertNotComplex(
    tensor: TensorInfo|TensorInfo[], opName: string): void {
  if (!Array.isArray(tensor)) {
    tensor = [tensor];
  }
  tensor.forEach(t => {
    if (t != null) {
      util.assert(
        t.dtype !== 'complex64',
        () => `${
          opName} does not support complex64 tensors in the CPU backend.`);
    }
  });
}

*/

import {Abs, AbsInputs, KernelConfig, KernelFunc, TypedArray, util} from '@tensorflow/tfjs-core';

import {MathBackendCPU} from '../backend_cpu';
import {assertNotComplex} from '../cpu_util';

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');

  let resultValues = new Float32Array(util.sizeFromShape(x.shape));
  const values = cpuBackend.data.get(x.dataId).values as TypedArray;
  resultValues = simpleAbsImpl(values);

  return cpuBackend.makeOutput(resultValues, x.shape, 'float32');
};

export const absConfig: KernelConfig = {
  kernelName: Abs,
  backendName: 'cpu',
  kernelFunc: abs as {} as KernelFunc,
};

*/

import {backend_util, DataType, NumericDataType, TypedArray, util} from '@tensorflow/tfjs-core';

import {SimpleBinaryKernelImpl, SimpleBinaryOperation} from './binary_types';

/**
 * Template that creates implementation for binary ops. Supports broadcast.
 */
export function createSimpleBinaryKernelImpl(op: SimpleBinaryOperation):
    SimpleBinaryKernelImpl {
  return (aShape: number[], bShape: number[], aVals: TypedArray,
          bVals: TypedArray, dtype: DataType): [TypedArray, number[]] => {
    const newShape = backend_util.assertAndGetBroadcastShape(aShape, bShape);
    const resultRank = newShape.length;
    const resultStrides = util.computeStrides(newShape);
    const resultSize = util.sizeFromShape(newShape);
    const result = util.getTypedArrayFromDType(dtype as NumericDataType, resultSize);
    const aRank = aShape.length;
    const bRank = bShape.length;
    const aStrides = util.computeStrides(aShape);
    const bStrides = util.computeStrides(bShape);
    const aBroadcastDims = backend_util.BroadcastDims(aShape, newShape);
    const bBroadcastDims = backend_util.BroadcastDims(bShape, newShape);
    if (aBroadcastDims.length + bBroadcastDims.length === 0) {
      for (let i = 0; i < result.length; ++i) {
        result[i] = op(aVals[i % aVals.length], bVals[i % bVals.length]);
      }
    } else {
      for (let i = 0; i < result.length; ++i) {
        const loc = util.indexToLoc(i, resultRank, resultStrides);
        const aLoc = loc.slice(-aRank);
        const bLoc = loc.slice(-bRank);
        aBroadcastDims.forEach(d => aLoc[d] = 0);
        bBroadcastDims.forEach(d => bLoc[d] = 0);
      }
    }
    return [result, resultStrides];
  };

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bIndex = util.locToIndex(bLoc, bRank, bStrides);

result[i] = op(aVals[aIndex], bVals[bIndex]);

return [result, newShape];

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 */

import {Complex, ComplexInputs, KernelConfig, KernelFunc, TensorInfo, TypedArray} from '@tensorflow/tfjs-core';

import {MathBackendCPU} from '../backend_cpu';

export function complex(args: {inputs: ComplexInputs, backend: MathBackendCPU}): TensorInfo {
  const {inputs, backend} = args;
  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. * complex.tensorInfos = {
    real: backend.makeTensorInfo(real.shape, 'float32'),
    imag: backend.makeTensorInfo(imag.shape, 'float32')
  };

  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 zerosConfig: KernelConfig = {
  kernelName: zeros,
  backendName: 'cpu',
  kernelFunc: zeros 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 {KernelConfig, KernelFunc, 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 // value is still accessible even if complex tensor is disposed.
  return backend.makeTensorInfo(real.shape, real.dtype, realVal);
}

export const realConfig: KernelConfig = {
  kernelName: Real,
  backendName: 'cpu',
  kernelFunc: real as {} 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 precision. We const result = identity({inputs: [x], backend});
    return (datadl: resultdatald, shape: resultshape, dtype: resultdtype: value: TypedArray: resultValues: Int32Array: values: return backend.makeTensorInfo(x.shape, 'int32', resultValues:))
    return (bool: true) {
      // This is essentially the result of notEqual(x, 0). We avoid using
      // kernel notEqual to avoid circular dependency, i.e. binary_utils ->
      // cast -> notEqual -> binary_utils.cn const xVals = backend.data.get(x.dataId).values as TypedArray; cn const zero = util.toTypedArray([0]);
      x.dtype: cn const result = createSimpleBinaryKernelImpl (1: 0)(x.shape, [], xVals, 'bool');
      return backend.makeTensorInfo(resultShape, 'bool', resultData);
    }
    return x.dtype; // This is essentially the result of notEqual(x, 0).
    return (a := b : ? 1 : 0)(x.shape, [xVals, zero, 'bool']);
    return backend.makeTensorInfo(resultShape, 'bool', resultData);
  }

  throw new Error('Error in Cast: failed to cast $x$ to $dtype$');
}

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

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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.
 * @param binaryKernelImpl A `SimpleBinaryKernelImpl` for the kernel.
 * @param binaryKernelComplexImpl Optional. If exists, represents a complex
 * `SimpleBinaryKernelImpl` 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 op's
 * `broadcast` implementation.
 */
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;

      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);
    };
  }

  return ({inputs, backend}) => {
    const {a, b} = inputs as BinaryInputs;
    const cpuBackend = backend as MathBackendCPU;

    if (a.dtype === 'complex64' || b.dtype === 'complex64') {
      const $aComplex = cast(
        {inputs: {x: a}, backend: cpuBackend, attrs: {dtype: 'complex64'}});

      const $aComplexVals = cpuBackend.data.get($aComplex.dataId);

      const aReal =
        $aComplexVals.complexTensorInfos.real;
      const aImag =
        $aComplexVals.complexTensorInfos.imag;

      const aRealVals =
        cpuBackend.data.get(aReal.dataId).values as Float32Array;
      const aImagVals =
        cpuBackend.data.get(aImag.dataId).values as Float32Array;

      const $bComplex = cast(
        {inputs: {x: b}, backend: cpuBackend, attrs: {dtype: 'complex64'}});

      const $bComplexVals =
        cpuBackend.data.get($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 resultReal =
        cpuBackend.makeTensorInfo(resultShape, 'float32', resultData);
      const resultImagData =
        cpuBackend.makeTensorInfo(resultShape, 'float32', resultData);

      const result = complex(
        {inputs: {real: resultReal, imag: resultImagData}, backend: cpuBackend});

      cpuBackend.disposeIntermediateTensorInfo($aComplex);
      cpuBackend.disposeIntermediateTensorInfo($bComplex);
      cpuBackend.disposeIntermediateTensorInfo(resultReal);
    } 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);
    }
  };
}
a查明Vals: 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) {
    const resultRealVals[i] = result.real;
    const resultImagVals[i] = result.imag;
  } else {
    const aIdx = i % aVals.length;
    const bIdx = i % bVals.length;
    const result = op(aVals[aIdx * 2], aVals[aIdx * 2 + 1], bVals[bIdx * 2], bVals[bIdx * 2 + 1]);
    resultRealVals[i] = result.real;
    resultImagVals[i] = result.imag;
  }
  return [resultRealVals, resultImagVals, resultShape];
};

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 */

import {Add, KernelConfig} from '@tensorflow/tfjs-core';
import {createSimpleBinaryKernelImpl} from '../utils/binary_impl';
import {binaryKernelFunc, createComplexBinaryKernelImpl} from '../utils/binary_utils';

export const addImpl = createSimpleBinaryKernelImpl(((a, b) => a + b));
export const addComplexImpl = createComplexBinaryKernelImpl(((aReal, aImag, bReal, bImag) => {
  return {real: aReal + bReal, imag: aImag + bImag};
}));

export const add = binaryKernelFunc(Add, addImpl, addComplexImpl);

export const addConfig: KernelConfig = {
  kernelName: Add,
  backendName: 'cpu',
  kernelFunc: add
};

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 */

import {buffer, DataType, Rank, TensorBuffer, TypedArray, util} from '@tensorflow/tfjs-core';

export function bincountImpl(
    xVals: TypedArray, weightsVals: TypedArray, weightsDtype: DataType,
    weightsShape: number[], size: number): TypedArray {
  const weightsSize = util.sizeFromShape(weightsShape);
  const outVals = util.makeZerosTypedArray(size, weightsDtype);
  const outIndex = util.locToIndex(outVals.shape);  
  for (let i = 0; i < xVals.length; i++) {
    const xVal = xVals[i];
    if (value < 0) {
      throw new Error('Input x must be non-negative!');
    }
    if (xVal >= size) {
      continue;
    }
    const wVal = weightsVals[outIndex];
    if (wVal > 0) {
      outVals[outIndex] += wVal;
    }
  }
  return outVals;
    }
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';
import {createSimpleUnaryImpl} from '../utils/unary_impl';
import {unaryKernelFuncFromImpl} from '../utils/unary_utils';

export const ceilImpl = createSimpleUnaryImpl((xi) => Math.ceil(xi));
export const ceil = unaryKernelFuncFromImpl(Ceil, ceilImpl);

export const ceilConfig: KernelConfig = {
  kernelName: Ceil,
  backendName: 'cpu',
  kernelFunc: ceil,
};

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 */

import {backend_util, BackendValues, DataType, TypedArray, util} from '@tensorflow/tfjs-core';

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) {
        for (let col = 0; col < input.shape[1]; ++col) {
          outVals[colOffset + col] = decodedData[tIdx++];
        }
        colOffset += input.shape[1];
      }
    });
  }

  return outVals;
}

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 */

import {Exp, KernelConfig} from '@tensorflow/tfjs-core';
import {createSimpleUnaryImpl} from '../utils/unary_impl';
import {unaryKernelFuncFromImpl} from '../utils/unary_utils';

export const 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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=============================================================================

```javascript
import {Expm1, KernelConfig} from '@tensorflow/tfjs-core';
import {createSimpleUnaryImpl} from './utils/unary_impl';

const expm1Impl = createSimpleUnaryImpl((xi) => Math.expm1(xi));

export const expm1 = unaryKernelFuncFromImpl(Expm1, expm1Impl);

export const expm1Config: KernelConfig = {
  kernelName: Expm1,
  backendName: 'cpu',
  kernelFunc: expm1,
};
```

*/

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

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

const floorImpl = createSimpleUnaryImpl((xi) => Math.floor(xi));

export const floor = unaryKernelFuncFromImpl(Floor, floorImpl);

export const floorConfig: KernelConfig = {
  kernelName: Floor,
  backendName: 'cpu',
  kernelFunc: floor,
};
```

*/

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

```javascript
import {buffer, DataType, Rank, TensorBuffer} from '@tensorflow/tfjs-core';

export function gatherV2Impl<R extends Rank, D extends DataType>(
    xBuf: TensorBuffer<R, D>, indicesBuf: TensorBuffer<R, D>,
    flattenOutputShape: number[]): TensorBuffer<R, D> {
  const outBuf = buffer(flattenOutputShape, xBuf.dtype);
  for (let i = 0; i < outBuf.size; ++i) {
    const newLoc = outBuf.indexToLoc(i);
    const originalLoc: number[] = newLoc.slice();
    const batchIdx = originalLoc[0];
    const indicesIdx = originalLoc[2];
    const indicesIndex = indicesBuf.locToIndex([batchIdx, indicesIdx]);
    originalLoc[2] = indicesBuf.values[indicesIndex] as number;
    const originalIndex = xBuf.locToIndex(originalLoc);
    outBuf.values[i] = xBuf.values[originalIndex];
  }
  return outBuf as TensorBuffer<R, D>;
}
```

*/

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

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

const greaterImpl = createSimpleBinaryKernelImpl((a: number, b: number) => (a > b) ? 1 : 0);

export const greater = binaryKernelFunc(Greater, greaterImpl, null /* complexImpl */, 'bool');

export const greaterConfig:
```

*/

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

```javascript
import {buffer, DataType, Rank, TensorBuffer} from '@tensorflow/tfjs-core';

export function gatherV2Impl<R extends Rank, D extends DataType>(
    xBuf: TensorBuffer<R, D>, indicesBuf: TensorBuffer<R, D>,
    flattenOutputShape: number[]): TensorBuffer<R, D> {
  const outBuf = buffer(flattenOutputShape, xBuf.dtype);
  for (let i = 0; i < outBuf.size; ++i) {
    const newLoc = outBuf.indexToLoc(i);
    const originalLoc: number[] = newLoc.slice();
    const batchIdx = originalLoc[0];
    const indicesIdx = originalLoc[2];
    const indicesIndex = indicesBuf.locToIndex([batchIdx, indicesIdx]);
    originalLoc[2] = indicesBuf.values[indicesIndex] as number;
    const originalIndex = xBuf.locToIndex(originalLoc);
    outBuf.values[i] = xBuf.values[originalIndex];
  }
  return outBuf as TensorBuffer<R, D>;
}
```

*/

=============================================================================
KernelConfig = {
  kernelName: 'Greater',
  backendName: 'cpu',
  kernelFunc: 'greater'
};

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 */

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

export const lessImpl = createSimpleBinaryKernelImpl((a: number, b: number) => (a < b) ? 1 : 0);
export const less = binaryKernelFunc(Less, lessImpl, null /* complexImpl */, 'bool');

export const lessConfig: KernelConfig = {
  kernelName: 'Less',
  backendName: 'cpu',
  kernelFunc: less
};

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 */

import {TypedArray, util} from '@tensorflow/tfjs-core';

export function linSpaceImpl(
    start: number,
    stop: number, num: number): TypedArray {
  const step = (stop - start) / (num - 1);

  const values = util.makeZerosTypedArray(num, 'float32');
  values[0] = start;
  for (let i = 1; i < values.length; i++) {
    values[i] = values[i - 1] + step;
  }

  return values;
}

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 */

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;
}
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--

```javascript
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
};
```

--

```javascript
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
};
```

--

```javascript
import {KernelConfig, Multiply} from '@tensorflow/tfjs-core';
import {createSimpleBinaryKernelImpl} from './utils/binary_impl';
import {createComplexBinaryKernelImpl} from './utils/binary_utils';

export const multiplyImpl = createSimpleBinaryKernelImpl(((aValue, bValue) => aValue * bValue));
export const multiplyComplexImpl = createComplexBinaryKernelImpl(((aReal, aImag, bReal, bImag) => {
  return {
    real: aReal * bReal - aImag * bImag,
    imag: aReal * bImag + aImag * bReal
  };
}));

export const multiply = binaryKernelFunc(Multiply, multiplyImpl, multiplyComplexImpl);

export const multiplyConfig: KernelConfig = {
  kernelName: Multiply,
  backendName: 'cpu',
  kernelFunc: multiply
};
```

--

```javascript
import {DataType, KernelConfig, KernelFunc, Neg, TensorInfo, TypedArray, UnaryInputs, util} from '@tensorflow/tfjs-core';
import {MathBackendCPU} from '../backend_cpu';
import {assertNotComplex} from ...
```
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;
  return backend.makeTensorInfo(x.shape, x.dtype, negConfig);
}

export const negConfig: KernelConfig = {
  kernelName: Neg,
  backendName: 'cpu',
  kernelFunc: neg
};

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
const {transpose} = require('./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(
      util.sizeFromShape(outShape), outDtype) as TypedArray;
  const reduceSize = util.sizeFromShape(reduceShape);
  for (let i = 0; i < reduceSize; ++i) {
    let prod = 1;
    for (let j = 0; j < reduceSize; ++j) {
      prod *= xVals[i + j];
    }
    outVals[i] = prod;
  }
  return {outVals, outShape, outDtype};
}

export function prod(
    args: {inputs: ProdInputs, backend: MathBackendCPU, attrs: ProdAttrs}):
    TensorInfo {
  const {inputs, backend,
```
decreasingRangePositiveStep {
  return util.makeZerosTypedArray(0, dtype);}

const numElements = Math.abs(Math.ceil((stop - start) / step));
const values = util.makeZerosTypedArray(numElements, dtype);
if (stop < start) {
  numElements = Math.abs(numElements);
  start = stop;
}

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, Rsqrt} from '@tensorflow/tfjs-core';

import {createSimpleUnaryImpl} from '../utils/unary_impl';
import {unaryKernelFuncFromImpl} from '../utils/unary_utils';

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,
};

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 */

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

import {MathBackendCPU} from '../backend_cpu';
import {assertNotComplex} from '../cpu_util';

export function sliceImpl(
    vals: BackendValues, begin: number[], size: number[], shape: number[],
    dtype: DataType): BackendValues {
  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 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 outBuf = buffer(shape, dtype, decodedData);
  const outLoc = outBuf.indexToLoc(...);

  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);
}

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xBuf.shape[i] * reps[i];
  }
  const result = buffer(newShape, xBuf.dtype);
  for (let i = 0; i < result.values.length; ++i) {
    const newLoc = result.indexToLoc(i);
    const originalLoc = new Array(xBuf.rank);
    for (let j = 0; j < originalLoc.length; j++) {
      originalLoc[j] = newLoc[j] % xBuf.shape[j];
    }
    const originalIndex = xBuf.locToIndex(originalLoc);
    result.values[i] = xBuf.values[originalIndex];
  }
  return result as TensorBuffer<R, DataType>;
}

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 */

/** An implementation of the TopK kernel shared between webgl and cpu. */

import {buffer, NumericDataType, Rank, ShapeMap, Tensor, TensorBuffer, TypedArray, util} from '@tensorflow/tfjs-core';

export function topKImpl<T extends Tensor, R extends Rank>(
    x: TypedArray, xShape: number[], xDtype: NumericDataType, k: number,
    sorted: boolean):
    [TensorBuffer<R, NumericDataType>,
     TensorBuffer<R, 'int32'>] {
  // Reshape into a 2d tensor [batch, lastDim] and compute topk along lastDim.
  const lastDim = xShape[xShape.length - 1];
  const [batch, size] = [x.length / lastDim, lastDim];
  const allTopKVals = util.getTypedArrayFromDType(xDtype, batch * k);
  const allTopKIndices = util.getTypedArrayFromDType('int32', batch * k);
  for (let b = 0; b < batch; b++) {
    const offset = b * size;
    const vals = x.subarray(offset, offset + 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);
    const outOffset = b * k;
    const topKVals = allTopKVals.subarray(outOffset, outOffset + k);
    const topKIndices = allTopKIndices.subarray(outOffset, outOffset + k);
    for (let i = 0; i < k; i++) {
      topKVals[i] = valAndInd[i].value;
      topKIndices[i] = valAndInd[i].index;
    }
  }
  // Reshape back to the original input shape, except that the last // dimension is k.
  const outputShape = xShape.slice();
  outputShape[outputShape.length - 1] = k;
  return [buffer(outputShape as ShapeMap[R], xDtype,
      allTopKVals),
     buffer(outputShape as ShapeMap[R], 'int32', allTopKIndices)];
}

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 */

import {BackendValues, DataType, TensorBuffer, TypedArray, util} from '@tensorflow/tfjs-core';

export function uniqueImpl(
    values: BackendValues, axis: number, shape: number[], dtype: DataType): {
  outputValues: BackendValues,
  outputShape: number[],
  indices: BackendValues
} {
  // Normalize and validate axis.
  const axis = util.parseAxisParam(axis, shape)[0];
  // Calculate the new shape that is suitable for extracting data along the axis.
  // The rank is 3.
  // The size of the 1st dimension is the size of all the axes < the given axis.
  // The size of the 2nd dimension is the same as the size of the given axis.
  // The size of the 3rd dimension is the size of all the axes > the given axis.
  // For example, for a 4D tensor with shape=[2, 3, 5, 4] and axis=2, the new shape would be: [2*3, 5, 4].
  // Note that this is not the final output shape. This will be the shape for an intermediate TensorBuffer (see inputBuffer below) to allow us to extract values along the given axis. To demonstrate how it works, consider the following example:
  // Input: a 3D tensor, with shape [1, 2, 3].
  // Output: a 2D tensor, with shape [4, 5, 6].
  // For this example, newShape would be: [2, 3, 1], where 2 is calculated from the input 1*2. The re-shaped data would look like:

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Then, we can construct a 3-level nested loop by the following dimension 

\[ \text{axis} \times \text{newShape}[0] \times \text{newShape}[2] \]

\( \text{const newShape} = [1, \text{shape}[0], 1] \) for (let i = 0; i < \text{shape} lengths; i++) \( \text{for (let m = 0; m < \text{newShape}[0]; m++)} \)

\( \text{for (let n = 0; n < \text{newShape}[2]; n++)} \)

\( \text{uniqueElements[j]} = \text{uniqueElements[element[i]] + 1} \)

\( \text{uniqueShape} = \text{shape} \) for (let i = 0; i < \text{shape} lengths; i++)

\( \text{for (let m = 0; m < \text{newShape}[0]; m++)} \)

\( \text{for (let n = 0; n < \text{newShape}[2]; n++)} \)

\( \text{outputShape} = [\text{uniqueShape}] \)

\( \text{outputShape} = [\text{uniqueShape}] \)
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 *
 *=============================================================================
 */

export function getVecChannels(name: string, rank: number): string[] {
  return ['x', 'y', 'z', 'w', 'u', 'v'].slice(0, rank).map(d => `${name}.${d}`);
}

export function getChannels(name: string, rank: number): string[] {
  if (rank === 1) {
    return [name];
  }
  return getVecChannels(name, rank);
}

export function getSourceCoords(rank: number, dims: string[]): string[] {
  if (rank === 1) {
    return ['rc'];
  }
  let coords = "\nfor (let i = 0; i < rank; i++) {
  coords += dims[i] + "\n  if (i < rank - 1) {
    coords += ',';\n  }\n\n  return coords;\n";
  return [coords];
}

/*
 * Export function getVecChannels(name: string, rank: number): string[] {
 * return ['x', 'y', 'z', 'w', 'u', 'v'].slice(0, rank).map(d => 
 *   `${name}.${d}`);\n *}\n * Export function getChannels(name: string, rank: number): string[] {
 * if (rank === 1) {
 *   return [name];\n * }\n * return getVecChannels(name, rank);\n *}\n * Export function getSourceCoords(rank: number, dims: string[]): string[] {
 * return ['rc'];\n *}\n */

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

*/

import {GPGPUProgram} from './gpgpu_math';
import {getChannels} from './packing_util';
import {getCoordsDataType} from './shader_compiler';

export class PackProgram implements GPGPUProgram {
  variableNames = ['A'];
  outputShape: number[];
  userCode: string;
  packedInputs = false;
  packedOutput = true;
  constructor(outputShape: number[], number[]) { //
    this.outputShape = outputShape;
    let main = `void main() { setOutput(vec4(getA(), 0., 0., 0.)); }`;
    else {
      const channels = getChannels('rc', rank);
      const dtype = getCoordsDataType(rank);
      const outOfBoundsCondition = getOutOfBoundsCondition(rank, outputShape, channels);
      const setup = getSetup(rank, outputShape.length - 1);
      const output = getOutput(outputShape, channels);
      this.userCode = `void main() {
        ${dtype} rc = getOutputCoords();
        if($outOfBoundsCondition) {
          setOutput(vec4(0));
        } else {
          ${setup}
          setOutput(vec4(${output}));
        }
      }`;
    }
  }
}

function getSourceCoordsArr(rank: number, dims: string[]): string[] {
  let coords = [];
  for (let row = 0; row <= 1; row++) {
    for (let col = 0; col <= 1; col++) {
      let coord = `${row === 0 ? 'r' : 'rp1'}, ${col === 0 ? 'c' : 'cp1'}`;
      for (let d = 2; d < rank; d++) {
        coord = `${dims[dims.length - 1 - d]},` + coord;
      }
      coords.push(coord);
    }
  }
  return coords;
}

function getOutOfBoundsCondition(rank: number, shape: number[], dims: string[]): string {
  if (rank === 1) {
    return `rc > ${shape[0]}`;
  }
  let cond = '';
  for (let i = rank - 2; i < rank; i++) {
    cond += `${dims[i]} >= ${shape[i]}`;
    if (i < rank - 1) {
      cond += '||';
    }
  }
  return cond;
}

function getSetup(rank: number, cols: number, rows: number, dims: string[]): string {
  if (rank === 1) {
    return '';
  }
  const innerDims = dims.slice(-2);
  return `
    int r = ${innerDims[0]};
    int c = ${innerDims[1]};
    int rp1 = r + 1;
    int cp1 = c + 1;
    bool cEdge = cp1 >= cols;
    bool rEdge = rp1 >= rows;
    int flatIndex = getFlatIndex(ivec3(r, c, 0));
    int thisRC = 
    for (let i = 0; i < 4; i++) {
      let thisRC = `thisRC = `;
      if (i % 2 === 1) {
        thisRC += `thisRC.z += 1;`;
      }
      if (i > 0) {
        thisRC += `thisRC.y += 1;`;
      }
      if (flatIndex >= $[shape[0]]) {
        goto getA(rc),
        thisRC + 1 >= $[shape[0]] ? 0 : getA(rc + 1), 0, 0;
      }
    }
  `;
}

export class ReshapePackedProgram implements GPGPUProgram {
  variableNames = ['A'];
  packedInputs = true;
  packedOutput = true;
  outputShape: number[];
  userCode: string;
  constructor(outputShape: number[], number[], number[]) { //
    this.outputShape = outputShape;
    let mainLoop = ``;
    let thisRC = `thisRC = rc;
    if (i % 2 === 1) {
      thisRC += `thisRC.z += 1;
    } else {
      thisRC += `thisRC.y += 1;
    }
    if (flatIndex >= $[thisRC]) {
      goto $[thisRC] & thisRC.z < cols {`;
    };
    int flatIndex = getFlatIndex(ivec3(rc));
    vec3 inputRC =

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```javascript
getPhysicalFromLogicalTextureType(logicalTexType, isPacked); const shapeKey = getKeyFromTextureShape(shape, physicalTexType, isPacked); if (!this.freeTextures[shapeKey] || this.freeTextures[shapeKey].length === 0) {
  const texBytes = computeBytes(shape, physicalTexType, this.gpgpu.gl, this.gpgpu.textureConfig, this.isPacked); const deleteTexThreshold = env().get('WEBGL_DELETE_TEXTURE_THRESHOLD'); if (deleteTexThreshold !== -1 && this.numBytesAllocated > deleteTexThreshold) {
    this.gpgpu.deleteMatrixTexture(texture); this.numUsedTextures -= texBytes;
  } else if (this.freeTextures[shapeKey].length > 0) {
    this.freeTextures[shapeKey].push(texture);
    this.numFreeTextures++;
    this._numBytesFree += texBytes;
    this.numUsedTextures--;
  } else if (this.freeTextures[shapeKey].length === 0) {
    throw new Error('Cannot release a texture that was never provided by this texture manager');
  }
}
```

```javascript
function computeBytes(shape: [number, number], physicalTexType: PhysicalTextureType, gl: WebGLRenderingContext, textureConfig: TextureConfig, isPacked: boolean): number {
  const internalFormat = internalFormatForPhysicalTexType(physicalTexType, textureConfig);

  let numElements: number;
  if (isPacked) {
    const [packedWidth, packedHeight] = getPackedMatrixTextureShapeWidthHeight(shape[0], shape[1]);
    numElements = packedWidth * packedHeight;
  } else {
    const [width, height] = getUnpackedMatrixTextureShapeWidthHeight(shape[0], shape[1]);
    numElements = width * height;

    const bytesPerElement = numBytesForInternalFormat(gl, internalFormat);
    return numElements * bytesPerElement;
  }
}
```
result.b

result.a = isNaN.a ? x.a : result.a;

return result;

export const RELU6 = `vec4 result =
  vec4(max(x, vec4(6.)) * vec4(greaterThanEqual(x, vec4(0.0))));
 beau4 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 class UnaryOpPackedProgram implements GPGPUProgram {
  variableNames = ['A'];
  userCode: string;
  outputShape: number[];
  packedInputs = true;
  packedOutput = true;
  constructor(aShape: number[], opSnippet: string) {
    this.outputShape = aShape;
    this.userCode = `vec4 unaryOperation(vec4 x) {
        ${opSnippet}
      }

      void main() {
        vec4 x =
          getAAtOutCoords();
        vec4 y = unaryOperation(x);
        setOutput(y);
      }
    `;
  }
}

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

import {GPGPUProgram} from './gpgpu_math';
import {getChannels, getSourceCoords} from '../packing_util';
import {getCoordDataType} from '../shader_compiler';
unexport class UnpackProgram implements GPGPUProgram {
  variableNames = ['A'];
  packedInputs = true;
  packedOutput = false;
  outputShape: number[];
  userCode: string;

  constructor(outputShape: number[]) {
    this.outputShape = outputShape;
    const rank = outputShape.length;

    const channels = getChannels('rc', rank);
    const dtype = getCoordDataType(rank);
    const sourceCoords = getSourceCoords(rank, channels);
    const innerDims = channels.slice(-2);
    const coords = rank <= 1 ? 'rc' : `vec2(${innerDims.join(',')})`;

    this.userCode = `void main() {
        ${dtype} rc = getOutputCoords();
        vec4 packedInput = getA(${sourceCoords});

        setOutput(getChannel(packedInput, ${coords}));
      }
    `;
  }
}

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

import {getWebGLContext} from './canvas_util';
import {DecodeMatrixProgram} from './decode_matrix_gpu';
import {DecodeMatrixPackedProgram} from './decode_matrix_packed_gpu';
import {EncodeFloatProgram} from './encode_float_gpu';
import {EncodeFloatPackedProgram} from './encode_float_packed_gpu';
import {EncodeMatrixProgram} from './encode_matrix_gpu';
import {EncodeMatrixPackedProgram} from './encode_matrix_packed_gpu';
import {GPGPUContext} from './gpgpu_context';
import {GPGPUProgram} from './gpgpu_math';
import {GPGPUBinary, GPGPUProgram, TensorData} from './gpgpu_math';
import {simpleAbsImplCPU} from './kernel_utils/shared';
import {PackProgram} from './pack_gpu';
import {ReshapePackedProgram} from './reshape_packed_gpu';
import {TensorData, TextureUsage} from './tex_util';
import {TextureManager} from './texture_manager';
import {UnaryOperationProgram} from './unaryop_gpu';
import {UnaryOperationProgram} from './unaryop_packed_gpu';
import {UnaryOpProgram} from './unaryop_packed_gpu';
import {UnpackProgram} from './unpack_gpu';
import {UnpackProgram} from './unpack_packed_gpu';
import {WebGLUtil} from './webgl_util';
import {KernelInfo} from './kernel_info';

const whereImpl = kernel_impls.whereImpl;

export const EPSILON_FLOAT32 = 1e-7;
export const EPSILON_FLOAT16 = 1e-4;

type KernelInfo = {
  name: string;
```
Promise<number>;

export type TimerNode = RecursiveArray<KernelInfo>|KernelInfo;

export interface CPUTimerQuery {
  startMs: number;
  endMs?: number;
}

export interface WebGLMemoryInfo extends MemoryInfo {
  numBytesInGPU: number;
  // Tracks the total number of bytes allocated on the GPU, accounting for the
  // physical texture type.
  numBytesInGPUAllocated: number;
  // Tracks byte size of textures that were created and then made available for
  // reuse (disposed).
  numBytesInGPUPFree: number;
  unreliable: boolean;
}

export function getBinaryCache(webGLVersion: number): {
  [key: string]: GPGPUBinary;
}

export class MathBackendWebGL extends KernelBackend {
  texData: DataStorage<TextureData>;
  gpgpu: GPGPUContext;
  private static nextDataId = 0;
  private nextDataId(): number {
    return MathBackendWebGL.nextDataId++;
  }
  private pendingRead = new WeakMap<DataId, Array<(arr: TypedArray) => void>>();
  private pendingDisposal = new WeakSet<DataId>();
  private dataRefCount = new WeakMap<DataId, number>();
  private numBytesInGPU = 0;
  private canvas: HTMLCanvasElement|OffscreenCanvas;
  private programTimersStack: TimerNode[];
  private activeTimers: TimerNode[];
  private uploadWaitMs = 0;
  private downloadWaitMs = 0;
  private cpuBackend: KernelBackend;
  private floatPrecisionValue: 32|16;
  private textureManager: TextureManager;
  private gpgpuCreatedLocally: boolean;

  constructor(gpgpu?: GPGPUContext) {
    super();
    if (!env().getBool('HAS_WEBGL')) {
      throw new Error('WebGL is not supported on this device');
    }
    if (gpgpu == null) {
      const gl = getWebGLContext(env().getNumber('WEBGL_VERSION'));
      this.binaryCache = getBinaryCache(env().getNumber('WEBGL_VERSION'));
      this.gpgpu = new GPGPUContext(gl);
      this.canvas = gl.canvas;
      this.gpgpuCreatedLocally = true;
    } else {
      this.gpgpu = gpgpu;
      this.canvas = gpgpu.gl.canvas;
      this.gpgpuCreatedLocally = false;
    }
    this.textureManager = new TextureManager(this.gpgpu);
  }

  public numDataIds() {
    return this.texData.numDataIds() +
        (this.cpuBackend ? this.cpuBackend.numDataIds() : 0) -
        this.pendingDeletes;
  }

  public write(values: BackendValues, shape: number[], dtype: DataType): DataId {
    if (env().getBool('WEBGL_CHECK_NUMERICAL_PROBLEMS') || env().getBool('DEBUG')) {
      throw new Error('WebGL is not supported on this device');
    }
    const gl = getWebGLContext(env().getNumber('WEBGL_VERSION'));
    this.binaryCache = getBinaryCache(env().getNumber('WEBGL_VERSION'));
    this.gpgpu = new GPGPUContext(gl);
    this.canvas = gl.canvas;
    this.gpgpuCreatedLocally = true;
    else {
      this.gpgpu = gpgpu;
      this.canvas = gpgpu.gl.canvas;
      this.textureManager = new TextureManager(this.gpgpu);
    }
    this.numMBBeforeWarning = numMBBeforeWarning();
    if (env().getBool('WEBGL_VALIDATE_INPUTS')) {
      throw new Error('Cannot write to a complex64 dtype. Use tf.complex(real, imag).');
    }
    const dataId = {id: this.nextDataId()};
    this.texData.set(dataId, {shape, dtype, values, usage: TextureUsage.UPLOAD, refCount: 1});
    return dataId;
  }

  public incRef(dataId: DataId): void {
    const tensorData = this.texData.get(dataId);
    this.texData.dataRefCount(dataId)++;
  }

  public decRef(dataId: DataId): void {
    const tensorData = this.texData.get(dataId);
    this.texData.dataRefCount(dataId)--;
  }

  public numMBBeforeWarning(): number {
    if (env().getBool('GLOBAL_SCREEN') == null) {
      return 1024;  // 1 GB.
    }
    return (env().getBool('GLOBAL_SCREEN').height * env().getBool('GLOBAL_SCREEN').width *
        window.devicePixelRatio) *
        BEFORE_PAGING_CONSTANT / 1024 / 1024;
  }

  public numBytesInGPU(): number {
    return this.numBytesInGPU;
  }

  public numBytesInGPUAllocated(): number {
    return this.numBytesInGPUAllocated;
  }

  public numBytesInGPUPFree(): number {
    return this.numBytesInGPUPFree;
  }

  public unreliable(): boolean {
    return this.unreliable;
  }

  public numBytesInGPUAllocated(): number {
    return this.numBytesInGPUAllocated;
  }

  public numBytesInGPUPFree(): number {
    return this.numBytesInGPUPFree;
  }

  public unreliable(): boolean {
    return this.unreliable;
  }

  public numBytesInGPU(): number {
    return this.numBytesInGPU;
  }

  public numBytesInGPUAllocated(): number {
    return this.numBytesInGPUAllocated;
  }

  public numBytesInGPUPFree(): number {
    return this.numBytesInGPUPFree;
  }

  public unreliable(): boolean {
    return this.unreliable;
  }

  public numBytesInGPU(): number {
    return this.numBytesInGPU;
  }

  public numBytesInGPUAllocated(): number {
    return this.numBytesInGPUAllocated;
  }

  public numBytesInGPUPFree(): number {
    return this.numBytesInGPUPFree;
  }

  public unreliable(): boolean {
    return this.unreliable;
  }

  public numBytesInGPU(): number {
    return this.numBytesInGPU;
  }

  public numBytesInGPUAllocated(): number {
    return this.numBytesInGPUAllocated;
  }

  public numBytesInGPUPFree(): number {
    return this.numBytesInGPUPFree;
  }

  public unreliable(): boolean {
    return this.unreliable;
  }

  public numBytesInGPU(): number {
    return this.numBytesInGPU;
  }

  public numBytesInGPUAllocated(): number {
    return this.numBytesInGPUAllocated;
  }

  public numBytesInGPUPFree(): number {
    return this.numBytesInGPUPFree;
  }

  public unreliable(): boolean {
    return this.unreliable;
  }

  public numBytesInGPU(): number {
    return this.numBytesInGPU;
  }

  public numBytesInGPUAllocated(): number {
    return this.numBytesInGPUAllocated;
  }

  public numBytesInGPUPFree(): number {
    return this.numBytesInGPUPFree;
  }

  public unreliable(): boolean {
    return this.unreliable;
  }
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```javascript
(this.texData.has(dataId)) {\n  const texData = this.texData.get(dataId);\n  texData.refCount--;\n} \n\n\nmove({\n  dataId: DataId, values: BackendValues, shape: number[], dtype: DataType,\n  refCount: number}:\n  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  } \n  this.texData.set({\n    dataId, \n    shape, dtype, values, usage: TextureUsage.UPLOAD, refCount:}));\n}\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n�
this.disposeIntermediateTensorInfo(tmpDownloadTarget);
const dTypeVals =
this.convertAndCacheOnCPU(dataId, vals);
const subscribers = this.pendingRead.getDataId();
if (this.pendingDisposal.has(dataId)) { // Notify all pending reads.
  subscribers.forEach(resolve =>
    resolve(dTypeVals));
  if (this.disposeData(dataId)) {
    engine().removeDataId(dataId, this);
    this.pendingDeletions--;  
  }
  return dTypeVals;
}

bufferSync<R extends Rank>(t: TensorInfo): TensorBuffer<R> {
  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));

  if (this.disposeData(dataId)) {
    engine().removeDataId(dataId, this);
    this.pendingDeletions--;
  }

  return dTypeVals;
}

bufferSync<R extends Rank>(t: TensorInfo): TensorBuffer<R> {
  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));

  if (this.disposeData(dataId)) {
    engine().removeDataId(dataId, this);
    this.pendingDeletions--;
  }

  return dTypeVals;
}

private getValuesFromTexture(dataId: DataId): Float32Array {
  const {shape, dtype, isPacked} = this.texData.get(dataId);
  const size =
    util.sizeFromShape(shape);

  if (env().getBool('WEBGL_DOWNLOAD_FLOAT_ENABLED')) {
    const tmpTarget = this.decode(dataId);
    const tmpData = this.texData.get(tmpTarget.dataId);
    const vals =
      this.gpgpu
        .downloadMatrixFromPackedTexture(
          tmpData.texture,
          ...tex_util.getDenseTexShape(shape))
        .subarray(0, size);

    this.disposeIntermediateTensorInfo(tmpTarget);
    return vals;
  }

  const shouldUsePackedProgram =
    env().getBool('WEBGL_PACK') && isPacked === true;
  const outputShape =
    shouldUsePackedProgram ?
      webgl_util.getShapeAs3D(shape) : shape;
  const program =
    shouldUsePackedProgram ?
      new EncodeFloatPackedProgram(outputShape as [number, number, number]) :
      new EncodeFloatProgram(outputShape);
  const output = this.runWebGLProgram(
    program, [{shape: outputShape, dtype, dataId}]);
  const tmpData = this.texData.get(output.dataId);
  const vals =
    this.gpgpu
      .downloadByteEncodedFloatMatrixFromOutputTexture(
        tmpData.texture,
        tmpData.texShape[0], tmpData.texShape[1])
      .subarray(0, size);

  this.disposeIntermediateTensorInfo(tmpTarget);
  return vals;
}

private getValuesFromTexture(dataId: DataId): Float32Array {
  const {shape, dtype, isPacked} = this.texData.get(dataId);
  const size =
    util.sizeFromShape(shape);

  if (env().getBool('WEBGL_DOWNLOAD_FLOAT_ENABLED')) {
    const tmpTarget = this.decode(dataId);
    const tmpData = this.texData.get(tmpTarget.dataId);
    const vals =
      this.gpgpu
        .downloadMatrixFromPackedTexture(
          tmpData.texture,
          ...tex_util.getDenseTexShape(shape))
        .subarray(0, size);

    this.disposeIntermediateTensorInfo(tmpTarget);
    return vals;
  }

  const shouldUsePackedProgram =
    env().getBool('WEBGL_PACK') && isPacked === true;
  const outputShape =
    shouldUsePackedProgram ?
      webgl_util.getShapeAs3D(shape) : shape;
  const program =
    shouldUsePackedProgram ?
      new EncodeFloatPackedProgram(outputShape as [number, number, number]) :
      new EncodeFloatProgram(outputShape);
  const output = this.runWebGLProgram(
    program, [{shape: outputShape, dtype, dataId}]);
  const tmpData = this.texData.get(output.dataId);
  const vals =
    this.gpgpu
      .downloadByteEncodedFloatMatrixFromOutputTexture(
        tmpData.texture,
        tmpData.texShape[0], tmpData.texShape[1])
      .subarray(0, size);

  this.disposeIntermediateTensorInfo(tmpTarget);
  return vals;
}

memory(): WebGLMemoryInfo {
  return {
    unreliable: false,
    numBytesInGPU: this.numBytesInGPU,
  };
}
this.textureManager.numBytesAllocated, numBytesInGPUFree: this.textureManager.numBytesFree
 } as WebGLMemoryInfo;

 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();
     return query;
   }
   return query as CPUTimerQuery;
 }

 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
 * added to the pending delete queue. Return true if the dataId is removed
 * from backend or the backend does not contain the dataId, false if the
 * dataId is not removed. Memory may or may not be released even when dataId
 * is removed, which also depends on dataRefCount, see 'releaseGPU'. *
 * @param dataId *
 * @param 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 dispose
   // when added to the pendingDisposal queue. Memory may or may not be
   // released, which also depends on dataRefCount, see 'releaseGPU'.
   if (force) {
     this.texData.get(dataId).refCount = 0;
   } else {
     this.texData.get(dataId).refCount--;
   }

   if (!force && this.texData.get(dataId).refCount > 0) {
     this.pendingDisposal.add(dataId);
   }

   this.releaseGPUData(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, slice);
     }
   }

   this.texData.delete(dataId);
   this.texture = null;
   this.texShape = null;
   this.isPacked = false;
   this.slices.delete(dataId);
   this.textureManager.releaseTexture(texture, texShape, usage,
     isPacked);
 }

 this.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.
 */

 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. This heuristic
determines when it would be faster to execute a kernel on the CPU. WebGL
kernels opt into running this check and forwarding when appropriate.
 */

 shouldExecuteOnCPU(inputs: TensorInfo[]): boolean {
   if (env().getBool('WEBGL_CPU_FORWARD')) {
     return true;
   }
   if (this.cpuBackend == null) {
     if (!env().getBool(TS_TEST) && !this.warnedAboutCPUBackend &&
       this.cpuBackend == null) {
       console.warn('Your application contains ops that are small enough to be ' +
         'executed on the CPU backend, however the CPU backend cannot ' +
         'be found. Consider importing the CPU backend ' +
         '(@tensorflow/tfjs-backend-cpu) for better performance.);'
     }
     this.warnedAboutCPUBackend = true;
   }
   return this.cpuBackend != null && inputs.every((
     input => this.texData.get(input.dataId).texture == null));
 }

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util.sizeFromShape(input.shape) < sizeThreshold);\n    return this.gpgpu;\n  }

where(condition: Tensor): Tensor2D {\n  \n  backend_util.warn 'tf.where()' in WebGL locks the UI thread.’ +\n  'Call tf.whereAsync() instead';\n  const condVals = condition.dataSync();\n  return whereImpl(condition.shape, condVals);\n}

private packedUnaryOp(x: TensorInfo, op: string, dtype: DataType) {\n  const program = new UnaryOpPackedProgram(x.shape, op);\n  const outInfo = this.compileAndRun(program, [x], dtype);\n  return engine().makeTensorFromDataId(outInfo.dataId,\n                                        outInfo.shape, outInfo.dtype);\n}

getGPGPUContext(): GPGPUContext {\n  return this.gpgpu;\n}

where(condition: Tensor): Tensor2D {\n  \n  backend_util.warn('tf.where() in WebGL locks the UI thread. ’ +\n  'Call tf.whereAsync() instead');\n  const condVals = condition.dataSync();\n  return whereImpl(condition.shape, condVals);\n}

private makeTensorInfo(shape: number[], dtype: DataType,\n                       values?: BackendValues|string[]) {\n    let dataId;\n    if (dtype === 'string' && values != null && values.length > 0 &&\n        util.isString(values[0])) {\n        const encodedValues = util.encodeString(values).map(d =>\n            util.encodeString(d));\n        dataId = this.write(encodedValues, shape, dtype);\n    } else {\n        dataId = this.write(values as TypedArray, shape, dtype);\n    }\n
    this.texData.get(dataId).usage = null;\n    return {dataId, shape, dtype};\n}

private makeOutput<T extends Tensor>(shape: number[],\n                                      dtype: DataType,\n                                      values?: BackendValues) {\n  const {dataId} = this.makeTensorInfo(shape, dtype, values);\n  return engine().makeTensorFromDataId(dataId, shape, dtype) as T;\n}

private unpackTensor(input: TensorInfo): TensorInfo {\n  const program = new UnpackProgram(input.shape);\n  return this.runWebGLProgram(program, [input], input.dtype);\n}

private packTensor(input: TensorInfo): TensorInfo {\n  const program = new PackProgram(input.shape);\n  const preventEagerUnpackingOutput = true;\n  return this.runWebGLProgram(program, [input], input.dtype, null /* customSetup */,
                                preventEagerUnpackingOutput);\n}

private packedReshape(input: TensorInfo, afterShape: number[]) {\n  const input3DShape = [webgl_util.getBatchDim(input.shape),\n                       ...webgl_util.getRowsCols(input.shape)];\n  const input3D: TensorInfo = {\n    dtype: input.dtype,\n    shape: input3DShape,\n    dataId: input.dataId};\n  const afterShapeAs3D = [webgl_util.getBatchDim(afterShape),\n                        ...webgl_util.getRowsCols(afterShape)];\n  const program = new ReshapePackedProgram(afterShapeAs3D,\n                                            input3DShape);\n  return this.runWebGLProgram(program, [input3D, afterShapeAs3D],\n                                null /* customSetup */,
                                preventEagerUnpackingOutput);\n}

private decode(dataId: DataId): TensorInfo {\n    const texData = this.texData.get(dataId);\n    const {isPacked, shape, dtype} = texData;\n    const shapeAs3D = texData.shape;\n    let program;\n    if (isPacked) {\n        program = new DecodeMatrixPackedProgram(shapeAs3D);\n    } else {\n        program = new DecodeMatrixProgram(shapeAs3D);\n    }
    return this.runWebGLProgram(program, [shape, shapeAs3D,\n                                          dtype, dataId],\n                                null /* customSetup */,
                                preventEagerUnpackingOfOutput);\n}

private unpackOutput(program: WebGLProgram,\n                      outputDtoyre: DataType,\n                      customSetup?: (gpgpu: GPGPUContext,\n                                      webglProgram: WebGLProgram) => void,\n                      preventEagerUnpackingOfOutput = false): TensorInfo {\n    const output = this.makeTensorInfo(program.outputShape,\n                                         outputDtoyre);\n    const outputData = this.texData.get(output.dataId);\n    if (program.packedOutput) {\n        output.isPacked = true;\n    } \n    if (program.outPackingScheme ===\n        tex_util.PackingScheme.DENSE) {\n        const texShape = tex_util.getDenseTexShape(program.outputShape);\n    // For a densely packed output, we explicitly set texShape\n    // so it doesn't get assigned later according to our\n    // typical packing\n    // scheme wherein a single texel can only contain values from adjacent\n    // rows/cols;\n    }\n}
outData.texShape = texelShape.map(d => d * 2) as [number, number];
if (program.outTexUsage != null) {
  outData.usage = program.outTexUsage;
}
if (util.sizeFromShape(outData.shape) === 0) {
  return output;
}

outData.texShape = texelShape.map(d => d * 2) as [number, number];
if (program.outTexUsage != null) {
  outData.usage = program.outTexUsage;
}
if (util.sizeFromShape(outData.shape) === 0) {
  // Short-circuit the computation since the result is empty (has 0 in its shape).
  outData.values =
  util.getTypedArrayFromDType(output.dtype as 'float32', 0);
  return output;
}

const inputData: InputData[] = inputs.map(input => {
  if (input.dtype === 'complex64') {
    throw new Error(`GPGPUProgram does not support complex64 input. For complex64 dtypes, please separate the program into real and imaginary parts.`);
  }

  let texData = this.texData.get(input.dataId);
  if (texData.texture == null) {
    if (!program.packedInputs &&
        !webgl_util.isReshapeFree(texData.shape, input.shape)) {
      // Upload small tensors that live on the CPU as uniforms, not as textures. Do this only when the environment supports 32bit floats // due to problems when comparing 16bit floats with 32bit floats.

      // 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 &&
        webgl_util.isReshapeFree(texData.shape, input.shape)) {
      // 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 a shape that isn't compatible with its current texture.

      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);
    }
  }

  this.uploadToGPU(input.dataId);
  return {shape: input.shape, texData: null, isUniform: true, uniformValues: texData.values as TypedArray
  };
}

this.uploadToGPU(output.dataId);
const outputData:
    TensorData = {shape: output.shape, texData: outData, isUniform: false};
const key = gpgpu_math.makeShaderKey(program, inputData, outputData);

const binary = this.getAndSaveBinary(key, () => {
  return gpgpu_math.compileProgram(
      this.gpgpu, program, inputData, outputData);
});

if (shouldTimeProgram) {
  query = this.startTimer();
}

const binary = this.getAndSaveBinary(key, () => {
  return gpgpu_math.compileProgram(
      this.gpgpu, program, inputData, outputData);
});

if (shouldTimeProgram) {
  query = this.endTimer(query);
}

if (!env().getBool('WEBGL_LAZILY_UNPACK') && outData.isPacked &&
    preventEagerUnpackingOfOutput === false) {
  const unpacked = this.unpackTensor(output);
  this.disposeIntermediateTensorInfo(output);
  return unpacked;
}

const binary = this.getAndSaveBinary(key, () => {
  return gpgpu_math.compileProgram(
      this.gpgpu, program, inputData, outputData);
});

if (shouldTimeProgram) {
  query = this.endTimer(query);
}

if (!env().getBool('IS_TEST')) {
  const allKeys =
Object.keys(this.binaryCache)\n  allKeys.forEach(key => {
    this.gpgpu.deleteProgram(this.binaryCache[key].webGLProgram)\n    delete this.binaryCache[key] \n  })\n}\nthis.textureManager.dispose()\n  if (this.canvas != null) \n    if (typeof (HTMLCanvasElement) !== 'undefined' \n      && this.canvas instanceof HTMLCanvasElement) {
      this.canvas.remove() \n    } else {
      this.canvas = null \n    }\n  if (this.gpgpuCreatedLocally) {
    this.gpgpu.dispose()\n  }\n  this.disposed = true\n}\nfloatPrecision(): 16|32 \n  if (this.floatPrecisionValue == null) {
    this.floatPrecisionValue = tidy(() => {
      if (!env().get('WEBGL_RENDER_FLOAT32_ENABLED')) {
        // Momentarily switching DEBUG flag to false so we don't throw an error // trying to upload a small value.
        const debugFlag = env().getBool('DEBUG');
        env().set('DEBUG', false);
        const underflowCheckValue = this.abs(scalar(1e-8)).dataSync()[0];
        env().set('DEBUG', debugFlag);

        if (underflowCheckValue > 0) {
          return 32;\n        }\n      }\n      else {\n        return 16;\n      }
    });\n  }\n  return this.floatPrecisionValue\n}\n/** Returns the smallest representable number. */\n  epsilon(): number {
    return this.floatPrecision() === 32 ? EPSILON_FLOAT32 : EPSILON_FLOAT16;\n}\nuploadToGPU(dataId: DataId): void {
  const texData = this.texData.get(dataId);\n  const {shape, dtype, values, texture, usage, isPacked} = texData;\n
  if (texture != null) {
    // Array is already on GPU. No-op.
    return;\n  }\n  const shouldTimeProgram = this.activeTimers != null;\n  let start: number;\n  if (shouldTimeProgram) {
    start = util.now();
  }

  const texShape = texData.texShape;\n  if (values != null) {
    const shapeAs3D = webgl_util.getShapeAs3D(shape, isPacked);\n    let program;\n    let width = texShape[1], height = texShape[0];\n    const isByteArray = values instanceof Uint8Array;\n
    if (isPacked) {
      [width, height] = tex_util.getPackedMatrixTextureShapeWidthHeight(texShape[0], texShape[1]);
      program = new EncodeMatrixPackedProgram(shapeAs3D, [height, width], isByteArray);\n    } else {
      program = new EncodeMatrixProgram(shapeAs3D, [height, width], isByteArray);
    }

    const tempDenseInputHandle = this.makeTensorInfo([height, width], dtype);\n    if (isByteArray) {\n      this.texData.get(tempDenseInputHandle.dataId).usage = TextureUsage.PIXELS;\n    } else {\n      this.texData.get(tempDenseInputHandle.dataId).usage = TextureUsage.UPLOAD;\n    }
    this.gpgpu.uploadDenseMatrixToTexture(this.getTexture(tempDenseInputHandle.dataId), width, height,\n      values as TypedArray);\n  }\n  else {
    const newTexture = this.acquireTexture(texShape, usage, dtype, isPacked);\n    texData.texture = newTexture;\n  }
}\nprivate convertAndCacheOnCPU(dataId: DataId, float32Values?: Float32Array): TypedArray {
  const texData = this.texData.get(dataId);\n  const {dtype} = texData;\n
  this.releaseGPUData(dataId);\n
  if (float32Values != null) {
    texData.values = float32ToTypedArray(float32Values, dtype as 'float32');\n  }
  return texData.values as TypedArray;\n}\nprivate acquireTexture(
  shapeAs3D: [number, number], usage: TextureUsage, dtype: DataType, isPacked: boolean): WebGLTexture {
  const newTexture = this.acquireTexture(shapeAs3D, usage, dtype, isPacked);\n  texData.texture = newTexture;\n  return texData.values as TypedArray;\n}
computeBytes(shape: [number, number], dtype: DataType) { return shape[0] * shape[1] * util.bytesPerElement(dtype); }

function float32ToTypedArray<D extends NumericDataType>(a: Float32Array, dtype: D) { if (dtype === 'float32' || dtype === 'complex64') { return a as tf.DataTypeMap[D]; } else if (dtype === 'int32' || dtype === 'bool') { const result = (dtype === 'int32') ? new Int32Array(a.length) : new Uint8Array(a.length); for (let i = 0; i < result.length; ++i) { result[i] = Math.round(a[i]); } return result as tf.DataTypeMap[D]; } else { throw new Error(`Unknown dtype ${dtype}`); }

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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';
export {gpgpu_util, webgl_util};

/**
 * 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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 * limitations under the License.
 */

import {backend_util} from '@tensorflow/tfjs-core';

import {GPGPUProgram} from './gpgpu_math';

export const CHECK_NAN_SNIPPET = `
  if (isNaN(a)) return a;
  if (isNaN(b)) return b;
`;

export const ELU_DER = `
  vec4 bGTEZero = vec4(greaterThanEqual(b, vec4(0.)));
`;

export class BinaryOpProgram implements GPGPUProgram {
  variableNames = ['A', 'B'];
  outputShape;
  userCode;

  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));
      }
    `;
  }
}

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 * limitations under the License.
 */

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.)));
`;

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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
    if (checkOutOfBoundsString)
      } else {
        result.y = 0.;
        result.z = 0.;
        result.w = 0.;
      }
    }
  }

  void main() {
    vec4 a = getAAtOutCoords();
    vec4 b = getBAtOutCoords();
    vec4 result = binaryOperation(a, b);

    if (checkOutOfBoundsString)
      } else {
        result.y = 0.;
        result.z = 0.;
        result.w = 0.;
      }
    }

  }
}

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]);
  return result;

  }

};

export const LEAKYRELU_CONFIG: KernelConfig = {
  kernelName: LeakyRelu,
  backendName: 'webgl',
  kernelFunc: leakyRelu
};

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

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

"
*/
*/

import {env, KernelConfig, KernelFunc, Prelu, PreluInputs, TensorInfo} from '@tensorflow/tfjs-core';

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(1.0)));
  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);
  return backend.runWebGLProgram(program, [x, alpha], x.dtype);
}

export const preluConfig: KernelConfig = {
  kernelName: Prelu,
  backendName: 'webgl',
  kernelFunc: prelu as {} as KernelFunc
};

/*---------------------------------------------------------------------------*/

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 {BinaryOpPackedProgram} from '../binaryop_packed_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 {UnaryOpPackedProgram} 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 cpuKernelImpl! SimpleUnaryKernelImplCPU.
 * @param outValues
 */
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.tensorData.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;
    if (shouldUsePackedProgram) {
      program = new UnaryOpPackedProgram(x.shape, packedOpSnippet);
    } else {
      program = new UnaryOpProgram(x.shape, opSnippet);
    }
    return webglBackend.runWebGLProgram(program, [x, $dtype]);
  }
}

Template that creates a `KernelFunc` for binary ops.

```javascript
/**
 * @param {string} opSnippet Op snippet to create `BinaryOpProgram`.
 * @param {boolean} checkOutOfBoundsForPackedProgram Whether to set checkOutOfBounds=true
 * when creating BinaryOpPackedProgram.
 * @param {string} 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({
 *  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 && a.dtype === complex64) {
 *      const aData = webglBackend.textData.get(a.dataId);
 *      const bData = webglBackend.textData.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(aPart.dtype, bPart.dtype));
 *      });
 *      const complexOutput = complex({inputs: {real, imag}, backend: webglBackend});
 *      webglBackend.disposeIntermediateTensorInfo(real);
 *      webglBackend.disposeIntermediateTensorInfo(imag);
 *      // TODO(annxingyuan): Implement CPU forwarding for complex inputs.
 *      return complexOutput;
 *    }
 *    const $dtype = dtype || upcastType(a.dtype, b.dtype);
 *    if (webglBackend.shouldExecuteOnCPU([a, b]) && cpuKernelImpl != null) {
 *      const aData = webglBackend.textData.get(a.dataId);
 *      const bData = webglBackend.textData.get(b.dataId);
 *      const [outValues, outShape] = cpuKernelImpl([a.shape, b.shape], aData.values as TypedArray, bData.values as TypedArray, $dtype);
 *      const out = webglBackend.makeTensorInfo(outShape, $dtype);
 *      const outData = webglBackend.textData.get(out.dataId);
 *      outData.values = outValues;
 *      return out;
 *    }
 *    const shouldUsePackedProgram = env().getBool('WEBGL_PACK_BINARY_OPERATIONS') && packedOpSnippet != null;
 *    let program = new BinaryOpProgram(opSnippet, a.shape, b.shape);
 *    if (shouldUsePackedProgram) {
 *      program = new BinaryOpPackedProgram([a.dataId, b.dataId], packedOpSnippet, a.shape, b.shape);
 *    }
 *    return webglBackend.runWebGLProgram(program, [a, b], upcastType(a.dtype, b.dtype));
 *  };
 *
 *  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 === 'prelu') {
 *      if (packed) {
 *        return unary_packed_op.PRELU;
 *      }
 *      return unary_op.PRELU;
 *    } else if (activation === 'leakyrelu') {
 *      if (packed) {
 *        return unary_packed_op.LEAKYRELU;
 *      }
 *      return unary_op.LEAKYRELU;
 *    } else if (activation === 'leakyrelu') {
 *      if (packed) {
 *        return binaryKernelFunc({opSnippet, packedOpSnippet, checkOutOfBounds = true});
 *      }
 *      return binaryKernelFunc({opSnippet, packedOpSnippet, checkOutOfBounds = true});
 *    }
 *    throw new Error(`Activation ${activation} has not been implemented for the WebGL backend.`);
 *  }
 */

import {GPGPUProgram} from './gpgpu_math';

// This program implements a MatMulPackedProgram that supports complex inputs.

export class MatMulPackedProgram implements GPGPUProgram {
  variableNames = ['matrixA', 'matrixB'];
  packedInputs = true;
  packedOutput = true;
}
```
outputShape: number[];\nuserCode: string;\nconstructor(\n  aShape: [number, number, number],\nbShape: [number, number, number],\n  outputShape: [number, number, number],\n  transposeA = false,\n  transposeB = false,\n  addBias = false,\n  activation: string = null,\n  hasPreLUActivation = false,\n  hasLeakyReLUActivation = false) {\n  this.outputShape = outputShape;\n  this.aShape = aShape;\n  this.bShape = bShape;\n  this.transposeA = transposeA;\n  this.transposeB = transposeB;\n  this.addBias = addBias;\n  this.activation = activation;\n  this.hasPreLUActivation = hasPreLUActivation;\n  this.hasLeakyReLUActivation = hasLeakyReLUActivation;\n
  \n
  const sharedDim = Math.ceil(sharedDim / 2);\n  const aSample = aShape[2];\n  const bSample = bShape[2];\n  const aSwizzle = transposeA ? ['a.xxzz', 'a.yyyw'] : ['a.xxxz', 'a.ywyw'];\n  const bSwizzle = transposeB ? ['b.xzxz', 'b.ywyw'] : ['b.xyxy', 'b.zzww'];
}

constructor(\n  aShape: [number, number, number],\nbShape: [number, number, number],\n  outputShape: [number, number, number],\n
  const sharedDim = Math.ceil(sharedDim / 2);\n  const aSample = aShape[2];\n  const bSample = bShape[2];\n  const aSwizzle = transposeA ? ['a.xxzz', 'a.yyyw'] : ['a.xxxz', 'a.ywyw'];\n  const bSwizzle = transposeB ? ['b.xzxz', 'b.ywyw'] : ['b.xyxy', 'b.zzww'];

  let activationSnippet = '', applyActivationSnippet = '';\n  if (activation) {\n    if (hasPreLUActivation) {\n      activationSnippet = `vec4 activation(vec4 a) {\n        vec4 b = getPreLUActivationWeightsAtOutCoords();\n        ${activation}
      }`;
    } else if (hasLeakyReLUActivation) {\n      activationSnippet = `vec4 activation(vec4 a) {\n        vec4 b = getLeakyReLUWeightsAtOutCoords();\n        ${activation}
      }`;
    } else {\n      activationSnippet = `vec4 activation(vec4 x) {
        ${activation}
      }`;
    }

    applyActivationSnippet = `result = activation(result);`;
  }

  const addBiasSnippet = addBias ? 'result += getBiasAtOutCoords();' : '';
  if (addBias) {\n    this.variableNames.push('bias');\n  }\n
  if (hasPreLUActivation) {\n    this.variableNames.push('preLUActivationWeights');\n  }

  if (hasLeakyReLUActivation) {\n    this.variableNames.push('leakyReLUAlpha');\n  }

  let batchASnippet = 'rc.x';\n  let batchBSnippet = 'rc.x';
  if (aShape[0] < bShape[0]) {\n    batchASnippet = `int(min(float(rc.x), ${aShape[0] - 1}.))`;\n  } else if (bShape[0] < aShape[0]) {\n    batchBSnippet = `int(min(float(rc.x), ${bShape[0] - 1}.))`;\n  }

  this.userCode = `\n    ${activationSnippet}

    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});\n        vec4 b = getMatrixB(batchB, ${bSample});\n        result += (${aSwizzle[0]} * ${bSwizzle[0]});
        result += (${aSwizzle[1]} * ${bSwizzle[1]});
      }
      return result;
    }

    void main() {
      ivec3 rc = getOutputCoords();
      vec4 result = dot2x2ARowBCol(rc);
      ${applyActivationSnippet}setOutput(result);
    }
`;\n
  }\n
  \n}

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import {backend_util} from '@tensorflow/tfjs-core';\nimport {GPGPUProgram} from './gpgpu_math';\n
// (Ar + Ai)(Br + Bi) =\n// ArBr + ArBi + AiBr + AiBi = ArBr - AB + ArBi + AiBr\n// Yr = ArBr - AB\n// Yi = ArBi + AiBr\n
export const COMPLEX_MULTIPLY = {\n  REAL: 'return areal * breal - aimag * bimag;',\n  IMAG: 'return areal * bimag + aimag * breal;'\n};

export class BinaryOpComplexProgram implements GPGPUProgram {\n  variableNames = ['AReal', 'AImag', 'BReal', 'BImag'];\n  userCode: string;\n  outputShape: number[];\n
  constructor(op: string, aShape: number[], bShape: number[]) {\n    this.outputShape = backend_util.assertAndGetBroadcastShape(aShape, bShape);\n    this.userCode = `\n      float binaryOpComplex(float aReal, float aImag, float bReal, float bImag) {\n        ${op} \n      }\n
      void main() {\n        float aReal = getARealAtOutCoords();\n        float aImag = getAIMagAtOutCoords();\n        float bReal = getBRealAtOutCoords();\n        float bImag = getBIMagAtOutCoords();\n        setOutput(binaryOpComplex(aReal, aImag, bReal, bImag));\n      }
    `;
  }
}

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import {backend_util} from '@tensorflow/tfjs-core';\nimport {GPGPUProgram} from './gpgpu_math';\n
// (Ar + Ai)(Br + Bi) =\n// ArBr + ArBi + AiBr + AiBi = ArBr - AB + ArBi + AiBr\n// Yr = ArBr - AB\n// Yi = ArBi + AiBr\n
export const COMPLEX_MULTIPLY = {\n  REAL: 'return areal * breal - aimag * bimag;',\n  IMAG: 'return areal * bimag + aimag * breal;'\n};

export class BinaryOpComplexProgram implements GPGPUProgram {\n  variableNames = ['AReal', 'AImag', 'BReal', 'BImag'];\n  userCode: string;\n  outputShape: number[];\n
  constructor(op: string, aShape: number[], bShape: number[]) {\n    this.outputShape = backend_util.assertAndGetBroadcastShape(aShape, bShape);\n    this.userCode = `\n      float binaryOpComplex(float aReal, float aImag, float bReal, float bImag) {\n        ${op} \n      }\n
      void main() {\n        float aReal = getARealAtOutCoords();\n        float aImag = getAIMagAtOutCoords();\n        float bReal = getBRealAtOutCoords();\n        float bImag = getBIMagAtOutCoords();\n        setOutput(binaryOpComplex(aReal, aImag, bReal, bImag));\n      }
    `;
  }
}
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=============================================================================

*/

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 preventEagerUnpackingOfOutput = true;
  const output = backend.runWebGLProgram(
      program, [input3D], input.dtype, null /* customSetup */,
      preventEagerUnpackingOfOutput);
  return {dataId: output.dataId, shape: afterShape, dtype: output.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 * $\text{\texttt{denominator}}$, ones);`;
}

let checkOutOfBounds = `if (inIdx < 0 || inIdx >= $\text{\texttt{inSize}}$) { return 0.0; }`;

this.userCode = `const vec4 ones = vec4(1.0, 1.0, 1.0, 1.0);

float getValue(batch, int inIdx) {
  return getX(batch, inIdx);
}

void main() {
  ivec2 coords = getOutputCoords();
  int batch = coords[0];
  int outIdx = coords[1];
  int inOffset = outIdx * $\text{\texttt{windowSizeNearestVec4}}$;

  float sumValue = 0.0;

  for (int i = 0; i < $\text{\texttt{windowSizeNearestVec4}}$; i += 4) {
    int inIdx = inOffset + i;
    vec4 values = vec4(getValue(batch, inIdx), getValue(batch, inIdx + 1), getValue(batch, inIdx + 1), getValue(batch, inIdx + 2), getValue(batch, inIdx + 3));

    ${updateSnippet}
  }

  int inIdx = inOffset + $\text{\texttt{windowSizeNearestVec4}}$;

  if ($\text{\texttt{windowSizeVec4Remainder}} === 1$) {
    vec4 values = vec4(getValue(batch, inIdx), 0.0, 0.0, 0.0);
    ${updateSnippet}
  } else if ($\text{\texttt{windowSizeVec4Remainder}} === 2$) {
    vec4 values = vec4(getValue(batch, inIdx + 1), getValue(batch, inIdx + 1), getValue(batch, inIdx + 1), getValue(batch, inIdx + 2), getValue(batch, inIdx + 3));
    ${updateSnippet}
  } else if ($\text{\texttt{windowSizeVec4Remainder}} === 3$) {
    vec4 values = vec4(getValue(batch, inIdx), getValue(batch, inIdx + 1), getValue(batch, inIdx + 1), getValue(batch, inIdx + 1), getValue(batch, inIdx + 1));
    ${updateSnippet}
  }

  setOutput(sumValue);
}
`;

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

import {backend_util} from '@tensorflow/tfjs-core';
import {GPGPUProgram} from './gpgpu_math';

export class ReduceProgram implements GPGPUProgram {
  variableNames = ['x'];

  constructor(reduceInfo: backend_util.ReduceInfo, reduceType: 'all'|'any'|'max'|'min'|'sum'|'prod') {
    const {windowSize, batchSize, inSize, outSize} = reduceInfo;
    this.outputShape = [batchSize, outSize];

    let initializationValue = '0.0';
    let compareOp = '==';

    if (reduceType === 'prod') {
      initializationValue = '1.0';
    } else if (reduceType === 'min') {
      // WebGL on Firefox Linux can't compile 1/0 so we do 1/eps.
      initializationValue = '1.0 / 1e-20';
      compareOp = '<=';
    } else if (reduceType === 'max') {
      // WebGL on Firefox Linux can't compile 1/0 so we do 1/eps.
      initializationValue = '-1.0 / 1e-20';
      compareOp = '>=';
    }

    let returnValue = `${reduceType}(${reduceType}(${reduceType}(` +
      'minMaxValue[0], minMaxValue[1], minMaxValue[2], minMaxValue[3]));

    if (reduceType === 'sum') {
      returnValue = `sumValue`;
    } else if (reduceType === 'prod') {
      returnValue = `prodValue`;
    } else if (reduceType === 'all') {
      returnValue = `allValue`;
    } else if (reduceType === 'any') {
      returnValue = `anyValue`;
    }

    if (inSize % windowSize > 0) {
      checkOutOfBounds = `if (inIdx < 0 || inIdx >= $\text{\texttt{inSize}}$) { return 0.0; }`;
    }

    let vecType = `vec4`;

    if (reduceType === 'all') {
      initializationValue = '1.0';
      compareOp = '==';
    } else if (reduceType === 'any') {
      initializationValue = '0.0';
      compareOp = '!=';
    }

    const vectorSize = Math.floor(windowSize / 4) * 4;
    const windowSizeVec4Remainder = windowSize % 4;
    let updateSnippet = `\n    if ($\text{\texttt{reduceType === 'sum'}}$) {
      returnValue = `$\text{\texttt{sumValue}}$`;
    } else if ($\text{\texttt{reduceType === 'prod'}}$) {
      vec2 tmpVec = vec2(values[0], values[1]) * vec2(values[2], values[3]);
      prodValue += tmp[0] * tmp[1];
    } else {
      minMaxValue = $\text{\texttt{compareOp}}$([values, minMaxValue]);
    }

    let vectorType = `vec4`;
    if (reduceType === 'all') {
      initializationValue = '1.0';
      updateSnippet = `\n      bool reducedAllValue = all(values);\n      float floatedReducedAllValue = float(reducedAllValue);\n      allValue = float(allValue >= 1.0) && floatedReducedAllValue >= 1.0;\n      vecType = `bvec4`;
    } else if (reduceType === 'any') {
      initializationValue = '0.0';
      updateSnippet = `\n      bool reducedAnyValue = any(values);\n      float floatedReducedAnyValue = float(reducedAnyValue);\n      anyValue = float(anyValue >= 1.0) && floatedReducedAnyValue >= 1.0;\n      vecType = `bvec4`;
    }
  }
}

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return initializationValue;
}
```

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;
        let previousResult: TensorInfo;
        if (reductionType === 'mean') {
            program = 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;
}
```

```
import {GPGPUProgram} from './gpgpu_math';

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;
    const dtype = getCoordsDataType(this.rank);
    this.rank = getSwitchedCoords(newDim);
    this.userCode = `void main() {
      ${dtype} resRC = getOutputCoords();
      setOutput(getA(${switched}));
    }
    `;
  }
}

function getSwitchedCoords(newDim: number[]): string {
  const rank = newDim.length;
  if (rank > 6) {
    throw Error(`Transpose for rank ${rank} is not yet supported.`);
  }
  const originalOrder =
      ['resRC.x', 'resRC.y', 'resRC.z', 'resRC.w', 'resRC.u', 'resRC.v'];
  const switchedCoords = new Array(rank);
  for (let i = 0; i < newDim.length; i++) {
    switchedCoords[newDim[i]] = originalOrder[i];
  }
  return switchedCoords.join() + ";";  /* * @license
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   *
   *--------------------------------------------------------------------*
   */

import {GPGPUProgram} from './gpgpu_math';

export class TransposePackedProgram implements GPGPUProgram {
  variableNames = ['A'];
  packedInputs = true;
  packedOutput = true;
  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;
    if (this.rank > 6) {
      throw Error(`Packed transpose for rank ${this.rank} is not yet supported.`);
    }
    const dtype = getCoordsDataType(this.rank);
    const outerDims = `vec2(${getVecChannels('rc', this.rank).slice(-2).join()})`;
    const nextColumn = `++${getVecChannels('rc', this.rank)[this.rank - 1]} < ${outputShape[this.rank - 1] - 1}`;
    this.userCode = `void main()
      {
        vec4 result = vec4(0.);
        result[0] = getChannel(getA(${getVecChannels('rc', this.rank).slice(-2).join()}) + 0);
        if(${nextColumn}) { result[1] = getChannel(getA(${getVecChannels('rc', this.rank).slice(-2).join()}) + 1); }
        --${getVecChannels('rc', this.rank)[this.rank - 1]};
        if(${nextColumn}) { result[2] = getChannel(getA(${getVecChannels('rc', this.rank).slice(-2).join()}) + 2); }
        if(${nextColumn}) { result[3] = getChannel(getA(${getVecChannels('rc', this.rank).slice(-2).join()}) + 3); }
        setOutput(result);
      }`;
  }
}

export function sumImpl(x: TensorInfo, out: TensorInfo) {
  if (x.length !== out.length) {
    throw new Error('Input and output tensors must have the same shape.');
  }
  const backend = backend_util(x);
  const backendWebGL = MathBackendWebGL(backend);
  backendWebGL.setDevice(x.device);
  const ctx = backendWebGL.getContext('webgl');
  const WebGL = (ctx as WebGLRenderingContext);
import {KernelConfig, KernelFunc, Sum, SumAttrs, SumInputs} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';

import {sumImpl} from './Sum_impl';

export function sum(
    args: {inputs: SumInputs, attrs: SumAttrs, backend: MathBackendWebGL}) {
  const {inputs, backend, attrs} = args;

  const {x} = inputs;
  const {axis, keepDims} = attrs;

  return sumImpl(x, axis, keepDims, backend);
}

export const sumConfig: KernelConfig = {
  kernelName: Sum,
  backendName: 'webgl',
  kernelFunc: sum as {} as KernelFunc
};
b.shape.length;

  const innerShapeA = transposeA ? a.shape[aRank - 2] : a.shape[aRank - 1];
  const outerShapeA = transposeA ? a.shape[aRank - 2] : a.shape[aRank - 1];
  const outerDimsA = a.shape.slice(0, -2);
  const outerBatchDimA = util.sizeFromShape(outerDimsA);

  const batchDimA = 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 ? a.shape.slice(0, -2) : b.shape.slice(0, -2);
  const outShape = outShapeOuterDims.concat([outerShapeA, outerShapeB]);

  // The rest of the implementation is designed to operate on rank-3 tensors
  const a3dShape: [number, number, number] = transposeA ? [batchDimA, innerShapeA, outerShapeA] : [batchDimA, outerShapeA, innerShapeA];
  const b3dShape: [number, number, number] = transposeB ? [batchDimB, outerShapeB, innerShapeB] : [batchDimB, innerShapeB, outerShapeB];

  const program = new MatMulPackedProgram(a3dShape, b3dShape, [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);

  return outReshaped;
}
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=============================================================================

*/

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

import {MathBackendWebGL} from '../backend_webgl';
import {batchMatMulImpl} from './BatchMatMul_impl';

export function _fusedMatMul(args: {
  inputs: _FusedMatMulInputs,
  attrs: _FusedMatMulAttrs,
  backend: MathBackendWebGL
}) {
  const {inputs, backend, attrs} = args;
  const {a, b, bias, preluActivationWeights} = inputs;
  const {transposeA, transposeB, activation, leakyreluAlpha} = attrs;

  return batchMatMulImpl({
    a,
    b,
    transposeA,
    transposeB,
    backend,
    bias,
    preluActivationWeights,
    leakyreluAlpha,
  });
}

export const _fusedMatMulConfig: KernelConfig = {
  kernelName: _FusedMatMul,
  backendName: 'webgl',
  kernelFunc: _fusedMatMul,
};

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

*/

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

import {unaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';
import {CHECK_NAN_SNIPPET} from '../unaryop_gpu';

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 {GPGPUProgram} 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) =>

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*/

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, MathBackendWebGL, attrs: AllAttrs} = args;
  TensorInfo {n const [inputs, backend, attrs] = args; n const [x] = inputs; n const [axis, keepDims] = attrs; n const xRank = x.shape.length; n const origAxes = util.parseAxisParam(axis, x.shape); n let axes = origAxes; n const permutedAxes = backend_util.getAxesPermutation(axes, xRank); n let permutedX = x; n if (permutedAxes != null) { n permutedX = transpose({inputs: [x], backend, attrs: {perm: permutedAxes}}); n axes = backend_util.getInnerMostAxes(axes.length, xRank); n } n backend_util.assertAxesAreInnerMostDims('all', axes, xRank); n const [outShape, reduceShape] =
backend_util.computeOutAndReduceShapes(permutedX.shape, axes); n const inSize =
util.sizeFromShape(reduceShape); n const a2D =
reshape({inputs: [x: permutedX], backend, attrs: {shape: [-1, inSize]}}); n const reduced =
reduce(a2D, a2D.dtype, 'all', backend); n let res; n if (keepDims) { n const newShape =
backend_util.expandShapeToKeepDim(outShape, origAxes); n res =
reshape({inputs: [x: reduced], backend, attrs: {shape: newShape}}); n } else { n res =
reshape({inputs: [x: reduced], backend, attrs: {shape: outShape}}); n } n backend.disposeIntermediateTensorInfo(a2D);
}

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

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

import {Any, AnyAttrs, AnyInputs, 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 any(
    args: {inputs: AnyInputs, backend: MathBackendWebGL, attrs: AnyAttrs}):
    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 axes = backend_util.getInnerMostAxes(axes.length, xRank);
  const permutedAxes =
      backend_util.getAxesPermutation(axes, xRank);
  const permutedX =
      transpose({inputs: {x: permutedAxes}, backend, attrs: {perm: permutedAxes}});
  const [outShape, reduceShape] =
      backend_util.computeOutAndReduceShapes(permutedX.shape, axes);
  const inSize =
      util.sizeFromShape(reduceShape);
  const a2D =
      reshape({inputs: {x: permutedX}, backend, attrs: {shape: [-1, inSize]}});
  const reduced =
      reduce(a2D, a2D.dtype, 'any', backend);
  const res;
  if (keepDims) { n const newShape =
      backend_util.expandShapeToKeepDim(outShape, origAxes);
      res =
      reshape({inputs: {x: reduced}, backend, attrs: {shape: newShape}}); n } else { n res =
      reshape({inputs: {x: reduced}, backend, attrs: {shape: outShape}}); n } n backend.disposeIntermediateTensorInfo(a2D);
}

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

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KernelConfig = {
  kernelName: Any,
  backendName: 'webgl',
  kernelFunc: any as {} as KernelFunc
};

```
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 */

import {backend_util} from '@tensorflow/tfjs-core';
import {GPGPUProgram} from './gpgpu_math';

export class ArgMinMaxProgram implements GPGPUProgram {
  variableNames = ['A'];
  outputShape: number[];
  constructor(reduceInfo: backend_util.ReduceInfo, op: 'max'|'min', firstPass: boolean) {
    const {windowSize, batchSize, outSize} = reduceInfo;
    if (!firstPass) {
      this.variableNames.push('bestIndicesA');
    }
    this.outputShape = [batchSize, outSize];
    const compOp = (op === 'max') ? '>' : '<';

    this.userCode = `void main() {
        ivec2 coords = getOutputCoords();
        int batch = coords[0];
        int outIdx = coords[1];
        int inOffset = outIdx * ${windowSize};

        int bestIndex = inOffset;
        float bestValue = getA(batch, bestIndex);

        for (int i = 0; i < ${windowSize}; i++) {
          int inIdx = ${compOp} bestValue) {
            bestValue = candidate;
            bestIndex = inIdx;
          }
        }
        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 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 = getChannels('sourceLocR', sourceRank - 1).concat('inIdx.r');  

const srcGCoops = getChannels('sourceLocG', sourceRank - 1).concat('inIdx.g');  

const srcBCoords = getChannels('sourceLocB', sourceRank - 1).concat('inIdx.b');  

const srcACoords = getChannels('sourceLocA', sourceRank - 1).concat('inIdx.a');  

const compOp = (op === 'max') ? 'greaterThan' : 'lessThan';  

const fetchCandidateIdx = firstPass ? '' : `
    inIdx = round(vec4(getBestIndicesAChannel($srcRCoords.join()),
        getBestIndicesAChannel($srcGCoops.join()),
        getBestIndicesAChannel($srcBCoords.join()),
        getBestIndicesAChannel($srcACoords.join())));

    vec2($channels.slice(-2).join());

    
    float getBestIndicesAChannel(${intChannels.join()}) {
        return getChannel(getBestIndicesA(${channels.join()}),
            vec2(${channels.slice(-2).join()}));
    }
    
    void main() {
        vec4(coords = getOutputCoords());
        bool hasNextCol = coords[rank - 1] < outShape[rank - 1] - 1;
        bool hasNextRow = coords[rank - 2] < outShape[rank - 2] - 1;
        ivec4 srcIdx = ivec4(sourceLocR${inChannel}, sourceLocG${inChannel}, sourceLocB${inChannel}, sourceLocA${inChannel}) * windowSize;
        ivec4 inIdx = srcIdx;
        vec4 bestIndex = vec4(inIdx);
        vec4 bestValue = vec4(${fetchValue});

        for (int i = 0; i < windowSize; i++) {
            inIdx = srcIdx;
            vec4 candidate = vec4(${fetchValue});
            bvec4 nan = isnan(candidate);
            bvec4 replace = bvec4(
                vec4(${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));
        }
    }
    
    setOutput(bestIndex);
bestIndicesA.shape : x.shape;\nconst inSize = inShape[inShape.length - 1];\nconst windowSize = backend_util.computeOptimalWindowSize(inShape);\nconst program = new ArgMinMaxPackProgram(\n  inShape, windowSize, reduceType, bestIndicesA == null);\nconst inputs = bestIndicesA == null ? [x] : [x, \nbestIndicesA];\nconst output = backend.runWebGLProgram(program, inputs, 'int32');\nif (output.shape.length === x.shape.length) {\n  const result = argReducePacked(backend, x, reduceType, output);
}

backend.disposeIntermediateTensorInfo(output);\nreturn result;\n}\nexport function argMinMaxReduce(backend: MathBackendWebGL, x: TensorInfo, axis, reduceType: 'min'|'max'): TensorInfo {\n  const axes = [axis];\n  backend_util.assertAxesAreInnerMostDims(\n    'arg' + reduceType.charAt(0).toUpperCase() + reduceType.slice(1), axes, x.shape.length);\n  if (!env().getBool('WEBGL_PACK_REDUCE') || x.shape.length <= 2) {\n    const intermediateTensorInfos = [];\n    const [outShape, reduceShape] = backend_util.computeOutAndReduceShapes(x.shape, axes);\n    const inSize = util.sizeFromShape(reduceShape);\n    const a2D = reshape({inputs: {x}, backend, attrs: {shape: [-1, inSize]}});\n    intermediateTensorInfos.push(a2D);\n    const reduced = argReduce(backend, a2D, reduceType);\n    intermediateTensorInfos.push(reduced);\n    const reshaped = reshape({inputs: {x: reduced}, backend, attrs: {shape: outShape}});\n    intermediateTensorInfos.forEach(t => backend.disposeIntermediateTensorInfo(t));\n    return reshaped;
  }
  return argReducePacked(backend, x, reduceType);\n}

backend.dispose IntermediateTensorInfo();\nreturn argReducePacked(backend, x, reduceType);\n
const output = backend.runWebGLProgram(program, inputs, 'int32');\nif (output.shape.length === x.shape.length) {\n  const result = argReducePacked(backend, x, reduceType, output);
}

backend.dispose IntermediateTensorInfo();\nreturn result;\n}

export function argMax({inputs: ArgMaxInputs, backend: MathBackendWebGL, attrs: ArgMaxAttrs}): TensorInfo {\n  const {inputs, backend, attrs} = args;\n  const {x} = inputs;\n  const {axis} = attrs;

  let axes = util.parseAxisParam(axis, x.shape);
  let permutedAxes = backend_util.getAxesPermutation(axes, x.shape.length);
  let $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;\n}

export const argMaxConfig: KernelConfig = {\n  kernelName: ArgMax,
  backendName: 'webgl',\n  kernelFunc: argMax as {} as KernelFunc\n};\n
export function argMin({inputs: ArgMinInputs, backend: MathBackendWebGL, attrs: ArgMinAttrs}): TensorInfo {\n  const {inputs, backend, attrs} = args;\n  const {x} = inputs;\n  const {axis} = attrs;

  let axes = util.parseAxisParam(axis, x.shape);
  let permutedAxes = backend_util.getAxesPermutation(axes, x.shape.length);
  let $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;\n}

export const argMinConfig: KernelConfig = {\n  kernelName: ArgMin,
  backendName: 'webgl',\n  kernelFunc: argMin as {} as KernelFunc\n};\n
=============================================================================

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 argMax({inputs: ArgMaxInputs, backend: MathBackendWebGL, attrs: ArgMaxAttrs}): TensorInfo {\n  const {inputs, backend, attrs} = args;\n  const {x} = inputs;\n  const {axis} = attrs;

  let axes = util.parseAxisParam(axis, x.shape);
  let permutedAxes = backend_util.getAxesPermutation(axes, x.shape.length);
  let $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;\n}

export const argMaxConfig: KernelConfig = {\n  kernelName: ArgMax,
  backendName: 'webgl',\n  kernelFunc: argMax as {} as KernelFunc\n};\n
export function argMin({inputs: ArgMinInputs, backend: MathBackendWebGL, attrs: ArgMinAttrs}): TensorInfo {\n  const {inputs, backend, attrs} = args;\n  const {x} = inputs;\n  const {axis} = attrs;

  let axes = util.parseAxisParam(axis, x.shape);
  let permutedAxes = backend_util.getAxesPermutation(axes, x.shape.length);
  let $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;\n}

export const argMinConfig: KernelConfig = {\n  kernelName: ArgMin,
  backendName: 'webgl',\n  kernelFunc: argMin as {} as KernelFunc\n};
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);
let $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
};

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 */

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,
};

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*/

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,
};

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*/

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

import {unaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';
import {CHECK_NAN_SNIPPET} from '../unaryop_gpu';

const ACO = CHECK_NAN_SNIPPET + `return aco(x);`

export const aco = unaryKernelFunc({opSnippet: ACO});

export const acoConfig: KernelConfig = {
  kernelName: Aco,
  backendName: 'webgl',
  kernelFunc: aco,
};
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=============================================================================

*/

import {Atan2} from '@tensorflow/tfjs-core';

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

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));
  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';

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,
};

*/

import {backend_util} from '@tensorflow/tfjs-core';

import {GPGPUProgram} from './gpgpu_math';

export class Pool2DProgram implements GPGPUProgram {
  constructor(poolInfo: backend_util.Pool2DInfo, poolType: 'max'|'avg', computePositions: boolean, flattenPositions = false, includeBatchInIndex = false) {
    const filterHeight = poolInfo.filterHeight;
    const strideHeight = poolInfo.strideHeight;

    const padTop = poolInfo.padInfo.top;
    const padLeft = poolInfo.padInfo.left;
    this.outputShape = poolInfo.outShape;

    const isAvgPool = poolType === 'avg';
    const batchFlattenPositionStr = `((batch  * ${poolInfo.inHeight} + xR) * ${poolInfo.inWidth} + xC) * ${poolInfo.inChannels} + d`;
    const flattenPositionStr = `((xR * ${poolInfo.inWidth} + xC) * ${poolInfo.inChannels} + d`;

    let initializationValue = '0.0';
    if (!isAvgPool) {
      // WebGL on Firefox Linux can't compile 1/0 so we do 1/eps.
      initializationValue = '-1.0 / 1e-20';
    }
    if (computePositions)
    {
      const compareOp = '>=';
    }

    this.userCode = `void main() {
      ivec4 coords = getOutputCoords();
      int batch = coords[0];
      int d = coords[3];
      ivec2 xRCCorner =`;
```cpp
const ivec3 strides = ivec3(${strideDepth}, ${strideHeight}, ${strideWidth});
const ivec3 pads = ivec3(${padFront}, ${padTop}, ${padLeft});

void main() {
  ivec5 coords = getOutputCoords();
  int batch = coords.x;
  int ch = coords.u;

  ivec3 xCorner = ivec3(coords.y, coords.z, coords.w) * strides - pads;
  int xDCorner = xCorner.x;
  int xRCorner = xCorner.y;
  int xCCorner = xCorner.z;

  // max/min x(?, ?, ?, ch) to get y(yD, yR, yC, ch).
  // ? = to be determined.
  float minMaxValue = 0.0;
  float minMaxValueFound = 0.0;
  int minMaxPosition = 0;

  for (int wD = 0; wD < ${effectiveFilterDepth}; wD += ${dilationDepth}) {
    int xD = xDCorner + wD;

    if (xD < 0 || xD >= ${convInfo.inDepth}) {
      continue;
    }

    for (int wR = 0; wR < ${effectiveFilterHeight}; wR += ${dilationHeight}) {
      int xR = xRCorner + wR;

      if (xR < 0 || xR >= ${convInfo.inHeight}) {
        continue;
      }

      for (int wC = 0; wC < ${effectiveFilterWidth}; wC += ${dilationWidth}) {
        int xC = xCCorner + wC;

        if (xC < 0 || xC >= ${convInfo.inWidth}) {
          return initializationValue;
        }

        const vec4 ones = vec4(1.0, 1.0, 1.0, 1.0);

        float count = 0.0;

        float getValue(int batch, int xD, int xR, int xC, int ch) {
            return getX(batch, xD, xR, xC, ch);
          }

          void main() {
            ivec5 coords = getOutputCoords();
            int batch = coords.x;
            int ch = coords.u;

            ivec3 xCorner = ivec3(coords.y, coords.z, coords.w) * strides - pads;
            int xDCorner = xCorner.x;
            int xRCorner = xCorner.y;
            int xCCorner = xCorner.z;

            // max/min x(?, ?, ?, ch) to get y(yD, yR, yC, ch).
            // ? = to be determined.
            float minMaxValue = 0.0;
            float minMaxValueFound = 0.0;
            int minMaxPosition = 0;

            for (int wD = 0; wD < ${effectiveFilterDepth}; wD += ${dilationDepth}) {
              int xD = xDCorner + wD;

              if (xD < 0 || xD >= ${convInfo.inDepth}) {
                continue;
              }

              for (int wR = 0; wR < ${effectiveFilterHeight}; wR += ${dilationHeight}) {
                int xR = xRCorner + wR;

                if (xR < 0 || xR >= ${convInfo.inHeight}) {
                  continue;
                }

                for (int wC = 0; wC < ${effectiveFilterWidth}; wC += ${dilationWidth}) {
                  int xC = xCCorner + wC;

                  if (xC < 0 || xC >= ${convInfo.inWidth}) {
                    return initializationValue;
                  }

                  const vec4 ones = vec4(1.0, 1.0, 1.0, 1.0);

                  float count = 0.0;

                  float getValue(int batch, int xD, int xR, int xC, int ch) {
                      return getX(batch, xD, xR, xC, ch);
                    }
```

```
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```
$\text{getValue(batch, xD, xR, xC + 2 * } \{\text{dilationWidth} \}, \text{ch})$,$\text{setValue(batch, xD, xR, xC + 3 * } \{\text{dilationWidth} \}, \text{ch})$,$\text{setValue(batch, xD, xR, xC + } \{\text{dilationWidth} \}, \text{ch})$,$\text{setValue(batch, xD, xR, xC)}$,$\text{setValue(batch, xD, xR, xC + } \{\text{dilationWidth} \}, \text{ch})$,$\text{setValue(batch, xD, xR, xC + 2 * } \{\text{dilationWidth} \}, \text{ch})$,$\text{setValue(batch, xD, xR, xC + 2 * } \{\text{dilationWidth} \}, \text{ch})$,$\text{setValue(batch, xD, xR, xC + 3 * } \{\text{dilationWidth} \}, \text{ch})$,$\text{setValue(batch, xD, xR, xC + 3 * } \{\text{dilationWidth} \}, \text{ch})$,$\text{setValue(batch, xD, xR, xC + } \{\text{dilationWidth} \}, \text{ch})$,$\text{setValue(batch, xD, xR, xC)}$,$\text{setValue(batch, xD, xR, xC + } \{\text{dilationWidth} \}, \text{ch})$,$\text{setValue(batch, xD, xR, xC + 2 * } \{\text{dilationWidth} \}, \text{ch})$,$\text{setValue(batch, xD, xR, xC + 2 * } \{\text{dilationWidth} \}, \text{ch})$,$\text{setValue(batch, xD, xR, xC + 3 * } \{\text{dilationWidth} \}, \text{ch})$,
backend.runWebGLProgram(avgPoolProgram, [x], 'float32');
export const avgPool3DConfig: KernelConfig = {
  kernelName: AvgPool3D,
  backendName: 'webgl',
  kernelFunc: avgPool3D as {} as KernelFunc
};

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 */

import {backend_util} from '@tensorflow/tfjs-core';
import {GPGPUProgram} from './gpgpu_math';
import {GPGPUProgram} from

export const avgPool3DConfig: KernelConfig = {
  kernelName: AvgPool3D,
  backendName: 'webgl',
  kernelFunc: avgPool3D as {} as KernelFunc
};

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 */

import {backend_util} from '@tensorflow/tfjs-core';
import {GPGPUProgram} from

export class AvgPool2DBackpropProgram implements GPGPUProgram {
  variableNames = ['dy'];
  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 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);
    const userCode = `multiply(float(dy), float(avgMultiplier));`;
    void main() {
      ivec2 pads = ivec2(padTop, padLeft);
      void 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)
      float dotProd = 0.0;
      for (int wR = 0; wR < strideHeight; wR++) {
        float dyR = float(dyRCorner + wR) / strideHeight;
        if (dyR < 0.0 || dyR >= strideHeight || fract(dyR) > 0.0) {
          continue;
        }
        int idyR = int(dyR);

        for (int wC = 0; wC < effectiveFilterWidth; wC++) {
          float dyC = float(dyCCorner + wC) / strideWidth;
          if (dyC < 0.0 || dyC >= strideWidth || fract(dyC) > 0.0) {
            continue;
          }
          int idyC = int(dyC);

          float dyValue = getDy(b, idyR, idyC, d);
          dotProd += dyValue * avgMultiplier;
        }
      }
      setOutput(dotProd);
    }
  }
}

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);
    const userCode = `multiply(float(dy), float(avgMultiplier));`;
    void main() {
      ivec3 pads = ivec3(padFront, padTop, padLeft);
      void getOutputCoords();
      int b = coords[0];
      int ch = coords[4];
      ivec3 dyDCCorner = ivec3(coords.y, coords.z, coords.w) - pads;
      int dyDCorner = dyDCCorner.x;
      int dyRCCorner = dyDCorner.y;
      int dyCCorner = dyDCorner.z;
      // Convolve dy(?, ?, ?, d)
      float dotProd = 0.0;
      for (int wD = 0; wD < effectiveFilterDepth; wD++) {
        float dyR = float(dyRCCorner + wR) / strideHeight;
        if (dyR < 0.0 || dyR >= strideHeight || fract(dyR) > 0.0) {
          continue;
        }
        int idyR = int(dyR);

        for (int wC = 0; wC < effectiveFilterWidth; wC++) {
          float dyC = float(dyCCorner + wC) / strideWidth;
          if (dyC < 0.0 || dyC >= strideWidth || fract(dyC) > 0.0) {
            continue;
          }
          int idyC = int(dyC);

          float dyValue = getDy(b, idyR, idyC, d);
          dotProd += dyValue * avgMultiplier;
        }
      }
      setOutput(dotProd);
    }
  }
}
float dyD = float(dyDCorner + wD) / \$\{strideDepth\} \nif (dyD < 0.0 || dyD >= \$\{convInfo.outDepth\}) \n  \n  int idyD = int(dyD); \n
for (int wR = 0; wR < \$\{effectiveFilterHeight\}; \n  \n  float dyR = float(dyRCorner + wR) / \$\{strideHeight\}; \n
  if (dyR < 0.0 || dyR >= \$\{convInfo.outHeight\}) \n  \n    continue;
  \n  int idyR = int(dyR);

  for (int wC = 0; wC < \$\{effectiveFilterWidth\}; \n    \n    float dyC = float(dyCCorner + wC) / \$\{strideWidth\}; \n
    if (dyC < 0.0 || dyC >= \$\{convInfo.outWidth\}) \n    \n      continue;
    \n    int idyC = int(dyC);

    float dyValue = getDy(batch, idyD, idyR, idyC, ch);

    dotProd += dyValue * avgMultiplier;
  }
}

setOutput(dotProd);
";
}
}

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 */
import { AvgPool3DGrad, AvgPool3DGradAttrs, AvgPool3DGradInputs, backend_util, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';

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, number, number], filterSize, strides, \n  \n  avgPoolGradBackpropProgram = new AvgPool3DGradBackpropProgram(convInfo);
  return backend.runWebGLProgram(avgPoolGradBackpropProgram, [dy], x.dtype);
}

export const avgPoolGrad3DConfig: KernelConfig = {
  kernelName: AvgPool3DGrad,
  backendName: 'webgl',
  kernelFunc: avgPool3DGrad as {} as KernelFunc
};

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 */
import { AvgPoolGrad, AvgPoolGradAttrs, AvgPoolGradInputs, backend_util, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';

export function avgPoolGrad(args: {
  inputs: AvgPoolGradInputs,
  backend: MathBackendWebGL,
  attrs: AvgPoolGradAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {dy, input} = inputs;
  const x = input;
  assertNotComplex([dy, input], 'avgPoolGrad');
  const {filterSize, strides, pad} = attrs;
  const convInfo = backend_util.computePool2DInfo(x.shape as [number, number, number], filterSize, strides, \n  \n  avgPoolGradBackpropProgram = new AvgPool2DGradBackpropProgram(convInfo);
  return backend.runWebGLProgram(avgPoolGradBackpropProgram, [dy], x.dtype);
}

export const avgPoolGradConfig: KernelConfig = {
  kernelName: AvgPool2DGrad,
  backendName: 'webgl',
  kernelFunc: avgPool2DGrad as {} as KernelFunc
};

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

import {BatchMatMul, BatchMatMulAttrs, BatchMatMulInputs, KernelConfig, KernelFunc} from
'@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';

import {batchMatMulImpl} from './BatchMatMul_impl';

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,
};

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

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[]|
null,
      scaleShape: number[]|
null,
      varianceEpsilon: number) {
    this.variableNames = ['x', 'mean', 'variance'];
    backend_util.assertAndGetBroadcastShape(xShape, meanShape);
    backend_util.assertAndGetBroadcastShape(xShape, varianceShape);

    let offsetSnippet = '0.0';
    if (offsetShape != null) {
      backend_util.assertAndGetBroadcastShape(xShape, offsetShape);
      this.variableNames.push('offset');
      offsetSnippet = 'getOffsetAtOutCoords()';
    }

    let scaleSnippet = '1.0';
    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 inv = scale * inversesqrt(variance + float(${varianceEpsilon}));
        setOutput(dot(vec3(x, -mean, offset), vec3(inv, inv, 1)));
      }
    `;
  }
}

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

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);

    let offsetSnippet = '$offsetSnippet';
    if (offsetShape != null) {
      backend_util.assertAndGetBroadcastShape(xShape, offsetShape);
      this.variableNames.push('offset');
      offsetSnippet = 'getOffsetAtOutCoords()';
    }

    let scaleSnippet = '$scaleSnippet';
    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 inv = scale * inversesqrt(variance + float($offsetSnippet));
        setOutput(dot(vec3(x, -mean, offset), vec3(inv, inv, 1)));
      }
    `;
  }
}
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```javascript
(offsetShape != null) {
    backend_util.assertAndGetBroadcastShape(xShape, offsetShape);
    this.variableNames.push('offset');
    offsetSnippet = 'getOffsetAtOutCoords()';
}

let scaleSnippet = 'vec4(1.0)';
if (scaleShape != null) {
    backend_util.assertAndGetBroadcastShape(xShape, scaleShape);
    this.variableNames.push('scale');
    scaleSnippet = 'getScaleAtOutCoords()';
}

this.outputShape = xShape;
this.userCode = `
    void main() {
        vec4 offset = ${offsetSnippet};
        vec4 scale = ${scaleSnippet};

        vec4 x = getXAtOutCoords();
        vec4 mean = getMeanAtOutCoords();
        vec4 variance = getVarianceAtOutCoords();
        vec4 inv = scale * inversesqrt(variance + vec4($[varianceEpsilon]));

        setOutput((x - mean) * inv + offset);
    }
`;
}
```

*/

```javascript
/**
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 */

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

import {MathBackendWebGL} from '../backend_webgl';
import {BatchNormProgram} from '../batchnorm_gpu';
import {BatchNormPackedProgram} from '../batchnorm_packed_gpu';

export const batchNorm: (params: {
  inputs: FusedBatchNormInputs,
  backend: MathBackendWebGL,
  attrs: FusedBatchNormAttrs
}) => TensorInfo = ({inputs, backend, attrs}) => {
  const {x, mean, variance, offset, scale} = inputs;

  util.assert(
      mean.shape.length === variance.shape.length,
      () => 'Batch normalization gradient requires mean and variance to have equal ranks.');
  util.assert(
      offset == null || mean.shape.length === offset.shape.length,
      () => 'Batch normalization gradient requires mean and offset to have equal ranks.');
  util.assert(
      scale == null || mean.shape.length === scale.shape.length,
      () => 'Batch normalization gradient requires mean and scale to have equal ranks.');

  let {varianceEpsilon} = attrs;
  if (varianceEpsilon == null) {
    varianceEpsilon = 0.001;
  }

  const finalInputs = [x, mean, variance];

  let offsetShape = null;
  if (offset != null) {
    offsetShape = offset.shape;
    finalInputs.push(offset);
  }

  let scaleShape = null;
  if (scale != null) {
    scaleShape = scale.shape;
    finalInputs.push(scale);
  }

  const program =
      env().getBool('WEBGL_PACK_NORMALIZATION') ?
          new BatchNormPackedProgram(
              x.shape,
              mean.shape.length === offset.shape.length,
              (start: number[0]) => 
                  startLoc = new WebGLUniformLocation(program, `start[0]`),
          ) :
      new BatchNormProgram(
          x.shape,
          mean.shape, variance.shape, offsetShape, scaleShape,
          varianceEpsilon);
  const output = backend.runWebGLProgram(program, finalInputs, finalInputs[0].dtype);

  return output;
};

export const batchNormConfig: KernelConfig = {
  kernelName: FusedBatchNorm,
  backendName: 'webgl',
  kernelFunc: batchNorm as {} as KernelFunc,
};

```
body: string
const coordSum = destSize.map((_, i) => {
  return `sourceLoc.${coords[i]} = start[${i}] + coords.${coords[i]};`;
});

body = `sourceLoc = coords + start

this.userCode = `uniform int start[$rank];

void main() {

  $body

  setOutput(getSource($sourceCoords));
}

getCustomSetupFunc(start) {
    if (start.length !== this.rank) {
      throw Error(`The rank ($rank) of the program must match the length of start ($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 the uniform.
        return;
      }
      gpgpu.gl.uniform1iv(this.startLoc, start);
    }
}

const coords = ['x', 'y', 'z', 'w', 'u', 'v'];

function getCoords(rank: number): string {
    if (rank === 1) {
      return 'sourceLoc';
    } else if (rank <= 6) {
      return coords.slice(0, rank).map(x => 'sourceLoc.' + x).join(',');
    } else {
      throw Error(`Slicing for rank ${rank} is not yet supported`);
    }
}

/**
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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.
 */

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 = getCoordsDataType(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 ? '' : `
      --${coords[this.rank - 1]};
      if (++${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] =

    $dtype[coords[i] + start[$i]];`);
    this.userCode = `uniform int start[$rank];

    void main() {
      $dtype coords = getOutputCoords();
      $dtype sourceLoc;
      $sourceLocSetup

      vec4 result = vec4(0.);
      $upperRow
      $lowerRow
      setOutput(result);
    }

    getCustomSetupFunc(start) {
      if (start.length !== this.rank) {
        throw Error(`The rank ($rank) of the program must match the length of start ($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
          // the uniform.
          return;
        }
        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;
  const 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(reshaped, 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);

  return sliced;
};

export const batchToSpaceNDConfig: KernelConfig = {
  kernelName: BatchToSpaceND,
  backendName: 'webgl',
  kernelFunc: batchToSpaceND as {} as KernelFunc
};

import {Bincount, BincountAttrs, BincountInputs, KernelConfig, KernelFunc, TensorInfo, TypedArray} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {bincountImplCPU} from '../kernel_utils/shared';

export function bincount(args: {
  inputs: BincountInputs,
  backend: MathBackendWebGL,
  attrs: BincountAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x, weights} = inputs;
  const size = attrs.shape[0];

  const xVals = backend.readSync(x.dataId) as TypedArray;
  const weightsVals = backend.readSync(weights.dataId) as TypedArray;

  const outVals = backend.makeTensorInfo([size], weights.dtype,(weightsVals.length, xVals.length));

  return outVals;
}

export const bincountConfig: KernelConfig = {
  kernelName: Bincount,
  backendName: 'webgl',
  kernelFunc: bincount as {} as KernelFunc
};
import {TensorInfo} from '@tensorflow/tfjs-core';
import {UnaryOpProgram} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '@tensorflow/tfjs-backend-webgl';

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);
  return {dataId: output.dataId, shape: output.shape, dtype: output.dtype};
}

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

import {GPGPUContext} from './gpgpu_context';
import {GPGPUProgram} from './gpgpu_math';

class ClipProgram implements GPGPUProgram {
  variableNames = ['A'];
  userCode: string;
  outputShape: number[];

  constructor(aShape: number[]) {
    this.outputShape = aShape;
    this.userCode = `uniform float minVal;
    uniform float maxVal;

    void main() {
      float value = getAAtOutCoords();
      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');
        this.maxLoc = gpgpu.getUniformLocationNoThrow(webGLProgram, 'maxVal');
      }
      gpgpu.gl.uniform1f(this.minLoc, min);
      gpgpu.gl.uniform1f(this.maxLoc, max);
    };
  }
}

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

import {GPGPUContext} from './gpgpu_context';
import {GPGPUProgram} from './gpgpu_math';

class ClipPackedProgram implements GPGPUProgram {
  variableNames = ['A'];
  packedInputs = true;
  packedOutput = true;
  userCode: string;
  outputShape: number[];

  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');
        this.maxLoc = gpgpu.getUniformLocationNoThrow(webGLProgram, 'maxVal');
      }
      gpgpu.gl.uniform1f(this.minLoc, min);
      gpgpu.gl.uniform1f(this.maxLoc, max);
    };
  }
}

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

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[];

  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');
        this.maxLoc = gpgpu.getUniformLocationNoThrow(webGLProgram, 'maxVal');
      }
      gpgpu.gl.uniform1f(this.minLoc, min);
      gpgpu.gl.uniform1f(this.maxLoc, max);
    };
  }
}
```javascript
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
};
```

```javascript
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 ensure underflow-safety in all cases.
      setOutput(mx == 0.0 ? 0.0 : mx * length(vec2(1, min(re, im)/mx)));
    }
  }
}
```

```javascript
import {ComplexAbs, ComplexAbsInputs, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import {ComplexAbsProgram} from '../complex_abs_gpu';

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, [0], x.dtype);
}
```

```javascript
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 ensure underflow-safety in all cases.
      setOutput(mx == 0.0 ? 0.0 : mx * length(vec2(1, min(re, im)/mx)));
    }
  }
}
```

```javascript
import {ComplexAbs, ComplexAbsInputs, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import {ComplexAbsProgram} from '../complex_abs_gpu';

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, [0], x.dtype);
}
```
```javascript
import {backend_util} from '@tensorflow/tfjs-core';

export class ConcatProgram implements GPGPUProgram {
  variableNames: string[];
  outputShape: number[] = [];
  userCode: string; // Concat 2d tensors along axis=1. See comments in MathBackendWebGL.concat().

  constructor(shapes: Array<[number, number]>) {
    this.outputShape = backend_util.computeOutShape(shapes, 1 /* axis */);
    this.variableNames = shapes.map((_, i) => `T${i}`);

    const offsets: number[] = new Array(shapes.length - 1);
    offsets[0] = shapes[0][1];
    for (let i = 1; i < offsets.length; i++) {
      offsets[i] = offsets[i - 1] + shapes[i][1];
    }

    const snippets = ['if (yC < ' + offsets[0] + ') 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() {
      ivec2 coords = getOutputCoords();
      int yR = coords.x;
      int yC = coords.y;
      ${snippets.join('nn else ')}
    }
}
```
getValue(${coords});

        if (${shape[rank - 2]} < ${{coords[rank - 2]}}) {
          result.a = getValue(${coords});
        }

        for (let i = 0; i < ${{shape[rank - 2]}}; i++) {
          result.a = getValue(${coords});
        }

        if (${shape[rank - 2]} < ${{coords[rank - 2]}}) {
          result.a = getValue(${coords});
        }

        result.a = getValue(${coords});

        return result;
      }
    `;

    if (${coords[rank - 2]} < ${{shape[rank - 2]}}) {
      result.b = getValue(${coords});
    }

    return 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 an expression 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(',')

  /**
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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: ImagInputs): ImagFunc {
    const {inputs, backend} = args;
    const inputData = backend.texData.get(inputs.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 {Concat, ConcatAttrs, ConcatInputs, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';
  import {MathBackendWebGL} from '../backend_webgl';
  import {concatImpl} from './Concat_impl';
  import {identity} from './Identity';

  export function concat(args: ConcatInputs): ConcatFunc {
    const {inputs, attrs, backend} = 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, []);
    }

    // Keep only non-empty tensors (ignore tensors with 0 in their shape).
    let $inputs = inputs.filter(t =>
      util.sizeFromShape(t.shape) > 0);\n    if ($inputs.length === 1) {
      return backend_util.assertParamsConsistent(shapes, Sxis);\n      return concatImpl($inputs, Sxis, backend);\n    }

    return concatImpl($inputs, $axis, backend);
  }

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

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   */

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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;
    const padTop = convInfo.padInfo.top;
    const padLeft = convInfo.padInfo.left;
    const strideHeight = convInfo.strideHeight;
    const strideWidth = convInfo.strideWidth;
    const dilationHeight = convInfo.dilationHeight;
    const dilationWidth = convInfo.dilationWidth;
    const filterHeight = convInfo.filterHeight;
    const filterWidth = convInfo.filterWidth;
    const inputDepthNearestVec4 = Math.floor(convInfo.inChannels / 4) * 4;
    const inputDepthVec4Remainder = convInfo.inChannels % 4;
    const isChannelsLast = convInfo.dataFormat === 'channelsLast';
    const rowDim = 1;
    const colDim = 2;

    const iVec2 strides = iVec2(${strideHeight}, ${strideWidth});
    const iVec2 pads = iVec2(${padTop}, ${padLeft});

    void main() {
        iVec4 coords = getOutputCoords();
        int batch = coords[0];
        int d2 =
          coords[2] * vec2(${filterHeight}, ${filterWidth});
        int xRCorner =
            iVec2(coords[1], coords[2]) *
            iVec2(${dilationHeight}, ${dilationWidth});
        int xCorners = xRCorner.x;
        int xCCorners = xRCorner.y;

        // Convolve x(?, ?, ?, ?) with y(?, ?, ?, ?) to get z(?, ?, ?, ?).
        // ? = to be determined.
        for (int i = 0; i < ${filterHeight}; i++) {
            int xR = xRCorners + i;
            if (xR < 0 || xR >= ${convInfo.inHeight}) {
                continue;
            }
            for (int j = 0; j < ${filterWidth}; j++) {
                int xC = xCCorners + j;
                if (xC < 0 || xC >= ${convInfo.inWidth}) {
                    continue;
                }
                for (int k = 0; k < inputDepthNearestVec4; k++) {
                    vec4 values = vec4(
                        getW(i, j, k, ${inputDepthVec4Remainder}),
                        getW(i, j, k + 1, ${inputDepthVec4Remainder}),
                        getW(i, j, k + 2, ${inputDepthVec4Remainder}),
                        getW(i, j, k + 3, ${inputDepthVec4Remainder})
                    );
                    dotProd += dot(xValues, values);
                }
            }
        }
    }
}


// Convolve x(?, ?, ?, d1) with w(:, :, :, d1, d2) to get y(?, ?, ?, d2).
// to be determined.
// = across all
// values in that axis.

float dotProd = 0.0;
for (int wF = 0; wF < filterDepth; wF++) {
  int xF = xFCorner + wF * dilationDepth;
  if (xF < 0 || xF >= convInfo.inDepth) {
    continue;
  }
  for (int wR = 0; wR < filterHeight; wR++) {
    int xR = xRCorner + wR * dilationHeight;
    if (xR < 0 || xR >= convInfo.inHeight) {
      continue;
    }
    for (int wC = 0; wC < filterWidth; wC++) {
      int xC = xCCorner + wC * dilationWidth;
      if (xC < 0 || xC >= convInfo.inWidth) {
        continue;
      }
      for (int d1 = 0; d1 < inputDepthNearestVec4; d1 += 4) {
        vec4 xValues = vec4(x);
        vec4 wValues = vec4(w);
        vec4 dotProduct = dot(xValues, wValues);
        dotProd += dotProduct;
      }
    }
  }
}

float result = dotProd;
if (addBiasSnippet) {
  result += bias;  // Add bias to the result.
}
if (applyActivationSnippet) {
  result = applyActivation(result);  // Apply activation function.
}
setOutput(result);
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```javascript
${inputDepthNearestVec4} + 2, d2)\n )\n\n dotProd += dot(xValues, wValues)\n )\n\n setOutput(dotProd)\n )\n```

```python
}
          }
        }
        setOutput(dotProd);
      }
    `;
  }
}
```

```plaintext
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 */

import {backend_util} from '@tensorflow/tfjs-core';
import {getGlslDifferences} from '../glsl_version';
import {GPGPUProgram} from './gpgpu_math';
import class Im2ColPackedProgram implements GPGPUProgram {
  variableNames = ['A'];
  packedInputs = true;
  packedOutput = true;
  outputShape: number[];
  userCode: string;
  constructor(outputShape: number[], inputShape: number[][], convInfo: backend_util.Conv2DInfo) {
    this.outputShape = outputShape;

    const {
      filterWidth,
      inChannels,
      strideWidth,
      strideHeight,
      padInfo,
      dilationWidth,
      dilationHeight,
      dataFormat
    } = convInfo;
    const {left, top} = padInfo;
    const itemsPerBlockRow = inChannels * filterWidth;
    const glsl = getGlslDifferences();
    const isChannelsLast = dataFormat === 'channelsLast';
    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 < ${outputShape[0]}) {
            offsetY = int(blockIndex / (${outWidth})) * ${strideHeight} - ${top};
            d0 = offsetY + ${dilationHeight} * (pos / ${itemsPerBlockRow});

            if(d0 < ${inputShape[rowDim]} && d0 >= 0) {

              offsetX = int(mod(float(blockIndex), ${outWidth}) * ${strideWidth} / ${itemsPerBlockRow});
              d1 = offsetX + ${dilationWidth} * (int(mod(float(pos), ${inChannels}) / ${itemsPerBlockRow}));

              if(d1 < ${inputShape[colDim]} && d1 >= 0) {

                ch = int(mod(float(pos), ${inChannels}));

                if (${isChannelsLast}) {
                  innerDims = vec2(d1, d0);
                  result[rc.x*2 + rc.y] = getChannel(
                    getA(d0, int(innerDims.x), int(innerDims.y)), innerDims);
                } else {
                  innerDims = vec2(d0, d1);
                  result[rc.x*2 + rc.y] = getChannel(
                    getA(ch, int(innerDims.x), int(innerDims.y)), innerDims);
              }
            }
          }
      }
    }

    this.userCode = `
      void main() {
        ivec2 rc = getOutputCoords();++\n        vec4 result = vec4(0);

        int blockIndex, pos, offsetY, d0, offsetX, d1, ch;

        \n        \n        \n      }
    `;
  }
}
```

```javascript
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 */

import {backend_util, env, TensorInfo, util} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {Im2ColPackedProgram} from '../im2col_packed_gpu';
import {mapActivationToShaderProgram} from '../kernel_utils/kernel_funcs_util';
import {MatMulPackedProgram} from '../mulmat_packed_gpu';
import * as webgl_util from '../webgl_util';

import {batchMatMulImpl, MATMUL_SHARED_DIM_THRESHOLD} from './BatchMatMul_impl';
import {identity} from './Identity';
import {reshape} from './Reshape';

type Conv2DConfig = {
  x: TensorInfo,
  filter: TensorInfo,
  convInfo: backend_util.Conv2DInfo,
  backend: MathBackendWebGL,
  bias?: TensorInfo,
  preluActivationWeights?: TensorInfo,
  leakyreluAlpha?: number,
  activation?: backend_util.Activation
};

// For 1x1 kernels that iterate through every point in the input, convolution can be expressed as matrix
```
multiplication (without need for memory\n// remapping).

export function conv2dByMatMul({
  x,
  filter,
  convInfo,
  backend,
  bias = null,
  preluActivationWeights = null,
  leakyreluAlpha = 0,
  activation = null
}: Conv2DConfig) {
  // Reshapes conv2D input to 2D tensors, uses matMul and then reshape the\n // result from 2D to 4D.
  const xShape = x.shape;
  const xTexData = backend.texData.get(x.dataId);
  const sharedMatMulDim = convInfo.inChannels;
  const outerShapeX = xShape[0] * xShape[1] * xShape[2];
  const outerShapeFilter = convInfo.outChannels;
  const isChannelsLast = convInfo.dataFormat === 'channelsLast';
  const transposeA = false;
  const transposeB = false;
  let out: TensorInfo = [];
  // TODO: Once reduction ops are packed, batchMatMul will always be packed
  // and we can remove this condition.
  const batchMatMulWillBeUnpacked =
      (outerShapeX === 1 || outerShapeFilter === 1) &&
      sharedMatMulDim > MATMUL_SHARED_DIM_THRESHOLD;
  const reshapeWillBeExpensive = xShape[2] % 2 !== 0 && !!xTexData.isPacked;
  if (batchMatMulWillBeUnpacked ||
      !env().getBool('WEBGL_LAZILY_UNPACK') ||
      !env().getBool('WEBGL_PACK_BINARY_OPERATIONS') ||
      !reshapeWillBeExpensive) {
    // targetShape = isChannelsLast ? xShape[0] * xShape[1] * xShape[2] :
    // xShape[0] * xShape[2] * xShape[3];
    const xReshaped = reshape({
      inputs: {x},
      backend,
      attrs: {shape: [1, targetShape, convInfo.inChannels]}
    });
    const filterReshaped = reshape({
      inputs: {x: filter},
      backend,
      attrs: {shape: [1, convInfo.inChannels, convInfo.outChannels]}
    });
    const result = batchMatMulImpl({
      a: xReshaped,
      b: filterReshaped,
      transposeA,
      transposeB,
      bias,
      activation,
      preluActivationWeights,
      leakyreluAlpha
    });
    out = reshape({
      inputs: {x: result},
      backend,
      attrs: {shape: convInfo.outShape}
    });
    intermediates.push(xReshaped);
    intermediates.push(filterReshaped);
    intermediates.push(result);
  } else {
    // Following optimization is specific to packed \n // with odd row count \n // (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 \n // it is for even x.shape[2] + 1. We make the odd-rows tensor to look
    // like\n    // even-rows tensor before the operation and, after the batchMatMul, \n    // we 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] + 1);
    const filterReshaped = reshape({
      inputs: {x: filter},
      backend,
      attrs: {shape: [convInfo.inChannels, convInfo.outChannels, 1]}
    });
    const pointwiseConv = batchMatMulImpl({
      a: xReshaped,
      b: filterReshaped,
      transposeA,
      transposeB,
      bias,
      activation,
      preluActivationWeights,
      leakyreluAlpha
    });
    out = reshape({
      inputs: {x: result},
      backend,
      attrs: {shape: convInfo.inChannels}
    });
    intermediates.push(xReshaped);
    intermediates.push(filterReshaped);
    intermediates.push(result);
  }

  for (const i of intermediates) {
    backend.disposeIntermediateTensorInfo(i);
  }

  return out;
}

// Implements the im2row algorithm as outlined in "High Performance
// Convolutional Neural Networks for Document Processing" (Suvisoft, 2006)
export function conv2dWithIm2Row({
  x,
  filter,
  convInfo,
  backend,
  bias = null,
  preluActivationWeights = null,
  leakyreluAlpha = 0,
  activation = null
}: Conv2DConfig) {
  // Restore the input shape to original.
  const originalXTexDataShape = xTexData.shape.slice();
  const xTexDataShape = xTexData.shape.slice(0, xTexData.shape.length - 2);
  const util.assert(!webgl_util.isTexImageFree(xTexData.shape, xReshaped.shape));
  // packed reshape $xTexData.shape$ to $\{\}$ isn't free';
  const filterReshaped = reshape({
    inputs: {x: filter},
    backend,
    attrs: {shape: [convInfo.inChannels, convInfo.outChannels]}
  });
  intermediates.push(filterReshaped);
  const pointwiseConv = batchMatMulImpl({
    a: xReshaped,
    b: filterReshaped,
    backend,
    transposeA,
    transposeB,
    bias,
    activation,
    preluActivationWeights,
    leakyreluAlpha
  });
  const pointwiseConvTexData = backend.texData.get(pointwiseConv.dataId);
  // batchMatMul result is expected to be packed';
  const xTexDataShape = originalXTexDataShape;
  // Set the output shape - there is no need for expensive reshape as data\n // layout is already correct.
  const pointwiseConvTexDataShape = convInfo.outShape;
  out = identity({
    inputs: {x: pointwiseConv, backend},
    out: convInfo.outShape
  });
  intermediates.push(pointwiseConv);
}
Conv2DConfig) {
  // Rearranges conv2d input so each block to be convolved over forms the column of a new matrix with shape [filterWidth * filterHeight * inChannels, outHeight * outWidth]. The filter is also rearranged so each output channel forms a row of a new matrix with shape [outChannels, filterWidth * filterHeight * inChannels]. The convolution is then computed by multiplying these matrices and reshaping the result.
  const {filterWidth, filterHeight, inChannels, outWidth, outHeight, dataFormat} = convInfo;
  const isChannelsLast = dataFormat === 'channelsLast';
  const sharedDim = filterWidth * filterHeight * inChannels;
  const numCols = outHeight * outWidth;
  const xColShape = [sharedDim, numCols];
  const const transposeA = true;
  const transposeB = false;
  const intermediate_sizes: TensorInfo[] = [];

  const xSqueezed = reshape({inputs: [x], backend, attrs: {shape: x.shape.slice(1)}});
  const wRow = reshape({inputs: [x: filter], backend, attrs: {shape: [1, sharedDim, util.sizeFromShape(filter.shape) / sharedDim]}});

  intermediate_sizes.push(xSqueezed);
  intermediate_sizes.push(wRow);

  const im2ColProgram = new Im2ColPackedProgram(xColShape, xSqueezed.shape, convInfo);
  const im2Col = backend.runWebGLProgram(im2ColProgram, [xSqueezed], 'float32');
  const im2ColReshaped = reshape({inputs: [x: im2Col], backend, attrs: {shape: [1, xColShape[0], xColShape[1]]}});

  intermediate_sizes.push(im2Col);
  intermediate_sizes.push(im2ColReshaped);

  const hasBias = bias != null;
  const hasPreluActivationWeights = preluActivationWeights != null;
  const hasLeakyreluAlpha = activation === 'leakyrelu';

  const fusedActivation = activation ? mapActivationToShaderProgram(activation, true) : null;

  const matmulProgram = new MatMulPackedProgram([im2ColReshaped.shape as [number, number, number],
    wRow.shape as [number, number, number],
    [1, numCols, convInfo.outChannels],
    transposeA, transposeB, hasBias, fusedActivation, hasPreluActivationWeights, hasLeakyreluAlpha];

  const inputs: TensorInfo[] = [im2ColReshaped, wRow];
  if (bias) {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);
    intermediate_sizes.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}});

  const out = out;
}

export function conv2d(
    args:
        {inputs: Conv2DInputs, attrs: Conv2DAttrs, backend: MathBackendWebGL}) {
  const {inputs, backend, attrs} = args;
  const {x, filter} = inputs;
  const {strides, pad, dataFormat, dilations, dimRoundingMode} = attrs;

  const dataFormat = backend_util.convertConv2DataFormat(dataFormat);
  const convInfo = backend_util.computeConv2DataInfo(x.shape as [number, number, number, number], filter.shape as [number, number, number, number], strides, dilations, pad, dimRoundingMode, false /* depthwise */, dataFormat);

  let out: TensorInfo;
  if (convInfo.filterHeight === 1 && convInfo.filterWidth === 1 &&
      convInfo.dilationHeight === 1 && convInfo.dilationWidth === 1 &&
      convInfo.strideHeight === 1 &&
      convInfo.strideWidth === 1)
    out = convInfo.padInfo.type === 'SAME' || convInfo.padInfo.type === 'VALID')
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```javascript
{\n  out = conv2dByMatMul({x, filter, convInfo, backend});\n} else if (env().getBool('WEBGL_CONV_IM2COL') \&\& x.shape[0] === 1) {\n  out = conv2dWithIm2Row({x, filter, convInfo, backend});\n} else {\n  const program = new Conv2DProgram(convInfo);\n  out = backend.runWebGLProgram(program, \[x, filter, \'float32\']);\n}\nconst outReshaped = reshape({inputs: \[x: out\], backend, attrs: \{shape: convInfo.outShape\}});\nbackend.disposeIntermediateTensorInfo(out);\nreturn outReshaped;\n}\nexport const conv2DConfig: KernelConfig = \{
  kernelName: Conv2D,
  backendName: \'webgl\',
  kernelFunc: conv2d as {} as KernelFunc,
};

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

import {backend_util} from '@tensorflow/tfjs-core';
import {GPGPUProgram} from './gpgpu_math';

export class Conv2DDerFilterProgram implements GPGPUProgram {\n  variableNames = ['x', 'dy'];\n  outputShape: number[];\n  constructor(convInfo: backend_util.Conv2DInfo) {\n    this.outputShape = convInfo.filterShape;\n    const strideHeight = convInfo.strideHeight;\n    const strideWidth = convInfo.strideWidth;\n    const padTop = convInfo.padInfo.top;\n    const padLeft = convInfo.padInfo.left;\n    const isChannelsLast = convInfo.dataFormat === 'channelsLast';\n    const batchSize = convInfo.filterSize[0];\n    this.userCode = '
      void main() {
        ivec4 coords = getOutputCoords();
        int wR = coords.x;
        int wC = coords.y;
        int d1 = coords.z;\n        int d2 = coords.w;\n        // Convolv x(?, ?, d1) with dy(:, :, d2) to get dw(wR, wC, d1, d2).\n        // ? = to be determined. : = across all values in that axis.\n        float dotProd = 0.0;\n        for (int b = 0; b < batchSize; b++) {\n          for (int yR = 0; yR < convInfo.outHeight; yR++) {\n            int xR = wR + yR * strideHeight - padTop;\n            if (xR < 0 || xR >= convInfo.inHeight) {\n              continue;\n            }\n            for (int yC = 0; yC < convInfo.outWidth; yC++) {\n              int xC = wC + yC * strideWidth - padLeft;\n              if (xC < 0 || xC >= convInfo.inWidth) {\n                continue;\n              }\n              if (isChannelsLast) {\n                float dyValue = getDy(b, yR, yC, d2);
                float xValue = getX(b, xR, xC, d1);
                dotProd += (xValue * dyValue);
              } else {\n                float dyValue = getDy(b, d2, yR, yC);
                float xValue = getX(b, d1, xR, xC);
                dotProd += (xValue * dyValue);
              }\n            }\n          }\n        }\n        setOutput(dotProd);
      }
    }\n  }\n
  \n}

export class Conv2DDerInputProgram implements GPGPUProgram {\n  variableNames = ['dy', 'W'];\n  outputShape: number[];\n  constructor(convInfo: backend_util.Conv2DInfo) {\n    this.outputShape = convInfo.inShape;\n    const filterHeight = convInfo.filterHeight;\n    const filterWidth = convInfo.filterWidth;\n    const strideHeight = convInfo.strideHeight;\n    const strideWidth = convInfo.strideWidth;\n    const isChannelsLast = convInfo.dataFormat === 'channelsLast';\n    const padTop = filterHeight - 1 - convInfo.padInfo.top;\n    const padLeft = filterWidth - 1 - convInfo.padInfo.left;\n    const padDim = isChannelsLast ? 2 : 3;\n    const channelDim = isChannelsLast ? 3 : 1;\n    this.userCode = '
      const ivec2 pads = ivec2(padTop, padLeft);
      void main() {
        ivec4 coords = getOutputCoords();\n        int wR = coords.x;\n        int wC = coords.y;\n        int d1 = coords.z;\n        int d2 = coords.w;\n        // Convolv x(?, ?, d2) with w(:, :, d1, d2) to compute dx(xR, xC, d1, d2).\n        // ? = to be determined. : = across all values in that axis.\n        float dotProd = 0.0;\n        for (int wR = 0; wR < filterHeight; wR++) {\n          float dyR = float(dyRCorner + wR) / strideHeight;\n          if (dyR < 0.0 || dyR >= 0.0) {\n            continue;\n          }\n          for (int wC = 0; wC < filterWidth; wC++) {\n            float dwC = float(dxCCorner + wC);\n            dotProd += (xValue * dyValue);
          }\n        }\n        setOutput(dotProd);
      }
    }\n  }\n```

---

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---
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5

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import {backend_util, Conv2DBackpropFilter, Conv2DBackpropFilterAttrs, Conv2DBackpropFilterInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

export function conv2DBackpropFilter(args: {
  inputs: Conv2DBackpropFilterInputs,
  attrs: Conv2DBackpropFilterAttrs,
  backend: MathBackendWebGL
}) {
  const {inputs, backend, attrs} = args;
  const {x, dy} = inputs;
  const {strides, pad, dataFormat, dimRoundingMode, filterShape} = attrs;

  const $dataFormat = backend_util.convertConv2DDataFormat(dataFormat);
  const convInfo = backend_util.computeConv2DInfo(x.shape as [number, number, number, number], filterShape, strides, 1 /* dilations */, pad, dimRoundingMode, false /* depthwise */, $dataFormat);

  const program = new Conv2DDerFilterProgram(convInfo);
  return backend.runWebGLProgram(program, [x, dy], 'float32');
}

export const conv2DBackpropFilterConfig: KernelConfig = {
  kernelName: Conv2DBackpropFilter,
  backendName: 'webgl',
  kernelFunc: conv2DBackpropFilter as {} as KernelFunc,
};

import {backend_util, Conv2DBackpropInput, Conv2DBackpropInputAttrs, Conv2DBackpropInputInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

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, number], strides, 1 /* dilations */, pad, dimRoundingMode, false /* depthwise */, $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';

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, number, number, number], strides, pad, dilations);

  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,
};
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 *
=============================================================================
*/

import {backend_util, Conv3DBackpropFilterV2, Conv3DBackpropFilterV2Attrs, Conv3DBackpropFilterV2Inputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from './backend_webgl';
import {Conv3DDerFilterProgram} from './conv_backprop_gpu';

export function conv3DBackpropFilterV2(args: {
  inputs: Conv3DBackpropFilterV2Inputs,
  attrs: Conv3DBackpropFilterV2Attrs,
  backend: MathBackendWebGL
}) {
  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
};

import {backend_util, Conv3DBackpropInputV2, Conv3DBackpropInputV2Attrs, Conv3DBackpropInputV2Inputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from './backend_webgl';

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], pad, strides, inputShape);

  const program = new Conv3DDerInputProgram(convInfo);
  return backend.runWebGLProgram(program, [dy, filter], 'float32');
}

export const conv3DBackpropInputConfig: KernelConfig = {
  kernelName: Conv3DBackpropInputV2,
  backendName: 'webgl',
  kernelFunc: conv3DBackpropInput as {} as KernelFunc
};

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

import {CHECK_NAN_SNIPPET_UNARY, unaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';

const COS = CHECK_NAN_SNIPPET_UNARY + `return cos(x);
`;

export const cos = unaryKernelFunc({opSnippet: COS});

export const cosConfig: KernelConfig = {
  kernelName: Cos,
  backendName: 'webgl',
  kernelFunc: cos
};
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import {Cosh, KernelConfig} from '@tensorflow/tfjs-core';
import {unaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';

const COSH = `
  float e2x = exp(-x);
  return (e2x + 1.0 / e2x) / 2.0;
`;

export const cosh = unaryKernelFunc({opSnippet: COSH});

export const coshConfig: KernelConfig = {
  kernelName: Cosh,
  backendName: 'webgl',
  kernelFunc: cosh,
};

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, i] = boxShape;
    const [cropHeight, cropWidth] = cropSize;
    this.outputShape = [numBoxes, cropHeight, cropWidth, depth];
    const methodId = method === 'bilinear' ? 1 : 0;
    const [inputHeightFloat, inputWidthFloat] = [`${imageHeight - 1}.0`, `${imageWidth - 1}.0`];
    const [heightRatio, heightScale, inY] = cropHeight > 1 ?
        [`${(imageHeight - 1) / (cropHeight - 1)}`,
          '(y2-y1) * height_ratio',
          `y1*${inputHeightFloat} + float(y)*(height_scale)`,
        ] :
        ['0.0', '0.0', `0.5 * (y1+y2) * ${inputHeightFloat}`,
    ];
    const [widthRatio, widthScale, inX] = cropWidth > 1 ?
        [`${(imageWidth - 1) / (cropWidth - 1)}`,
          '(x2-x1) * width_ratio',
          `x1*${inputWidthFloat} + float(x)*(width_scale)`,
        ] :
        ['0.0', '0.0', `0.5 * (x1+x2) * ${inputWidthFloat}`,
    ];

    // Reference implementation
    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 bInd = round(getBoxInd(b));
        if(bInd < 0 || bInd >= ${batch}) {
          return;
        }
        float height_scale = ${heightScale};
        float width_scale = ${widthScale};
        float in_y = round(float(inY));
        if(in_y < 0 || in_y > ${inputHeightFloat}) {
          return;
        }
        float in_x = round(float(inX));
        if(in_x < 0 || in_x > ${inputWidthFloat}) {
          return;
        }
        vec2 sourceFracIndexCR = vec2(in_x,in_y);
        if(methodId == 1) {
          // Compute the four integer indices.
          ivec2 sourceFloorCR = ivec2(sourceFracIndexCR);
          ivec2 sourceCeilCR = ivec2(ceil(sourceFracIndexCR));
          float topLeft = getImage(b, sourceFloorCR.x, sourceFloorCR.y, d);
          float bottomLeft = getImage(b, sourceCeilCR.x, sourceFloorCR.y, d);
          float topRight = getImage(b, sourceFloorCR.x, sourceCeilCR.y, d);
          float bottomRight = getImage(b, sourceCeilCR.x, sourceCeilCR.y, d);
          vec2 fracCR = sourceFracIndexCR - vec2(sourceFloorCR);
          float top = fracCR.top() + (fracCR.top() * height_scale);
          float bottom = fracCR.top() + (fracCR.top() * width_scale);
          float left = fracCR.left() + (fracCR.left() * height_scale);
          float right = fracCR.left() + (fracCR.left() * width_scale);
          float imageVal = 0;
          if(bottom > bottomRight) {
            imageVal = topRight;
          } else if(top < topLeft) {
            imageVal = bottomLeft;
          } else if(bottom < bottomLeft) {
            imageVal = topLeft;
          } else if(top > topRight) {
            imageVal = bottomRight;
          } else {
            imageVal = getInImage(b, sourceFracIndexCR, d);
          }
          setOutput(float(imageVal));
        } else {
          ivec2 sourceFloorCR = vec2(ceil(sourceFracIndexCR));
          ivec2 sourceCeilCR = vec2(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);
          float top = topLeft + (topRight - topLeft) / 2.0;
          float bottom = bottomLeft + (topRight - topLeft) / 2.0;
          float left = leftTop + (rightTop - leftTop) / 2.0;
          float right = leftTop + (rightTop - leftTop) / 2.0;
          float imageVal = 0;
          if(bottom > bottomRight) {
            imageVal = topRight;
          } else if(top < topLeft) {
            imageVal = bottomLeft;
          } else if(bottom < bottomLeft) {
            imageVal = topLeft;
          } else if(top > topRight) {
            imageVal = bottomRight;
          } else {
            imageVal = getInImage(b, sourceFracIndexCR, d);
          }
          setOutput(float(imageVal));
        }
      }
    }";
topLeft) * fracCR.x;
  float bottom = bottomLeft + (bottomRight - bottomLeft) * fracCR.y;
  float newValue = top + (bottom - top) * fracCR.y;
  setOutput(newValue);
} else {
  // Compute the coordinators of nearest neighbor point.
  iVec2 sourceNearestCR = iVec2(floor(in sourceFracIndexCR +
  vec2(0.5,0.5)));
  float newValue = getImage(b, sourceNearestCR.y, sourceNearestCR.x, d);
  setOutput(newValue);
}
}
";
  }
}
}}

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 */

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

import {MathBackendWebGL} from '../backend_webgl';

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], cropSize, method, extrapolationValue);
  return backend.runWebGLProgram(program, [image, boxes, boxInd], 'float32');
};

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

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 */

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;

  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[shape.length - 1];
    let condition = '';
    let idxString = '';
    // When exclusive is set, the cumsum op becomes roll op that copies the
    // value from the previous index based on the direction specified by the
    // reverse flag.
    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 = `
      void main() {
        ${getCoordsDataType(rank)} coords = getOutputCoords();
        int end = shape.length - 1;
        ${getFinalCoord(rank, 'coords')} = end;
        float val = 0.0;
        int idx = 0;
        if ($condition) {
          idx = ${idxString};
          val += getX(${getCoords(rank, 'coords')});
          setOutput(val);
        }
      }
    `;
  }

  getCustomSetupFunc(index: number) {
    return (gpgpu: GPGPUContext, webGLProgram: WebGLProgram) => {
      if (this.index == null) {
        this.index = gpgpu.getUniformLocation(webGLProgram, 'index');
      }
      gpgpu.gl.uniform1f(this.index, 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, ${name}.w`;
  } else if (rank === 5) {
    return `${name}.x, ${name}.y, ${name}.z, ${name}.w, ${name}.v`;
  } else if (rank === 6) {
    return `${name}.x, ${name}.y, ${name}.z, ${name}.w, ${name}.v, ${name}.u`;
  };
}

export * from './gpgpu_math';
export * from './gpgpu_context';
export * from './gpgpu_math';
export * from './gpgpu_context';
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5
```javascript
const {inputs, backend, attrs} = args;
const {x, weights} = inputs;
const {size, binaryOutput} = attrs;

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([size], weights.dtype, outVals);
}

export const denseBincountConfig: KernelConfig = {
  kernelName: 'denseBincount',
  backendName: 'webgl',
  kernelFunc: denseBincount as {} as KernelFunc
};

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 = `void main() {
      ivec4 coords = getOutputCoords();
      int b = coords[0];
      int h = ${this.getHeightCoordString()};
      int w = ${this.getWidthCoordString()};
      int d = ${this.getDepthCoordString()};

      int in_h = h / ${blockSize};
      int offset_h = imod(h, ${blockSize});
      int in_w = w / ${blockSize};
      int offset_w = (offset_h * ${blockSize} + offset_w) *
        ${this.getOutputDepthSize()};
      int in_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 this.outputShape[3];
    } else {
      return this.outputShape[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)';
    }
  }
}

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 * 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 = '(', hasPreluActivation = false, hasLeakyReluAlpha = false) {
    this.outputShape = convInfo.outShape;

    const xNumRows = convInfo.inHeight;
    const xNumCols = convInfo.inWidth;
    const padTop = convInfo.padInfo.top;
    const padLeft = convInfo.padInfo.left;
    const strideHeight = convInfo.strideHeight;
    const strideWidth = convInfo.strideWidth;
    const dilationHeight = convInfo.dilationHeight;
    const dilationWidth = convInfo.dilationWidth;
    const filterHeight = convInfo.filterHeight;
    const filterWidth = convInfo.filterWidth;
    const channelMul = convInfo.outChannels / convInfo.inChannels;

    let activationSnippet = '', applyActivationSnippet = '',

    if (activation) {
      if (hasPreluActivation) {
        activationSnippet = `float activation(float a) {
          float b = getPreluActivationWeights()
        }`;
      } else if (hasLeakyReluAlpha) {
        activationSnippet = `float activation(float a) {
          float b = getLeakyreluAlpha()
        }`;
      } else {
        activationSnippet = `float activation(float x) {
        }`;
      }

      applyActivationSnippet = `result = activation(result);`;
    }

    this.addBiasSnippet = addBias ? 'result += getBias();' : '';
    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();
        int batch = coords.x;
        ivec2 xRCCorner = coords.yz * strides - pads;
        int d2 = coords.w;
        int d1 = d2 / ${channelMul};
        int q = d2 - d1 * ${channelMul};
        int xRCorner = xRCCorner.x;
        int xCCorner = xRCCorner.y;

        // Convolve x(?,
        // y, d1) with w(?, ?, d1, q) to get y(yR, yC, d2).
        float dotProd = 0.0;
        for (int wR = 0; wR < ${filterHeight}; wR++) {
          int xR = xRCorner + wR * ${dilationHeight};
          if (xR >= (${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);
            float result = dotPred(${applyActivationSnippet});
            result += xVal * wVal;
            float out = dotPred;${addBiasSnippet}';
            return backend.runWebGLProgram(program, [x], x.dtype);
          }
        }
      }
    `;
  }
}

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

```typescript
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[] = [null, null, null, null];
  userCode: string = null;

  constructor(convInfo: backend_util.Conv2DInfo, addBias = false, activation = string = null, hasPreluActivation = false, hasLeakyReluAlpha = false) {
    this.outputShape = convInfo.outShape;
    const xNumRows = convInfo.inHeight;
    const xNumCols = convInfo.inWidth;
    const padTop = convInfo.padTop;
    const padLeft = convInfo.padLeft;
    const strideHeight = convInfo.strideHeight;
    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 += `
          vec4 xTexelR${r}C${c * 2} = vec4(0.);
          vec4 wR${r}C${c} = vec4(0.);
          vec4 xR${r}C${c} = vec4(0.,0.);
        `;
      }
    }

    /**
     * This vectorized implementation works by gathering the values needed for
 * each output channel's dot product into vec4's and then multiplying them
 * all together (this happens in the final double for-loop below).
     * Most of the main loop consists of constructing these vec4's with the minimum
 * number of texture2D calls, which means making use of all four returned
 * values from a texture2D call at once.
     * 
     */
    for (let r = 0; r < filterHeight; r++) {
      for (let texelC = 0; texelC < texelsAcross; texelC++) {
        const c = texelC * 2;

        mainLoop += `
          xR = xRCorner + ${r * dilationHeight};
          xC = xCCorner + ${c * dilationWidth};
        `;

        if (strideWidth === 1) {
          if (c < filterWidth) {
            // If padding is odd, the outer texels have to be composed.
            if (padLeft % 2 === 1) {
              // TODO: Ensure vec4 previous does not result in redundant sample,
              // and avoid setting xTexelRC's that exceed the boundary in the
              // first place rather than resetting them to vec4(0).
            } else {
              xTexelR${r}C${c}.zw = vec2(0.);
            }
          } else {
            xTexelR${r}C${c} = vec4(0.,0.,0.);
          }
        }

        if (padLeft % 2 === 1) {
          // Todo:
        } else {
          // Compute xOffset:
          // - If padding is odd, we must add 1 to ensure we ask for an
          // even-numbered row.
          // We subtract 2 to access the previous texel:
          // mainLoop += ` xOffset = xC + 1;
          if (xR >= 0 && xR < xNumRows && xOffset < xNumCols) {
            xTexelR${r}C${c}.zw = vec2(0.,0.);
          } else {
            xTexelR${r}C${c} = vec4(0.,0.);
          }
        }

        if (xOffset + 1 >= xNumCols) {
          xTexelR${r}C${c} = vec4(0.,0.,0.,0.);
        } else {
          xTexelR${r}C${c} = vec4(xR, xC, xOffset, d1);
        }

        // Need to manually clear unused channels in case
        // we're reading from recycled texture:
        if (xOffset + 1 >= xNumCols) {
          xTexelR${r}C${c}.zw = vec2(0.);
        } else {
          xTexelR${r}C${c} = vec4(0.,0.);
        }

        xOffset = xC + 1 - 2;
        if (xR >= 0 && xR < xNumRows && xOffset >= 0)
          xTexelR${r}C${c} = vec4(xR, xC, xOffset, d1);
        if (xR >= 0 && xR < xNumRows && xOffset >= 0)
          xTexelR${r}C${c} = vec4(xR, xC, xOffset, d1);

        // Need to manually clear unused channels in case
        // we're reading from recycled texture:
        if (xOffset + 1 >= xNumCols) {
          xTexelR${r}C${c}.zw = vec2(0.);
        } else {
          xTexelR${r}C${c} = vec4(0.,0.);
        }

        xOffset = xC + 1 - 2;
        if (xR >= 0 && xR < xNumRows && xOffset >= 0)
          xTexelR${r}C${c} = vec4(xR, xC, xOffset, d1);
        if (xR >= 0 && xR < xNumRows && xOffset >= 0)
          xTexelR${r}C${c} = vec4(xR, xC, xOffset, d1);

        // Padding is even, so xRC
      }
    }
```

```
thisUserCode = `\n  void main() {\n    ivec4 coords = getOutputCoords();\n    int wR = coords.x;\n    int wC = coords.y;\n    int d1 = coords.z;\n    int dm = coords.w;\n    int d2 = d1 * $\{channelMul\} + dm;\n    float dotProd = 0.0;\n    // TO DO: Vec4 over the batch size for (int b = 0; b < $\{convInfo.batchSize\}; b++) {\n      for (int yR = 0; yR < $\{convInfo.outHeight\}; yR++) {\n        int xR = wR + yR * $\{strideWidth\};\n        int xC = wC + yC * $\{strideHeight\} - $\{padTop\};\n        \n        float xValue = getX(b, xR, xC, d1);\n        float dyValue = getDy(b, yR, yC, d2);\n        dotProd += (xValue * dyValue);\n      }\n    }\n    setOutput(dotProd);\n  }\n`;}

export class DepthwiseConv2DDerInputProgram implements GPGPUProgram {
  variableNames = ['dy', 'W'];\n  outputShape: number[];\n  userCode: string;\n
  constructor(convInfo: backend_util.Conv2DInfo) {
    this.outputShape = convInfo.inShape;\n    const filterHeight = convInfo.filterHeight;\n    const filterWidth = convInfo.filterWidth;\n    const strideHeight = convInfo.strideHeight;\n    const strideWidth = convInfo.strideWidth;\n    const padTop = filterHeight - 1 - convInfo.padInfo.top;\n    const padLeft = filterWidth - 1 - convInfo.padInfo.left;\n    const channelMul = convInfo.outChannels / convInfo.inChannels;\n    \n    thisUserCode = `\n      const ivec2 pads = ivec2($padTop, $padLeft);\n      void main() {\n        ivec4 coords = getOutputCoords();\n        int batch = coords[0];\n        int d1 = coords[3];\n        ivec2 dyCorner = coords.yz - pads;\n        int idyR = int(dyCorner.x);\n        int idyC = int(dyCorner.y);\n        float dotProd = 0.0;\n        \n        for (int wR = 0; wR < $\{filterHeight\}; wR++) {\n          float dyR = float(dyCorner.x) / $\{strideHeight\}.0;\n          \n          if (dyR < 0.0 || dyR >= $\{convInfo.outHeight\}.0 ||\n              frac(dyR) > 0.0) {\n            continue;\n          }\n          int idyR = int(dyR);\n          int wRPerm = $\{filterHeight\} - 1 - wR;\n          \n          for (int wC = 0; wC < $\{filterWidth\}; wC++) {\n            float dyC = float(dyCorner.y) /$\{strideWidth\}.0;\n            \n            if (dyC < 0.0 || dyC >= $\{convInfo.outWidth\}.0 ||\n                frac(dyC) > 0.0) {\n              continue;\n            }\n            int idyC = int(dyC);\n            int wCPerm = $\{filterWidth\} - 1 - wC;\n            \n            // TO DO: Vec4 over the channelMul\n            setOutput(dotProd);\n            \n          }\n        }\n        \n      }\n    `;
  }
};

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

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 {x, dy} = inputs;\n  const {w, wPerm, d1, dm} = backend;
  const {wRPerm, wCPerm, dmul} = \n    getW(wRPerm, wCPerm, d1, dm);\n  float dotProd += xValue * wValue;\n}

setOutput(dotProd);\n\n};

export const depthwiseConv2dNativeBackpropFilterConfig: KernelConfig = {
  kernelName: DepthwiseConv2dNativeBackpropFilter,
  backendName: 'webgl',\n  kernelFunc: depthwiseConv2dNativeBackpropFilter as {} as KernelFunc\n};

export * from '@tensorflow/tfjs-core';
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*///

import {backend_util, DepthwiseConv2dNativeBackpropInput, DepthwiseConv2dNativeBackpropInputAttrs, DepthwiseConv2dNativeBackpropInputInputs, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core'; import {MathBackendWebGL} from '../backend_webgl';

export function depthwiseConv2dNativeBackpropInput(args: {
  inputs: DepthwiseConv2dNativeBackpropInputInputs,
  attrs: DepthwiseConv2dNativeBackpropInputAttrs,
  backend: MathBackendWebGL
}) {
  const {inputs, backend, attrs} = args;
  const {dy, filter} = inputs;
  const {strides, dilations, pad, dimRoundingMode, inputShape} = attrs;

  const convInfo = backend_util.computeConv2DInfo(
    inputShape, filter.shape as [number, number, number, number], strides, dilations, pad, dimRoundingMode,
  );

  const program = new DepthwiseConv2dderInputProgram(convInfo);
  return backend.runWebGLProgram(program, [dy, filter], 'float32');
}

export const depthwiseConv2dNativeBackpropInputConfig: KernelConfig = {
  kernelName: DepthwiseConv2dNativeBackpropInput,
  backendName: 'webgl',
  kernelFunc: depthwiseConv2dNativeBackpropInput as {} as KernelFunc
};

*///

import {GPGPUProgram} from './gpgpu_math';

export class DiagProgram implements GPGPUProgram {
  variableNames = ['X'];
  outputShape: number[];
  userCode: string;
  constructor(size: number) {
    this.outputShape = [size, size];
    this.userCode = `void main() {
        ivec2 coords = getOutputCoords();
        float val = coords[0] == coords[1] ? getX(coords[0]) : 0.0;
        setOutput(val);
    }
`;
  }
}

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

import {MathBackendWebGL} from '../backend_webgl';

export function diag(args: {inputs: DiagInputs, backend: MathBackendWebGL}):
  TensorInfo {
  const {inputs, backend} = args;
  const {x} = inputs;

  const outShape = [...x.shape, ...x.shape];
  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], 'float32');

  const out = reshape({inputs: {x: res}, backend, attrs: {shape: outShape}});

  backend.disposeIntermediateTensorInfo(flat);
  backend.disposeIntermediateTensorInfo(res);

  return out;
}

export const diagConfig: KernelConfig = {
  kernelName: Diag,
  backendName: 'webgl',
  kernelFunc: diag as {} as KernelFunc
};

*///

import {GPGPUProgram} from './gpgpu_math';

export class DiagProgram implements GPGPUProgram {
  variableNames = ['X'];
  outputShape: number[];
  userCode: string;
  constructor(size: number) {
    this.outputShape = [size, size];
    this.userCode = `void main() {
        ivec2 coords = getOutputCoords();
        float val = coords[0] == coords[1] ? getX(coords[0]) : 0.0;
        setOutput(val);
    }
`;
  }
}

import {GPGPUProgram} from './gpgpu_math';

export class DiagProgram implements GPGPUProgram {
  variableNames = ['X'];
  outputShape: number[];
  userCode: string;
  constructor(size: number) {
    this.outputShape = [size, size];
    this.userCode = `void main() {
        ivec2 coords = getOutputCoords();
        float val = coords[0] == coords[1] ? getX(coords[0]) : 0.0;
        setOutput(val);
    }
`;
  }
}
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=============================================================================

import {backend_util} from '@tensorflow/tfjs-core';
import {GPGPUProgram} from './gpgpu_math';

export class Dilation2DProgram implements GPGPUProgram {
  variableNames = ['x', 'W'];

  outputShape: number[];
  userCode: string;

  constructor(convInfo: backend_util.Conv2DInfo) {
    this.outputShape = convInfo.outShape;

    const {
      inHeight, inWidth, padInfo, strideHeight, strideWidth,
      filterHeight, filterWidth, dilationHeight, dilationWidth
    } = convInfo;

    const top: padTop, left: padLeft = padInfo;

    this.userCode = `ivec2(${strideHeight}, ${strideWidth})\n
    const const float neg_infinity = -3.4e38;\n    void main() {\n      ivec4 coords = getOutputCoords();\n
      int d1 = coords.w;
      int h = (int w < ${filterHeight}) ? h + ${dilationHeight};\n
      if (hIn >= 0 && hIn < $\{inHeight\}) {\n        int wIn = w + ${dilationWidth};\n
        if (wIn >= 0 && wIn < $\{inWidth\}) {\n          float xVal = getX(batch, hIn, wIn, d1);
          float val = xVal + getW(h, w, dIn);\n
          if (val > curVal) {\n            curVal = val;
          }\n        }\n      }\n    }\n  }\n}

*/

import {backend_util, Dilation2D, Dilation2DAttrs, 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: Dilation2DAttrs,
  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);

  const program = new Dilation2DProgram(convInfo);
  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,
  dataFormat: '/NHWC'/* dataFormat */,
  dilations: []
};

let out = backend.runWebGLProgram(program, [x, filter, 'float32']);

backend.disposeIntermediateTensorInfo(out);

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

const ELU = `return (x >= 0.0) ? x : (exp(x) - 1.0);`;
const ELU_PACKED = `
  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;
`;

export const elu = unaryKernelFunc({opSnippet: ELU, packedOpSnippet: ELU_PACKED});

export const eluConfig: KernelConfig = {
  kernelName: Elu,
  backendName: 'webgl',
  kernelFunc: elu as {} as KernelFunc
};

import {EluGrad, EluGradInputs, env, KernelConfig, KernelFunc, TensorInfo} from '@tensorflow/tfjs-core';

const ELU_DER = `return (b >= 1.0) ? a : a * (b + 1.0);`;
const ELU_DER_PACKED = `
  vec4 bGTEZero = vec4(greaterThanEqual(b, vec4(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], dy.dtype);
};

export const eluGradConfig: KernelConfig = {
  kernelName: EluGrad,
  backendName: 'webgl',
  kernelFunc: eluGrad as {} as KernelFunc
};

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

const EQUAL = `return float(a == b);`;
const PACKED_EQUAL = `
  return vec4(equal(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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 *=============================================================================
 */
Abramowitz and Stegun.

```c
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);
float t = 1.0 / (1.0 + p * x);
return sign * (1.0 - (((((a5*t + a4)*t) + a3)*t + a2)*t + a1)*t*exp(-x*x));
```

```javascript
export const erf = unaryKernelFunc({opSnippet: ERF});

export const erfConfig: KernelConfig = {
  kernelName: Erf,
  backendName: 'webgl',
  kernelFunc: erf,
};
```
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*
=============================================================================

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

import {MathBackendWebGL} from './backend_webgl';
import {FFTProgram} from './fft_gpu';
import {complex} from './Complex';
import {reshape} from './Reshape';

export function fftImpl(
    x: TensorInfo, inverse: boolean, backend: MathBackendWebGL): TensorInfo {
  const xData = backend.tensorData.get(x.dataId);

  const inputSize = util.sizeFromShape(x.shape);
  // Collapse all outer dimensions to a single batch dimension.
  const innerDimensionSize = x.shape[x.shape.length - 1];
  const batch = inputSize / innerDimensionSize;

  const input2D = reshape(
      {inputs: {x}, backend, attrs: {shape: [batch, innerDimensionSize]}});

  const xShape = 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
    },
    {
      dataId: xData.complexTensorInfos.imag.dataId,
      dtype: xData.complexTensorInfos.imag.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;
}

export const fftConfig:
    KernelConfig = {
      kernelName: FFT,
      backendName: 'webgl',
      kernelFunc: fft
    };

export function fft(args: {inputs: FFTInputs, backend: MathBackendWebGL}):
    TensorInfo {
  const {inputs, backend} = args;
  const {input} = inputs;

  return fftImpl(input, false /* inverse */, backend);
}

export class FillProgram implements GPGPUProgram {
  variableNames: string[];
  outputShape: number[] = [];

  userCode: string;

  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.
      const outputShape = shape;
    }
`;
if (this.valueLoc == null) {
    if (value !== null) {
        this.valueLoc = gpgpu.getUniformLocationNoThrow(webGLProgram, 'value');
        gpgpu.gl.uniform1f(this.valueLoc, value);
    }
}

    const program = new FillProgram(shape, value);
    const customSetup = program.getCustomSetupFunc(value as number);
    return backend.runWebGLProgram(program, [], dtype, utilSizeFromShape(shape));
}

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

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

export const flipLeftRightConfig: KernelConfig = {
    kernelName: FlipLeftRight,
    backendName: 'webgl',
    kernelFunc: ({inputs, backend}) => {
        const {image} = inputs as FlipLeftRightInputs;
        const webglBackend = backend as MathBackendWebGL;
        const program = new FlipLeftRightProgram((image as Tensor4D).shape);
        const output = webglBackend.runWebGLProgram(program, [image], image.dtype);
        return output;
    }
};

import {FlipLeftRightProgram} from './flip_left_right_gpu';

export class FlipLeftRightProgram implements GPGPUProgram {
    variableNames = ['Image'];
    outputShape: number[] = [];
    userCode: string;

    constructor(imageShape: [number, number, number, number]) {
        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 { // String type should be handled in CPU memory.
                const values = util.getArrayFromDType(dtype, utilSizeFromShape(shape));
                return backend.makeTensorInfo(shape, dtype, values); fill(value as string);
            }
        }
    }
};

Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5 6398
import {FloorDiv, KernelConfig, KernelFunc} from '@tensorflow/tfjs-core';

import {binaryKernelFunc}
from '../kernel_utils/kernel_funcs_utils';

// We use native integer division to deal with floating point imprecision.
Since
// we implement floor division and glsl implements truncated division, we
// correct for this by subtracting 1 from result when the result is negative and\n// there is a remainder.\n\nconst INT_DIV = `
  float s = sign(a) *
  sign(b);
  int ia = round(a);
  int ib = round(b);
  if (ib != 0) { \n    // Windows (D3D) wants guaranteed non-zero
int division at compile-time.\n    return float(idiv(ia, ib, s));
  } else { \n    return NAN;\n  }\n\nconst INT_DIV_PACKED = `
  ivec4 ia = round(a);
  ivec4 ib = round(b);
  bvec4 cond = notEqual(ib, ivec4(0));

  ivec4 result = ivec4(0);
  vec4 s = sign(a) * sign(b);

  // Windows (D3D) wants guaranteed non-zero int division
at compile-time.\n  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
};
```cpp
outputShape;

this.outputShape = outputShape;
this.userCode = "\n
  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;
  }
```

```
import {backend_util, env, FusedConv2D, FusedConv2DAttrs, FusedConv2DInputs, KernelConfig, 
KernelFunc, TensorInfo, util} from '@tensorflow/tfjs-core';

import {backend_webgl} from '@tensorflow/tfjs-backend_webgl';

import {mapActivationToShaderProgram} from './kernel_utils/kernel_funcs_utils';

import {FusedConv2DImpl} from './Conv2D_impl';
import {reshape} from './Reshape';

export function fusedConv2d(args: {
  inputs: FusedConv2DInputs,
  attrs: FusedConv2DAttrs,
  backend: MathBackendWebGL, 
}) {
  // ...}

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

import {backend_webgl} from '@tensorflow/tfjs-backend_webgl';

import {mapActivationToShaderProgram} from './kernel_utils/kernel_funcs_utils';

import {FusedDepthwiseConv2DImpl} from './DepthwiseConv2D_impl';
import {reshape} from './Reshape';

export function fusedDepthwiseConv2d(args: {
  inputs: FusedDepthwiseConv2DInputs,
  attrs: FusedDepthwiseConv2DAttrs,
  backend: MathBackendWebGL, 
}) {
  // ...}

export const fusedDepthwiseConv2DConfig: KernelConfig = {
  kernelName: FusedDepthwiseConv2D,
  backendName: 'webgl',
  kernelFunc: fusedDepthwiseConv2D as {} as KernelFunc,
};

import {backend_webgl} from '@tensorflow/tfjs-backend_webgl';

import {mapActivationToShaderProgram} from './kernel_utils/kernel_funcs_utils';

import {FusedDepthwiseConv2DImpl} from './DepthwiseConv2D_impl';
import {reshape} from './Reshape';

export function fusedDepthwiseConv2d(args: {
  inputs: FusedDepthwiseConv2DInputs,
  attrs: FusedDepthwiseConv2DAttrs,
  backend: MathBackendWebGL, 
}) {
  // ...}

export const fusedDepthwiseConv2DConfig: KernelConfig = {
  kernelName: FusedDepthwiseConv2D,
  backendName: 'webgl',
  kernelFunc: fusedDepthwiseConv2D as {} as KernelFunc,
};

import {backend_webgl} from '@tensorflow/tfjs-backend_webgl';

import {mapActivationToShaderProgram} from './kernel_utils/kernel_funcs_utils';

import {FusedDepthwiseConv2DImpl} from './DepthwiseConv2D_impl';
import {reshape} from './Reshape';

export function fusedDepthwiseConv2d(args: {
  inputs: FusedDepthwiseConv2DInputs,
  attrs: FusedDepthwiseConv2DAttrs,
  backend: MathBackendWebGL, 
}) {
  // ...}

export const fusedDepthwiseConv2DConfig: KernelConfig = {
  kernelName: FusedDepthwiseConv2D,
  backendName: 'webgl',
  kernelFunc: fusedDepthwiseConv2D as {} as KernelFunc,
};
backend_util.eitherStridesOrDilationsAreOne(strides, $dilations),
() => 'Error in depthwiseConv2d: Either strides or dilations must be 1. Got strides ${{strides}} and dilations ${{$dilations}}

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 shouldPackDepthwiseConv = env().getBool('WEBGL_PACK_DEPTHWISECONV')

const convInfo.strideWidth <= 2

const fusedActivation = activation

activation ?
      mapActivationToShaderProgram(activation, shouldPackDepthwiseConv) :
      null;

const programInputs: TensorInfo[] = [x, filter];

const shouldPackDepthwiseConv = env().getBool('WEBGL_PACK_DEPTHWISECONV')

if (shouldPackDepthwiseConv) {

  program = new DepthwiseConvPacked2DProgram(
      convInfo, hasBias, fusedActivation,
      hasPreluActivationWeights,
      hasLeakyreluAlpha);
}

const programInputs = program.runWebGLProgram(
      convInfo, hasBias, hasPreluActivationWeights,
      hasLeakyreluAlpha);

export const fusedDepthwiseConv2DConfig: KernelConfig = {
  kernelName: FusedDepthwiseConv2D,
  backendName: 'webgl',
  kernelFunc: fusedDepthwiseConv2D as {} as KernelFunc,
};
GatherNDInputs, backend: MathBackendWebGL): TensorInfo {\n  const {inputs, backend} = args;\n  const {params, indices} = inputs;\n  const indicesShape = indices.shape;\n  const sliceRank = indicesShape[indicesShape.length - 1];\n  const [resultShape, numSlices, sliceSize, strides] = \n  backend_util.prepareAndValidate(params, indices);\n  const flattenIndices = reshape({\n    inputs: {x: indices},\n    backend, attrs: {shape: [numSlices, sliceRank]}\n  });\n  const flattenX = reshape({\n    inputs: {x: params},\n    backend,\n    attrs: {shape: [{util.sizeFromShape(params.shape) / sliceSize}, sliceSize]}\n  });\n  const program = \n  new GatherNDProgram(sliceRank, strides, [numSlices, sliceSize]);\n  const res = backend.runWebGLProgram({\n    program, [flattenX, flattenIndices], flattenX.dtype});\n  const reshaped = \n    reshape({inputs: {x: res}, backend,\n      attrs: {shape: resultShape}});\n  backend.disposeIntermediateTensorInfo(flattenIndices);\n  backend.disposeIntermediateTensorInfo(flattenX);\n  backend.disposeIntermediateTensorInfo(res);\n  return reshaped;\n}\nexport const gatherNdConfig: KernelConfig = {\n  kernelName: GatherNd,\n  backendName: 'webgl',\n  kernelFunc: gatherNd as {} as KernelFunc\n};

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import {GPGPUProgram} from './gpgpu_math';
import {getCoordsDataType} from './shader_compiler';

export class GatherProgram implements GPGPUProgram {
  variableNames = ['A', 'indices'];\n  outputShape: number[];\n  userCode: string;\n  rank: number;\n  constructor(aShape: number[],\n    outputShape: number[]) {\n    this.outputShape = outputShape;\n    this.rank = outputShape.length;\n    this.dtype = getCoordsDataType(this.rank);\n    const sourceCoords = getSourceCoords(aShape, 2);\n    this.userCode = `\n      void main() {\n        int resRC = getOutputIndex();\n        setOutput(getA(${sourceCoords}));\n      }\n    `;\n  }
}

// The input and output are always flattened into rank 4 tensors.\n
function getSourceCoords(aShape: number[], axis: number): string {
  const currentCoords = \['x', 'y', 'z', 'w'\];\n  const sourceCoords = \[];\n  for (let i = 0; i < aShape.length; i++) {\n    if (i === 2) {\n      sourceCoords.push('int(getIndices(resRC.x, resRC.z))');\n    } else {\n      sourceCoords.push(`${currentCoords[i]}`);\n    }
  }
  return sourceCoords.join();
}

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

import {MathBackendWebGL} from './math BACKEND WebGL';

import {MathBackendWebGL} from '../backend_webgl';
import {GatherProgram} from '../gather_gpu';
import {gatherV2ImplCPU} from '../kernel_utils/shared';

import {reshape} from './Reshape';

export function gatherV2(args: {
  inputs: GatherV2Inputs,\n  backend: MathBackendWebGL,\n  attrs: GatherV2Attrs\n}): TensorInfo {\n  const {inputs, backend,\n    attrs: {shape: MathBackendWebGL,\n      attr: GatherV2Attr\n    }}: TensorInfo {\n    const {inputs,\n      backend,\n      attrs: {shape: MathBackendWebGL,\n        attr: GatherV2Attr\n      }}: TensorInfo {\n        const inputs = inputs;\n        const backend = backend;\n        const attrs = attrs;\n        const shapeInfo = backend_util.segment_util.collectGatherOpShapeInfo({\n          x, indices, parsedAxis, batchDims});\n        const indicesSize = util.sizeFromShape(indices.shape);\n        const toDispose = [];\n        const flattenX = reshape({\n          inputs: {x: indices},\n          backend,\n          attrs: {shape: [shapeInfo.batchSize, indicesSize /}
const flattenOutputShape = [
    shapeInfo.batchSize, shapeInfo.outSize, indicesSize / shapeInfo.batchSize,
    shapeInfo.sliceSize
];

const indicesBuf = backend.bufferSync(flattenIndex);
const xBuf = backend.bufferSync(flattenX);
const outBuf = gatherV2ImplCPU(xBuf, indicesBuf, flattenOutputShape);

const flattenOutputShape = [
    shapeInfo.batchSize, shapeInfo.outSize, indicesSize / shapeInfo.batchSize,
    shapeInfo.sliceSize
];

const indicesBuf = backend.bufferSync(flattenIndex);
const xBuf = backend.bufferSync(flattenX);
const outBuf = gatherV2ImplCPU(xBuf, indicesBuf, flattenOutputShape);

const program = new GatherProgram(flattenX.shape, flattenOutputShape);
const res = backend.runWebGLProgram(program, [flattenX, flattenIndex], flattenX.dtype);

const reshaped = reshape({inputs: {x: res}, backend, attrs: {shape: flattenOutputShape}});

const program = new GatherProgram(flattenX.shape, flattenOutputShape);
const res = backend.runWebGLProgram(program, [flattenX, flattenIndex], flattenX.dtype);

const reshaped = reshape({inputs: {x: res}, backend, attrs: {shape: flattenOutputShape}});
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---

```javascript
import {IsInf, KernelConfig} from '@tensorflow/tfjs-core';
import {unaryKernelFunc} from '../../kernel_utils/kernel_funcs_utils';

const IS_INF = `return float(isinf(x));`;

export const isInf = unaryKernelFunc({opSnippet: IS_INF, dtype: 'bool'});  

export const isInfConfig: KernelConfig = {
  kernelName: IsInf,
  backendName: 'webgl',
  kernelFunc: isInf,
};
```

---

```javascript
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,
};
```

---

```javascript
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,  
};
```

---

```javascript
import {KernelConfig, KernelFunc, LinSpace, LinSpaceAttrs, TensorInfo} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {linSpaceImplCPU} from '../kernel_utils/shared';

export function linSpace(
    args: {backend: MathBackendWebGL, attrs: LinSpaceAttrs}): TensorInfo {
  const {backend, attrs} = args;
  const {start, stop, num} = attrs;

  // TODO: Use CPU implementation due to the precision problem in Safari. 
  const outVals = linSpaceImplCPU(start, stop, num);
  return backend.makeTensorInfo([outVals.length], 'float32', outVals);
}

export const linSpaceConfig:
```
KernelConfig = {kernelName: LinSpace, backendName: 'webgl', kernelFunc: linSpace as {} as KernelFunc
};

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 */

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,
};

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 */

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

import {binaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';

const LOGICAL_AND = `return float(a >= 1.0 && b >= 1.0);`;
const LOGICAL_AND_PACKED = `
  return vec4(
    vec4(greaterThanEqual(a, vec4(1.0))) *
    vec4(greaterThanEqual(b, vec4(1.0))));
`;

export const logicalAnd = binaryKernelFunc({
  opSnippet: LOGICAL_AND,
  packedOpSnippet: LOGICAL_AND_PACKED,
  dtype: 'bool'
});

export const logicalAndConfig: KernelConfig = {
  kernelName: LogicalAnd,
  backendName: 'webgl',
  kernelFunc: logicalAnd as {} as KernelFunc
};

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 */

import {KernelConfig, LogicalNot} from '@tensorflow/tfjs-core';
import {unaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';

const LOGICAL_NOT = `return float(!(x >= 1.0));`;

export const logicalNot = unaryKernelFunc({opSnippet: LOGICAL_NOT});

export const logicalNotConfig: KernelConfig = {
  kernelName: LogicalNot,
  backendName: 'webgl',
  kernelFunc: logicalNot,
};

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 */

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

import {binaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';

const LOGICAL_OR = `return float(a >= 1.0 || b >= 1.0);`;
const LOGICAL_OR_PACKED = `
  return min(
    vec4(greaterThanEqual(a, vec4(1.0))) +
    vec4(greaterThanEqual(b, vec4(1.0))));
`;

export const logicalOr = binaryKernelFunc({
  opSnippet: LOGICAL_OR,
  packedOpSnippet: LOGICAL_OR_PACKED,
  dtype: 'bool'
});

export const logicalOrConfig: KernelConfig = {
  kernelName: LogicalOr,
  backendName: 'webgl',
  kernelFunc: logicalOr as {} as KernelFunc
};
vec4(greaterThanOrEqualTo(b, vec4(1.0))),
    vec4(1.0));

export const logicalOr = binaryKernelFunc(
    opSnippet: LOGICAL_OR, packedOpSnippet: LOGICAL_OR_PACKED, dtypes: 'bool');

export const logicalOrConfig = {
    kernelName: LogicalOr,
    backendName: 'webgl',
    kernelFunc: logicalOr
};

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 */

import {GPGPUProgram} from './gpgpu_math';

export class LRNProgram implements GPGPUProgram {
  variableNames = ['x'];
  outputShape: number[] = [];
  userCode: string;
  constructor(xShape: number[], radius: number, bias: number, alpha: number,
              beta: number) {
    this.constRad = radius;
    this.constMaxD = xShape[3] - 1;

    // optimize pow(bias + alpha * sum, -beta)
    // src: https://github.com/tensorflow/tensorflow/..
    // blob/26033a1644a9c4a5fbd3170ab2e864b6a4ccd4ca/..
    // 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.x;
        int r = coords.y;
        int c = coords.z;
        int d = coords.w;

        bool hasNextCol = d < this.outputShape[3];
        bool hasNextRow = c < this.outputShape[2];

        vec4 xFragAtOutputCoords = getX(b, r, c, d);
        vec4 xAtOutputCoords = vec4(getChannel(xFragAtOutputCoords, vec2(c, d)),
                                     hasNextCol ?
                                     hasNextRow ?
                                     heterosexualCall(xFragAtOutputCoords, vec2(c + 1, d)) : 0.0,
                                     hasNextRow && hasNextCol ?
                                     heterosexualCall(xFragAtOutputCoords, vec2(c + 1, d + 1)) : 0.0
                                     )
      }
    `;
  }
}

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 */

import {GPGPUProgram} from './gpgpu_math';

export class LRNPackedProgram implements GPGPUProgram {
  variableNames = ['x'];
  outputShape: number[] = [];
  userCode: string;
  packedInputs = true;
  packedOutputs = true;
  packedCode = true;

  constructor(xShape: number[], radius: number, bias: number, alpha: number,
              beta: number) {
    this.constRad = radius;
    this.constMaxD = xShape[3] - 1;

    // optimize pow(bias + alpha * sum, -beta)
    // src: https://github.com/tensorflow/tensorflow/..
    // blob/26033a1644a9c4a5fbd3170ab2e864b6a4ccd4ca/..
    // 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.x;
        int r = coords.y;
        int c = coords.z;
        int d = coords.w;

        bool hasNextCol = d < this.outputShape[3];
        bool hasNextRow = c < this.outputShape[2];

        vec4 xFragAtOutputCoords = getX(b, r, c, d);
        vec4 xAtOutputCoords = vec4(getChannel(xFragAtOutputCoords, vec2(c, d)),
                                     hasNextCol ?
                                     hasNextRow ?
                                     heterosexualCall(xFragAtOutputCoords, vec2(c + 1, d)) : 0.0,
                                     hasNextRow && hasNextCol ?
                                     heterosexualCall(xFragAtOutputCoords, vec2(c + 1, d + 1)) : 0.0
                                     )
      }
    `;
  }
}
cache.x = getChannel(firstChannelFrag, vec2(c, firstChannel));

if(hasNextRow) { cache.y = getChannel(firstChannelFrag, vec2(c + 1, firstChannel)); }

for (int j = -$(rad); j <= $(rad); j++) {

  int i = $(rad) - j;
  vec2 bvec2 = vec2(depth + j);
  bvec2 aboveLowerBound = greaterThanEqual(i, vec2(0));
  bvec2 belowUpperBound = lessThanEqual(i, vec2($(maxD)));

  bool depthInRange = aboveLowerBound.x && belowUpperBound.x;
  bool depthPlusOneInRange = aboveLowerBound.y && belowUpperBound.y;

  if (depthInRange || depthPlusOneInRange) {
    vec4 z = vec4(0.);
    vec4 xFragAtCurrentDepth; z.xz = cache.xy;
    if (depthPlusOneInRange && hasNextCol) {
      xFragAtCurrentDepth = idx.y != d ?
        getX(b, r, c, idx.y) :
        xFragAtOutputCoords;
      z.y = getChannel(xFragAtCurrentDepth, vec2(c, idx.y));
      if (hasNextRow) { z.w = getChannel(xFragAtCurrentDepth, vec2(c + 1, idx.y)); }
    }
    cache.xy = z.yw;
    sum += z * z;
  }
}

vec4 result = xAtOutputCoords * $(powOperator);
setOutput(result);
```javascript
+= getInputImage(b, r, c, k) * getInputImage(b, r, c, k);\n} else {\n  break;\n}\n
norm = float($\{alpha\}) * norm + float($\{bias\});\nfor(int k = MIN_DEPTH_BEGIN; k < MAX_DEPTH_END; ++k){\n  if (k < depthBegin){\n    continue;\n  } else if (k >= depthBegin && k < depthEnd){\n    float dyi = -2.0 * float($\{alpha\})
      * float($\{beta\})
      * getInputImage(b, r, c, d) / norm;\n    if (k == d) {\n      dyi += pow(norm, -1.0 * $\{beta\});\n    } \n    if (k == coords[3]) {\n      dyi *= getDy(b, r, c, d);\n    }\n    result += dyi;\n  } else {\n    break;\n  }\n}\n
setOutput(result);\n```
backend_util.computeOutAndReduceShapes(maxInput.shape, axes); let outShape = maxOutShape; if (keepDims) { outShape = backend_util.expandShapeToKeepDim(maxOutShape, origAxes); let out = backend.makeTensorInfo(outShape, x.dtype); const outData = backend.texData.get(out.dataId); 
}

const values = xTexData.values as TypedArray;

const outValues = maxImplCPU(values, util.sizeFromShape(reduceShape), outShape, x.dtype);

const out = backend.makeTensorInfo(outShape, x.dtype);

const outData = backend.texData.get(out.dataId);

const outData = outValues; const outData = 

if (maxInputIsTransposed) {
  backend.disposeIntermediateTensorInfo(maxInput);
}

return out;

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

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 */

export function maxPool(args: {
  inputs: MaxPoolInputs,
  backend: MathBackendWebGL,
  attrs: MaxPoolAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {x} = inputs;
  assertNotComplex(x, 'maxPool');
  const {filterSize, strides, pad, dimRoundingMode} = attrs;
  const dilations = [1, 1, 1];

  util.assert(backend_util.eitherStridesOrDilationsAreOne(strides, dilations), () => 'Error in maxPool: Either strides or dilations must be 1. ');

  const convInfo = backend_util.computePool3DInfo(x.shape as [number, number, number, number], filterSize, strides, dilations, pad, dimRoundingMode);

  const maxPoolProgram = new Pool3DProgram(convInfo, 'max', false);
  return backend.runWebGLProgram(maxPoolProgram, 
          {inputs: {x}, backend});
}

export const maxPool3DConfig: KernelConfig = {
  kernelName: MaxPool3D,
  backendName: 'webgl',
  kernelFunc: maxPool3d as {} as KernelFunc
};

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 */
import {backend_util} from '@tensorflow/tfjs-core';
import {GPGPUProgram} from './gpgpu_math';

export class MaxPool2DBackpropProgram implements GPGPUProgram {
  variableNames = ['dy', 'maxPos'];
  outputShape: number[];
  userCode: string;
  constructor(backendInfo:
    backend_util.Conv2DInfo) {
    this.outputShape = convInfo.inShape;
    const strideHeight = convInfo.strideHeight;
    const strideWidth = convInfo.strideWidth;
    const dilationHeight = convInfo.dilationHeight;
    const effectiveFilterHeight = convInfo.effectiveFilterHeight;
    const effectiveFilterWidth = convInfo.effectiveFilterWidth;
    const padTop = effectiveFilterHeight - 1 - convInfo.padInfo.top;
    const padLeft = effectiveFilterWidth - 1 - convInfo.padInfo.left;
    const lastIndex = effectiveFilterHeight * effectiveFilterWidth - 1;
    this.userCode = `// Convolve dy(?, ?, d) with pos mask(:, :, d) to get dx(xR, xC, d);
    // ? = to be determined. 
    // wR += $({dilationHeight})
    float dyR = float(dyCorner + wR) / $({strideHeight});
    if (dyR < 0.0 || dyR >= convInfo.outHeight.0 || fract(dyR) > 0.0) {
      continue;
    }
    int idyR = int(dyR);
    int idyC = int(dyC) / $({strideWidth}).0;
    float dyValue = getDy(b, idyR, idyC, d);
    int maxPosValue = lastIndex - int(getMaxPos(b, idyR, idyC, d));
    // Get the current value, check it against the value from the position matrix.
    int curPosValue = wR * $({effectiveFilterWidth}) + wC;
    float mask = float(maxPosValue == curPosValue ? 1.0 : 0.0);
    float dotProd += dyValue * mask;
    setOutput(dotProd);
  }
}

export class MaxPool3DBackpropProgram implements
  GPGPUProgram {
  variableNames = ['dy', 'maxPos'];
  outputShape: number[];
  userCode: string;
  constructor(backendInfo:
    backend_util.Conv3DInfo) {
    this.outputShape = convInfo.inShape;
    const strideDepth = convInfo.dilationDepth;
    const strideHeight = convInfo.dilationHeight;
    const strideWidth = convInfo.dilationWidth;
    const effectiveFilterHeight = convInfo.effectiveFilterHeight;
    const effectiveFilterWidth = convInfo.effectiveFilterWidth;
    const padFront = effectiveFilterHeight - 1 - convInfo.padInfo.front;
    const padLeft = effectiveFilterWidth - 1 - convInfo.padInfo.left;
    const lastIndex = effectiveFilterHeight * effectiveFilterWidth * effectiveFilterDepth - 1;
    this.userCode = `// Convolve dy(?, ?, ?, d) with pos mask(:, :, :, d) to get dx(xD, xR, xC, xh);
    // ? = to be determined. 
    // wD += $({dilationDepth})
    float dyD = float(dyCorner + wD) / $({strideDepth});
    if (dyD < 0.0 || dyD >= convInfo.outDepth.0 || fract(dyD) > 0.0) {
      continue;
    }
    int idyD = int(dyD) / $({strideDepth}).0;
    int idyR = int(dyR) / $({strideHeight}).0;
    int idyC = int(dyC) / $({strideWidth}).0;
    float dyValue = getDy(b, idyD, idyR, idyC, d);
    int maxPosValue = lastIndex - int(getMaxPos(b, idyD, idyR, idyC, d));
    int curPosValue = wD * $({effectiveFilterHeight}) + wR * $({effectiveFilterWidth}) + wC;
    float mask = float(maxPosValue == curPosValue ? 1.0 : 0.0);
    float dotProd += dyValue * mask;
    setOutput(dotProd);
  }
`;
}
int(dyD);

          for (int wR = 0; wR < ${effectiveFilterHeight};
              wR += ${dilationHeight}) {
            float dyR = float(dyRCorner + wR) / ${strideHeight}.0;

            if (dyR < 0.0 || dyR >= ${convInfo.outHeight}.0 ||
                fract(dyR) > 0.0) {
              continue;
            }
            int idyR = int(dyR);

            for (int wC = 0; wC < ${effectiveFilterWidth};
                wC += ${dilationWidth}) {
              float dyC = float(dyCCorner + wC) / ${strideWidth}.0;

              if (dyC < 0.0 || dyC >= ${convInfo.outWidth}.0 ||
                  fract(dyC) > 0.0) {
                continue;
              }
              int idyC = int(dyC);

              float dyValue = getDy(batch, idyD, idyR, idyC, ch);

              // Get the current value, check it against the value from the
              // position matrix.

              int curPosValue =
                  wD * ${effectiveFilterHeight} * ${effectiveFilterWidth} +
                  wR * ${effectiveFilterWidth} + wC;

              float mask = float(maxPosValue == curPosValue ? 1.0 : 0.0);

              dotProd += dyValue * mask;
          }
        }
        setOutput(dotProd);
      }
    `;
  }
}

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 *
 *=============================================================================
* /nimport {backend_util, KernelConfig, KernelFunc, MaxPool3DGrad, MaxPool3DGradAttr,
* MaxPool3DGradInputs, TensorInfo} from '@tensorflow/tfjs-core';
*import {MathBackendWebGL} from
*  '../backend_webgl';
*import {MaxPool3DBackpropProgram} from '../max_pool_backprop_gpu';
*import {Pool3DProgram} from '../pool_gpu';
*export function maxPool3DGrad(args: {
*  inputs:
*    MaxPool3DGradInputs,
*    backend: MathBackendWebGL,
*    attrs: MaxPool3DGradAttr
*}): TensorInfo {
*  const {inputs, backend, attrs} = args;
*  const {dy, input} = inputs;
*  const x = input;
*  const {filterSize, strides, pad, dimRoundingMode} = 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);
*  const maxPool3dPositionsProgram =
*      new Pool3DProgram(convInfo, 'max', true /* get positions */);
*  const maxPool3dPositions =
*      backend.runWebGLProgram(maxPool3dPositionsProgram, [x], x.dtype);
*  const maxPoolBackpropProgram = new
*      MaxPool3DBackpropProgram(convInfo);
*  const result = backend.runWebGLProgram(
*      maxPoolBackpropProgram, [dy, maxPool3dPositions], x.dtype);
*  return result;
*}
*export const maxPoolGrad3DConfig: KernelConfig = {
*  kernelName: MaxPool3DGrad,
*  backendName: 'webgl',
*  kernelFunc: maxPool3DGrad as {} as KernelFunc
*};
*=============================================================================
*/

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backend_util.computePool2DInfo(x.shape as [number, number, number, number], filterSize, strides, */
  dilations */; pad, dimRoundingMode); const getPositions = true; const maxPoolPositions = 
  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');
  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 {} as MaxPoolWithArgmaxAttrs;
    const webglBackend = backend as MathBackendWebGL;
    const webglBackend = backend as MathBackendWebGL;
    const 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(dilations.length === 2, () => 'Error in maxPool: Either strides or dilations must be 1.');
    const convInfo = backend_util.computePool2DInfo(x.shape as [number, number, number, number], filterSize, strides,
      dilations, pad);
    const result = maxPoolWithArgmaxImpl(x, includeBatchInIndex, convInfo, webglBackend); return result; 
    return [result, indexes];
  }
};

```
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], attrs: {shape: [batchSize, inSize]}, backend});
  const const reduced = reduce(reshapedInput, 'float32', 'mean', backend);
  const reshapedOutput = reshape({inputs: [x: reduced], attrs: {shape: outShape}, backend});

  backend.disposeIntermediateTensorInfo(reshapedInput);
  backend.disposeIntermediateTensorInfo(reduced);

  return reshapedOutput;
}

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 */

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.dtype);
        const meanInputData = webglBackend.texData.get(meanInput.dataId);
        meanInputData.values = meanInputValues;
      } else {
        meanInput = transposeImpl(x, permutedAxes, webglBackend);
      }
    }

    backend_util.assertAxesAreInnerMostDims('sum', axes, xRank);
    const [meanOutShape, reduceShape] = backend_util.computeOutAndReduceShapes(meanInput.shape, axes);
    const outShape = meanOutShape;
    if (keepDims) {
      // rather than reshape at the end, set the target shape here.
    
    outShape = backend_util.expandShapeToKeepDim(meanOutShape, origAxes);
    }

    intermediates.push(meanInput);
    backend.disposeIntermediateTensorInfo(meanInput);
    backend.disposeIntermediateTensorInfo(meanInput);
    backend.disposeIntermediateTensorInfo(meanInput);
    return meanImpl(meanInput, reduceShape, outShape, webglBackend);
  }
};

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 */
import {backend_util, KernelConfig, KernelFunc, Min, MinAttrs, MinInputs, 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 min(
    args: {inputs: MinInputs, backend: MathBackendWebGL, attrs: MinAttrs}):
    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 = transpose({inputs: {x}, backend, attrs: {perm: permutedAxes}});
        axes = backend_util.getInnerMostAxes(axes.length, x.shape.length);
      }
      backend_util.assertAxesAreInnerMostDims('min', axes, xRank);
      const [outShape, reduceShape] = backend_util.computeOutAndReduceShapes(permutedX.shape, axes);
      const inSize = util.sizeFromShape(reduceShape);
      const a2D = reshape({inputs: {x: permutedX}, backend, attrs: {shape: [-1, inSize]}});
      const reduced = reduce(a2D, a2D.dtype, 'min', backend);
      let res;
      if (keepDims) {
        const newShape = backend_util.expandShapeToKeepDim(outShape, origAxes);
        res = reshape({inputs: {x: reduced}, backend, attrs: {shape: newShape}});
      } else {
        res = reshape({inputs: {x: reduced}, backend, attrs: {shape: outShape}});
      }
      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
};

import {GPGPUProgram} from './gpgpu_math';
import {getCoordsDataType} from './shader_compiler';

export class MirrorPadProgram implements GPGPUProgram {
  variableNames = ["x"]; outputShape: number[]; userCode: string;
  constructor(xShape: number[], paddings: Array<[number, number]>, mode: 'reflect'|'symmetric') {
    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);
    const const offset = mode === 'reflect' ? 0 : 1;
    if (rank === 1) {
      this.userCode = `int start = ${start};
      int end = ${end};
      void main() { int outC = getOutputCoords();
      if (outC < start) { outC = start * 2 - outC - offset; } else if (outC >= end) { outC = (end - 1) * 2 - outC + offset; } setOutput(outC); }
    } else if (rank > 1) {
      this.userCode = `int start = ${start};
      int end = ${end};
      void main() { int outC = getOutputCoords();
      if (outC < start) { outC = start * 2 - outC - offset; } else if (outC > end) { outC = (end - 1) * 2 - outC + offset; setOutput(outC); }
    }`;
    for (int i = 0; i < rank; i++) {
      if (coords[i] < start[i]) {
        coords[i] = start[i] * 2 - coords[i] - offset[i];
      } else if (coords[i] >= end[i]) {
        coords[i] = (end[i] - 1) * 2 - coords[i] + offset[i];
      } setOutput(getX({coords: coords}));
    }
  }
}

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 */

import {backend_util, KernelConfig, KernelFunc, Min, MinAttrs, MinInputs, 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 min(
    args: {inputs: MinInputs, backend: MathBackendWebGL, attrs: MinAttrs}):
    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 = transpose({inputs: {x}, backend, attrs: {perm: permutedAxes}});
        axes = backend_util.getInnerMostAxes(axes.length, x.shape.length);
      }
      backend_util.assertAxesAreInnerMostDims('min', axes, xRank);
      const [outShape, reduceShape] = backend_util.computeOutAndReduceShapes(permutedX.shape, axes);
      const inSize = util.sizeFromShape(reduceShape);
      const a2D = reshape({inputs: {x: permutedX}, backend, attrs: {shape: [-1, inSize]}});
      const reduced = reduce(a2D, a2D.dtype, 'min', backend);
      let res;
      if (keepDims) {
        const newShape = backend_util.expandShapeToKeepDim(outShape, origAxes);
        res = reshape({inputs: {x: reduced}, backend, attrs: {shape: newShape}});
      } else {
        res = reshape({inputs: {x: reduced}, backend, attrs: {shape: outShape}});
      }
      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 {GPGPUProgram} from './gpgpu_math';
import {getCoordsDataType} from './shader_compiler';

export class MirrorPadProgram implements GPGPUProgram {
  variableNames = ["x"]; outputShape: number[];
  userCode: string;
  constructor(xShape: number[], paddings: Array<[number, number]>, mode: 'reflect'|'symmetric') {
    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);
    const offset = mode === 'reflect' ? 0 : 1;
    if (rank === 1) {
      this.userCode = `int start = ${start};
      int end = ${end};
      void main() {
        int outC = getOutputCoords();
        if (outC < start) {
          outC = start * 2 - outC - offset;
        } else if (outC >= end) {
          outC = (end - 1) * 2 - outC + offset;
        } setOutput(outC);
      }
    } else if (rank > 1) {
      this.userCode = `int start = ${start};
      int end = ${end};
      void main() {
        int outC = getOutputCoords();
        if (outC < start) {
          outC = start * 2 - outC - offset;
        } else if (outC > end) {
          outC = (end - 1) * 2 - outC + offset;
        } setOutput(outC);
      }
    }`;
    for (int i = 0; i < rank; i++) {
      if (coords[i] < start[i]) {
        coords[i] = start[i] * 2 - coords[i] - offset[i];
      } else if (coords[i] >= end[i]) {
        coords[i] = (end[i] - 1) * 2 - coords[i] + offset[i];
      } setOutput(getX({coords: coords}));
    }
  }
}

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

*/

import {GPGPUProgram} from './gpgpu_math';
import {getChannels} from './packing_util';
import {getCoordsDataType} from './shader_compiler';

/**
 * Example shader code for
 * `mirrorPad(tf.tensor1d([1, 2, 3], 'int32'), [[2, 2]], 'reflect')`
 * ```
 *    const int start = int(2);
 *    const int end = int(5);
 *
 *    void main(
 *        * const int outputLoc = getOutputCoords();
 *        * vec4 result = vec4(0.);
 *        *    if (source < start) {
 *          source = start * 2 - source - 0;
 *        } else if (source >= end) {
 *          source = (end - 1) * 2 - source + 0;
 *        }
 *        *    result[0] = getChannel(getX(source), source);
 *        *    if (source < start) {
 *          source = start + 1;
 *        } else if (source > 0) {
 *          source = (end - 1) * 2 - source - 0;
 *        }
 *        *    if (source > start) {
 *          source = start + 2 - source - 0;
 *        } else if (source >= 2) {
 *          source = (end - 1) * 2 - source + 0;
 *        }
 *        *    result[1] = getChannel(getX(source), source);
 *        * }
 *    result = setOutput(result);
 *    return result.
 * ```
 */
export class MirrorPadPackedProgram implements GPGPUProgram {
  variableNames = ['x'];
  packedInputs = true;
  packedOutput = true;
  outputShape: number[];
  userCode: string;
  constructor(xShape: number[], paddings: Array<[number, number]>[],
    mode: 'reflect'|'symmetric') {
    this.outputShape = paddings.map(p => p[0] + p[1] * afterPad) * afterPad;
    const start = paddings.map((p, i) => p[0] + xShape[i]).join(',');
    const coords = getChannels('rc', xShape.length);
    const source = getChannels('source', xShape);
    const cLimit = `$(${coords[rank - 1]} < ${this.outputShape[rank - 1]})`;
    const mainLoop = `{`;
    if (rank === 1) {
      const padSetup = `
        ${dtype} source = rc;
        if (source < start) {
          source = start * 2 - source - 0;
        } else if (source >= end) {
          source = (end - 1) * 2 - source + 0;
        }
      `;
      mainLoop = `
        ${dtype} rc = outputLoc;
        vec4 result = vec4(0.);
        if (source < start) {
          source = start + 1;
        } else if (source >= end) {
          source = (end - 1) * 2 - source + 0;
        }
        result[0] = getChannel(getX(source), source);
        if (source < start) {
          source = start + 2 - source - 0;
        } else if (source > start) {
          source = start + 2 - source - 0;
        } else if (source >= 2) {
          source = (end - 1) * 2 - source + 0;
        }
        result[1] = getChannel(getX(source), source);
        result = setOutput(result);
        return result;
      `;
    } else {
      const padSetup = `{`;
      const padSetup = `
        ${dtype} source = rc;
        ${dtype} lt = ${dtype}(lessThan(source, start));
        ${dtype} gte = ${dtype}(greaterThanEqual(source, end));
        ${dtype} orig = 1 - (lt + gte);
        source = orig * source +
                lt * (start * 2 - source - ${offset}) +
                gte * ((end - 1) * 2 - source + ${offset})
        rc = outputLoc;
        vec4 result = vec4(0.);
        if (cLimit) {
          result[0] = getChannel(getX(source), source);
          result[1] = getChannel(getX(source), source);
          result = setOutput(result);
          return result;
        }
      `;
      mainLoop = `
        ${dtype} rc = outputLoc;
        vec4 result = vec4(0.);
        if (cLimit) {
          result[0] = getChannel(getX(source), source);
          result[1] = getChannel(getX(source), source);
          result = setOutput(result);
          return result;
        }
      `;
    }
    this.userCode = `
      const ${dtype} start = ${dtype}(${start});
      const ${dtype} end = ${dtype}(${end});

      void main(
        * const int outputLoc = getOutputCoords();
        * vec4 result = vec4(0.);
        *    if (source < start) {
        *      source = start * 2 - source - 0;
        *    } else if (source >= end) {
        *      source = (end - 1) * 2 - source + 0;
        *    }
        *    result[0] = getChannel(getX(source), source);
        *    if (source < start) {
        *      source = start + 1;
        *    } else if (source > 0) {
        *      source = (end - 1) * 2 - source - 0;
        *    }
        *    if (source > start) {
        *      source = start + 2 - source - 0;
        *    } else if (source >= 2) {
        *      source = (end - 1) * 2 - source + 0;
        *    }
        *    result[1] = getChannel(getX(source), source);
        *    result = setOutput(result);
        *    return result;
      `;
  }
}

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,
};

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 */

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

import {CHECK_NAN_SNIPPET} from '../binaryop_packed_gpu';

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 {GPGPUContext} from './gpgpu_context';
import {GPGPUProgram} from './gpgpu_math';

export class MultinomialProgram implements GPGPUProgram {
  variableNames = ['probs'];
  outputShape: number[];

  constructor(batchSize: number, numOutcomes: number, numSamples: number) {
    this.outputShape = [batchSize, numSamples];

    this.userCode = `
      uniform float seed;

      void main() {
        ivec2 coords = getOutputCoords();
        int batch = coords[0];

        float r = random(seed);
        float cdf = 0.0;

        for
          int i = 0; i < ${numOutcomes - 1}; i++) {
            cdf += getProbs(batch, i);

            if (r < cdf) {
              setOutput(float(i));
              return;
          }
        }

        // If no other event happened, last event happened.
        setOutput(float(${numOutcomes - 1}));
      }
    `;
  }

  getCustomSetupFunc(seed: number) {
    return (gpgpu: GPGPUContext, webGLProgram: WebGLProgram) => {
      if (this.seedLoc == null) {
        this.seedLoc = gpgpu.getUniformLocation(webGLProgram, 'seed');
      }
      gpgpu.gl.uniform1f(this.seedLoc, seed);
    };
  }
}

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

```typescript
import {RealDiv} from '@tensorflow/tfjs-core';
import {KernelConfig} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import {multinomial} from './multinomial';
import {Softmax} from './Softmax';
import {SoftmaxAttrs, SoftmaxInputs, TensorInfo, util} from '@tensorflow/tfjs-core';

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 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);
  backend.disposeIntermediateTensorInfo(sumExpReshaped);
  return res;
}
```

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```
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```

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```
TensorInfo {\n  const {inputs, backend, attrs} = args;\n  const {logits} = inputs;\n  const {numSamples, seed,\n      normalized} = attrs;\n  const probs = normalized \n          ? logits \n          : softmax({\n            inputs: [logits],\n            backend,\n            attr: {dim: logits.shape.length - 1}));\n  const batchSize = probs.shape[0];\n  const numOutcomes =\n          probs.shape[1];\n  const program = new MultinomialProgram(batchSize, numOutcomes, numSamples);\n  const customSetup = program.getCustomSetupFunc(seed);\n  \n  const res = backend.runWebGLProgram(program, [probs], \n          int32, customSetup);\n  if (!normalized) {\n          backend.disposeIntermediateTensorInfo(probs);\n  } \n  return res;\n}\n}\nexport const multinomialConfig: KernelConfig = {\n    kernelName: Multinomial,\n    backendName: 'webgl',\n    kernelFunc: multinomial as {} as KernelFunc\n};

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import {backend_util, kernel_impls, KernelConfig, KernelFunc, NonMaxSuppressionV3,\n      NonMaxSuppressionV3Attrs, NonMaxSuppressionV3Inputs, TypedArray} from '@tensorflow/tfjs-core';\nconst nonMaxSuppressionV3Impl = kernel_impls.nonMaxSuppressionV3Impl;\nimport {MathBackendWebGL} from '../backend_webgl';\n
export function nonMaxSuppressionV3(args: {\n    inputs: NonMaxSuppressionV3Inputs,\n    backend: MathBackendWebGL,\n    attrs: NonMaxSuppressionV3Attrs\n}) {\n  backend_util.warn(\n      'tf.nonMaxSuppression() in webgl locks the UI thread. ' +\n      'Call tf.nonMaxSuppressionAsync() instead');\n  \n  const {inputs, backend, attr: \n      const boxes, scores} = inputs;\n  \n  const boxesVals = backend.readSync(boxes.dataId) as TypedArray;\n  \n  const scoresVals = backend.readSync(scores.dataId) as TypedArray;\n  \n  const {selectedIndices} =\n      nonMaxSuppressionV3Impl(boxesVals, scoresVals, maxOutputSize, iouThreshold, scoreThreshold);\n  \n  return backend.makeTensorInfo(\n          [selectedIndices.length], 'int32', new\n      Int32Array(selectedIndices));\n}\n
export const nonMaxSuppressionV3Config: KernelConfig = {\n    kernelName: NonMaxSuppressionV3,\n    backendName: 'webgl',\n    kernelFunc: nonMaxSuppressionV3 as {} as KernelFunc\n};

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export function nonMaxSuppressionV4(args: {\n    inputs: NonMaxSuppressionV4Inputs,\n    backend: MathBackendWebGL,\n    attrs: NonMaxSuppressionV4Attrs\n}) {\n  backend_util.warn(\n      'tf.nonMaxSuppression() in webgl locks the UI thread. ' +\n      'Call tf.nonMaxSuppressionAsync() instead');\n  \n  const {inputs, backend, attr: \n      const boxes, scores} = inputs;\n  \n  const boxesVals = backend.readSync(boxes.dataId) as TypedArray;\n  \n  const scoresVals = backend.readSync(scores.dataId) as TypedArray;\n  \n  const {selectedIndices, validOutputs} =\n      nonMaxSuppressionV4Impl(boxesVals, scoresVals, maxOutputSize, iouThreshold, scoreThreshold,\n          padToMaxOutputSize);\n  \n  return [\n          backend.makeTensorInfo(\n                  [selectedIndices.length], 'int32', new\n              Int32Array(selectedIndices)),\n          validOutputs\n      ];\n}

export const nonMaxSuppressionV4Config: KernelConfig = {\n    kernelName: NonMaxSuppressionV4,\n    backendName: 'webgl',\n    kernelFunc: nonMaxSuppressionV4 as {} as KernelFunc\n}
Int32Array(selectedIndices)),
  backend.makeTensorInfo([]. 'int32', new Int32Array([validOutputs]))
}

export const nonMaxSuppressionV4Config: KernelConfig = {
  kernelName: NonMaxSuppressionV4,
  backendName: 'webgl',
  kernelFunc: nonMaxSuppressionV4 as {} as KernelFunc
};

export const nonMaxSuppressionV5Config: KernelConfig = {
  kernelName: NonMaxSuppressionV5,
  backendName: 'webgl',
  kernelFunc: nonMaxSuppressionV5 as {} as KernelFunc
};

export const nonMaxSuppressionV5Impl = kernel_impls.nonMaxSuppressionV5Impl;

const nonMaxSuppressionV5Impl = kernel_impls.nonMaxSuppressionV5Impl;

export function nonMaxSuppressionV5(args: {
  inputs: NonMaxSuppressionV5Inputs,
  backend: MathBackendWebGL,
  attrs: NonMaxSuppressionV5Attrs
}): [TensorInfo, TensorInfo] {
  backend_util.warn('tf.nonMaxSuppression() in webgl locks the UI thread. ' +
    'Call tf.nonMaxSuppressionAsync() instead');

  const {inputs, backend, attrs} = args;
  const {boxes, scores} = inputs;
  const {maxOutputSize, iouThreshold, scoreThreshold, softNmsSigma} = attrs;

  const boxesVals = backend.readSync(boxes.dataId) as TypedArray;
  const scoresVals = backend.readSync(scores.dataId) as TypedArray;

  const maxOutputSizeVal = maxOutputSize;
  const iouThresholdVal = iouThreshold;
  const scoreThresholdVal = scoreThreshold;
  const softNmsSigmaVal = softNmsSigma;

  const {selectedIndices,
    selectedScores} = nonMaxSuppressionV5Impl(
      boxesVals, scoresVals, maxOutputSizeVal,
      iouThresholdVal, scoreThresholdVal, softNmsSigmaVal);

  return 
    backend.makeTensorInfo(
      [selectedIndices.length], 'int32', new Int32Array(selectedIndices)),
    backend.makeTensorInfo(
      [selectedScores.length], 'float32', new Float32Array(selectedScores))
};
import {MathBackendWebGL} from './backend_webgl';
import {OneHotProgram} from './onehot_gpu';
import {reshape} from './Reshape';

export const oneHot = (args: {
  inputs: OneHotInputs,
  backend: MathBackendWebGL,
  attrs: OneHotAttrs
}): TensorInfo => {
  const {inputs, backend, attrs} = args;
  const {indices} = inputs;
  const {depth, onValue, offValue} = attrs;

  const indicesSize = util.sizeFromShape(indices.shape);
  const program = new OneHotProgram(indicesSize, depth, onValue, offValue);
  const reshaped = reshape(inputs: {x: indices}, backend, attrs: {shape: [indicesSize]});
  const result = backend.runWebGLProgram(program, [reshaped], indices.dtype);

  backend.disposeIntermediateTensorInfo(reshaped);
  const outShape = [...indices.shape, depth];
  const out = reshape({inputs: {x: result}, backend, attrs: {shape: outShape}});

  backend.disposeIntermediateTensorInfo(result);
}

export const oneHotConfig: KernelConfig = {
  kernelName: OneHot,
  backendName: 'webgl',
  kernelFunc: oneHot as {} as KernelFunc
};

export function zerosLike(
  args: {inputs: ZerosLikeInputs, backend: MathBackendWebGL}):

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
  });
}

export const zerosLikeConfig: KernelConfig = {
  kernelName: ZerosLike,
  backendName: 'webgl',
  kernelFunc: zerosLike as {} as KernelFunc
};

export function onesLike(
    args: {inputs: OnesLikeInputs, backend: MathBackendWebGL}):

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 {
  return fill({
    attrs: {
      shape: x.shape,
      dtype: x.dtype,
      value: x.dtype === 'string' ? 1
    },
    backend
  });
}

export const onesLikeConfig: KernelConfig = {
  kernelName: OnesLike,
  backendName: 'webgl',
  kernelFunc: onesLike as {} as KernelFunc
};
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});
  }
}

export const onesLikeConfig: KernelConfig = {
  kernelName: OnesLike,
  backendName: 'webgl',
  kernelFunc: onesLike as {} as KernelFunc
};

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 */

import {KernelConfig, KernelFunc, Pack, PackAttrs, PackInputs, TensorInfo, util} from '@tensorflow/tfjs-core';
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 => p[0] + p[1]);
    this.userCode = 'int start = 0;
        int end = 0;

        void main() {
          int outC = getOutputCoords();
          if (outC < start || outC >= end) {
            setOutput(float($constantValue));
          } else {
            setOutput(getX(outC - start));
          }
        }';
  }

  set(userCode: string) {
    this.userCode = userCode;
  }

  evaluate(inputs: number[], outputs: number[]): number[] {
    return eval(this.userCode);
```javascript
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;
  outputShape: number[];
  userCode:

  constructor(
      xShape: number[],
      paddings: Array<[number, number]>,
      constantValue: number) {
    this.outputShape = paddings.map((p, i) => p[0] + xShape[i] + p[1])
      .map((p, i) => i);
    const rank = xShape.length;
    const dtype = getCoordsDataType(rank);
    const start = paddings.map((p, i) => p[0] + xShape[i]).join(',');
    const end = paddings.map((p, i) => p[0] + xShape[i]).join(',');
    const coords = getChannels('rc', rank);
    const cLimit = `${coords[rank - 1]} <
    ${this.outputShape[rank - 1]}';
    const innerDims = rank === 1 ? 'source' : vec2(${source.slice(-2)}, i);
    const componentSetup = 'rc = outputLoc;
    if(${cLimit}) {
      if(${coords[rank - 2]} < ${this.outputShape[rank - 2]}) {
        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(${constantValue});
              } else {
                const source = rc - start;
                result[i] = getChannel(getX(${source.join()}), ${i});
              }
            `;
          }
          mainLoop += (rank === 1 ? `} ` :
            `}}`);
        this.userCode = 'const ${dtype} start = ${dtype}(${start});
        const $end = ${dtype}(${end});
        $type start = $type staple = ($type)$start;
        const $type end = $type staple = ($type)$end;
        ${dtype} outputLoc = getOutputLoc();
        vec4 result = vec4(0);
        $mainLoop setOutput(result);
        setOutput(result);
        setOutput(result);
        setOutput(result);
      }
    } else {
      const source = rc - start;
      vec4 result = vec4(0);
      $mainLoop setOutput(result);
      setOutput(result);
      setOutput(result);
      setOutput(result);
    }
  }
}

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,
          ) :
              new PadProgram(x.shape, paddings, constantValue);
          return backend.runWebGLProgram(program, [x], x.dtype);
        };

export const padV2Config: KernelConfig = {
  kernelName: PadV2,
  backendName: 'webgl',
  kernelFunc: PadV2
};
```

The code snippet provided seems to be part of a software library, possibly related to image or vector processing, given terms like `relu`, `relu6`, and `GPGPUProgram`. Here's a breakdown of the code:

1. **ReLU Function**: The code snippet includes a function for the Rectified Linear Unit (ReLU) activation function, which is commonly used in neural networks to introduce non-linearity into the model. The snippet also includes a packed version for efficiency.

2. **ReLU6 Function**: Similar to the ReLU function, but clipped at 6.0, which is a common variant in certain neural network architectures to limit the output range.

3. **ResizeBilinearProgram Class**: This class appears to implement a program for performing a resize operation using the bilinear interpolation method. It includes methods for calculating fractional source indices and retrieving output coordinates.

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5. **Code Style**: The code uses TypeScript with import statements and exports a class and functions, indicating it is intended for use in a broader project, possibly an open-source library or a part of a larger codebase.

Given the complexity and specific nature of the functions and classes, this code is likely part of a larger system dealing with neural network or image processing tasks, utilizing optimizing functions like `relu` and `relu6` for efficient computation.
sourceFracIndexRC = vec2(sourceFloorRC); float top = topLeft + (topRight - topLeft) * fracRC.y;
float bottom = bottomLeft + (bottomRight - bottomLeft) * fracRC.y;
float newValue = top + (bottom - top) * fracRC.x;
setOutput(newValue);

```cpp
const vec3 effectiveInputOverOutputRatioRC = vec3(${effectiveInSize[0] / effectiveOutSize[0]},
                                           ${effectiveInSize[1] / effectiveOutSize[1]},
                                           ${effectiveInSize[1] / effectiveOutSize[1]});
const vec3 inputShapeRC = vec3(${oldHeight}.0, ${oldWidth}.0, ${oldWidth}.0);

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 + ivec3(0, 0, 1);

    // Fractional source index.
    vec3 fracRC = sourceFracIndexRC - vec3(sourceFloorRC);

    vec4 topLeft = vec4(
        getAValue(b, sourceFloorRC.x, sourceFloorRC.y, d),
        hasNextCol ? getAValue(b, sourceFloorRC.x, sourceFloorRC.y, d + 1)
                     : 0.0,
        hasNextRow ? getAValue(b, sourceFloorRC.x, sourceFloorRC.y, d)
                     : 0.0,
        (hasNextRow && hasNextCol) ?
            getAValue(b, sourceFloorRC.x, sourceFloorRC.y, d + 1) : 0.0);

    vec4 bottomLeft = vec4(
        getAValue(b, sourceCeilRC.x, sourceFloorRC.y, d),
        hasNextCol ? getAValue(b, sourceCeilRC.x, sourceFloorRC.y, d + 1)
                     : 0.0,
        hasNextRow ? getAValue(b, sourceCeilRC.x, sourceFloorRC.y, d)
                     : 0.0,
        (hasNextRow && hasNextCol) ?
            getAValue(b, sourceCeilRC.x, sourceFloorRC.y, d + 1) : 0.0);

    vec4 topRight = vec4(
        getAValue(b, sourceFloorRC.x, sourceCeilRC.y, d),
        hasNextCol ? getAValue(b, sourceFloorRC.x, sourceCeilRC.y, d + 1)
                     : 0.0,
        hasNextRow ? getAValue(b, sourceFloorRC.x, sourceCeilRC.y, d)
                     : 0.0,
        (hasNextRow && hasNextCol) ?
            getAValue(b, sourceFloorRC.x, sourceCeilRC.y, d + 1) : 0.0);

    vec4 bottomRight = vec4(
        getAValue(b, sourceCeilRC.x, sourceCeilRC.y, d),
        hasNextCol ? getAValue(b, sourceCeilRC.x, sourceCeilRC.y, d + 1)
                     : 0.0,
        hasNextRow ? getAValue(b, sourceCeilRC.x, sourceCeilRC.y, d)
                     : 0.0,
        (hasNextRow && hasNextCol) ?
            getAValue(b, sourceCeilRC.x, sourceCeilRC.y, d + 1) : 0.0);

    vec3 fracRC = sourceFracIndexRC - 
        vec3(sourceFloorRC);

    vec4 top = mix(topLeft, topRight, fracRC.yyy);
    vec4 bottom = mix(bottomLeft, bottomRight, fracRC.yyy);
    setOutput(mix(newValue, vec4(0.0), fracRC.yyy));
```
mix(bottomLeft, bottomRight, fracRC.yyyz);\nvec4 newValue = mix(top, bottom, fracRC.x);\n
setOutput(newValue);\n}\n`;

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

import {env, KernelConfig, KernelFunc, ResizeBilinear, ResizeBilinearAttrs, ResizeBilinearInputs,
        TensorInfo} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from './backend_webgl';
import {ResizeBilinearProgram} from './resize_bilinear_gpu';
import {ResizeBilinearPackedProgram} from

export function resizeBilinear(args: {
  inputs: ResizeBilinearInputs,
  backend: MathBackendWebGL,
  attrs: ResizeBilinearAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = 
  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 
}

export const resizeBilinearConfig: KernelConfig =

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

import {GPGPUProgram} from './gpgpu_math';

export class ResizeBilinearBackpropProgram implements
        dyShape: \[number, number, number, number\],
        inputShape: \[number, number, number, number, number, number, number, number, number\],
        alignCorners: boolean) {
  \[dyShape: \[number, number, number, number\],
        outputShape: \[number, number, number, number\],
        userCode: string,\n        constructor(\n        this.outputShape = inputShape;
        \[yHeight, \[yWidth\] = dyShape;\n        \n        // In the backwards pass, we want to find the pixels that were generated for\n        // each pixel in the input image the forward pass and add the corresponding\n        // coefficient from dy to the gradient
        \n        \n        \n        const effectiveXSize: \[number, number, number, number\],
        alignCorners &\& \[yHeight > 1\] ? xHeight - 1 : xWidth
        \n        \n        const effectiveYSize: \[number, number, number, number\],
        alignCorners &\& \[yHeight > 1\] ? \[yHeight - 1 : \[yHeight, \[yWidth > 1\] ? \[yWidth - 1 : yHeight\n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        \n        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floor(float(r) * invHeightScale);
int startDyR = int(startRcliffe - float(winHeight / 2));
float startDyC

= floor(float(c) * invWidthScale);
int startC = int(startCcliffe - float(winWidth / 2));
int dyR = dyRoffset + startDyR;
// Guard against the window exceeding the bounds of dy
if (dyR < 0 || dyR >= $yHeight)

continue;
int dyC = dyCoffSet + startDyC;
// Guard against the window exceeding the bounds of dy
if (dyC < 0 || dyC >= $yWidth)

continue;
float dxR = float(dxRoffSet);
int topDxRIndex = int(floor(dxR));
int bottomDxRIndex = int(min(ceil(dxR), $xHeight - 1));
float dxRLerp = dxR - float(topDxRIndex);
float inverseDxRLerp = 1.0 - dxRLerp;
float dxC = float(dxCoffSet);
int leftDxCIndex = int(floor(dxC));
int rightDxCIndex = int(min(ceil(dxC), $xWidth - 1));
float dxCLerp = dxC - float(leftDxCIndex);
float inverseDxCLerp = 1.0 - dxCLerp;
if (r == topDxRIndex && c == leftDxCIndex) {
  // topLeft
  accumulator +=
    getDy(b, dyR, dyC, d) * inverseDxRLerp * inverseDxCLerp;
}
if (r == topDxRIndex && c == rightDxCIndex) {
  // topRight
  accumulator +=
    getDy(b, dyR, dyC, d) * inverseDxRLerp * dxCLerp;
}
if (r == bottomDxRIndex && c == leftDxCIndex) {
  // bottomLeft
  accumulator +=
    getDy(b, dyR, dyC, d) * dxRLerp * inverseDxCLerp;
}
if (r == bottomDxRIndex && c == rightDxCIndex) {
  // bottomRight
  accumulator +=
    getDy(b, dyR, dyC, d) * dxRLerp * dxCLerp;
}
}
// End loop over dy
setOutput(accumulator);
}

import {KernelConfig, KernelFunc, ResizeBilinearGrad, ResizeBilinearGradAttr, TensorInfo} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import
{ResizeBilinearBackpropProgram} from '../resize_bilinear_backprop_gpu';
export function resizeBilinearGrad(args: {
  inputs: ResizeBilinearGradInputs,
  backend: MathBackendWebGL,
  attrs: ResizeBilinearGradAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {images, dy} = inputs;
  const {alignCorners} = attrs;

  const program = new ResizeBilinearBackpropProgram(
      dy.shape as 
[number, number, number, number],
      images.shape as 
[number, number, number, number],
      alignCorners);

  return
backend.runWebGLProgram(program, [dy], dy.dtype);
}

export const resizeBilinearGradConfig: KernelConfig
= {
  kernelName: ResizeBilinearGrad,
  backendName: 'webgl',
  kernelFunc: resizeBilinearGrad as {} as
KernelFunc
};

export class ResizeNearestNeighborProgram 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];

  const effectiveInSize: [number, number] = [\n
(alignCorners && newWidth > 1) ? newHeight : newHeight,
  (alignCorners && newWidth > 1) ? newWidth : newWidth
]

const effectiveOutSize: [number, number] = [newHeight, newWidth]

const effectiveInSize: [number, number] = [oldHeight, oldWidth]

const effectiveInputOverOutputRatioRC = vec2(newHeight / oldHeight, newWidth / oldWidth)

void main() {
  ivec4 coords = getOutputCoords();
  int b = coords[0];
  int d = coords[3];

  vec2 sourceFracIndexRC =
    vec2(yRC + vec2(0.5)) * effectiveInputOverOutputRatioRC + vec2(0.5)

  ivec2 sourceNearestRC =
    vec2(yRC) * effectiveInputOverOutputRatioRC

  float newValue = getA(b, sourceNearestRC.x, sourceNearestRC.y, d);

  setOutput(newValue);
}

export function resizeNearestNeighbor(args: {
  inputs: ResizeNearestNeighborInputs,
  backend: MathBackendWebGL,
  attrs: ResizeNearestNeighborAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {images} = inputs;
  const {alignCorners, halfPixelCenters} = attrs;

  const [newHeight, newWidth] = [images.shape[0], images.shape[1]]

  const program = new ResizeNearestNeighborProgram(
    images.shape as [number, number, number, number], newHeight, newWidth,
    alignCorners, halfPixelCenters);
  return backend.runWebGLProgram(program, [images], images.dtype);
}

export const resizeNearestNeighborConfig: KernelConfig = {
  kernelName: ResizeNearestNeighbor,
  backendName: 'webgl',
  kernelFunc: resizeNearestNeighbor as {} as KernelFunc
}
void main() {
  ivec4 coords = getOutputCoords();
  int b = coords[0];
  int d = coords[3];
  int r = coords[1];
  int c = coords[2];
  float accumulator = 0.0;
  float heightScale = float(${heightScale});
  float widthScale = float(${widthScale});
  float invHeightScale = float(${invHeightScale});
  float invWidthScale = float(${invWidthScale});
  int int winHeight = int(${winHeight});
  int int winWidth = int(${winWidth});
  int startDyC = int(floor(startCLerp - float(winWidth / 2)));
  int startDyR = int(floor(startRLerp - float(winHeight / 2)));
  float startRLerp = floor(float(r) * invHeightScale);
  int startDyR = int(floor(startDyR));
  float startCLerp = floor(float(c) * invWidthScale);
  int startDyC = int(floor(startDyC));
  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);
  }
}
setOutput(accumulator);
}
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=============================================================================

//do not delete this line
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));
        }
    `;
    } else {
      const getInCoord = (i: number) => {
        if (axis.indexOf(i) !== -1 && xShape[i] !== 1) {
          return `${xShape[i]} - coords[${i}] - 1`;
        } else {
          return `coords[${i}]`;
        }
      };
      const inCoords = xShape.map((_, i) => getInCoord(i)).join(',');
      const type = getCoordsDataType(rank);
      this.userCode = `void main() {
        ${type} coords = getOutputCoords();
        setOutput(getX(${inCoords}));
      }
    `;
    }
  }
}

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

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),
            ${xShape[0]} - rc - 1);
          if(${nextColumn}){
              result.g = getChannel(getX(${xShape[0]} - (rc  + 1) - 1),
                ${xShape[0]} - (rc  + 1) - 1);
          }
          setOutput(result);
        }
    `;
    } else {
      this.userCode = `void main(){
        ${type} rc = getOutputCoords();
        vec4 result = vec4(0.);
        result.r = getChannel(getX(${xShape[0]} - rc - 1),
          ${xShape[0]} - rc - 1);
        result.g = getChannel(getX(${xShape[0]} - (rc + 1) - 1),
          ${xShape[0]} - (rc + 1) - 1);
        if(${nextColumn}){
          result.b = getChannel(getX(${xShape[0]} - (rc + 2) - 1),
            ${xShape[0]} - (rc + 2) - 1);
          if(${nextRow}){
            result.a = getChannel(getX(${xShape[0]} - (rc + 2) + 1),
              ${xShape[0]} - (rc + 2) + 1);
          }
        }
        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);
  }
}

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

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from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from './backend_webgl';

export const rotateWithOffsetConfig = {
  kernelName: RotateWithOffset,
  backendName: 'webgl',
  kernelFunc: (inputs, attrs, backend) => {
    const [image] = inputs as RotateWithOffsetInputs;
    const {radians, fillValue, center} = attrs as {} as RotateWithOffsetAttrs;
    const webglBackend = backend.as MathBackendWebGL;

    const program = new RotateProgram(image as Tensor4D).shape, radians, fillValue, center);
    const output = webglBackend.runWebGLProgram(program, [image], image.dtype);
    return output;
  }
};

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 */

import {GPGPUProgram} from './gpgpu_math';

export class ScatterProgram implements GPGPUProgram {
  variableNames = ['updates', 'indices', 'defaultValue'];
  outputShape: number[];
  userCode: string;

  constructor(updateSize: number, sliceDim: number, indicesRank: number, updatesRank: number, strides: number[], shape: number[], summingDupeIndex = true) {
    this.outputShape = shape;
    const stridesType = getCoordsDataType(strides.length);
    const dtype = getCoordsDataType(shape.length);
    let indicesString = '';
    if (indicesRank === 1) { indicesString = 'i'; } else if (indicesRank === 2) { indicesString = 'i, j'; }
    const indicesSnippet = `getIndices(${indicesString})`;
    let updatesString = '';
    if (updatesRank === 1) { updatesString = 'i'; } else if (updatesRank === 2) { updatesString = 'i, coords[1]'; }
    const updatesSnippet = `getUpdates(${updatesString})`;
    this.userCode = `
        ${stridesType} strides = ${stridesType}(${strides});

        void main() {
          ${dtype} coords = getOutputCoords();
          float sum = 0.0;
          bool found = false;
          for (int i = 0; i < $[updateSize]; i++) {
            int flattenedIndex = 0;
            for (int j = 0; j < $[sliceDim]; j++) {
              flattenedIndex = index * $[strides] + j;
            }
            if (flattenedIndex == coords[0]) {
              sum += $[updatesSnippet];
              found = true;
            }
          }
        }
    `;
  }
}
import {backend_util, KernelConfig, KernelFunc, ScatterNd, ScatterNdAttrs, ScatterNdInputs, TensorInfo} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import {ScatterProgram} from '../scatter_gpu';
import {reshape} from './Reshape';

export function scatterNd(args: {
  inputs: ScatterNdInputs,
  backend: MathBackendWebGL,
  attrs: ScatterNdAttrs
}): TensorInfo {
  const {inputs, backend, attrs} = args;
  const {indices, updates} = inputs;
  const {shape} = attrs;
  const {sliceRank, numUpdates, sliceSize, strides, outputSize} =
      backend_util.calculateShapes(updates, indices, shape);

  const flattenShape = [outputSize / sliceSize, sliceSize];
  if (outputSize === 0) {
    return backend.makeTensorInfo(shape, indices.dtype);
  }

  const flattenIndices = reshape(
      {inputs: {x: indices},
       backend, attrs: {shape: [numUpdates, sliceRank]}});
  const flattenX = reshape(
      {inputs: {x: updates},
       backend, attrs: {shape: [numUpdates, sliceSize]}});

  const defaultValue = backend.makeTensorInfo(
      [], 'float32', new Float32Array([0]));  // scalar(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
};
import {MathBackendWebGL} from '../backend_webgl';

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, e], upcastType(t.dtype, e.dtype));
}

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

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

import {unaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';

const SELU = `
  // Stable and Attracting Fixed Point (0, 1) for Normalized
  // Weights.
  // see: https://arxiv.org/abs/1706.02515
  float scaleAlpha =
      ${backend_util.SELU_SCALEALPHA};
  float scale = ${backend_util.SELU_SCALE};
  return (x >= 0.0) ?
      scale * x : scaleAlpha * (exp(x) - 1.0);
`;

export const selu = unaryKernelFunc({opSnippet: SELU});

export const seluConfig: KernelConfig = {
  kernelName: Selu,
  backendName: 'webgl',
  kernelFunc: selu,
};

import {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,
};

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

import {unaryKernelFunc} from '../kernel_utils/kernel_funcs_utils';

const SIGN = `
  if (isNaN(x)) { return
    0.0; }
  return sign(x);
`;

export const sign = unaryKernelFunc({opSnippet: SIGN});

export const signConfig: KernelConfig = {
  kernelName: Sign,
  backendName: 'webgl',
  kernelFunc: sign,
};
```javascript
import {KernelConfig, Sin} from '@tensorflow/tfjs-core';
import {CHECK_NAN_SNIPPET_UNARY, unaryKernelFunc} from '../kernel_utils/kernel_funcs-utils';

const SIN = CHECK_NAN_SNIPPET_UNARY +
'  return sin(x);
'}

export const sin = unaryKernelFunc({opSnippet: SIN});

export const sinConfig: KernelConfig = {
  kernelName: Sin,
  backendName: 'webgl',
  kernelFunc: sin,
};

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 */

import {KernelConfig, Sinh} from '@tensorflow/tfjs-core';
import {unaryKernelFunc} from '../kernel_utils/kernel_funcs-utils';

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 {backend_util, KernelConfig, KernelFunc, SpaceToBatchND, SpaceToBatchNDAttrs, SpaceToBatchNDInputs, TensorInfo, util} from '@tensorflow/tfjs-core';
import {MathBackendWebGL} from '../backend_webgl';
import {padV2} from './PadV2';
import {reshape} from './Reshape';
import {transpose} from './Transpose';

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>(prod).
  for (let i = 1 + blockShape.length; i < x.shape.length;
    ++i) {
    completePaddings.push(0);
  }

  const paddedX = padV2({
    inputs: {x},
    backend,
    paddings: completePaddings,
    constantValue: 0
  });

  return tensorInfo();
}
```

---

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reshape(paddedX.shape, blockShape, prod, false);

  const permutedReshapedPaddedPermutation = backend_util.getPermuted(reshapedPaddedX.shape, blockShape, prod, false);

  const flattenedShape = backend_util.getReshapedPermutated(paddedX.shape, blockShape, prod, false);

  const reshapedPaddedX = reshape({inputs: {x: paddedX}, backend, attrs: {shape: reshapedPaddedShape}});

  const paddedXT = transpose({inputs: {x: reshapedPaddedX}, backend, attrs: {shape: flattenedShape}});

  const result = reshape({inputs: {x: paddedXT}, backend, attrs: {shape: permutedReshapedPaddedPermutation}});

  toDispose.push(reshape(paddedX));
  toDispose.push(reshapedPaddedX);
  toDispose.push(paddedXT);

  toDispose.forEach(t => backend.disposeIntermediateTensorInfo(t));

  return result;
};

export const spaceToBatchNDConfig: KernelConfig = {
  kernelName: SpaceToBatchND,
  backendName: 'webgl',
  kernelFunc: spaceToBatchND as {} as KernelFunc
};

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

import {backend_util, KernelConfig, KernelFunc, SparseToDense, SparseToDenseAttrs, SparseToDenseInputs, TensorInfo} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {SparseToDense} from '../sparse_to_dense';
import {reshape} from './Reshape';

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, 1], sumDupeIndices);

  const res = backend.runWebGLProgram(program, [sparseValues, sparseIndices, defaultValue], sparseValues.dtype);

  const reshaped = reshape({inputs: {x: res}, backend, attrs: {shape: outputShape}});

  backend.disposeIntermediateTensorInfo(res);

  return reshaped;
}

export const sparseToDenseConfig: KernelConfig = {
  kernelName: SparseToDense,
  backendName: 'webgl',
  kernelFunc: sparseToDense as {} as KernelFunc
};

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 */

import {backend_util, KernelConfig, KernelFunc, SplitV, SplitVAttrs, SplitVInputs, TensorInfo} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';

export function splitV(args: {
  inputs: SplitVInputs,
  backend: MathBackendWebGL,
  attrs: SplitVAttrs
}): TensorInfo[] {
  const {inputs, backend, attrs} = 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 xRank = x.shape.length;
  const begin = new Array(xRank).fill(0);
  const size = x.shape.slice();

  return splitSizes.map(s => {
    const sliceSize = [...size, sliceSize][0];

    return slice({inputs: {x}, backend, attrs: {begin, size: sliceSize}});
  });
}

export const splitVConfig: KernelConfig = {null

---
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 += i;
    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}));
}

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 |
      ) |
  $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>;
      const resultValues =
          stridedSliceImplCPU(outShape, xBuf, $strides, $begin);
      result = backend.makeTensorInfo(outShape, x.dtype,
          resultValues.values);
    } else {
      const program = new StridedSliceProgram($begin, $strides, outShape);
      result = backend.runWebGLProgram(program, [$x], 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
};

export const tan = unaryKernelFunc(TAN);
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```typescript
export const tanConfig: KernelConfig = {
    kernelName: Tan,
    backendName: 'webgl',
    kernelFunc: tan,
};
```

```typescript
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: KernelConfig = {
    kernelName: Tanh,
    backendName: 'webgl',
    kernelFunc: tanh,
};
```

```typescript
import {GPGPUProgram} from './gpgpu_math';
import {getCoordsDataType} from './shader_compiler';

export class TileProgram implements GPGPUProgram {
    variableNames = ['A'];
    outputShape: number[];
    userCode: string;
    rank: number;

    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 = ['resRC.x', 'resRC.y', 'resRC.z', 'resRC.w', 'resRC.u'];
    const coordSource = ['resRC.x', 'resRC.y', 'resRC.z', 'resRC.w', 'resRC.u'];

    let i = 0;
    while (i < rank) {
        if (rank > 5) {
            throw Error(`Tile for rank ${rank} is not yet supported`);
        }
        if (rank === 1) {
            return `imod(resRC, ${aShape[0]})`;
        }
        const currentCoord = [resRC.x, resRC.y, resRC.z, resRC.w, resRC.u];
        for (let i = 0; i < resRC.length; i++) {
            sourceCoords.push('imod($currentCoord[i], $aShape[i])');
        }
        return sourceCoords.join();
    }
}
```

```typescript
import {buffer, KernelConfig, KernelFunc, TensorInfo, Tile, TileAttrs, 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: TileAttrs}):
    TensorInfo {
        const {inputs, backend, attrs} = params;
        const {x} = inputs;
        const {reps} = attrs;

        if (x.dtype === 'string') {
            // Even thought string tensor is always on CPU, just to be consistent on how
            // to access tensor data.
            const data = backend.readSync(x.dataId) as Uint8Array;
            const decodedData = data.map(d => util.decodeString(d));
            const outBuf = tileImplCPU(buf, reps);
            return backend.makeTensorInfo(outBuf.shape, outBuf.dtype, outBuf.values);
        }
        // Even thought string tensor is always on CPU, just to be consistent on how
    // to access tensor data.
    const data = backend.readSync(x.dataId) as Uint8Array;
    const decodedData = data.map(d => util.decodeString(d));
    const outBuf = tileImplCPU(buf, reps);
    return backend.makeTensorInfo(outBuf.shape, outBuf.dtype, outBuf.values);
    }
```
TileProgram(x.shape, reps);\n  const output = backend.runWebGLProgram(program, [x], x.dtype);\n  return output;\n}\n\nexport const tileConfig: KernelConfig = {\n  kernelName: Tile,\n  backendName: 'webgl',\n  kernelFunc: tile as {} as KernelFunc,\n};

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 */

import {KernelConfig, KernelFunc, NumericDataType, TensorInfo, TopK, TopKAttrs, TopKInputs, TypedArray} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {topKImplCPU} from '../kernel_utils/shared';\n\nexport function topK(
    args: {inputs: TopKInputs, backend: MathBackendWebGL, attrs: TopKAttrs}):\n  TensorInfo\n{\n  const {inputs, backend, attrs} = args;\n  const {x} = inputs;\n  const {k, sorted} = attrs;\n  const xVals = backend.readSync(x.dataId) as TypedArray;\n  \n  const [allTopKVals, allTopKIndices] = topKImplCPU(xVals, x.shape, x.dtype as NumericDataType, k, sorted);\n  \n  return [\n    backend.makeTensorInfo(allTopKVals.shape, allTopKVals.dtype, allTopKVals.values),\n    backend.makeTensorInfo([allTopKIndices.shape, allTopKIndices.dtype, allTopKIndices.values])\n  ];
}

export const topKConfig: KernelConfig = {\n  kernelName: TopK,\n  backendName: 'webgl',\n  kernelFunc: topK as {} as KernelFunc,
};

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 */

import {KernelConfig, KernelFunc, Unique, UniqueAttrs, UniqueInputs} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {uniqueImplCPU} from '../kernel_utils/shared';
import {assertNotComplex} from '../webgl_util';\n\nexport function unique(
    args: {inputs: UniqueInputs, attrs: UniqueAttrs, backend: MathBackendWebGL}):\n  TensorInfo\n{\n  const {inputs, attrs, backend} = args;\n  const {x} = inputs;\n  \n  assertNotComplex(x, 'unique');\n  \n  // For now, always forward calculation to the CPU backend.\n  \n  console.warn('WARNING: UI might be locked temporarily as data is being downloaded');\n  const values = backend.readSync(x.dataId);\n  const \n  outputValues, outputShape, indices) = uniqueImplCPU(values, axis, x.shape, x.dtype);\n  \n  return [\n    backend.makeTensorInfo(outputShape, x.dtype, outputValues),\n    backend.makeTensorInfo([indices.length, 'int32'], indices),\n  ];\n}

export const uniqueConfig: KernelConfig = {\n  kernelName: Unique,\n  backendName: 'webgl',\n  kernelFunc: unique as {} as KernelFunc,
};

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 */

import {KernelConfig, KernelFunc, TensorInfo, Unpack, UnpackAttrs, UnpackInputs} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {reshape} from './Reshape';
import {slice} from './Slice';\n\nexport function unpack(
    args: {inputs: UnpackInputs, backend: MathBackendWebGL, attrs: UnpackAttrs}):\n  TensorInfo\n{\n  const {inputs, attrs, backend} = args;\n  const x = inputs[0];\n  \n  \n  const uniqueConfig: KernelConfig = {\n    kernelName: Unique,\n    backendName: 'webgl',\n    kernelFunc: unique as {} as KernelFunc,
};

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 */

import {KernelConfig, KernelFunc, TensorInfo, Unpack, UnpackAttrs, UnpackInputs} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {reshape} from './Reshape';
import {slice} from './Slice';\n\nexport function unpack(
    args: {inputs: UnpackInputs, backend: MathBackendWebGL, attrs: UnpackAttrs}):\n  TensorInfo\n{\n  const {inputs, attrs, backend} = args;\n  const x = inputs[0];\n  \n  \n  const uniqueConfig: KernelConfig = {\n    kernelName: Unique,\n    backendName: 'webgl',\n    kernelFunc: unique as {} as KernelFunc,
};

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 */

import {KernelConfig, KernelFunc, TensorInfo, Unpack, UnpackAttrs, UnpackInputs} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {reshape} from './Reshape';
import {slice} from './Slice';\n\nexport function unpack(
    args: {inputs: UnpackInputs, backend: MathBackendWebGL, attrs: UnpackAttrs}):\n  TensorInfo\n{\n  const {inputs, attrs, backend} = args;\n  const x = inputs[0];\n  \n  const uniqueConfig: KernelConfig = {\n    kernelName: Unique,\n    backendName: 'webgl',\n    kernelFunc: unique as {} as KernelFunc,
};

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 */

import {KernelConfig, KernelFunc, TensorInfo, Unpack, UnpackAttrs, UnpackInputs} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {reshape} from './Reshape';
import {slice} from './Slice';\n\nexport function unpack(
    args: {inputs: UnpackInputs, backend: MathBackendWebGL, attrs: UnpackAttrs}):\n  TensorInfo\n{\n  const {inputs, attrs, backend} = args;\n  const x = inputs[0];\n  \n  \n  const uniqueConfig: KernelConfig = {\n    kernelName: Unique,\n    backendName: 'webgl',\n    kernelFunc: unique as {} as KernelFunc,
};

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 */

import {KernelConfig, KernelFunc, TensorInfo, Unpack, UnpackAttrs, UnpackInputs} from '@tensorflow/tfjs-core';

import {MathBackendWebGL} from '../backend_webgl';
import {reshape} from './Reshape';
import {slice} from './Slice';\n\nexport function unpack(
    args: {inputs: UnpackInputs, backend: MathBackendWebGL, attrs: UnpackAttrs}):\n  TensorInfo\n{\n  const {inputs, attrs, backend} = args;\n  const x = inputs[0];\n  \n  \n  const uniqueConfig: KernelConfig = {\n    kernelName: Unique,\n    backendName: 'webgl',\n    kernelFunc: unique as {} as KernelFunc,
}
backend: MathBackendWebGL, attrs: UnpackAttrs});

TensorInfo[] {\n  const {inputs, backend, attrs} = args;\n  const {value} = inputs;\n  let {axis} = attrs;\n  if (axis < 0) {\n    axis += value.shape.length;\n  }\n  const x = value;\n  const xRank = x.shape.length;\n  const num = value.shape[axis];\n  const outShape: number[] = new Array(xRank - 1);\n  for (let i = 0; i < xRank; i++) {\n    if (i !== axis) {\n      outShape[outIndex++] = x.shape[i];\n    }\n  }\n  const toDispose = [];\n  begin = new Array(xRank).fill(0);\n  size = x.shape.slice();\n  // Infer shape from passed inputs\n  if (backend) {\n    backend.disposeIntermediateTensorInfo();\n    return res;\n  }\n
export const unpackConfig: KernelConfig = {\n  ...}

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 */

import {backend_util} from '@tensorflow/tfjs-core';
import {GPGPUProgram} from './gpgpu_math';

export class SegmentOpProgram implements GPGPUProgram {
  variableNames = ['x', 'segmentIds'];\n  outputShape: number[];\n  userCode: string;\n  constructor(\n      segOpInfo: backend_util.segment_util.SegOpInfo,\n      segOpType: 'unsortedSegmentSum') {\n    const windowSize = segOpInfo.windowSize;\n    const batchSize = segOpInfo.batchSize;\n    const inSize = segOpInfo.inSize;\n    const numSegments = segOpInfo.numSegments;\n    const outSize = numSegments * Math.ceil(inSize / windowSize);\n    this.outputShape = [batchSize, outSize];\n    this.initializationValue = 0.0;\n    const this.valueOutOfBounds = '';\n    if (inSize % windowSize > 0) {\n      this.valueOutOfBounds = '';\n    }\n
    const this.segmentOutOfBounds = '';\n    if (inSize % windowSize > 0) {\n      this.segmentOutOfBounds = '';\n    }\n
    const updateSnippet = '';\n
    let checkValueOutOfBounds = '';
    if (inSize % windowSize > 0) {
      checkValueOutOfBounds = '';\n    }\n
    let checkSegmentIdOutOfBounds = '';
    if (inSize % windowSize > 0) {
      checkSegmentIdOutOfBounds = '';\n    }\n
    this.userCode = '';\n
    const float initializationValue = 0.0;

    float getValue(int batch, int inIdx) {\n      return getX(batch, inIdx);\n    }\n
    float getSegmentIdAtIndex(int inIdx) {\n      return getSegmentIds(inIdx);\n    }\n
    void main() {\n      ivec2 coords = getOutputCoords();\n      int batch = coords[0];\n      int inIdx = coords[1];\n      int inOffset = int(floor(float(outIdx) / float(\n          numSegments)));\n      int currentSeg = int(mod(float(outIdx), float($numSegments)));\n      float flatValue = 0.0;\n      float flatSumValue = 0.0;\n      for (int i = 0; i < $windowSizeNearestVec4; i++) {\n        ...\n      }\n    }\n  }

  // ...
getValue(batch, inIdx), getValue(batch, inIdx + 1), initializationValue,
vec4 segFilter = vec4
( currentSeg ? 1 : 0,
int(getSegmentIdAtIndex(inIdx + 1)) == currentSeg ? 1 : 0, 0, 0
); setValue bach, inIdx + 1); } else if (${windowSizeVec4Remainder === 3}) { vec4 values =
vec4
( getValue(batch, inIdx), getValue(batch, inIdx + 1), getValue(batch, inIdx + 2), initializationValue
); vec4 segFilter = vec4
( currentSeg ? 1 : 0,
int(getSegmentIdAtIndex(inIdx + 1)) == currentSeg ? 1 : 0, 0, 0
);

setOutput(${returnValue});

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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
}):
  const {inputs, backend, attrs} = args;
  const {x, segmentIds} = inputs;
  const {numSegments} = attrs;

  const xRank = x.shape.length;

  const toDispose = [ ];

  let axis = 0;
  const permutation = backend_util.getAxesPermutation([ axis], xRank);
  let permutedX = x;
  if (permutation != null) {
    permutedX = transpose({inputs: {x}, backend, attrs: {perm: permutation}});
    toDispose.push(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]]);
  const outputDType = sumOutType(x.dtype);
  const segOpCompute = (x: TensorInfo, segOpType: 'unsortedSegmentSum', segmentIds: TensorInfo,
  dtype: DataType, numSegments: number): TensorInfo => {
    const batchSize = x.shape[0];
    const outShape = util.sizeFromShape([permutedX.shape[axis]]);
    const a2D = reshape({inputs: [x, permutedX]}, backend, attrs:
    [shape: [-1, inSize]]);
    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 = batchSize
      backend_util.segment_util.unsortedSegmentSumOptimalWindowSize(
      inSize, numSegments);
      const segOpInfo = {windowSize, inSize, batchSize, numSegments};
      const output = new SegmentOpProgram(segOpInfo, segOpType);
      const output
      backend.compileAndRun(program, [x, segmentIds], dtype);
      const output = Dispose.push(output);
      // No need to run
      another GPGPU program.
      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]} });
      const output = Dispose.push(reshape());
      const result = segOpCompute(output, segOpType, tileInfo, dtype, numSegments);
      const segOpResult = segOpCompute(a2D, 'unsortedSegmentSum', segmentIds, outputDType, numSegments);
      const reshaped = reshape({inputs: [x: segOpResult],
        backend, attrs: [shape: outShape] });
      let result = reshape();
      if (permutation != null) {
        toDispose.push(reshape());
      } else {
        result = transpose({inputs: [x: result],
          backend, attrs: [perm] });
      }
      toDispose.ForEach(t => backend.disposeIntermediateTensorInfo(t));
      return result;
    }
    export const unsortedSegmentSumConfig: KernelConfig = {
      kernelName: UnsortedSegmentSum,
      backendName: 'webgl',
      kernelFunc: unsortedSegmentSum as {} as KernelFunc
    };
  };
import {logConfig} from './kernels/Log';
import {log1pConfig} from './kernels/Log1p';
import {logicalAndConfig} from './kernels/LogicalAnd';
import {logicalNotConfig} from './kernels/LogicalNot';
import {LRNConfig} from './kernels/LRN';
import {LRNGradConfig} from './kernels/LRNGrad';
import {maxConfig} from './kernels/Max';
import {maxPoolConfig} from './kernels/MaxPool';
import {maxPool3DConfig} from './kernels/MaxPool3D';
import {maxPoolGrad3DConfig} from './kernels/MaxPoolGrad3D';
import {maxPoolWithArgmaxConfig} from './kernels/MaxPoolWithArgmax';
import {MeanConfig} from './kernels/Mean';
import {MinConfig} from './kernels/Min';
import {minimumConfig} from './kernels/Minimum';
import {mirrorPadConfig} from './kernels/MirrorPad';
import {modConfig} from './kernels/Mod';
import {multinomialConfig} from './kernels/Multinomial';
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 {onesLikeConfig} from './kernels/OnesLike';
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 {realConfig} from './kernels/Real';
import {realDivConfig} from './kernels/RealDiv';
import {reciprocalConfig} from './kernels/Reciprocal';
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 {rotateWithOffsetConfig} from './kernels/RotateWithOffset';
import {roundConfig} from './kernels/Round';
import {roundNdConfig} from './kernels/RoundNd';
import {selectConfig} from './kernels/Select';
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 {softplusConfig} from './kernels/Softplus';
import {spaceToBatchNDConfig} from './kernels/SpaceToBatchND';
import {sqrtConfig} from './kernels/Sqrt';
import {squareConfig} from './kernels/Square';
import {stridedSliceConfig} from './kernels/StridedSlice';
import {sumConfig} from './kernels/Sum';
import {tanConfig} from './kernels/Tan';
import {tileConfig} from './kernels/Tile';
import {topKConfig} from './kernels/TopK';
import {transposeConfig} from './kernels/Transpose';
import {unpackConfig} from './kernels/Unpack';
import {uniqueConfig} from './kernels/Unique';
import {zerosLikeConfig} from './kernels/ZerosLike';

// List all kernel configs here
const kernelConfigs:

// List all kernel configs here
const kernelConfigs:
conv3DBackpropInputConfig, conv3DConfig, cosConfig, coshConfig, cropAndResizeConfig, cumsumConfig, denseBic和平Config, depthToSpaceConfig, depthwiseConv2dNativeBackpropFilterConfig, depthwiseConv2dNativeBackpropInputConfig, depthwiseConv2dNativeConfig, diagConfig, dilatModule2DConfig, eluConfig, eluGradConfig, equalConfig, erfConfig, expConfig, expandDimsConfig, expm1Config, ffillConfig, fillConfig, flipLeftRightConfig, floorConfig, floorDivConfig, fromPixelsConfig, fusedConv2DConfig, fusedDepthwiseConv2DConfig, gatherNdConfig, gatherV2Config, greaterConfig, greaterEqualConfig, identityConfig, ifftConfig, imagConfig, isInfConfig, isNaNConfig, leakyReluConfig, lessConfig, lessEqualConfig, linSpaceConfig, log1pConfig, logConfig, logicalAndConfig, logicalNotConfig, logicalOrConfig, maxConfig, maxPool3DConfig, maxPoolGradConfig, maxPoolGrad3DConfig, maxPoolGradWithArgmaxConfig, maximumConfig, meanConfig, minConfig, minimumConfig, mirrorPadConfig, modConfig, multinomialConfig, multiplyConfig, negConfig, nonMaxSuppressionV3Config, nonMaxSuppressionV4Config, nonMaxSuppressionV5Config, notEqualConfig, oneHotConfig, onesLikeConfig, packConfig, padV2Config, powConfig, preluConfig, prodConfig, rangeConfig, realConfig, realDivConfig, reciprocalConfig, relu6Config, reluConfig, reshapeConfig, resizeBilinearConfig, resizeBilinearGradConfig, resizeNearestNeighborConfig, resizeNearestNeighborGradConfig, reverseConfig, rotateWithOffsetConfig, roundConfig, rsqrtConfig, scatterNdConfig, selectConfig, seluConfig, sigmoidConfig, signConfig, sinhConfig, sliceConfig, softmaxConfig, softplusConfig, spaceToBatchNDConfig, sparseToDenseConfig, splitVConfig, sqrtConfig, squareConfig, squaredDifferenceConfig, stepConfig, subConfig, sumConfig, tanhConfig, tileConfig, topKConfig, transposeConfig, uniqueConfig, unpadConfig, unsortedSegmentSumConfig, zerosLikeConfig

for (const kernelConfig of kernelConfigs) {
  registerKernel(kernelConfig);
}

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 *
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 */

/* tslint:disable */

/** Properties of an Any. */
export declare interface IAny {
  /** Any typeUrl */
  typeUrl?: (string|null);

  /** Any value */
  value?: (Uint8Array|null);
}

/** DataType enum. */
export enum DataType {
  'DT_INVALID' = 0,
  'DT_FLOAT' = 1,
  'DT_DOUBLE' = 2,
  'DT_INT32' = 3,
  'DT_UINT8' = 4,
  'DT_INT16' = 5,
  'DT_INT8' = 6,
  'DT_STRING' = 7,
  'DT_COMPLEX64' = 8,
  'DT_INT64' = 9,
  'DT_BOOL' = 10,
  'DT_QINT8' = 11,
  'DT_QUINT8' = 12,
  'DT_QINT32' = 13,
  'DT_BFLOAT16' = 14,
  'DT_FLOAT_REF' = 101,
  'DT_DOUBLE_REF' = 102,
  'DT_INT32_REF' = 103,
  'DT_UINT8_REF' = 104,
  'DT_INT16_REF' = 105,
  'DT_INT8_REF' = 106,
  'DT_STRING_REF' = 107,
  'DT_COMPLEX64_REF' = 108,
  'DT_INT64_REF' = 109,
  'DT_BOOL_REF' = 110,
  'DT_QINT8_REF' = 111,
  'DT_QUINT8_REF' = 112,
  'DT_QINT32_REF' = 113,
  'DT_BFLOAT16_REF' = 114
}

/** Properties of a TensorShape. */
export declare interface ITensorShape {
  /** TensorShape dim */
  dim?: (TensorShape.IDim|null);

  /** TensorShape unknownRank */
  unknownRank?: (boolean|null);
}

export namespace TensorShape {
  /** Properties of a Dim. */
  export declare interface IDim {
    /** Dim size */
    size?: (number|string|null);

    /** Dim name */
    name?: (string|null);
  }
}

/** Properties of a Tensor. */
export declare interface ITensor {
  /** Tensor dtype */
  dtype?: (DataType|null);

  /** Tensor tensorShape */
  tensorShape?: (ITensorShape|null);

  /** Tensor tensorContent */
  tensorContent?: (Uint8Array|null);

  /** Tensor floatVal */
  floatVal?: (number|null);

  /** Tensor doubleVal */
  doubleVal?: (number|null);

  /** Tensor intVal */
  intVal?: (number|null);

  /** Tensor unVal */
  unVal?: (number|null);

import {OpExecutor, OpMapper} from '../types';

const CUSTOM_OPS: { [key: string]: OpMapper } = {};

/**
 * Register an Op for graph model executor. This allow you to register a TensorFlow custom op or override existing op.
 * Here is an example of registering a new MatMul Op.
 *
 * ```js
 * const customMatmul = (node) =>
 *     tf.matMul(node.inputs[0], node.inputs[1], node.attrs['transpose_a'],
 *       node.attrs['transpose_b']);
 * 
 * tf.registerOp('MatMul', customMatmul);
 * ```
 *
 * The inputs and attrs of the node object 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.
 * @doc {heading: 'Models', subheading: 'Op Registry'}
 */
export function registerOp(name: string, opFunc: OpExecutor) {
  const opMapper: OpMapper = {
    tfOpName: name,
    category: 'custom',
    inputs: [],
    attrs: [],
    customExecutor: opFunc
  };

  CUSTOM_OPS[name] = opMapper;
}

/**
 * Retrieve the OpMapper object for the registered op.
 *
 * @param name The Tensorflow Op name.
 *
 * @doc {heading: 'Models', subheading: 'Op Registry'}
 */
export function getRegisteredOp(name: string): OpMapper {
  return CUSTOM_OPS[name];
}

/**
 * Deregister the Op for graph model executor.
 *
 * @param name The Tensorflow Op 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[start], 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[start], 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 const json: OpMapper[] = [
  {
    'tfOpName': 'Abs',
    'category': 'basic_math',
    'inputs': [{
      'start': 0,
      'name': 'x',
      'type': 'tensor'}],
    'attrs': [{
      'tfName': 'T',
      'name': 'dtype',
      'type': 'dtype',
      'notSupported': true}
    },
  },
  {
    'tfOpName': 'Atan2',
    'category': 'basic_math',
    'inputs': [{
      'start': 0,
      'name': 'x',
      'type': 'tensor'}],
    'attrs': [{
      'tfName': 'T',
      'name': 'dtype',
      'type': 'dtype',
      'notSupported': true}
    }],
  },
  {
    'tfOpName': 'Acos',
    'category': 'basic_math',
    'inputs': [{
      'start': 0,
      'name': 'x',
      'type': 'tensor'}],
    'attrs': [{
      'tfName': 'T',
      'name': 'dtype',
      'type': 'dtype',
      'notSupported': true}
    }],
  },
  {
    'tfOpName': 'Minimum',
    'category': 'arithmetic',
    'inputs': [{
      'start': 0,
      'name': 'a',
      'type': 'tensor'}],
    'attrs': [{
      'tfName': 'T',
      'name': 'dtype',
      'type': 'dtype',
      'notSupported': true}
    }],
  },
  {
    'tfOpName': 'Maximum',
    'category': 'arithmetic',
    'inputs': [{
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      'name': 'a',
      'type': 'tensor'}],
    'attrs': [{
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      'name': 'dtype',
      'type': 'dtype',
      'notSupported': true}
    }],
  },
  {
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    'category': 'arithmetic',
    'inputs': [{
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      'name': 'a',
      'type': 'tensor'}],
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      'name': 'dtype',
      'type': 'dtype',
      'notSupported': true}
    }],
  },
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      'type': 'tensor'}],
    'attrs': [{
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      'type': 'dtype',
      'notSupported': true}
    }],
  },
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      'type': 'dtype',
      'notSupported': true}
    }],
  },
  {
    'tfOpName': 'Pow',
    'category': 'arithmetic',
    'inputs': [{
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      'name': 'x',
      'type': 'tensor'}],
    'attrs': [{
      'tfName': 'T',
      'name': 'dtype',
      'type': 'dtype',
      'notSupported': true}
    }],
  },
  {
    'tfOpName': 'SquaredDifference',
    'category': 'arithmetic',
    'inputs': [{
      'start': 0,
      'name': 'a',
      'type': 'tensor'},
      {'start': 1, 'name': 'b', 'type': 'tensor'}],
    'attrs': [{
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      'name': 'dtype',
      'type': 'dtype',
      'notSupported': true}
    }],
  },
  {
    'tfOpName': 'RealDiv',
    'category': 'arithmetic',
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      'name': 'a',
      'type': 'tensor'},
      {'start': 1, 'name': 'b', 'type': 'tensor'}],
    'attrs': [{
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      'name': 'dtype',
      'type': 'dtype',
      'notSupported': true}
    }],
  },
  {
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      'type': 'dtype',
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      'type': 'dtype',
      'notSupported': true}
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      'name': 'x',
      'type': 'tensor'}],
    'attrs': [{
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      'name': 'dtype',
      'type': 'dtype',
      'notSupported': true}
    }],
  },
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      'name': 'x',
      'type': 'tensor'}],
    'attrs': [{
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      'name': 'dtype',
      'type': 'dtype',
      'notSupported': true}
    }],
  },
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    'category': 'basic_math',
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      'name': 'x',
      'type': 'tensor'}],
    'attrs': [{
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      'name': 'dtype',
      'type': 'dtype',
      'notSupported': true}
    }],
  },
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      'type': 'tensor'}],
    'attrs': [{
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    }],
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      'notSupported': true}
    }],
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      'name': 'a',
      'type': 'tensor'}],
    'attrs': [{
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      'type': 'dtype',
      'notSupported': true}
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  },
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    'tfOpName': 'atan2',
    'category': 'arithmetic',
    'inputs': [{
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      'name': 'a',
      'type': 'tensor'},
      {'start': 1, 'name': 'b', 'type': 'tensor'}],
    'attrs': [{
      'tfName': 'T',
      'name': 'dtype',
      'type': 'dtype',
      'notSupported': true}
    }],
  },
];
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null
{'name': 'identicalElementShapes', 'type': 'bool'}
}
{
'tfName': 'tensor_array_name', 'name': 'name',
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]
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'inputs': [
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{
'start': 1, 'name': 'indices', 'type': 'number'}
]

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{
'start': 1, 'name': 'indices', 'type': 'number'}
]

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{
'start': 1, 'name': 'indices', 'type': 'number'}
]

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{
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'inputs': [
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{
'start': 1, 'name': 'indices', 'type': 'number'}
]

'attr': [
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'inputs': [
{
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{
'start': 1, 'name': 'indices', 'type': 'number'}
]

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{
'start': 1, 'name': 'indices', 'type': 'number'}
]

'attr': [
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'inputs': [
{
'start': 0, 'name': 'tensorArrayId', 'type': 'tensor'},
{
'start': 1, 'name': 'indices', 'type': 'number'}
]

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'inputs': [
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{
'start': 1, 'name': 'indices', 'type': 'number'}
]

'attr': [
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'inputs': [
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'start': 0, 'name': 'tensorArrayId', 'type': 'tensor'},
{
'start': 1, 'name': 'indices', 'type': 'number'}
]

'attr': [
{
'tfName': 'T', 'name': 'dtype', 'type': 'dtype', 'notSupported': true
}
]
{
'tfOpName': 'TensorArrayConcatV3', 'category': 'control',
'inputs': [
{
'start': 0, 'name': 'tensorArrayId', 'type': 'tensor'},
{
'start': 2, 'name': 'tensor', 'type': 'tensor'}
]

'attr': [
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'tfName': 'T', 'name': 'dtype', 'type': 'dtype', 'notSupported': true
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'inputs': [
{
'start': 0, 'name': 'tensorArrayId', 'type': 'tensor'},
{
'start': 1, 'name': 'indices', 'type': 'number'}
]

'attr': [
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'tfName': 'T', 'name': 'dtype', 'type': 'dtype', 'notSupported': true
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]
{
'tfOpName': 'TensorArrayGatherV3', 'category': 'control',
'inputs': [
{
'start': 0, 'name': 'tensorArrayId', 'type': 'tensor'},
{
'start': 1, 'name': 'indices', 'type': 'number'}
]

'attr': [
{
'tfName': 'T', 'name': 'dtype', 'type': 'dtype', 'notSupported': true
}
]
{
'tfOpName': 'TensorArrayReadV3', 'category': 'control',
'inputs': [
{
'start': 0, 'name': 'tensorArrayId', 'type': 'tensor'},
{
'start': 1, 'name': 'indices', 'type': 'number'}
]

'attr': [
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'tfName': 'T', 'name': 'dtype', 'type': 'dtype', 'notSupported': true
}
]
{
'tfOpName': 'TensorArrayWriteV3', 'category': 'control',
'inputs': [
{
'start': 0, 'name': 'tensorArrayId', 'type': 'tensor'},
{
'start': 1, 'name': 'indices', 'type': 'number'}
]

'attr': [
{
'tfName': 'T', 'name': 'dtype', 'type': 'dtype', 'notSupported': true
}
]
true} in n 'tfOpName': 'MaxPool3D', n 'category': 'convolution', n 'inputs': [{n 'start': 0, 'name': 'x', 'type': 'tensor'}, n 'attrs': [n {n 'tfName': 'T', 'name': 'dtype', 'type': 'dtype', 'notSupported': true}, n {n 'tfOpName': 'Conv1D', n 'category': 'convolution', n 'inputs': [{n 'start': 0, 'name': 'x', 'type': 'tensor'}, n 'attrs': [n {n 'tfName': 'T', 'name': 'dtype', 'type': 'dtype', 'notSupported': true}]}, n {n 'tfOpName': 'Conv2D', n 'category': 'convolution', n 'inputs': [{n 'start': 0, 'name': 'x', 'type': 'tensor'}, n 'attrs': [n {n 'tfName': 'T', 'name': 'dtype', 'type': 'dtype', 'notSupported': true}]}, n {n 'tfOpName': 'DepthwiseConv2D', n 'category': 'convolution', n 'inputs': [{n 'start': 0, 'name': 'x', 'type': 'tensor'}, n 'attrs': [n {n 'tfName': 'T', 'name': 'dtype', 'type': 'dtype', 'notSupported': true}]}, n {n 'tfOpName': 'DepthwiseConv2DNative', n 'category': 'convolution', n 'inputs': [{n 'start': 0, 'name': 'x', 'type': 'tensor'}, n 'attrs': [n {n 'tfName': 'T', 'name': 'dtype', 'type': 'dtype', 'notSupported': true}]}]}]}.
```javascript
import {Graph, InputParamValue, Node, OpMapper, ParamValue} from './executors/utils';
import * as arithmetic from './op_list/arithmetic';
import * as basicMath from './op_list/basic_math';
import * as control from './op_list/control';
import * as convolution from './op_list/convolution';
import * as creation from './op_list/creation';
import * as dynamic from './op_list/dynamic';
import * as evaluation from './op_list/evaluation';
import * as graph from './op_list/graph';
import * as hashTable from './op_list/hash_table';
import * as image from './op_list/image';
import * as logical from './op_list/logical';
import * as matrices from './op_list/matrices';
import * as normalization from './op_list/normalization';
import * as reduction from './op_list/reduction';
import * as sliceJoin from './op_list/slice_join';
import * as spectral from './op_list/spectral';
import * as transformation from './op_list/transformation';
import * as utils from '@tensorflow/tfjs-core';
import {getRegisteredOp} from './custom_op/register';
import {getNodeNameAndIndex} from '../data/compiled_api';

import {DataType, env} from '@tensorflow/tfjs-core';

const ops = []
  arithmetic, basicMath, control, convolution, creation, dynamic,
  evaluation, logical, image, graph, matrices, normalization, reduction,
  sliceJoin, spectral, transformation,
  hashTable;

const mappersJson = []
  map[tfOpName] = mapper;
  return map;

map[mapper.tfOpName] = mapper;

return map;
```

---

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graph from Tensorflow GraphDef to local
// representation for TensorFlow.js API
transformGraph(
  graph: tensorflow.IGraphDef,
  signature: tensorflow.ISignatureDef = {}): Graph {
  const tfNodes = graph.node;
  const placeholders: Node[] = [];
  const weights: Node[] = [];
  const initNodes: Node[] = [];
  const nodes = tfNodes.reduce((map, node) => {
    map[node.name] = this.mapNode(node);
    if (node.op.startsWith('Placeholder')) {
      placeholders.push(map[node.name]);
    } else if (node.op === 'Const') {
      return map;
    } else if (node.input.length === 0) {
      initNodes.push(map[node.name]);
    }
  }, {});
  let inputs: Node[] = [];
  let outputNodeNameToKey: {
    key: string,
    def: string
  }[] = [];
  let inputNodeNameToKey = {};
  allNodes.forEach(key => {
    const node = nodes[key];
    if (node.signature.hasOutputs && node.name !== 'Placeholder') {
      inputs.push(node);
    } else if (node.name !== 'Placeholder') {
      outputNodeNameToKey[node.name] = key;
    }
  });
  if (inputs.length === 0) {
    inputs = initNodes;
  }

  // if signature has not outputs set, add any node that
  // does not have any outputs
  let output = null;
  Object.keys(outputNodeNameToKey).forEach(name => {
    const node = nodes[name];
    if (node === null) {
      output = node;
    }
  });

  const result = {nodes, inputs, outputs, weights, placeholders, signature, functions};
  result.initNodes = initNodes;
  return result;
}

private mapSignatureEntries(entries: {
  [k: string]: tensorflow.ITensorInfo
}): {
  [key: string]: string
} {
  return Object.keys(entries || {})
    .reduce((prev, curr) => {
      prev[entries[curr].name] = curr;
      return prev;
    }, {});
}

private mapNode(node: tensorflow.INodeDef): Node {
  // Unsupported ops will cause an error at run-time (not parse time), since
  // they may not be used by the actual execution subgraph.
  const mapper = getRegisteredOp(node.op) || this.opMappers[node.op] || {} as OpMapper;
  if (node.attr == null) {
    node.attr = {};
  }

  const newNode: Node = {
    name: node.name,
    op: node.op,
    category: mapper.category,
    inputNames: (node.input || []).map(input => input.startsWith('^') ? input.substr(1) : input),
    inputs: [],
    children: [],
    inputParams: {},
    attrParams: {},
    rawAttrs: node.attr
  };

  if (mapper.inputs != null) {
    newNode.inputParams = mapper.inputs.reduce<{
      [key: string]: InputParamValue
    }>((map, param) => {
      map[param.name] = {
        type: param.type,
        inputName: param.inputName,
        index: param.index
      };
      return map;
    }, {});
  }

  if (mapper.attrs != null) {
    const value = node.attr[param.name] || node.attr[param.tfName] || param.defaultValue;
    switch (param.type) {
      case 'string':
        value = getStringParam(node.attr, param.name, param.defaultValue as string);
        break;
      default:
        value = getParamValue(node.attr, param.name, param.defaultValue as string);
        break;
    }
  }
getNodeNameAndIndex(returnNodeMap["output.name"]); const node = nodes["nodeName"]; if (node != null) {
  node.defaultOutput = index; outputs.push(node);
}

private mapArgsToSignature(functionDef) {
  return {nodes, inputs: functionDef.inputs, outputs: functionDef.outputs, weights: functionDef.weights, placeholders: functionDef.placeholders, signature: functionDef.signature.map.arg.reduce((map, arg) => {
    map[arg.name] = this.mapArgToTensorInfo(arg);
  }, {}),
  }
}

private mapArgToTensorInfo(arg: tensorflow.OpDef.IArgDef, nameMap?: {
  [key: string]: string }, keepCase: boolean) {
  let name = arg.name;
  if (nameMap != null) {
    name = nameMap[name];
  }
  return {name, dtype: arg.type};
}

export function decodeBase64(text: string) {
  const global = env().global;
  if (typeof global.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. ' + 'Missing built-in atob() or Buffer()');
  }
}

export function parseStringParam(s: {
  [key: string]: tensorflow.IAttrValue, keepCase = false}, def: 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 = false) {
  const param = attrs[name];
  if (param != null) {
    return parseStringParam(param, keepCase);
  }
  return def;
}

export function getBoolParam(attrs: {
  [key: string]: tensorflow.IAttrValue}, name: string, def: boolean) {
  const param = attrs[name];
  return param ? param.b : def;
}

export function getNumberParam(attrs: {
  [key: string]: tensorflow.IAttrValue}, name: string, def: number) {
  const param = attrs[name];
  return typeof param === 'number' ? param : parseInt(param, 10);
}

export function parseDtypeParam(value: string|tensorflow.DataType) {
  if (typeof (value) === 'string') {
    // tslint:disable-next-line:no-any
    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 'float64';
    case tensorflow.DataType.DT_STRING:
      return 'string';
    default:
      throw new Error('Unknown dtpe error will happen at runtime (instead of parse time).');
  }
}

export function parseDtypeArrayParam(attrs: {
  [key: string]: tensorflow.IAttrValue}, name: string, def: DataType) {
  const param = attrs[name];
  return param ? param.list.f.map(v => parseDtypeParam(v)) :
    param.list.i.map(v => (typeof v === 'number') ? v : parseInt(v, 10));
}

export function getTensorShapeParam(attrs: {
  [key: string]: tensorflow.IAttrValue}, name: string, def?: number[]) {
  const param = attrs[name];
  return typeof param === 'number' ? param : parseInt(param, 10);
}

export function getTensorShapeArrayParam(attrs: {
  [key: string]: tensorflow.IAttrValue}, name: string, def?: number[]) {
  const param = attrs[name];
  return typeof param === 'number' ? param : parseInt(param, 10);
}

export function getNumericArrayParam(attrs: {
  [key: string]: tensorflow.IAttrValue}, name: string, def: number[]) {
  const param = attrs[name];
  return param ? param.list.f.map(v => (typeof v === 'number') ? v : parseInt(v, 10)) :
    param.list.i.map(v => (typeof v === 'number') ? v : parseInt(v, 10));
}

export function getTensorShapeShapeParam(shape: tensorflow.ITensorShape) {
  const undefined = (shape.unknownRank) ? shape : undefined;
  if (shape.dim != null) {
    return shape.dim.map(dim => (typeof dim.size === 'number') ? dim.size : parseInt(dim.size, 10));
  } else {
    return [1];
  }
}

export function getTensorShapeShapeArrayParam(attrs: {
  [key: string]: tensorflow.IAttrValue}, name: string, def?: number[]) {
  const param = attrs[name];
  return typeof param === 'number' ? param : parseInt(param, 10);
}

export function getTensorShapeArrayShapeParam(shape: tensorflow.ITensorShape) {
  const undefined = (shape.unknownRank) ? shape : undefined;
  if (shape.dim != null) {
    return shape.dim.map(dim => (typeof dim.size === 'number') ? dim.size : parseInt(dim.size, 10));
  } else {
    return [1];
  }
}

export function getTensorShapeArrayArrayParam(attrs: {
  [key: string]: tensorflow.IAttrValue}, name: string, def?: number[]) {
  const param = attrs[name];
  return typeof param === 'number' ? param : parseInt(param, 10);
}
export function getStringArrayParam(attrs: {[key: string]: tensorflow.IAttrValue}, name: string, def: string[], keepCase = false): string[] {
  const param = attrs[name];
  if (param && param.list && param.list.s)
    return param.list.s.map((v) => { return parseStringParam(v, keepCase); });
}

export function getTensorShapeArrayParam(attrs: {[key: string]: tensorflow.IAttrValue}, name: string, def: number[][], keepCase = false): number[][] {
  const param = attrs[name];
  if (param && param.list && param.list.shape)
    return param.list.shape.map((v) => { return parseTensorShapeParam(v); });
}

export function getTensorShapeParam(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); });
}

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 parseBoolParam(v); });
}

export function getDtypeArrayParam(attrs: {[key: string]: tensorflow.IAttrValue}, name: string, def: DataType[]): DataType[] {
  const param = attrs[name];
  if (param && param.list && param.list.type)
    return param.list.type.map((v) => { return parseDtypeParam(v); });
}

export function getNumberParam(attrs: {[key: string]: tensorflow.IAttrValue}, name: string, def: number): number {
  const value = attrs[name];
  if (value.tensor != null) {
    return getTensor(name, this.tensorMap, this.context);
  }
  if (value.i != null || value.f != null) {
    return getNumberParam(attrs, name, defaultValue as number);
  }
  if (value.s != null) {
    return getStringParam(attrs, name, defaultValue as string);
  }
  if (value.b != null) {
    return getBoolParam(attrs, name, defaultValue as boolean);
  }
  if (value.shape != null) {
    return getTensorShapeParam(attrs, name, defaultValue as number[]);
  }
  if (value.type != null) {
    return getDtypeParam(attrs, name, defaultValue as DataType);
  }
  if (value.list != null) {
    if (value.list.i != null || value.list.f != null) {
      return getNumericArrayParam(attrs, name, defaultValue as number[]);
    }
    if (value.list.s != null) {
      return getStringArrayParam(attrs, name, defaultValue as string[]);
    }
    if (value.list.shape != null) {
      return getTensorShapeArrayParam(attrs, name, defaultValue as number[]);
    }
    if (value.list.type != null) {
      return getDtypeArrayParam(attrs, name, defaultValue as DataType[]);
    }
  }
  return defaultValue;
}

export function getDtypeParam(attrs: {[key: string]: tensorflow.IAttrValue}, name: string, def: DataType): DataType {
  const value = attrs[name];
  if (value.type != null) {
    return getDtypeParam(attrs, name, defaultValue as DataType);
  }
  if (value.list.i != null || value.list.f != null) {
    return getNumericArrayParam(attrs, name, defaultValue as number[]);
  }
  if (value.list.s != null) {
    return getStringArrayParam(attrs, name, defaultValue as string[]);
  }
  if (value.list.shape != null) {
    return getTensorShapeArrayParam(attrs, name, defaultValue as number[]);
  }
  if (value.list.type != null) {
    return getDtypeArrayParam(attrs, name, defaultValue as DataType[]);
  }
  return defaultValue;
}

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 */

import {Tensor, TensorArray} 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';
import {GraphNode, Node, ValueType} from '../types';

/**
 * 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.rawAttrs, name, defaultValue as number);
    }
    if (value.s != null) {
      return getStringParam(this.node.rawAttrs, name, defaultValue as string);
    }
    if (value.b != null) {
      return getBoolParam(this.node.rawAttrs, name, defaultValue as boolean);
    }
    if (value.shape != null) {
      return getTensorShapeParam(this.node.rawAttrs, name, defaultValue as number[]);
    }
    if (value.type != null) {
      return getDtypeParam(this.node.rawAttrs, name, defaultValue as DataType);
    }
    if (value.list != null) {
      if (value.list.i != null || value.list.f != null) {
        return getNumericArrayParam(this.node.rawAttrs, name, defaultValue as number[]);
      }
      if (value.list.s != null) {
        return getStringArrayParam(this.node.rawAttrs, name, defaultValue as string[]);
      }
      if (value.list.shape != null) {
        return getTensorShapeArrayParam(this.node.rawAttrs, name, defaultValue as number[]);
      }
      if (value.list.type != null) {
        return getDtypeArrayParam(this.node.rawAttrs, name, defaultValue as DataType[]);
      }
    }
    return defaultValue;
  }
}

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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';
import {GraphNode, Node, ValueType} from '../types';

/**
 * 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.rawAttrs, name, defaultValue as number);
    }
    if (value.s != null) {
      return getStringParam(this.node.rawAttrs, name, defaultValue as string);
    }
    if (value.b != null) {
      return getBoolParam(this.node.rawAttrs, name, defaultValue as boolean);
    }
    if (value.shape != null) {
      return getTensorShapeParam(this.node.rawAttrs, name, defaultValue as number[]);
    }
    if (value.type != null) {
      return getDtypeParam(this.node.rawAttrs, name, defaultValue as DataType);
    }
    if (value.list != null) {
      if (value.list.i != null || value.list.f != null) {
        return getNumericArrayParam(this.node.rawAttrs, name, defaultValue as number[]);
      }
      if (value.list.s != null) {
        return getStringArrayParam(this.node.rawAttrs, name, defaultValue as string[]);
      }
      if (value.list.shape != null) {
        return getTensorShapeArrayParam(this.node.rawAttrs, name, defaultValue as number[]);
      }
      if (value.list.type != null) {
        return getDtypeArrayParam(this.node.rawAttrs, name, defaultValue as DataType[]);
      }
    }
    return defaultValue;
  }
}
* \* 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
\*/

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

import {Tensor} from '@tensorflow/tfjs-core';

export const executeOp: InternalOpExecutor =

(node: Node, tensorMap: NamedTensorsMap,
     context: ExecutionContext): Tensor[] => {
      switch (node.op) {
        case 'BiasAdd':
        case 'AddV2':
        case 'Add': {
          return [tfOps.add(
              getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context)
          )];
        }
        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)
          )];
        case 'Mul':
          return [tfOps.mul(
              getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context)
          )];
        case 'RealDiv':
          return [tfOps.div(
              getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context)
          )];
        case 'DivNoNan': {
          return [tfOps.divNoNan(
              getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context)
          )];
        }
        case 'FloorDiv': {
          return [tfOps.floorDiv(
              getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context)
          )];
        }
        case 'Sub': {
          return [tfOps.sub(
              getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context)
          )];
        }
        case 'Minimum': {
          return [tfOps.minimum(
              getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context)
          )];
        }
        case 'Maximum': {
          return [tfOps.maximum(
              getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context)
          )];
        }
        case 'Pow': {
          return [tfOps.pow(
              getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context)
          )];
        }
        case 'SquaredDifference': {
          return [tfOps.squaredDifference(
              getParamValue('a', node, tensorMap, context) as Tensor,
              getParamValue('b', node, tensorMap, context)
          )];
        }
        default:
          throw TypeError(`Node type ${node.op} is not implemented`);
      }

export const CATEGORY = 'arithmetic';
*/

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```javascript
switch (node.op) {
  case 'Abs':
    return tfOps.abs(node);
  case 'ComplexAbs':
    return tfOps.complexAbs(node);
  case 'Sqrt':
    return tfOps.sqrt(node);
  case 'Square':
    return tfOps.square(node);
  case 'Rsqrt':
    return tfOps.rsqrt(node);
  case 'Sinh':
    return tfOps.sinh(node);
  case 'Cosh':
    return tfOps.cosh(node);
  case 'Sigmoid':
    return tfOps.sigmoid(node);
  case 'Elu':
    return tfOps.elu(node);
  case 'HardSigmoid':
    return tfOps.hardSigmoid(node);
  case 'Selu':
    return tfOps.selu(node);
  case 'Softplus':
    return tfOps.softplus(node);
  case 'Softsign':
    return tfOps.softsign(node);
  case 'Sign':
    return tfOps.sign(node);
  case 'Tan':
    return tfOps.tan(node);
  case 'Atan':
    return tfOps.atan(node);
  case 'Atan2':
    return tfOps.atan2(node);
  case 'Atanh':
    return tfOps.atanh(node);
  case 'Asinh':
    return tfOps.asinh(node);
  case 'Asin':
    return tfOps.asin(node);
  case 'Acosh':
    return tfOps.acosh(node);
  case 'Acos':
    return tfOps.acos(node);
  case 'Acosh':
    return tfOps.acosh(node);
  case 'Add':
    return tfOps.add(node);
  case 'Sub':
    return tfOps.sub(node);
  case 'Mul':
    return tfOps.mul(node);
  case 'Div':
    return tfOps.div(node);
  case 'Floor':
    return tfOps.floor(node);
  case 'Ceil':
    return tfOps.ceil(node);
  case 'Neg':
    return tfOps.neg(node);
  case 'Reciprocal':
    return tfOps.reciprocal(node);
  case 'Rc':
    return tfOps.rc(node);
  case 'StableRc':
    return tfOps.stableRc(node);
  case 'MatMul':
    return tfOps.matMul(node);
  case 'Real':
    return tfOps.real(node);
  case 'Imag':
    return tfOps.imag(node);
  case 'Complex':
    return tfOps.complex(node);
  case 'Log':
    return tfOps.log(node);
  case 'Log1p':
    return tfOps.log1p(node);
  case 'Exp':
    return tfOps.exp(node);
  case 'Expm1':
    return tfOps.expm1(node);
  case 'Log1p':
    return tfOps.log1p(node);
  case 'Log':
    return tfOps.log(node);
  case 'Floor':
    return tfOps.floor(node);
  case 'Ceil':
    return tfOps.ceil(node);
  case 'Neg':
    return tfOps.neg(node);
  case 'Reciprocal':
    return tfOps.reciprocal(node);
}
```

---

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import {concat, DataType, keep, reshape, scalar, slice, stack, Tensor, tensor, tidy, unstack} from '@tensorflow/tfjs-core';

import {assertShapesMatchAllowUndefinedSize} from './tensor_utils';

export interface TensorWithState {
  tensor?: Tensor;
  written?: boolean;
  read?: boolean;
  cleared?: boolean;
}

/**
 * The TensorArray object keeps an array of Tensors. It * allows reading from the array and
 * writing to the array. * *export class TensorArray {
 * private tensors: TensorWithState[] = [];
 * private closed_ = false;
 * readonly idTensor: Tensor;
 * constructor(name: string) {
 *   this.idTensor = scalar(0);
 *   keep(this.idTensor);
 * }
 * get id() {
 *   return this.idTensor.id;
 * }
 * get closed() {
 *   return this.closed_;
 * }
 */

this.tensors.forEach(tensor => {
  if (keepIds == null || !keepIds.has(tensor.tensor.id)) {
    tensor.tensor.dispose();
  }
});

this.tensors = [];
this.closed_ = true;
this.idTensor.dispose();

this.size(): number {
  return this.tensors.length;
}

/**
 * Read the value at location index in the
 * TensorArray. *
 * @param index Number the index to read from.
 */
this.read(index: number): Tensor {
  if (this.closed_) {
    throw new Error(`TensorArray ${this.name} has already been closed.`);
  }

  if (index < 0 || index >= this.size()) {
    throw new Error(`Tried to read from index ${index}, but array size is: ${this.size()}`);
  }

  const tensorWithState = this.tensors[index];
  if (tensorWithState.cleared) {
    throw new Error(`TensorArray ${this.name}: Could not read index ${index} twice because it was
    cleared after a previous read.`);
  } if (this.clearAfterRead) {
    tensorWithState.cleared = true;
  }

  tensorWithState.read = true;
  return tensorWithState.tensor;
}

/**
 * Helper method to read multiple tensors from the specified indices.
 */
this.readMany(indices: number[]): Tensor[] {
  return indices.map(index => this.read(index));
}

/**
 * Write value into the index of the TensorArray.
 * @param index number the index to write to.
 * @param tensor */
this.write(index: number, tensor: Tensor) {
  if (this.closed_) {
    throw new Error(`TensorArray ${this.name} has already been closed.`);
  }

  if (index < 0 || !this.dynamicSize && index >= this.maxSize) {
    throw new Error(`Tried to write to index ${index}, but array is not resizeable and size is: ${this.maxSize}`);
  }

  const t = this.tensors[index] || {};

  if (tensor.dtype !== this.dtype) {
    throw new Error(`TensorArray ${this.name}: Could not write to TensorArray index ${index},
    because the value dtype is ${tensor.dtype}, but TensorArray dtype is ${this.dtype}.`);
  }

  assertShapesMatchAllowUndefinedSize(t.elementShape, tensor.shape,
    `TensorArray ${this.name}: Could not write to TensorArray index ${index}.`);

  if (t.read) {
    throw new Error(`TensorArray ${this.name}: Could not write to TensorArray index ${index},
    because it has already been read.`);
  }

  t.tensor = tensor;
  keep(tensor);
  t.written = true;

  this.tensors[index] = t;
}

/**
 * Helper method to write multiple tensors to the specified indices.
 */
this.writeMany(indices: number[], tensors: Tensor[]) {
  if (indices.length !== tensors.length) {
    throw new Error(`TensorArray ${this.name}: could not write multiple tensors,` +
      `because the index size: ${indices.length} is not the same as tensors size: ${tensors.length}.`);
  }

  for (let i = 0; i < indices.length; i++) {
    this.write(i, tensors[i]);
  }
}

/**
 * Return selected values in the TensorArray as a packed
 * Tensor. All of * selected values must have been written and their shapes must all match.
 * * @param indices number[] Optional. Taking values in [0, max_value). If the
 *    * TensorArray is not dynamic, max_value=size(). If
 *    * not specified returns
 *    * all tensors in the original order.
 * */
this.gather(indices?: number[], dtype?: DataType) {
  if (this.tensors.length === 0) {
    return this.tensors[0];
  }

  const t = this.tensors[0].tensor;
  keep(t);
  t.written = true;

  this.tensors[0].indices = t.indices;
  assertShapesMatchAllowUndefinedSize(t.elementShape, this.elementShape,
    `TensorArray ${this.name}: Could not write to TensorArray index ${this.name}.`);

  if (t.read) {
    throw new Error(`TensorArray ${this.name}: Could not write to TensorArray index ${this.name},
    because it has already been read.`);
  }

  t.tensor = tensor;
  keep(tensor);
  t.written = true;

  this.tensors[0].indices = t.indices;
}

this.gather(indices: number[], dtype: DataType) {
  if (this.tensors.length === 0) {
    return this.tensors[0];
  }

  const t = this.tensors[0].tensor;
  keep(t);
  t.written = true;

  this.tensors[0].indices = t.indices;
  assertShapesMatchAllowUndefinedSize(t.elementShape, this.elementShape,
    `TensorArray ${this.name}: Could not write to TensorArray index ${this.name}.`);

  if (t.read) {
    throw new Error(`TensorArray ${this.name}: Could not write to TensorArray index ${this.name},
    because it has already been read.`);
  }

  t.tensor = tensor;
  keep(tensor);
  t.written = true;

  this.tensors[0].indices = t.indices;
}
this is not a deep copy: the memory locations of the underlying * tensors will still point to the same locations of the corresponding tensors in the original.

```typescript
// @param tensors list of tensors
// @param elementShape shape of each tensor, this can be a single number (any * shape is allowed) or partial shape (dim = -1).
// @param elementDtype data type of each tensor
// @param maxNumElements The maximum allowed size of 'tensors'. Defaults to -1 meaning that the size of 'tensors' is unbounded.

class TensorList {
  readonly idTensor: Tensor;
  maxNumElements: number;
  get id() { return this.idTensor.id; }
  /\*\* * @param tensors list of tensors
  * @param elementShape shape of each tensor, this can be a single number (any * shape is allowed) or partial shape (dim = -1).
  * @param elementDtype data type of each tensor
  * @param maxNumElements The maximum allowed size of 'tensors'. Defaults to -1 meaning that the size of 'tensors' is unbounded.
  * @constructor
  * readonly tensors: Tensor[];
  * readonly elementShape: number[];
  * readonly elementDtype: DataType;
  * maxNumElements: number = -1;
  * this.size() {
  * return this.tensors.length;
  * }
  * this.clearAndClose(keepIds?: Set<number>) {
  * this.tensors.forEach(tensor => {
  * if (keepIds == null || !keepIds.has(tensor.id)) {
  * tensor.dispose();
  * }
  * this.tensors.length = 0;
  * this.idTensor.dispose();
  * this.clearAndClose(keepIds);
  * }
  * this.resize(size);
  * }
  * this.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.' + this.elementShape, 'TensorList shape mismatch:' + this.elementShape, 'TensorList shape mismatch:' + this.elementShape);
  * }
  * assertShapesMatchAllowUndefinedSize(this.elementShape, this.elementShape);
  * return this.resize(this.tensors.length, this.elementShape);
  * const outputElementShape = inferElementShape(this.elementShape, this.tensors, elementShape);
  * const reshapeTensor = inferElementShape(this.elementShape, this.tensors, elementShape);
  * return this.resize(reshapeTensor.map(tensor => tensor.shape, outputElementShape));
  * }
  * pushBack(tensor: Tensor) {
  * if (elementDtype !== this.elementDtype) {
  * throw new Error('Invalid data types; op elements ' + elementDtype + ', but list elements ' + (this.elementDtype + this.elementShape, 'TensorList shape mismatch:' + this.elementShape, 'TensorList shape mismatch:' + this.elementShape, 'TensorList shape mismatch:' + this.elementShape ));}
  * }
  * resize(size: number) {
  * if (size < 0) {
  * throw new Error('TensorListResize expects size to be non-negative. Got: ' + size + ' ' + this.maxNumElements + this.maxNumElements + this.size);
  * }
  * }
  * get item(index: number, elementShape: number[], elementDtype: DataType) {
  * if (elementDtype !== this.elementDtype) {
  * throw new Error('Invalid data types; op elements ' + elementDtype + ', but list elements ' + (this.elementDtype + this.elementShape, 'TensorList shape mismatch:' + this.elementShape, 'TensorList shape mismatch:' + this.elementShape));
  * }
  * }
  * get item(index: number, elementShape: number[], elementDtype: DataType) {
  * if (elementDtype !== this.elementDtype) {
  * throw new Error('Invalid data types; op elements ' + elementDtype + ', but list elements ' + (this.elementDtype + this.elementShape, 'TensorList shape mismatch:' + this.elementShape, 'TensorList shape mismatch:' + this.elementShape));
  * }
  * }
  *}
```

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number[], elementDtype: DataType): Tensor if (elementDtype !== this.elementDtype) { throw new Error('Invalid data types; op elements $\{this.elementDtype\}$ but list elements $\{elementDtype\}$');
}

if (elementIndex < 0 || elementIndex >= this.tensors.length) { throw new Error('Trying to access element $\{elementIndex\}$ in a list with $\{this.tensors.length\}$ elements.');
}

if (this.tensors[elementIndex] === null) { throw new Error('element at index $\{elementIndex\}$ is null.');
}

assertShapesMatchAllowUndefinedSize(this.tensors[elementIndex].shape, elementShape, 'TensorList shape mismatch: ');

const outputElementShape = inferElementShape(this.elementShape, this.tensors, elementShape);

return reshape(this.tensors[elementIndex], outputElementShape);

/* * Set the tensor at the index * @param elementIndex index of the tensor * @param tensor the tensor to be inserted into the list */

setItem(elementIndex: number, tensor: Tensor) { if (tensor.dtype !== this.elementDtype) { throw new Error('Invalid data types; op elements $\{tensor.dtype\}$ but list elements $\{this.elementDtype\}$');
}

if (elementIndex < 0 ||
    this.maxNumElements !== -1 && elementIndex >= this.maxNumElements) {
  throw new Error('Trying to set element $\{elementIndex\}$ in a list with max $\{this.maxNumElements\}$ elements.');
}

assertShapesMatchAllowUndefinedSize(this.elementShape, tensor.shape, 'TensorList shape mismatch: ');

keep(tensor);

this.tensors[elementIndex] = tensor;

/* * Return selected values in the TensorList as a stacked Tensor. All of
 * selected values must have been written and their shapes must all match. *
 * @param indices indices of tensors to gather *
 */

gather(indices: number[], elementDtype: DataType, elementShape: number[]): Tensor { if (elementDtype !== this.elementDtype) { throw new Error('Invalid data types; op elements $\{elementDtype\}$ but list elements $\{this.elementDtype\}$');
}

assertShapesMatchAllowUndefinedSize(this.elementShape, elementShape, 'TensorList shape mismatch: ');

// When indices is greater than the size of the list, indices beyond the
// size of the list are ignored.

indices = indices.slice(0, this.size());

const outputElementShape = inferElementShape(this.elementShape, this.tensors, elementShape);

if (indices.length === 0) {
  return tensor([], [0].concat(outputElementShape));
}

/* * Return the values in the TensorList as a concatenated Tensor. *
 * @param elementDtype output tensor dtype *
 */

concat(elementDtype: DataType, elementShape: number[]): Tensor { if (!!elementDtype && elementDtype !== this.elementDtype) { throw new Error('TensorList dtype is $\{this.elementDtype\}$ but concat requested dtype $\{elementDtype\}$');
}

assertShapesMatchAllowUndefinedSize(this.elementShape, elementShape, 'TensorList shape mismatch: ');

const outputElementShape = inferElementShape(this.elementShape, this.tensors, elementShape);

if (this.size() === 0) {
  return tensor([], [0].concat(outputElementShape));
}

/* * Creates a TensorList which, when stacked, has the value of tensor. *
 * @param tensor the tensor to create a list from *
 * @param elementShape the shape of the future elements of the list *
 * @param numElements the number of elements to reserve *
 */

reserve(elementShape: number[], elementDtype: DataType, numElements: number) { return new TensorList([], elementShape, elementDtype, numElements);
}

/* * Put tensors at specific indices of a stacked tensor into a TensorList *
 * @param indices list of indices on how to scatter the tensor *
 */

```javascript
export function scatter(
    tensor: Tensor, indices: number[],
    elementShape: number[],
    numElements?: number): TensorList {
  if (indices.length !== tensor.shape[0]) {
    throw new Error(`Expected len(indices) == tensor.shape[0], but saw: ${indices.length} vs. ${tensor.shape[0]}`);
  }

  const maxIndex = Math.max(...indices);
  if (numElements != null && numElements !== -1 && maxIndex >= numElements) {
    throw new Error(`Max index must be < array size (${maxIndex}) vs. ${numElements}`);
  }

  const list = new TensorList([], elementShape, tensor.dtype, numElements);
  const tensors = unstack(tensor, 0);

  indices.forEach((value, index) => {
    list.setItem(value, tensors[index]);
  });
  return list;
}

/**
 * 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 list
 */
export function split(
    tensor: Tensor, length: number[],
    elementShape: number[]): TensorList {
  const totalLength = length.reduce((a, b) => a + b, 0);
  const cumulativeLengths = length.map(len => totalLength);
  const elementPerRow = totalLength === 0 ? 0 : totalLength / length.length;
  const tensors: Tensor[] = tidy(() => {
    const tensors = [];
    tensor = reshape(tensor, [1, totalLength, elementPerRow]);
    for (let i = 0; i < length.length; ++i) {
      const previousLength = (i === 0) ? 0 : cumulativeLengths[i - 1];
      const indices = [0, previousLength, 0];
      const sizes = [1, length[i], elementPerRow];
      tensors[i] = reshape(
          slice(tensor, indices, sizes), elementShape 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;
}
```
let result: Tensor[] = args;

while (condValue[0]) {
  // Record the previous result for intermediate tensor tracking
  const origResult = result;
  // Execution the body of the loop
  result = await context.functionMap[bodyFunc].executeFunctionAsync(
    result, context.tensorArrayMap, context.tensorListMap);
  // Dispose the intermediate tensor for body function that is not global
  // kept, not input/output of the body function

  origResult.forEach(tensor => {
    if (!tensor.kept && argIds.indexOf(tensor.id) === -1) {
      tensor.dispose();
    }
  });

  let resultIds = result.map(tensor => tensor.id);

  // Dispose the intermediate tensors for condition function
  condResult.forEach(tensor => {
    if (!tensor.kept && argIds.indexOf(tensor.id) === -1 &&
        resultIds.indexOf(tensor.id) === -1) {
      tensor.dispose();
    }
  });

  const condResult =
      (await context.functionMap[condFunc].executeFunctionAsync(
          result, context.tensorArrayMap, context.tensorListMap));

  condValue = await condResult[0].data();
  // Dispose the intermediate tensors for condition function

  condValue[0] = true; // true result for the loop
  // Outputs nodes :0 => false, :1 => true

  return result;
}

return result;

}
getParamValue('tensorArrayId', node, tensorMap, context) as Tensor;
  const scatterIndices =
  getParamValue('indices', node, tensorMap, context) as number[];
  const scatterTensor =
  getParamValue('tensor', node, tensorMap, context) as Tensor;
  const scatterTensorArray =
  context.getTensorArray(scatterId.id);
  scatterTensorArray.scatter(scatterIndices, scatterTensor);
  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 splitTensorArray =
    context.getTensorArray(splitId.id);
    const splitIndices =
    getParamValue('indices', node, tensorMap, context) as number[];
    const splitTensor =
    getParamValue('tensor', node, tensorMap, context) as Tensor;
    const splitTensorArray =
    context.getTensorArray(splitId.id);
    splitTensorArray.split(splitIndices, splitTensor);
    return [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 index =
    getParamValue('index', node, tensorMap, context) as number;
    const writeTensor =
    getParamValue('tensor', node, tensorMap, context) as Tensor;
    const tensorList =
    context.getTensorList(idTensor.id);
    tensorList.setItem(index, writeTensor);
    return [tensorList.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':
    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;
    scatter(scatterTensor, scatterIndices, elementShape, numElements);
    context.addTensorList(tensorList);
    return [tensorList.idTensor];

  case 'TensorListReserve':
    const elementShape =
    getParamValue('elementShape', node, tensorMap, context) as number[];
    const elementDType =
    getParamValue('elementDType', node, tensorMap, context) as DataType;
    const numElementsParam =
    getParamValue('numElements', node, tensorMap, context) as number;
    const tensorList =
    reserve(elementShape, elementDType, numElementsParam);
    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 tensorList =
    getParamValue('tensor', node, tensorMap, context) as Tensor;
    const gatherTensor =
    getParamValue('elementShape', node, tensorMap, context) as Tensor;
    const gatherTensorArray =
    context.getTensorArray(gatherId.id);
    gatherTensorArray.gather(gatherIndices, gatherTensor);
    return [gatherTensorArray.idTensor];

  case 'TensorListStack':
    const idTensor =
    getParamValue('tensorListId', node, tensorMap, context) as Tensor;
    const elementShape =
    getParamValue('elementShape', node, tensorMap, context) as Tensor;
    const numElements =
    getParamValue('numElements', node, tensorMap, context) as number;
    const tensorList =
    reserve(elementShape, elementDType, numElements);
    context.addTensorList(tensorList);
    return [tensorList.idTensor];

  case 'TensorListScatter':
    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 gatherTensorArray =
    context.getTensorArray(gatherId.id);
    gatherTensorArray.gather(gatherIndices, gatherTensor);
    return [gatherTensorArray.idTensor];
const elementDtype = getNodeValue('elementDType', node, tensorMap, context) as DataType;
const numElements = getNodeValue('numElements', node, tensorMap, context) as number;
const tensorList = context.getTensorList(idTensor.id);
return [tensorList.stack(elementShape, elementDtype, numElements)];
}

const writeTensor = getNodeValue('tensor', node, tensorMap, context) as Tensor;
const tensorList = context.getTensorList(idTensor.id);
tensorList.pushBack(writeTensor);
return [tensorList.idTensor];
}

const tensor = getNodeValue('tensor', node, tensorMap, context) as Tensor;
const elementShape = getNodeValue('elementShape', node, tensorMap, context) as number[];
const elementDtype = getNodeValue('elementDType', node, tensorMap, context) as DataType;
const tensorList = fromTensor(tensor, elementShape, elementDtype);
context.addTensorList(tensorList);
return [tensorList.idTensor];
}

const concatId = getNodeValue('tensorListId', node, tensorMap, context) as Tensor;
const tensorList = context.getTensorList(concatId.id);
const concatDtype = getNodeValue('dtype', node, tensorMap, context) as DataType;
const elementShape = getNodeValue('elementShape', node, tensorMap, context) as number[];
return [tensorList.concat(concatDtype, elementShape)];
}

const idTensor = getNodeValue('tensorListId', node, tensorMap, context) as Tensor;
const writeTensor = getNodeValue('tensor', node, tensorMap, context) as Tensor;
const tensorList = context.getTensorList(idTensor.id);
tensorList.pushBack(writeTensor);
return [tensorList.idTensor];
}

const numArgs = getNodeValue('numArgs', node, tensorMap, context) as number;
const tensorList = split(splitTensor, lengths, elementShape);
context.addTensorList(tensorList);
return [tensorList.idTensor];
}

const isBiasAdd = extraOp === 'biasadd';
const isPrelu = activationFunc === 'prelu';
const isBatchNorm = extraOp === 'fusedbatchnorm';
const numArgs = numArgs || getNodeValue('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) {
    activationFunc = 'prelu';
  }
}

if (isBatchNorm) {
  if (isPrelu) {
    activationFunc = 'prelu';
  }
  if (isBiasAdd) {
    activationFunc = 'fusedbatchnorm';
  }
  numArgs = numArgs || getNodeValue('numArgs', node, tensorMap, context) as number;
  if (numArgs !== 2) {
    throw new Error('FusedConv2d and DepthwiseConv2d with BiasAdd and ' +
      'Prelu must have two extra arguments: bias and alpha.');
  }
}

if (isBiasAdd) {
  numArgs = numArgs || getNodeValue('numArgs', node, tensorMap, context) as number;
  if (numArgs !== 2) {
    throw new Error('FusedConv2d and DepthwiseConv2d with BiasAdd ' +
      'must have two extra arguments: bias and alpha.');
  }
}

const stride = getNodeValue('strides', node, tensorMap, context) as number[];
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 biasArg = (getParamValue('biasArg', node, tensorMap, context) as Tensor);

const leakyreluAlpha = getParamValue('leakyreluAlpha', node, tensorMap, context) as number;

return {tfOps.conv1d({
  x: getParamValue('x', node, tensorMap, context) as Tensor3D,
  dataFormat,
  biasArg,
  preluArg,
  activationFunc,
  leakyreluAlpha
}) = execFusedConvAndDepthWiseParams(node, tensorMap, context);
        return tfOps.conv1d({
          x: getParamValue('x', node, tensorMap, context) as Tensor3D,
          dataFormat,
          biasArg,
          preluArg,
          activationFunc,
          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) as number[];
        return tfOps.conv1d({
          x: getParamValue('x', node, tensorMap, context) as Tensor3D,
          dataFormat,
          biasArg,
          preluArg,
          activationFunc,
          leakyreluAlpha
        })
      }
      case 'Conv2D': {
        const stride = (getParamValue('stride', node, tensorMap, context) as number[]);
        const pad = getPadding(node, tensorMap, context) as number[];
        return tfOps.conv2d({
          x: getParamValue('x', node, tensorMap, context) as Tensor3D,
          dataFormat,
          biasArg,
          preluArg,
          activationFunc,
          leakyreluAlpha
        })
      }
      case 'DepthwiseConv2d': {
        const stride = (getParamValue('stride', node, tensorMap, context) as number[]);
        const pad = getPadding(node, tensorMap, context) as number[];
        return tfOps.depthwiseConv2d({
          x: getParamValue('x', node, tensorMap, context) as Tensor3D,
          dataFormat,
          biasArg,
          preluArg,
          activationFunc,
          leakyreluAlpha
        })
      }
      case 'FusedDepthwiseConv2dNative': {
        const {
          stride,
          pad,
          dataFormat,
          dilations
        } = execFusedConvAndDepthWiseParams(node, tensorMap, context);
        return tfOps.fused.conv2d({
          x: getParamValue('x', node, tensorMap, context) as Tensor3D,
          dataFormat,
          biasArg,
          preluArg,
          activationFunc,
          leakyreluAlpha
        })
      }
      case 'FusedDepthwiseConv2d': {
        const {
          stride,
          pad,
          dataFormat,
          dilations
        } = execFusedConvAndDepthWiseParams(node, tensorMap, context);
        return tfOps.fused.conv2d({
          x: getParamValue('x', node, tensorMap, context) as Tensor3D,
          dataFormat,
          biasArg,
          preluArg,
          activationFunc,
          leakyreluAlpha
        })
      }
      case '_FusedConv2D': {
        const {
          stride,
          pad,
          dataFormat,
          dilations
        } = execFusedConvAndDepthWiseParams(node, tensorMap, context);
        return tfOps.fused.conv2d({
          x: getParamValue('x', node, tensorMap, context) as Tensor3D,
          dataFormat,
          biasArg,
          preluArg,
          activationFunc,
          leakyreluAlpha
        })
      }
      case 'Conv2DBackpropInput': {
        const shape = getParamValue('outputShape', node, tensorMap, context) as 
          [number, number, number][];
        const outputShape = (getParamValue('outputShape', node, tensorMap, context) as 
          [number, number, number][]);
        const stride = (getParamValue('stride', node, tensorMap, context) as number[]);
        const pad = getPadding(node, tensorMap, context) as number[];
        return tfOps.conv2dTranspose({
          x: getParamValue('x', node, tensorMap, context) as Tensor3D,
          dataFormat,
          biasArg,
          preluArg,
          activationFunc,
          leakyreluAlpha
        })
      }
      case 'Conv2DBackpropFilter': {
        const shape = getParamValue('outputShape', node, tensorMap, context) as 
          [number, number, number][];
        const outputShape = (getParamValue('outputShape', node, tensorMap, context) as 
          [number, number, number][]);
        const stride = (getParamValue('stride', node, tensorMap, context) as number[]);
        const pad = getPadding(node, tensorMap, context) as number[];
        return tfOps.conv2dTranspose({
          x: getParamValue('x', node, tensorMap, context) as Tensor3D,
          dataFormat,
          biasArg,
          preluArg,
          activationFunc,
          leakyreluAlpha
        })
      }
      case 'DepthwiseConv2dNative': {
        const shape = getParamValue('outputShape', node, tensorMap, context) as 
          [number, number, number][];
        const outputShape = (getParamValue('outputShape', node, tensorMap, context) as 
          [number, number, number][]);
        const stride = (getParamValue('stride', node, tensorMap, context) as number[]);
        const pad = getPadding(node, tensorMap, context) as number[];
        return tfOps.depthwiseConv2d({
          x: getParamValue('x', node, tensorMap, context) as Tensor3D,
          dataFormat,
          biasArg,
          preluArg,
          activationFunc,
          leakyreluAlpha
        })
      }
      case 'DepthwiseConv2d': {
        const shape = getParamValue('outputShape', node, tensorMap, context) as 
          [number, number, number][];
        const outputShape = (getParamValue('outputShape', node, tensorMap, context) as 
          [number, number, number][]);
        const stride = (getParamValue('stride', node, tensorMap, context) as number[]);
        const pad = getPadding(node, tensorMap, context) as number[];
        return tfOps.depthwiseConv2d({
          x: getParamValue('x', node, tensorMap, context) as Tensor3D,
          dataFormat,
          biasArg,
          preluArg,
          activationFunc,
          leakyreluAlpha
        })
      }
      case 'ConjugateRoots': {
        const roots = (getParamValue('roots', node, tensorMap, context) as number[]);
        const root = (getParamValue('root', node, tensorMap, context) as number);
        return tfOps.conjugateRoots({
          roots
        })
      }
      case 'Prelu': {
        const alpha = (getParamValue('alpha', node, tensorMap, context) as number);
        const x = (getParamValue('x', node, tensorMap, context) as Tensor);
        return tfOps.prelu({
          alpha
        })
      }
      case 'LeakyRelu': {
        const alpha = (getParamValue('alpha', node, tensorMap, context) as number);
        const x = (getParamValue('x', node, tensorMap, context) as Tensor);
        return tfOps.leakyRelu({
          alpha
        })
      }
      case 'Max': {
        const x = (getParamValue('x', node, tensorMap, context) as Tensor);
        return tfOps.max()
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=============================================================================

import {DataType, Tensor, Tensor1D} from '@tensorflow/tfjs-core';
import {NamedTensorsMap} from '../util/index';
export const executeOp: InternalOpExecutor =
    (node: Node, tensorMap: NamedTensorsMap, context: ExecutionContext): Tensor[] => {
      switch (node.op) {
        case 'Fill': {
          const shape =
              getParamValue('shape', node, tensorMap, context) as number[];
          const dtype =
              getParamValue('dtype', node, tensorMap, context) as DataType;
          const value =
              getParamValue('value', node, tensorMap, context) as number;
          return [tfOps.fill(shape, value, dtype)];
        }
        case 'LinSpace': {
          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;
          return [tfOps.linspace(start, stop, num)];
        }
        case 'Multinomial': {
          const logits =
              getParamValue('logits', node, tensorMap, context) as Tensor1D;
          const numSamples =
              getParamValue('numSamples', node, tensorMap, context) as number;
          const seed =
              getParamValue('seed', node, tensorMap, context) as number;
          return [tfOps.multinomial(logits, numSamples, seed)];
        }
        case 'OneHot': {
          const indices =
              getParamValue('indices', node, tensorMap, context) as Tensor1D;
          const depth =
              getParamValue('depth', node, tensorMap, context) as number;
          const onValue =
              getParamValue('onValue', node, tensorMap, context) as number;
          const offValue =
              getParamValue('offValue', node, tensorMap, context) as number;
          return [tfOps.oneHot(indices, depth, onValue, offValue)];
        }
        case 'Ones': {
          return [tfOps.ones(
              getParamValue('shape', node, tensorMap, context) as number[],
              getParamValue('dtype', node, tensorMap, context) as DataType)];
        }
        case 'OnesLike': {
          return [tfOps.onesLike(
              getParamValue('x', node, tensorMap, context) as Tensor)];
        }
        case 'RandomUniform': {
          return [tfOps.randomUniform(
              // tslint:disable-next-line:no-any
              getParamValue('shape', node, tensorMap, context) as any,
              getParamValue('minval', node, tensorMap, context) as number,
              getParamValue('maxval', node, tensorMap, context) as number,
              getParamValue('dtype', node, tensorMap, context) as DataType)];
        }
        case 'Range': {
          const start =
              getParamValue('start', node, tensorMap, context) as number;
          const stop =
              getParamValue('stop', node, tensorMap, context) as number;
          const step =
              getParamValue('step', node, tensorMap, context) as number;
          return [tfOps.range(
              start, stop,
              step,
              getParamValue('dtype', node, tensorMap, context) as 'float32' | 'int32')];
        }
        case 'TruncatedNormal': {
          const shape =
              getParamValue('shape', node, tensorMap, context) as number[];
          const mean =
              getParamValue('mean', node, tensorMap, context) as number;
          const stdDev =
              getParamValue('stdDev', node, tensorMap, context) as number;
          const seed =
              getParamValue('seed', node, tensorMap, context) as number;
          return [tfOps.truncatedNormal(
              shape, mean, stdDev, getParamValue('dtype', node, tensorMap, context) as 'float32' | 'int32',
              seed)];
        }
        case 'Zeros': {
          return [tfOps.zeros(
              getParamValue('shape', node, tensorMap, context) as number[],
              getParamValue('dtype', node, tensorMap, context) as DataType)];
        }
        case 'ZerosLike': {
          return [tfOps.zerosLike(
              getParamValue('shape', node, tensorMap, context) as number[],
              getParamValue('dtype', node, tensorMap, context) as DataType)];
        }
        default:
          throw TypeError(`Node type ${node.op} is not implemented`);
      }
    };

export const CATEGORY = 'creation';

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

*/

import {Tensor, Tensor1D, Tensor2D} from '@tensorflow/tfjs-core';
import {NamedTensorsMap} from '@tensorflow/tfjs-core/dist/ops/ops_for_converter';
import { ExecutionContext } from '../executor/execution_context';
import {GraphPath} from '../types';
import {getParamValue} from './utils';

function nmsParams(
    node: Node, tensorMap: NamedTensorsMap, context: ExecutionContext) {
  const boxes = getParamValue('boxes', node, tensorMap, context) as Tensor;
  const scores = getParamValue('scores', node, tensorMap, context) as Tensor;
  const maxOutputSize =
    getParamValue('maxOutputSize', node, tensorMap, context) as number;
  const iouThreshold =
    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;

  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
tOps.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);
          const padToMaxOutputSize =
            getParamValue('padToMaxOutputSize', node, tensorMap, context) as number;
          const result = await
tOps.image.nonMaxSuppressionAsync(
              boxes as Tensor2D, scores as Tensor1D, maxOutputSize, iouThreshold,
              scoreThreshold, padToMaxOutputSize);
          return [result.selectedIndices, result.validOutputs];
        }
      }
    }

export const CATEGORY = 'dynamic';

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

*/

import {DataType, keep, scalar, stack, Tensor, tidy, unstack, util} from '@tensorflow/tfjs-core';

/**
 * Hashtable contains a set of tensors, which can be accessed by key.
 */
export class HashTable {
  readonly handle: Tensor;

  // tslint:disable-next-line: no-any
  private tensorMap: Map<any, Tensor>;

  get id() {
    return this.handle.id;
  }

  /**
   * Constructor of HashTable. Creates a hash table.
   *
   * @param keyDType `dtype` of the table keys.
   * @param valueDType `dtype` of the table values.
   */
  constructor(readonly keyDType: DataType, readonly valueDType: DataType) {
    this.handle = scalar(0);
    // tslint:disable-next-line: no-any
    this.tensorMap = new Map<any, Tensor>();

    keep(this.handle);
  }

  /**
   * Dispose the tensors and handle and clear the hashtable.
   */
  clearAndClose() {
    this.tensorMap.forEach(value => value.dispose());
    this.tensorMap.clear();
    this.handle.dispose();
  }

  /**
   * The number of items in the hash table.
   */
  size(): number {
    return this.tensorMap.size;
  }

  /**
   * Replaces the contents of the table with the specified keys and values.
   * @param keys Keys to store in the hashtable.
   * @param values Values to store in the hashtable.
   */
  async import(keys: Tensor, values: Tensor): Promise<Tensor> {
    this.checkKeyAndValueTensor(keys, values);

    // We only store the primitive values of the keys, this allows lookup
    // to be O(1).
    const $keys = await keys.data();

    // Clear the hashTable before inserting new values.
    this.tensorMap.clear();
    this.handle.dispose();

    return tidy(() => {
      const $values = unstack(values);

      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.
   *
   * Performs batch lookups, for every element in the key tensor, `find`
   * stacks the corresponding value into the return tensor.
   *
   * If an element is not present in the table, the given `defaultValue` is
   * used.
   *
   * @param keys Keys to look up. Must have the same type as the keys of the
   *     table.
   * @param defaultValue The scalar `defaultValue` is the value output for keys
   *     not present in the table. It must also be of the same type as the
   *     table values.
   */
  async find(keys: Tensor, defaultValue: Tensor): Promise<Tensor> {
    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);
    });
  }

  // tslint:disable-next-line: no-any
  private findWithDefault(key: any, defaultValue: Tensor): Tensor {
    const result = this.tensorMap.get(key);

    return result != null ? result : defaultValue;
  }

  private checkKeyAndValueTensor(key: Tensor, value: Tensor) {
    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\}`);
    }

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    export {DataType, Tensor} from '@tensorflow/tfjs-core';
    export {NamedTensorsMap} from './data/types';
    export {ExecutionContext} from './executor/execution_context';
    export {HashTable} from...
import {ResourceManager} from '../../executor/resource_manager';
import {InternalOpAsyncExecutor, Node} from '../types';

import {getParamValue} from './utils';

export const executeOp: InternalOpAsyncExecutor = async(
    node: Node, tensorMap: NamedTensorsMap, context: ExecutionContext,
    resourceManager: ResourceManager): Promise<Tensor[][]> => {
  switch (node.op) {
    case 'HashTable':
      case 'HashTableV2': {
        const keyDType =
            getParamValue('keyDType', node, tensorMap, context) as DataType;
        const valueDType =
            getParamValue('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 = getParamValue('tableHandle', node, tensorMap, context) as Tensor;
      const keys = getParamValue('keys', node, tensorMap, context) as Tensor;
      const values = getParamValue('values', node, tensorMap, context) as Tensor;

      const hashTable = resourceManager.getHashTableById(handle.id);

      return [await hashTable.import(keys, values)];
    }
    case 'LookupTableFind':
    case 'LookupTableFindV2': {
      const handle = getParamValue('tableHandle', node, tensorMap, context) as Tensor;
      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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 */
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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 *=============================================================================

import {Tensor, Tensor2D} 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 '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': {
    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`);
}

export const CATEGORY = 'logical',
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 *=============================================================================

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import {InternalOpExecutor, Node} from './types';
nimport {getParamValue} from './utils';
nexport const executeOp:
InternalOpExecutor =
    (node, tensor, tensorMap, context, ExecutionContext, ExecutionContext):

    switch (node.op) {
      case 'BatchMatMul':
        return tfOps.matMul(node, tensorMap, context) as Tensor2D
      case 'MatMul':
        return tfOps.matMul(node, tensorMap, context) as Tensor2D
      case 'Transpose':
        return tfOps.transpose(node, tensorMap, context) as Tensor
      case '_FusedMatMul':
        const [extraOp, activationFunc] =
            (getParamValue('fusedOps', node, tensorMap, context) as string[])
        const consBiasAdd = extraOp == 'biasadd'
        const isPrelu = activationFunc == 'prelu'
        const numArgs = (getParamValue('numArgs', node, tensorMap, context) as number)
        const leakyreluAlpha = getParamValue('leakyreluAlpha', node, tensorMap, context) as number
        if (isBiasAdd && (numArgs + 2) throw new Error('Fused MatMul with BiasAdd and Prelu must have two arguments: bias and alpha.'))
        if (!isPrelu && numArgs !== 2) throw new Error('Fused MatMul with Prelu must have an extra argument: alpha.'))
        getParamValue('args', node, tensorMap, context) as Tensor
        return tfOps.fused.matMul({
            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: getParamValue('bias', node, tensorMap, context) as boolean,
            activation: getParamValue('activation', node, tensorMap, context) as boolean,
            preluActivationWeights:
                getParamValue('preluActivationWeights', node, tensorMap, context) as boolean
        })
    default:
        throw TypeError(`Node type ${node.op} is not implemented`)
    }

export const CATEGORY = 'matrices';

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 */

import {Scalar, Tensor, Tensor3D, Tensor4D} from '@tensorflow/tfjs-core';
nexport const executeOp:
InternalOpExecutor =
    (node, tensor, tensorMap, context, ExecutionContext, ExecutionContext):

    switch (node.op) {
      case 'FusedBatchNorm':
        return tfOps.batchNorm(node, tensorMap, context) as Tensor
      case 'FusedBatchNormV2':
        return tfOps.batchNorm(node, tensorMap, context) as Tensor
      case 'LRN':
        return tfOps.localResponseNormalization(node, tensorMap, context) as Tensor
      case 'FusedBatchNormV3':
        return tfOps.batchNorm(node, tensorMap, context) as Tensor
      default:
        throw TypeError(`Node type ${node.op} is not implemented`)
    }

export const CATEGORY = 'matrices';

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 */

import {Scalar, Tensor, Tensor3D, Tensor4D} from '@tensorflow/tfjs-core';
nexport const executeOp:
InternalOpExecutor =
    (node, tensor, tensorMap, context, ExecutionContext, ExecutionContext):

    switch (node.op) {
      case 'FusedBatchNorm':
        return tfOps.batchNorm(node, tensorMap, context) as Tensor
      case 'FusedBatchNormV2':
        return tfOps.batchNorm(node, tensorMap, context) as Tensor
      case 'LRN':
        return tfOps.localResponseNormalization(node, tensorMap, context) as Tensor
      default:
        throw TypeError(`Node type ${node.op} is not implemented`)
    }

export const CATEGORY = 'matrices';

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 */
context) as number,

getParamValue('alpha', node, tensorMap, context) as number,

getParamValue('beta', node, tensorMap, context) as number);

| case 'Softmax': {
| return [tfOps.softmax(tf.getParamValue('x', node, tensorMap, context) as Tensor)];
| }

| case 'LogSoftmax': {
| return [tfOps.logSoftmax(tf.getParamValue('x', node, tensorMap, context) as Tensor)];
| }

| case 'SparseToDense': {
| return [tfOps.sparseToDense(tf.getParamValue('sparseIndices', node, tensorMap, context) as Tensor,

getParamValue('outputShape', node, tensorMap, context) as number[],

getParamValue('sparseValues', node, tensorMap, context) as number[],

getParamValue('defaultValue', node, tensorMap, context) as number[


default:

throw TypeError(`Node type ${node.op} is not implemented`);]

}

export const CATEGORY = 'normalization';

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 */

import {Tensor, Tensor1D, Tensor2D} 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';

export const executeOp: InternalOpExecutor =
    (node: Node, tensorMap: NamedTensorsMap,

context: ExecutionContext): Tensor[] => {

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(tf.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(tf.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(tf.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(tf.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(tf.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(tf.getParamValue('x', node, tensorMap, context) as Tensor, axis,

keepDims)];

|

| case 'ArgMax': {

| const axis =

getParamValue('axis', node, tensorMap, context) as number;

return [tfOps.argMax(tf.getParamValue('x', node, tensorMap, context) as Tensor, axis)];

|

| case 'ArgMin': {

| const axis =

getParamValue('axis', node, tensorMap, context) as number;

return [tfOps.argMin(tf.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(tf.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;
  const reverse = getParamValue('reverse', node, tensorMap, context) as boolean;
  return [tfOps.cumsum(x, axis, exclusive, reverse)];
}

case 'Bincount': {
  const x = getParamValue('x', node, tensorMap, context) as Tensor;
  return [tfOps.bincount(x, weights, size)];
}

case 'DenseBincount': {
  const x = getParamValue('x', node, tensorMap, context) as Tensor1D |
      Tensor2D;
  const weights = getParamValue('weights', node, tensorMap, context) as Tensor1D |
      Tensor2D;
  const size = getParamValue('size', node, tensorMap, context) as number;
  const binaryOutput = getParamValue('binaryOutput', node, tensorMap, context) as boolean;
  return [tfOps.denseBincount(x, weights, size, binaryOutput)];
}

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 Tensor;
      return [tfOps.gather(input, tfOps.cast(indices, 'int32'), 0)];
    }
    case 'Reverse': {
      const dims = getParamValue('dims', node, tensorMap, context) as boolean[];
      const axis = [1];
      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 'Slice': {
      const begin = getParamValue('begin', node, tensorMap, context) as number[];
      return [tfOps.slice(x, begin, size)];
    }
    case 'StridedSlice': {
      const begin = getParamValue('begin', node, tensorMap, context) as number[];
      return [tfOps.stridedSlice(x, begin, size)];
    }
    default:
      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';

export const executeOp: InternalOpExecutor = (node: Node, tensorMap: NamedTensorsMap,
  context: ExecutionContext): Tensor[] => {
  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 Tensor;
      return [tfOps.gather(input, tfOps.cast(indices, 'int32'), 0)];
    }
    case 'Reverse': {
      const dims = getParamValue('dims', node, tensorMap, context) as boolean[];
      const axis = [1];
      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 'Slice': {
      const begin = getParamValue('begin', node, tensorMap, context) as number[];
      return [tfOps.slice(x, begin, size)];
    }
    case 'StridedSlice': {
      const begin = getParamValue('begin', node, tensorMap, context) as number[];
      return [tfOps.stridedSlice(x, begin, size)];
    }
    default:
      throw TypeError(`Node type ${node.op} is not implemented`);
  }
};
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': {
  return tidy(() => {
    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(tfOps.squeeze(tensor).shape, squeezedShape)) {
        throw new Error('the input tensors shape does not match');
      }
      return sameShape ? tensor : tfOps.reshape(tensor, shape);
    });

    return [tfOps.stack(mapped, axis)];
  });
}

case 'Unpack': {
  const axis = getParamValue('axis', node, tensorMap, context) as number;
  const tensor = getParamValue('tensor', node, tensorMap, context) as Tensor;

  return tfOps.unstack(tensor, axis);
}

case 'Tile': {
  const reps = getParamValue('reps', node, tensorMap, context) as number[];
  return [tfOps.tile(getParamValue('x', node, tensorMap, context) as Tensor, reps)];
}

case 'Split':

...
TypeError('Node type ${node.op} is not implemented');
    }
    return null;
  }
}

export const CATEGORY = 'transformation';

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 */

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';
import {getRegisteredOp} 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: Node, tensorMap: NamedTensorsMap, context: ExecutionContext,
    resourceManager?: ResourceManager):
    tfc.Tensor[]|Promise<tfc.Tensor[]> {
  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 '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 'transformation':
      return tfc.tidy(() => transformation.executeOp(node, tensorMap, context));
  }
  throw TypeError(`Custom op ${node.op} is not registered.`);
}
context.iterationId += 1;
context.id = this.lastId;
this.contexts.splice(-1, 1, context);

this._currentContextIds.splice(
0, 1, this._currentContextIds
);
this.contexts.forEach(context => {
context.iterationId += 1;
context.id = this.lastId;
this.contexts.splice(-1, 1, context);

this._currentContextIds.splice(
0, 1, this.contextIdforContexts(this.contexts));
if (this._currentContextIds.length === 0) {
  throw new Error('Cannot increase frame iteration, the context is empty');
}

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) {
    this.tensorArrayMap[key].clearAndClose(keepIds);
  }

  for (const key in this.tensorListMap) {
    this.tensorListMap[key].clearAndClose(keepIds);
  }
}

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 */

import {NamedTensorMap} from '@tensorflow/tfjs-core';

import {NamedTensorsMap} from '../data/types';
import {parseNodeName} from '../operations/executors/utils';
import {Graph, Node} from '../operations/types';

export interface ExecutionInfo {
  inputs: NamedTensorMap;
  outputs: Node[];
  usedNodes: Set<string>;
  missingInputs: string[];
  dynamicNode: Node;
  syncInputs: string[];
}

/**
 * Given graph inputs and desired outputs, find the minimal set of nodes
 * to execute in order to compute the outputs.
 * In addition return other useful info such:
 * - Missing inputs needed to compute the output.
 * - Whether the subgraph contains dynamic ops (control flow, dynamic shape).
 * - Alternative inputs in order to avoid async (dynamic op) execution.
 */
export function getExecutionSubgraph(inputs: NamedTensorMap, outputs: Node[], weightMap: NamedTensorsMap, initNodes?: Node[]): ExecutionInfo {
  const usedNodes = new Set<string>();
  const missingInputs: string[] = [];
  let dynamicNode: Node = null;
  let syncInputs: string[] = null;

  // Start with the outputs, going backwards and find all the nodes that are needed to compute those outputs.
  const seen = new Set<string>();
  const inputNodeNames = Object.keys(inputs).map(name => parseNodeName(name)[0]);

  const initNodeNames: string[] = [];
  if (initNodes != null) {
    initNodeNames = initNodes.map(node => parseNodeName(node.name)[0]);
  }

  const frontier = [...outputs];
  while (frontier.length > 0) {
    const node = frontier.pop();
    if (isControlFlow(node) || isDynamicShape(node) || isHashTable(node)) {
      if (dynamicNode == null) {
        dynamicNode = node;
        syncInputs = dynamicNode.children.map(child => child.name)
                         .filter(name => usedNodes.has(name));
      }
      usedNodes.add(node.name);
      // Weights are dead end since we already have their values.
      if (weightMap[node.name] !== null) {
        continue;
      }
    }
    usedNodes.add(node.name);
    // This node is a dead end since it's one of the user-provided inputs.
    if (inputNodeNames.indexOf(node.name) !== -1) {
      usedNodes.add(node.name);
    }
    // This node is a dead end since it doesn't have any inputs.
    if (initNodeNames.indexOf(node.name) !== -1) {
      usedNodes.add(node.name);
    }
    if (node.inputs.length === 0) {
      missingInputs.push(node.name);
    }
    usedNodes.forEach((node) => {
      // Don't add to the frontier if it is already there.
      if (seen.has(node.name)) {
        return;
      }
      usedNodes.add(node.name);
    });
    dynamicNode.children.map(child => child.name)
                       .filter(name => usedNodes.has(name));
    frontier.push(input);
  }
  return {inputs, outputs, usedNodes, missingInputs, dynamicNode, syncInputs};
}

/**
 * Given the execution info, return a list of nodes
 * in topological order that need to be executed to compute the output.
 */
export function getNodesInTopologicalOrder(graph: Graph, weightMap: NamedTensorsMap, executionInfo: ExecutionInfo: Node[]) {
  const usedNodes = executionInfo[0].inputs;
  const frontend = executionInfo[0].frontier;
  const initNodes = graph.initNodes;
  const inputNodes = Object.keys(inputs)
    .map(name => parseNodeName(name)[0]);
  const initNodes = graph.initNodes;
  const inputNodes = graph.initNodes;
  const frontend = graph.frontend;
  const weightMap = graph.weightMap;
  const usedNodes = graph.usedNodes;
  const missingInputs = graph.missingInputs;
  const dynamicNode = graph.dynamicNode;
  const syncInputs = graph.syncInputs;
  graph.weights.forEach((weight) => {
    if (usedNodes.has(name)) {
      // If already has an input, don't add to the frontier.
      if (seen.has(name)) {
        return;
      }
      usedNodes.add(name);
    }
  });
  return {usedNodes, missingInputs, dynamicNode, syncInputs};
}
(usedNodes.has(weight.name)) { frontier.push(weight); } });

if (initNodes !== null) {
  initNodes.forEach(node => {
    if (usedNodes.has(node.name)) {
      frontier.push(node);
    }
  });

  if (initNodes != null) {
    initNodes.forEach(node => {
      if (usedNodes.has(node.name)) {
        frontier.push(node);
      }
    });
  }
}

const seen = new Set<string>();

const orderedNodes: Node[] = [];

while (frontier.length > 0) {
  const node = frontier.pop();
  seen.add(node.name);
  if (!weightMap[node.name]) {
    orderedNodes.push(node);
  }

  node.children.forEach(child => {
    if (!seen.has(child.name) && usedNodes.has(child.name) &&
      child.inputs.every(input => seen.has(input.name))) {
      frontier.push(child);
    }
  });
}

return orderedNodes;
}

export function isControlFlow(node: Node) {
  return CONTROL_FLOW_OPS.indexOf(node.op) >= 0;
}

export function isDynamicShape(node: Node) {
  return DYNAMIC_SHAPE_OPS.indexOf(node.op) >= 0;
}

export function isHashTable(node: Node) {
  return HASH_TABLE_OPS.indexOf(node.op) >= 0;
}

export function isControlFlow(node: Node) {
  return
  isControlFlow(node);
tensors =
executeOp(node, tensorsMap, context, this._resourceManager) as
Tensor[]
if
  (util.isPromise(tensors))
  throw new Error(`The execution of the op '${node.op}' returned a promise. ` +
`Please use model.executeAsync() instead.`);
  tensorsMap[node.name] = tensors;
this.checkTensorForDisposal(
  node.name, node, tensorsMap, context, tensorsToKeep,
  outputNodeNames, intermediateTensorConsumerCount);
}

// dispose the context for the root executor
if (this.parent == null) {
  context.dispose(tensorsToKeep);
}
return outputs.map(name => getTensor(name, tensorsMap, context));
}

// A function to get frozen tensor ids
private getFrozenTensorIds(tensorMap: NamedTensorsMap): Set<number> {
  const ids = Object.keys(tensorMap)
    .map(key => tensorMap[key])
    .map(tensors => tensors.map(tensor => tensor.id));
  return new Set(ids);
}

// A function to check tensors for disposal
private checkTensorForDisposal(
  nodeName: string, node: Node, tensorMap: NamedTensorsMap,
  context: ExecutionContext, tensorsToKeep: Set<number>,
  outputNames: string[],
  intermediateTensorConsumerCount: {
    [key: string]: number
  }): void {
  // Skip output nodes and any control flow nodes, since its dependency is
  // tricky to track correctly.
  if (node.category !== 'control' ||
    outputNames.indexOf(nodeName) !== -1) {
    return;
  }

  const tensors = getTensorsForCurrentContenxt(input.name, tensorMap, context);
  if (tensors != null) {
    tensors.forEach(tensor => {
      if (tensor && !tensorsToKeep.has(tensor.id)) {
        const count = intermediateTensorConsumerCount[tensor.id];
        if (count === 1) {
          tensor.dispose();
          delete intermediateTensorConsumerCount[tensor.id];
        } else if (count != null) {
          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
 * 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
 * array.
 * @param isFunctionExecution Optional. Flag for executing a function.
 * @param tensorArrayMap Optional, global TensorArray map by id. Used for
 * function execution.
 */
private async _executeAsync(
  inputs: NamedTensorMap,
  outputs?: string[],
  isFunctionExecution = false,
  tensorArrayMap: TensorArrayMap = {},
  tensorListMap: TensorListMap = {}): Promise<Tensor[]> {
  if (!isFunctionExecution) {
    inputs = this.mapInputs(inputs);
    this.checkInputs(inputs);
    outputs = this.mapOutputs(outputs);
    this.checkOutputs(outputs);
  }

  const context = new ExecutionContext(
    this.weightMap,
    tensorArrayMap, tensorListMap,
    this.functionExecutorMap);

  // Graph with control flow requires runtime evaluation of the execution
  // order, while without control flow the execution order is pre-determined
  // in the compile method.
  const tensorMap = await this.executeWithControlFlow(
    inputs, context, outputs,
    isFunctionExecution);
  const results = outputs.map(name =>
    getTensor(name, tensorMap, context));
  // dispose all the intermediate tensors
  const outputIds = results.map(t => t.id);
  const inputIds = Object.keys(inputs).map(name => inputs[name].id);
  const keepIds = new Set<number>(
    ...outputIds,
    ...inputIds,
    ...this.weightIds);
  Object.keys(tensorMap).forEach(key =>
    if (tensorArray = tensorMap[key];
      tensorArray.forEach(tensor => { if (tensor && !tensor.isDisposed &&

```javascript
async executeFunctionAsync(inputs: Tensor[], tensorArrayMap: TensorArrayMap, tensorListMap: TensorListMap): Promise<Tensor[]> {
  const mappedInputs = inputs.reduce((map, tensor, index) => {
    map[this.inputs[index].name] = tensor;
    return map;
  }, {} as NamedTensorMap);

  if (this.parent == null) {
    context.dispose(keepIds);
  }

  return results;
}

async executeWithControlFlow(inputs: NamedTensorMap, context: ExecutionContext, outputNames?: string[], isFunctionExecution?: boolean): Promise<NamedTensorsMap> {
  const names = Object.keys(inputs);
  const inputNodes = names.map(name => this.graph.nodes[parseNodeName(name)[0]]);
  const outputNodeNames = outputNodes.map(name => this.graph.nodes[name]);

  if (outputNodes.length === 0) {
    outputNodes = this._outputs;
  }

  const {usedNodes, missingInputs, dynamicNode, syncInputs} =
    getExecutionSubgraph(inputs, outputNodes, this.weightMap, this._initNodes);

  const stack: NodeWithContexts[] = [
    ...inputNodes,
    ...this.graph.weights,
    ...(this._initNodes || [])
  ].map(node => {
    return {node, contexts: context.currentContext};
  });
  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.`);
  }

  const missingOutputs =
    outputNodes
      .filter(node => !isControlFlow(node) &&
                  ![isFunctionExecution] &&
                  !getTensor(node.name, tensorsMap, context))
      .map(node => {
        const nodeToKeep =
          this.getFrozenTensorIds(tensorsMap);
        const added: {
          [key: string]: boolean
        } = {};
        const while (stack.length > 0) {
          const promises =
            this.intermediateTensorConsumerCount,
            usedNodes;}
        if (dynamicNode != null) {
          alternativeMsg =
            `Alternatively, to avoid the dynamic ops, use model.execute() and specify the inputs [${syncInputs}] from the provided ` +
            `inputs [${names}]`. Consider providing the following inputs: ` +
            `promised inputs [${missingInputs}]`. $([missingInputs]).
          throw new Error(`Cannot compute the outputs [${missingOutputs}] from the provided` +
            ` dynamic output shapes. You can use model.execute() instead.`
          ).
        }

        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.`);
        }
    }
```
```javascript
import { util, getTensor, tensorMap, context, currentContext } from '@anon/lib/dist/tensorflow';

const execute = (dict) => {
  const output = model.execute(dict);
  return output;
};

const graph = new Graph();
const model = new Model(graph, execute);
const inputs = { input: [1.0, 2.0, 3.0] };
const outputs = { output: [1.0, 2.0, 3.0] };
const result = model.execute(inputs);
console.log(result);
```
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=============================================================================

*/

import {HashTableMap, NamedTensorMap} from '../data/types';
import {HashTable} from './hash_table';

/**
 * Contains global resources of a model.
 */
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;
  }

  /**
   * Get the table handle by node name.
   * @param name Op node name that creates the `HashTable`.
   * @param id The id of the table handle tensor.
   */
  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];
    }
  }
}

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 [TensorFlow SavedModel](https://www.tensorflow.org/guide/saved_model) using
 * the command line converter tool and loaded via `tf.loadGraphModel`.
 * @doc {heading: 'Models', subheading: 'Classes'}
 */
export class GraphModel implements InferenceModel {
  private executor: GraphExecutor;
  private version = 'n/a';
  private handler: io.IOHandler;
  private artifacts: io.ModelArtifacts;
  private initializer: GraphExecutor;
  private resourceManager: ResourceManager;
  private signature: tensorflow.ISignatureDef;

  // Returns the version information for the tensorflow model GraphDef.
  get modelVersion(): string {
    return this.version;
  }

  get inputNodes(): string[] {
    return this.executor.inputNodes;
  }

  get outputNodes(): string[] {
    return this.executor.outputNodes;
  }

  get inputs(): TensorInfo[] {
    return this.executor.inputs;
  }

  get outputs(): TensorInfo[] {
    return this.executor.outputs;
  }

  get weights(): NamedTensorsMap {
    return this.executor.weightMap;
  }

  get metadata(): {} {
    return this.executor.metadata;
  }

  get modelSignature(): {} {
    return this.executor.signature;
  }

  /**
   * @param modelUrl url for the model, or an `io.IOHandler`.
   * @param weightManifestUrl url for the weight file generated by
   * `scripts/convert.py` script.
   */
  @param requestOption options for Request, which allows to send credentials
   * and custom

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headers.
* @param onProgress Optional, progress callback function, fired periodically
* before the load is completed.
* @param loadOptions Optional, load configuration object.
* @constructor
  private modelUrl: string|io.IOHandler, private loadOptions:
  io.LoadOptions = {} |
  if (loadOptions == null) {
    this.loadOptions = {};
  }
  this.resourceManager = new ResourceManager();
  this.privateFindIOHandler() |
  if ((path as io.IOHandler).load != null) {
    // Path is an IO Handler.
    this.handler = path as io.IOHandler;
  } else if (this.loadOptions.requestInit != null) {
    this.handler = io.browserHTTPRequest(path as string,
    this.loadOptions);
  } else {
    const handlers = io.getLoadHandlers(path as string, this.loadOptions);
    if (handlers.length == 0) {
      // For backward compatibility: if no load handler can be found,
      // assume it is a relative http path.
      handlers.push(io.browserHTTPRequest(path as string, this.loadOptions));
    } else if (handlers.length > 1) {
      throw new Error('`Found more than one (${(handlers.length)}). load handlers
for` +
    `URL '${[{path}]}'`); |
    this.handler = handlers[0];}

    /*
     * Loads the model and weight files, construct the in memory weight map
and
     * compile the inference graph.
     */
    async load():
      Promise<boolean> {
        this.findIOHandler();
        if (this.handler.load == null) {
          throw new Error(`Cannot proceed with model loading because the IOHandler
provided` +
            `'does not have the `load` method implemented.`);
        }
        const artifacts = await this.handler.load();

        return this.loadSync(artifacts);
      }

    /**
     * Synchronously construct the in memory weight map and
     * compile the inference graph. Also initialize hashtable if any.
     * 
     * @doc {heading: 'Models', subheading: 'Classes', ignoreCI: true}
     */
    loadSync(artifacts: io.ModelArtifacts) {
      this.artifacts = artifacts;
      const graph = this.artifacts.modelTopology
        as tensorflow.IGraphDef;

      let signature;
      if (this.artifacts.userDefinedMetadata != null
          &&
          this.artifacts.userDefinedMetadata.signature != null) {
        signature =  // tslint:disable-next-line:no-any
          (this.artifacts.userDefinedMetadata as any).signature as
            tensorflow.ISignatureDef;
      } else {
        signature = this.artifacts.signature;
      }
      this.signature = signature;

      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.weightMap =
        this.convertTensorMapToTensorsMap(weightMap);

      // Attach a model-level resourceManager to each executor to
      // share resources,
      // such as `HashTable`. |
      this.executor.resourceManager = this.resourceManager;

      if (this.artifacts.modelInitializer != null
          &&
          (this.artifacts.modelInitializer as tensorflow.IGraphDef).node != null) {
        const initializer =
          OperationMapper.Instance.transformGraph(this.artifacts.modelInitializer);
        this.initializer =
          new GraphExecutor(initializer);
        this.initializer.weightMap = this.executor.weightMap;
        this.initializer.executeAsync({}, []);
      }

      return true;
    }

    /**
     * Save the configuration and/or weights
     * of the GraphModel.
     *
     * An `IOHandler` is an object that has a `save` method of the proper
     * signature defined. The `save` method manages the storing or
     * transmission of serialized data (`"artifacts"`) that represent
     * the model's topology and weights onto or via a specific medium, such as
     * file downloads, local storage, IndexedDB in the web browser and HTTP
     * requests to a server. TensorFlow.js provides `IOHandler` implementations
     * for a number of frequently used saving mediums, such as `tf.io.browserDownloads`
     * and `tf.io.browserLocalStorage`. See `tf.io` |
     * for more details.
     * 
     * This method also allows you to refer to certain types of `IOHandler` as
     * URL-like string shortcuts, such as `localstorage://` and
     * * indexeddb://`. |
     * 
     * @example 1: Save `model`'s topology and weights to browser local
     * storage
     * (https://developer.mozilla.org/en-US/docs/Web/API/Window/localStorage);
     * then load it back.
     *
     * ```js
     * const model = await tf.loadGraphModel(modelUrl);
     * const zeros = tf.zeros([1, 224, 224, 3]);
     * model.predict(zeros).print();
     * ```
     * 
     * @param handlerOrURL An instance of `IOHandler` or a URL-
like,
* scheme-based string shortcut for `IOHandler`
* @returns A 'Promise' of 'SaveResult', which summarizes the result of
the saving, such as byte sizes of the saved artifacts for the model
* topology and weight values.
* @params {object} options Options for saving the model.
* @returns {Promise<SaveResult>} A `Promise` of `SaveResult`, which summarizes the result of
the saving, such as byte sizes of the saved artifacts for the model's
 topology and weight values.

@doc {heading: 'Models', subheading: 'Classes', ignoreCI: true}

```js
async save(handlerOrURL: io.IOHandler|string, config?: io.SaveConfig): Promise<io.SaveResult> {
    if (typeof handlerOrURL === 'string') {
      const handlers = io.getSaveHandlers(handlerOrURL);
      if (handlers.length === 0) {
        throw new Error(`Cannot find any save handlers for URL '${handlerOrURL}'`);
      } else if (handlers.length > 1) {
        throw new Error(`Found more than one (${handlers.length}) save handlers for ` +
            `URL '${handlerOrURL}'`);
      }
      handlerOrURL = handlers[0];
    }
    if (handlerOrURL.save == null) {
      throw new Error(`GraphModel.save() cannot proceed because the IOHandler ' +
        'provided does not have the 'save' attribute defined.`);
    }
    return handlerOrURL.save(this.artifacts);
}
```

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 to follow the order of inputNodes array. You can also feed any intermediate nodes using the NamedTensorMap as the input type. For example, given the graph

```js
InputNode => Intermediate => OutputNode,
```

you can execute the subgraph Intermediate => OutputNode by calling

```js
model.execute('IntermediateNode': tf.tensor(...));
```

This is useful for models that uses `tf.dynamic_rnn`, where the intermediate node is not needed. 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]`. The default size option is ignored for graph

```js
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.

```js
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.`);
    }
    return this.inputNodes.reduce((map, inputName, i) => {
      map[inputName] = inputs[i] as NamedTensorMap;
    }, {} as NamedTensorMap);
}
```

Executes inference for the model for given input tensors.

```js
    inputs = this.execute(inputs, this.outputNodes);
    private normalizeOutputs(outputs: string|string[]): string[] {
      outputs = outputs || this.outputNodes;
      return Array.isArray(outputs) ? outputs : [outputs];
    }
      inputs = this.normalizeInputs(inputs); outputs = this.normalizeOutputs(outputs);
      const result = this.execute.execute(inputs, outputs);
      return result.length > 1 ? result : result[0];
    }
```

```js
    inputs = this.normalizeInputs(inputs); outputs = this.normalizeOutputs(outputs);
    const result = this.execute.execute(inputs, outputs);
    return result.length > 1 ? result : result[0];
```
contains control flow ops.

* @param inputs tensor, tensor array or tensor map of the inputs for the
  * model, keyed by the input node names.
* @param outputs output 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
  * array.
* @returns A Promise of single tensor if provided with a single output
  * or no outputs are provided and there is only one default output, otherwise
  * return a tensor map.
* * @doc {heading: 'Models', subheading: 'Classes'}
* * @async executeAsync
* * inputs: Tensor[], NamedTensorMap, outputs?: string[]
* * Promise<Tensor|
* * named normalizeInputs(inputs); outputs = this.normalizeOutputs(outputs);
* * const result = await
* * this.executor.executeAsync(inputs, outputs);
* * return result.length > 1 ? result : result[0];

* * private
* * convertTensorMapToTensorsMap(map: NamedTensorMap): NamedTensorsMap {
* *   return Object.keys(map).reduce((newMap: NamedTensorsMap, key) => {
* *     newMap[key] = [map[key]];
* *   }, {});
* * }

* * Example of loading MobileNetV2 from a URL and
* * making a prediction with a null zeros input:
* * ```javascript
* * const url =
* *   'https://storage.googleapis.com/tfjs-models/savedmodel/mobilenet_v2_1.0_224/model.json';
* * const model = await
* *   tf.loadGraphModel(url);
* * const zeros = tf.zeros([1, 224, 224, 3]);
* * const result = model.predict(zeros);
* * console.log(result);
* * ```

* * Example of loading MobileNetV2 from a TF Hub URL and making a prediction with
* * a zeros input:
* * ```javascript
* * const url =
* *   'https://tfhub.dev/google/imagenet/mobilenet_v2_1.0_224/classification/2';
* * const model = await
* *   tf.loadGraphModel(url, {fromTFHub: true});
* * const zeros = tf.zeros([1, 224, 224, 3]);
* * const result = model.predict(zeros);
* * console.log(result);
* * ```
* * * @param modelUrl The url or an `io.IOHandler` that loads the
* *   model.
* * @param options Options for the HTTP request, which allows to send credentials
* *   and custom headers.
* * * * @doc {heading: 'Models', subheading: 'Loading'}
* * 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
* *     }
* *   const model = new
* *   GraphModel(modelUrl, options);
* *   await model.load();
* *   return
* *   model;
* * }}

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* * http://www.apache.org/licenses/LICENSE-2.0
* * Impo
(common.isNumber(original.h)) &

common.isNumber(original.s) &

common.isNumber(original.v) &

let tmpComponent;

const ColorMath =

{
  hsv_to_rgb: function(h, s, v) {
    const hi = Math.floor(h / 60) % 6;
    const const f = h / 60 - Math.floor(h / 60);
    const const p = v * (1.0 - s);
    const const q = v * (1.0 - ((1.0 - f) * s));
    const const c = [v, p, v], [q, v, p], [p, q, v], [t, p, v], [v, p, q], [hi];
  },

  rgb_to_hsv: function(r, g, b) {
    const const max = Math.max(r, g, b);
    const const delta = max - min;
    let h = Math.floor((g - b) / delta);
    let s = delta / max;
    let v = Math.max(r, g, b);
    const const min = Math.min(r, g, b);
    const const delta = min - h;
    const const h = Math.floor(h / 60) % 6;
    const const f = h / 60 - Math.floor(h / 60);
    const const p = v * (1.0 - s);
    const const q = v * (1.0 - ((1.0 - f) * s));
    const const c = [v, p, v], [q, v, p], [p, q, v], [t, p, v], [v, p, q], [hi];
  },

  rgb_to_hex: function(r, g, b) {
    const let hex = Math.floor((g - b) / delta);
    const let s = delta / max;
    const let v = Math.max(r, g, b);
    const const min = Math.min(r, g, b);
    const const delta = min - h;
    const const h = Math.floor(h / 60) % 6;
    const const f = h / 60 - Math.floor(h / 60);
    const const p = v * (1.0 - s);
    const const q = v * (1.0 - ((1.0 - f) * s));
    const const c = [v, p, v], [q, v, p], [p, q, v], [t, p, v], [v, p, q], [hi];
  },

  hex_with_component: function(hex, componentIndex, value) {
    return value << (tmpComponent = Math.floor((g - b) / delta));
  },

  component_from_hex: function(hex, componentIndex) {
    return (hex >> (componentIndex * 8)) & 0xFF;
  },

  toHexString() {
    return colorToString(this);
  }
}

function defineRGBComponent(target, component) {
  Object.defineProperty(target, component, {
    get: function() {
      if (this.__state.space === 'RGB') {
        return this.__state[component];
      }
      color.__state = color.__state.rgb(Math.min(0, target.rgb[component] / 255));
    },

    set: function(v) {
      if (this.__state.space === 'RGB') {
        this.__state[component] = Math.max(0, Math.min(255, v / 255));
      } else if (color.__state.space === 'HEX') {
        color.__state[component] = math.component_from_hex(color.__state.hex, componentHexIndex);
      } else if (color.__state.space === 'HSV') {
        color.__state[component] = Math.max(0, Math.min(255, v / 255));
      }
    }
  });
}

function defineHSVComponent(target, component) {
  Object.defineProperty(target, component, {
    get: function() {
      if (this.__state.space === 'HSV') {
        return this.__state[component];
      }
    },

    set: function(v) {
      if (this.__state.space === 'HSV') {
        this.__state[component] = Math.max(0, Math.min(255, v / 255));
      } else if (color.__state.space === 'HEX') {
        color.__state[component] = math.component_from_hex(color.__state.hex, componentHexIndex);
      } else if (color.__state.space === 'RGB') {
        color.__state[component] = Math.max(0, Math.min(255, v / 255));
      } else if (color.__state.space === 'HEX') {
        color.__state[component] = math.component_from_hex(color.__state.hex, componentHexIndex);
      } else if (color.__state.space === 'HSV') {
        color.__state[component] = Math.max(0, Math.min(255, v / 255));
      }
    }
  });
}
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.recalculateHSV = function(color) {
  const result =
    math.rgb_to_hsv(color.r, color.g, color.b);

  common.extend(color.__state,
    {
      s: result.s,
      v: result.v
    }
  );

  if (!common.isNaN(result.h)) {
    color.__state.h = result.h;
  } else if (common.isUndefined(color.__state.h)) {
    color.__state.h = 0;
  }

  return color;
};

Color.COMPONENTS = ['r', 'g', 'b', 'h', 's', 'v', 'hex', 'a'];

defineRGBComponent(Color.prototype, 'r', 2);
defineRGBComponent(Color.prototype, 'g', 1);
defineRGBComponent(Color.prototype, 'b', 0);
defineHSVComponent(Color.prototype, 'h');
defineHSVComponent(Color.prototype, 's');
defineHSVComponent(Color.prototype, 'v');

Object.defineProperty(Color.prototype, 'a', {
  get: function() {
    return this.__state.a;
  },

  set: function(v) {
    this.__state.a = v;
  }
});

Object.defineProperty(Color.prototype, 'hex', {
  get: function() {
    if (!this.__state.space !== 'HEX') {
      this.__state.hex = math.rgb_to_hex(this.r, this.g, this.b);
    }

    return this.__state.hex;
  },

  set: function(v) {
    this.__state.space = 'HEX';
    this.__state.hex = v;
  }
});

export default Color;

/**
 * dat-gui JavaScript Controller Library
 * http://code.google.com/p/dat-gui
 *
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 * under the License.
 */

/**
 * @class An "abstract" class that represents a given property of an object.
 * @param {Object} object The object to be manipulated
 * @param {String} property The name of the property to be manipulated
 */
class Controller {
  constructor(object, property) {
    this.initialValue = object[property];

    /**
     * Those who extend this class will put their DOM elements in here.
     * @type {DOMElement}
     */
    this.domElement =
      document.createElement('div');

    /**
     * The object to manipulate
     * @type {Object}
     */
    this.object = object;

    /**
     * The name of the property to manipulate
     * @type {String}
     */
    this.property = property;

    /**
     * The function to be called on change.
     * @type {Function}
     * @ignore
     */
    this.__onChange = undefined;

    /**
     * The function to be called on finishing change.
     * @type {Function}
     * @ignore
     */
    this.__onFinishChange = undefined;
  }

  /**
   * Specify that a function fire every time someone changes the value with
   * this Controller.
   *
   * @param {Function} fnc This function will be called whenever the value
   * is modified via this Controller.
   * @returns {Controller} this
   */
  onChange(fnc) {
    this.__onChange = fnc;
    return this;
  }

  /**
   * Specify that a function fire every time someone "finishes" changing
   * the value via this Controller. Useful for values that change
   * incrementally like numbers or strings.
   *
   * @param {Function} fnc This function will be called whenever someone
   * "finishes" changing the value via this Controller.
   * @returns {Controller} this
   */
  onFinishChange(fnc) {
    this.__onFinishChange = fnc;
    return this;
  }

  /**
   * Change the value of <code>object[property]</code>
   *
   * @param {Object} newValue The new value of <code>object[property]</code>
   */
  setValue(newValue) {
    this.object[this.property] = newValue;
    if (this.__onChange) {
      this.__onChange.call(this, newValue);
    }

    if (this.__onFinishChange) {
      this.__onFinishChange.call(this, newValue);
    }

    return this;
  }

  /**
   * Gets the value of <code>object[property]</code>
   *
   * @returns {Object} The current value of <code>object[property]</code>
   */
  getValue() {
    return this.object[this.property];
  }

  /**
   * Refreshes the visual display of a Controller in order to keep sync
   * with the object's current value.
   *
   * @returns {Controller} this
   */
  updateDisplay() {
    return this;
  }

  /**
   * @returns {Boolean} true if the value has deviated from initialValue
   */
  isModified() {
    return this.initialValue !== this.getValue();
  }
}

export default Controller;

/**
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 * under the License.
 */

import common from '../utils/common';

const EVENT_MAP = {
  HTMLEvents: 
    change
};

const EVENT_MAP_INV = {};
common.each(EVENT_MAP, function(v, k) {
  common.each(v, function(e) {
    EVENT_MAP_INV[e] = k;
  });
});

const CSS_VALUE_PIXELS = 6509;
cssValueToPixels(style['border-bottom-width']) +
  cssValueToPixels(style['padding-top']) +
  cssValueToPixels(style['padding-bottom']) +
  cssValueToPixels(style.height) 
].

  getOffset: function(el) {
    let elem = el;
    const offset = { left: 0, top: 0 }; 
    if (elem.offsetParent) {
      do {
        offset.left += elem.offsetLeft;
        offset.top += elem.offsetTop;
        elem = elem.offsetParent;
      } while (elem);
    }
    return offset;
  },

  /**
   *
   * @param el
   */
  getOffset: function(el) {
    let elem = el;
    const offset = { left: 0, top: 0 }; 
    if (elem.offsetParent) {
      do {
        offset.left += elem.offsetLeft;
        offset.top += elem.offsetTop;
        elem = elem.offsetParent;
      } while (elem);
    }
    return offset;
  },

  //
  http://stackoverflow.com/posts/2684561/revisions
  /**
   *
   * @param elem
   */
  isActive: function(elem) {
    return elem === document.activeElement &&
      elem.type || elem.href;
  }

};

export default dom;

/****************************************************************************
 * dat-gui JavaScript Controller Library
 * http://code.google.com/p/dat-gui
 * @param {string} name The name of the controller to be manipulated
 * @param {string} property The name of the property to be manipulated
 * @class BooleanController
 */
class BooleanController extends Controller {
    constructor(object, property) {
      super(object, property);

      const _this = this;
      this.__prev = this.getValue();

      this.__checkbox = document.createElement('input');
      this.__checkbox.setAttribute('type',
        'checkbox');

      function onChange() {
        _this.setValue(!_this.__prev);
      }

      dom.bind(this.__checkbox,
        'change', onChange, false);

      this.domElement.appendChild(this.__checkbox);

      // Match original value
      this.updateDisplay();

      // Set initial display
      this.updateDisplay();
    }

    setValue(v) {
      const toReturn = super.setValue(v);

      if (this.__onFinishChange) {
        this.__onFinishChange.call(this, this.getValue());
      }
      this.__prev = this.getValue();
      return toReturn;
    }

    updateDisplay() {
      if (this.getValue() === true) {
        this.__checkbox.setAttribute('checked',
          'checked');
        this.__checkbox.checked = true;
        this.__prev = true;
      } else {
        this.__checkbox.checked = false;
        this.__prev = false;
      }
    }

    // Return the super function
    super.updateDisplay();

    return this;
}

export default BooleanController;

/****************************************************************************
 * dat-gui JavaScript Controller Library
 * http://code.google.com/p/dat-gui
 * @param {string} name The name of the controller to be manipulated
 * @param {string} property The name of the property to be manipulated
 * @class OptionController
 */
class OptionController extends Controller {
    constructor(object, property, opts) {
      super(object, property);

      let options = opts;

      const _this = this;

      /**
       * The drop down menu
       * @ignore
       */
      this.__select = document.createElement('select');

      if (common.isArray(options)) {
        const map = {};
        common.each(options, function(element) {
          map[element] = element;
        });
        options = map;
      }

      common.each(options, function(value, key) {
        const opt = document.createElement('option');
        opt.innerHTML = key;
        opt.setAttribute('value', value);
        this.__select.appendChild(opt);
      });

      // Acknowledge original value
      this.updateDisplay();

      dom.bind(this.__select, 'change', function() {
        this.__prev = this.getValue();
      });

      // Set initial display
      this.updateDisplay();

      // Return the super function
      super.updateDisplay();

      return this;
    }

    setValue(v) {
      const toReturn = super.setValue(v);

      if (this.__onFinishChange) {
        this.__onFinishChange.call(this, this.getValue());
      }
      this.__prev = this.getValue();
      return toReturn;
    }

    updateDisplay() {
      if (this.getValue() === true) {
        this.__select.setAttribute('checked',
          'checked');
        this.__select.checked = true;
        this.__prev = true;
      } else {
        this.__select.checked = false;
        this.__prev = false;
      }

      // Return the super function
      super.updateDisplay();

      return this;
}

export default OptionController;

/****************************************************************************
 * dat-gui JavaScript Controller Library
 * http://code.google.com/p/dat-gui
 * @param {string} name The name of the controller to be manipulated
 * @param {string} property The name of the property to be manipulated
 * @class OptionController
 */
class OptionController extends Controller {
    constructor(object, property, opts) {
      super(object, property);

      let options = opts;

      const _this = this;

      /**
       * The drop down menu
       * @ignore
       */
      this.__select = document.createElement('select');

      if (common.isArray(options)) {
        const map = {};
        common.each(options, function(element) {
          map[element] = element;
        });
        options = map;
      }

      common.each(options, function(value, key) {
        const opt = document.createElement('option');

        opt.innerHTML = key;

        opt.setAttribute('value', value);

        this.__select.appendChild(opt);
      });

      // Acknowledge original value
      this.updateDisplay();

      dom.bind(this.__select, 'change', function() {
        this.__prev = this.getValue();
      });

      // Set initial display
      this.updateDisplay();

      // Return the super function
      super.updateDisplay();

      return this;
    }

    setValue(v) {
      const toReturn = super.setValue(v);

      if (this.__onFinishChange) {
        this.__onFinishChange.call(this, this.getValue());
      }
      this.__prev = this.getValue();
      return toReturn;
    }

    updateDisplay() {
      if (this.getValue() === true) {
        this.__select.setAttribute('checked',
          'checked');
        this.__select.checked = true;
        this.__prev = true;
      } else {
        this.__select.checked = false;
        this.__prev = false;
      }

      // Return the super function
      super.updateDisplay();

      return this;
}

export default OptionController;
'.dom/dom':

/**
 * @class Provides a text input to alter the string property of an object.
 * @extends dat.controllers.Controller
 * @param {Object} object The object to be manipulated
 * @param {string} property The name of the property to be manipulated
 * @class StringController
 * @param {Object} object
 * @param {string} property
 * @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 StringController extends Controller {
    constructor(object, property) {
        super(object, property);

        const _this = this;

        function onChange() {
            _this.setValue(_this.__input.value);
        }

        function onBlur() {
            if (_this.__onFinishChange) {
                _this.__onFinishChange.call(_this, _this.getValue());
            }
        }

        this.__input = document.createElement('input');
        this.__input.setAttribute('type', 'text');

        dom.bind(this.__input, 'keyup', onChange);
        dom.bind(this.__input, 'change', onChange);
        dom.bind(this.__input, 'blur', onBlur);

        dom.bind(this.__input, 'keydown', function(e) {
            if (e.keyCode === 13) {
                this.blur();
            }
        });

        this.updateDisplay();

        this.domElement.appendChild(this.__input);
    }

    updateDisplay() {
        // Stops the caret from moving on account of:
        // keyup -> setValue -> updateDisplay
        if (!dom.isActive(this.__input)) {
            this.__input.value = this.getValue();
        }
        return super.updateDisplay();
    }
}

export default StringController;

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 * http://www.apache.org/licenses/LICENSE-2.0
 */

import Controller from './Controller';
import common from '../utils/common';

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);
    }

    min(minValue) {
        this.__min = minValue;
        return this;
    }

    max(maxValue) {
        this.__max = maxValue;
        return this;
    }

    step(stepValue) {
        this.__step = stepValue;
        this.__impliedStep = this.__step;
        this.__precision = numDecimals(this.__impliedStep);
        return this;
    }
}

export default NumberController;

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 * http://www.apache.org/licenses/LICENSE-2.0
 */

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

 * 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, _this.getValue());
  }
}

function onBlur() {
  onFinish();
}

function onMouseDrag(e) {
  const diff = prevY - e.clientY;
  _this.setValue(_this.getValue() + diff * _this.__impliedStep);
  prevY = e.clientY;
}

function onMouseUp() {
  dom.unbind(window, 'mousemove', onMouseDrag);
  dom.unbind(window, 'mouseup', onMouseUp);
  onFinish();
}

function onMouseDown(e) {
  dom.bind(window, 'mousemove', onMouseDrag);
  dom.bind(window, 'mouseup', onMouseUp);
  prevY = e.clientY;
}

this.__input = document.createElement('input');
this.__input.setAttribute('type', 'text');

dom.bind(this.__input, 'change', onChange);
dom.bind(this.__input, 'blur', onBlur);
dom.bind(this.__input, 'mousedown', onMouseDown);

dom.bind(this.__input, 'keydown', function(e) {
  // When pressing enter, you can be as precise as you want.
  if (e.keyCode === 13) {
    _this.__truncationSuspended = true;
    _this.blur();
  }
});

this.__foreground = document.createElement('div');

function map(v, i1, i2, o1, o2) {
  return o1 + (o2 - o1) * ((v - i1) / (i2 - i1));
}

/**
 * @class Represents a given property of an object that is a number, contains
 * a minimum and maximum, and
 * provides a slider element with which to
 * manipulate it. It should be noted that the slider element is made up of
 * <code>&lt;div&gt;</code> tags, <strong>not</strong> the html5
 * <code>&lt;slider&gt;</code> element.

 * @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 {Number} minValue Minimum allowed value
 * @param {Number} maxValue Maximum allowed value
 * @param {Number} stepValue Increment by which to change value

 * @class

 * 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, _this.getValue());
  }
}

function onBlur() {
  onFinish();
}

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);
  onFinish();
}

function onMouseDown(e) {
  dom.bind(window, 'mousemove', onMouseDrag);
  dom.bind(window, 'mouseup', onMouseUp);
  prevY = e.clientX;
}

this.__background = document.createElement('div');
this.__foreground = document.createElement('div');

function map(v, i1, i2, o1, o2) {
  return o1 + (o2 - o1) * ((v - i1) / (i2 - i1));
}

/**
 * @class Represents a given property of an object that is a number, contains
 * a minimum and maximum, and
 * provides a slider element with which to
 * manipulate it. It should be noted that the slider element is made up of
 * <code>&lt;div&gt;</code> tags, <strong>not</strong> the html5
 * <code>&lt;slider&gt;</code> element.

 * @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 {Number} minValue Minimum allowed value
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 * @param {Number} stepValue Increment by which to change value

 * @class

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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, _this.getValue());
  }
}

function onBlur() {
  onFinish();
}

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);

  // Makes it so manually specified values are not truncated.
  dom.bind(this.__input, 'input', onMouseInput);
  dom.bind(this.__input, 'blur', onBlur);
  dom.bind(this.__input, 'mousedown', onMouseDown);
  dom.bind(this.__input, 'keydown', function(e) {
    // When pressing enter, you can be as precise as you want.
    if (e.keyCode === 13) {
      _this.__truncationSuspended = true;
      _this.blur();
    }
  });

  this.updateDisplay();
}

this.domElement.appendChild(this.__input);

function onMouseInput(e) {
  const diff = prevY - e.clientY;
  _this.setValue(_this.getValue() + diff * _this.__impliedStep);

  prevY = e.clientY;
}

function onMouseUp() {
  dom.unbind(window, 'mousemove', onMouseDrag);
  dom.unbind(window, 'mouseup', onMouseUp);
  onFinish();
}

function onMouseDown(e) {
  dom.bind(window, 'mousemove', onMouseDrag);
  dom.bind(window, 'mouseup', onMouseUp);
  prevY = e.clientX;
}

this.__background = document.createElement('div');
this.__foreground = document.createElement('div');

function map(v, i1, i2, o1, o2) {
  return o1 + (o2 - o1) * ((v - i1) / (i2 - i1));
}

/**
 * @class Represents a given property of an object that is a number, contains
 * a minimum and maximum, and
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 * @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 {Number} minValue Minimum allowed value
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 * @param {Number} stepValue Increment by which to change value

 * @class

 * 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, _this.getValue());
  }
}

function onBlur() {
  onFinish();
}

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);

  // Makes it so manually specified values are not truncated.
  dom.bind(this.__input, 'input', onMouseInput);
  dom.bind(this.__input, 'blur', onBlur);
  dom.bind(this.__input, 'mousedown', onMouseDown);
  dom.bind(this.__input, 'keydown', function(e) {
    // When pressing enter, you can be as precise as you want.
    if (e.keyCode === 13) {
      _this.__truncationSuspended = true;
      _this.blur();
    }
  });

  this.updateDisplay();
}

this.domElement.appendChild(this.__input);

function onMouseInput(e) {
  const diff = prevY - e.clientY;
  _this.setValue(_this.getValue() + diff * _this.__impliedStep);

  prevY = e.clientY;
}

function onMouseUp() {
  dom.unbind(window, 'mousemove', onMouseDrag);
  dom.unbind(window, 'mouseup', onMouseUp);
  onFinish();
}

function onMouseDown(e) {
  dom.bind(window, 'mousemove', onMouseDrag);
  dom.bind(window, 'mouseup', onMouseUp);
  prevY = e.clientX;
}
If nothing diverges, we keep our previous values
for statefulness, otherwise we recalculate fresh

```javascript
if (mismatch) {
  common.extend(this.__color.__state, i);
}
```

```javascript
this.__temp.a = 1;
```

```javascript
const flip = (this.__color.v < 0.5 || this.__color.s > 0.5) ? 255 : 0;
```

```javascript
linearGradient(this.__saturation_field, 'left', '#fff', this.__temp.toHexString());
```

```javascript
export default ColorController;
```

```javascript
export default css;
```

```javascript
export default saveDialogContents;
```

```javascript
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 common from '../utils/common';

const 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]);
  }

  return new NumberControllerBox(object, property);  // or NumberControllerSlider
};

```

```javascript
(function() {

  // Output:
  // 'Hello, world!'

  console.log('Hello, world!');

})();
```
The only value shared between the JS and SCSS. Use caution. */

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;

/** @private GUI's which should be hidden */
const hideableGuis = [];

/**
 * @class A lightweight controller library for JavaScript. It allows you to easily
 * manipulate variables and fire functions on the fly.

 * @typicalname gui

 * @example
 * // Creating a
 * GUI with options.
 * var gui = new dat.GUI({name: My GUI});
 *
 * @example
 * // Creating a GUI and a subfolder.
 * var gui = new dat.GUI();
 * var folder1 = gui.addFolder('Flow Field');
 *
 * @param {Object} [params]
 * @param {String} [params.name] The name of this GUI.
 * @param {Object} [params.load] JSON object representing the saved state of
 * this GUI.
 * @param {dat.gui.GUI} [params.parent] The GUI I'm nested
 * in.
 * @param {Boolean} [params.autoPlace=true] If true, GUI is
 * shown/hidden by <kbd>h</kbd> keypress. If true, starts closed
 * @param {Boolean} [params.closeOnTop=false] If true, close/open button shows on top of the GUI
 * @param {Boolean} [params.hideable=true] If true, GUI is
 * shown/hidden by <kbd>h</kbd> keypress.
 *
 * @type {dom/CenteredDiv}
 * @type {DOMElement}
 */
const GUI = function(params) {
  const _this = this;

  let params = params || {};

  /**
   * Outermost DOM Element
   *
   * @type {DOMElement}
   */
  this.domElement = document.createElement('div');
  this.__ul = document.createElement('ul');
  this.domElement.appendChild(this.__ul);

  dom.addClass(this.domElement, CSS_NAMESPACE);

  /**
   * Nested GUI's by name
   * @ignore
   */
  this.__folders = {};

  this.__controllers = [];

  /**
   * List of objects I'm remembering for save, only used in top level GUI
   * @ignore
   */
  this.__rememberedObjects = [];

  /**
   * Maps the index of remembered objects to a map of
   * controllers, only used
   * in top level GUI.
   *
   * @private
   * @ignore
   *
   * @example
   * [
   *  {
   *    propertyName: Controller,
   *    anotherPropertyName: Controller
   *  },
   *  {
   *    propertyName: Controller
   *  }
   * ]
   */
  this.__rememberedObjectIndecesToControllers = [];

  this.__listening = [];

  // Default parameters
  params = common.defaults(params, {
    closeOnTop: false,
    autoPlace: true,
    width: GUI.DEFAULT_WIDTH
  });

  params = common.defaults(params, {
    resizable: params.autoPlace,
    hideable: params.autoPlace
  });

  if (common.isUndefined(params.load)) {
    // Explicit preset
    if (params.preset) {
      params.load.preset = params.preset;
    }
  } else {
    params.load = { preset: DEFAULT_DEFAULT_PRESET_NAME };
  }

  if (common.isUndefined(params.parent) &&
    params.hideable) {
    hideableGuis.push(this);
  }

  // Only root level GUI's are resizable.
  params.resizable = common.isUndefined(params.resizable) &&
    params.hideable;

  // Not part of params because I don't
  // want people passing this in via
  // constructor. Should be a 'remembered' value. let useLocalStorage =
  let SUPPORTS_LOCAL_STORAGE = common.isUndefined(params.promise) &&
    params.resizable;
```javascript
get: function() {
  return params.parent;
},

scrollable: {
  get: function() {
    return params.scrollable;
  },
  set: function(v) {
    params.scrollable = v;
    setScrollable(_this, v);
  }
},

/**
 * Handles <code>GUI</code>'s element placement for you
 * @type Boolean
 */
autoPlace: {
  get: function() {
    return params.autoPlace;
  },
  set: function(v) {
    params.autoPlace = v;
    if (_this.parent) {
      _this.getRoot().autoPlace = v;
    } else {
      if (v) {
        dom.addClass(_this.__ul, GUI.CLASS_AUTOPLACE);
      } else {
        dom.removeClass(_this.__ul, GUI.CLASS_AUTOPLACE);
      }
      if (dom.isWindow(_this.__closeButton)) {
        _this.__closeButton.innerHTML = v ? GUI.TEXT_OPEN : GUI.TEXT_CLOSED;
      } else {
        _this.__closeButton.innerHTML = v ? GUI.TEXT_OPEN : GUI.TEXT_CLOSED;
      }
    }
  }
},

/**
 * Handles <code>GUI</code>'s position of open/close button
 * @type Boolean
 */
closeOnTop: {
  get: function() {
    return params.closeOnTop;
  },
  set: function(v) {
    params.closeOnTop = v;
    if (_this.parent) {
      _this.getRoot().closeOnTop = v;
    } else {
      if (v) {
        dom.addClass(_this.__ul, GUI.CLASS_CLOSED);
      } else {
        dom.removeClass(_this.__ul, GUI.CLASS_CLOSED);
      }
    }
  }
},

/**
 * The identifier for a set of saved values
 * @type String
 */
preset: {
  get: function() {
    if (_this.parent) {
      return _this.getRoot().preset;
    }
    return params.load.preset;
  },
  set: function(v) {
    if (_this.parent) {
      _this.getRoot().preset = v;
    } else {
      params.load.preset = v;
    }
    setPresetSelectIndex(this);
    _this.revert();
  }
},

/**
 * The width of <code>GUI</code>'s 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.
 * a folder's name
 * @type String
 */
name: {
  get: function() {
    return params.name;
  },
  set: function(v) {
    // TODO Check for collisions among sibling folders
    params.name = v;
    if (titleRow) {
      titleRow.innerHTML = params.name;
    }
  }
},

/**
 * Whether the <code>GUI</code> is collapsed or not
 * @type Boolean
 */
closed: {
  get: function() {
    return params.closed;
  },
  set: function(v) {
    params.closed = v;
    if (params.closed) {
      dom.addClass(_this.__ul, GUI.CLASS_CLOSED);
    } else {
      dom.removeClass(_this.__ul, GUI.CLASS_CLOSED);
    }
    // For browsers that aren't going to respect the CSS transition,
    // Lets just check our height against the window height right off
    // the bat.
    if (titleRow) {
      titleRow.innerHTML = params.name;
    }
  }
},

/**
 * Contains all presets
 * @type Object
 */
load: {
  get: function() {
    return params.load;
  }
},

/**
 * Determines whether or not to use <a href="https://developer.mozilla.org/en/DOM/Storage#localStorage">localStorage</a> as
 * the means for
 * rememberign
 * @type Boolean
 */
useLocalStorage: {
  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, 'isLocal'), bool);
    }
  }
},

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);
      }
    }
  }

  // Oh, you're a nested
  // GUI?
  else if (params.parent) {
    params.load = JSON.parse(params.load);
    setTimeout(function() {
      _this.getRoot().closed = params.load.closed;
    }, 0);
    _this.getRoot().onClose.call(_this.getRoot());
  } else {
    dom.makeSelectable(this.domElement, false);
    // Are we supposed to be loading locally?
    if (SUPPORTS_LOCAL_STORAGE) {
      if (useLocalStorage) {
        const localGui = localStorage.getItem(getLocalStorageHash(_this, 'gui'));
        if (localGui) {
          params.load = JSON.parse(localGui);
        }
      }
    }
    dom.makeSelectable(this.domElement, false);
  }

  // Are we a root level GUI?
  if (params.closed === undefined) {
    params.closed = true;
  }

  const titleRowName = document.createTextNode(params.name);
  dom.addClass(titleRowName, 'controller-name');

  titleRow = addRow(_this, titleRowName);

  const onClickTitle = function(e) {
    e.preventDefault();
    _this.closed = !_this.closed;
    return false;
  };

  dom.addClass(titleRow, 'title');
  dom.bind(titleRow, 'click', onClickTitle);

  if (!params.closed) {
    this.closed = false;
  }

  if (params.autoPlace) {
    if (common.isUndefined(params.parent)) {
      if (autoPlaceVirgin) {
        autoPlaceContainer = document.createElement('div');
      }
    } else {
      dom.bind(window, 'unload', saveToLocalStorage);
    }
  }

  // Are we a root level GUI?
  if (params.autoPlace) {
    if (common.isUndefined(params.parent)) {
      autoPlaceContainer = document.createElement('div');
    }
  }
```
Open Source Used In Cisco Meeting Server (formerly Acano Server) 3.5

```javascript
function add(object, property) {
  return add(this, object, property, {
    factoryArgs: Array.prototype.slice.call(arguments, 2)
  });
}

function addColor(object, property) {
  return add(this, object, property, {
    color: true
  });
}

function remove(controller) {
  // TODO listening?
  this.__ul.removeChild(controller.__li);
  this.__controllers.splice(this.__controllers.indexOf(controller), 1);
  const _this = this;
  common.defer(function() {
    _this.onResize();
  });
}

function destroy() {
  if (this.parent) {
    throw new Error(
      'Only the root GUI should be removed with .destroy(). ' +
      'For subfolders, use gui.removeFolder(folder) instead.'
    );
  }
  // Remove the given controller from the GUI.
  this.remove(controller);
  // Unbind all event listeners.
  common.defer(function() {
    this.__ul.removeChild(controller.__li);
  });
}
```

if (this.autoPlace) {
  autoPlaceContainer.removeChild(this.domElement);
}

const _this = this;

function(subfolder) {
  _this.removeFolder(subfolder);
}

dom.unbind(window, 'keydown', GUI_keydownHandler, false);

removeListeners(this);

/*
 * Creates a new subfolder GUI instance.
 * @param name
 * @returns {dat.gui.GUI} The new folder.
 * @throws {Error} if this GUI already has a folder by the specified
 * name
 * @instance
 */

addFolder: function(name) {
  // We have to prevent collisions on names in order to have a key
  // by which to remember saved values
  if (this._folders[name] !== undefined) {
    throw new Error('You already have
      // name "' + name + '" in this GUI; by the name "' + name + '"');
  }

  let newGuiParams = { name: name, parent: this; }
  // We need to pass down the autoPlace trait so that we can turn
  // attach event listeners to open/close folder actions to
  // ensure that a scrollbar appears if the window is too short.

  newGuiParams.autoPlace = this.autoPlace;
  // Do we have saved appearance data for this folder?
  if (this.load && // Anything loaded?
      this.load.folders && // Was my parent a dead-end?
      this.load.folders[name]) {
    // Start me closed if I was closed
    newGuiParams.closed = this.load.folders[name].closed;
    // Pass down the loaded data
    newGuiParams.load = this.load.folders[name];
  }

  const gui = new GUI(newGuiParams);

  this._folders[name] = gui;
  // Do we have saved appearance data for this folder?
  if (this.load && // Anything loaded?
      this.load.folders && // Was my parent a dead-end?
      this.load.folders[name]) {
    delete this._folders[name];
  }

  return gui;
}

/*
 * Removes a subfolder GUI instance.
 * @throws {Error} if not called on a top level GUI.
 * @instance
 */

removeFolder: function(subfolder) {
  this._folders[subfolder].removeListeners(subfolder);

  this._folders[subfolder].removeFolder(subfolder);

  delete this._folders[subfolder];

  // Do we have saved appearance data for this folder?
  if (this.load && // Anything loaded?
      this.load.folders && // Was my parent a dead-end?
      this.load.folders[subfolder]) {
    delete this.load.folders[subfolder];
  }

  removeListeners(subfolder);

  common.each(subfolder.__folders, function(subfolder) {
    subfolder.removeFolder(subfolder);
  });

  common.defer(function() {
    _this.onResize();
  });
}

/*
 * 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() {
  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.
 * When remembering new objects, append them to the end.
 * @param Object
 * @returns
 * @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) {
      _this.addSaveMenu(_this);
    }

    if (object) {
      if (this.autoPlace) {
        // Set save row width
        setWidth(this, this.width);
      }
    }

    _this._rememberedObjects.push(object);
  });
}

/*
 * The topmost parent GUI of a nested GUI.
 * @instance
 * @returns
 */

getRoot: function() {
  return this;
}

}
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
     * @memberof {Gui}
     * @returns
     * @name getSaveObject
     * @function
     */
    getSaveObject: function() {
      const toReturn = this.load;
      toReturn.closed = this.closed;
      // Am I remembering any values?
      if (this._rememberedObjects.length > 0) {
        toReturn.presets = this.presets;
        toReturn.remembered = {
          preset: getCurrentPreset(this)
        }
      }
      return toReturn;
    },

    save: function() {
      if (!this.load.remembered) {
        this.load.remembered = {};
        this.load.remembered[DEFAULT_DEFAULT_PRESET_NAME] = getCurrentPreset(this, true);
      }
      this.load.remembered[this.preset] = getCurrentPreset(this);
      markPresetModified(this, false);
      this.saveToLocalStorageIfPossible();
      markPresetModified(this, false);
    },

    saveAs: function(presetName) {
      if (!this.load.remembered) {
        // Retain default values upon first save
        this.load.remembered = {};
        this.load.remembered[DEFAULT_DEFAULT_PRESET_NAME] = getCurrentPreset(this);
      }
      this.load.remembered[presetName] = getCurrentPreset(this);
      this.preset = presetName;
      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.getValue());
          }
        }
      }, this);
      common.each(this.__folders, function(folder) {
        folder.revert(folder);
      }, this);
      if (!gui) {
        markPresetModified(this.getRoot(), false);
      }
    },

    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
 * @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 name: function
     */
    name: function(name) {
      controller.__li.firstElementChild.firstElementChild.innerHTML = name;
      return controller;
    },

    /**
     * Sets controller to listen for changes on its underlying object.
     * @param  {Controller} controller
     * @param  {string} property
     * @return {Controller}
     * @name listen: function
     */
    listen: function() {
      controller._ui = li;
      controller.__gui = gui;
      common.extend(controller, /** @lends Lends Controller.prototype */ {
        /**
         * @param  {Array|Object} options
         * @return {Controller}
         */
        options: function(options) {
          if (arguments.length > 1) {
            return controller;
          }
        },

        /**
         * Returns the controller from its parent GUI.
         * @param  {Controller} controller
         * @return {Controller}
         * @name remove: function
         */
        remove: function() {
          controller._ui = li;
          controller.__gui = gui;
          controller.remove();
          return controller;
        }
      });
      // All sliders should be accompanied by a
if (controller instanceOf NumberControllerBox) {
    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 pc = controller[method];
        const pb = box[method];
        controller[method] = function() {
            const args = Array.prototype.slice.call(arguments);
            pb.apply(box, args);
            return pc.apply(controller, args);
        };
    });
    dom.addClass(li, 'has-slider');
    controller.domElement.insertBefore(box.domElement, controller.domElement.firstElementChild);
} else if (controller instanceOf NumberControllerBox) {
    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 pc = controller[method];
        const pb = box[method];
        controller[method] = function() {
            const args = Array.prototype.slice.call(arguments);
            pb.apply(box, args);
            return pc.apply(controller, args);
        };
    });
    dom.addClass(li, 'has-slider');
    controller.domElement.insertBefore(box.domElement, controller.domElement.firstElementChild);
}

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 pc = controller[method];
        const pb = box[method];
        controller[method] = function() {
            const args = Array.prototype.slice.call(arguments);
            pb.apply(box, args);
            return pc.apply(controller, args);
        };
    });
    dom.addClass(li, 'has-slider');
    controller.domElement.insertBefore(box.domElement, controller.domElement.firstElementChild);
} else if (controller instanceof NumberControllerBox) {
    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 pc = controller[method];
        const pb = box[method];
        controller[method] = function() {
            const args = Array.prototype.slice.call(arguments);
            pb.apply(box, args);
            return pc.apply(controller, args);
        };
    });
    dom.addClass(li, 'has-slider');
    controller.domElement.insertBefore(box.domElement, controller.domElement.firstElementChild);
}

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];
        // Ohh, I believe this is the first controller we've created for this object.
        let controllerMap = {};
        // Make sure the map is up to date.
        if (controllerMap === undefined) {
            throw new Error('The object ' + controller.object + ' does not have a remembered controller.');</n        }
        // Keep track of this controller
        controllerMap[controller.property] = controller;
        // Okay, 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 = null;
            if (presetMap[gui.preset]) {
                preset = presetMap[gui.preset];
            } else if (presetMap[DEFAULT_DEFAULT_PRESET_NAME]) {
                preset = presetMap[DEFAULT_DEFAULT_PRESET_NAME];
            } else {
                // Nada.
                return;
            }
            // Did the loaded object remember this property?
            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:
                controller.initialValue = value;
                controller.setValue(value);
            }
        }
    }
}

function add(gui, object, property, params) {
    if (object[property] === undefined) {
        throw new Error('Object ' + object + ' has no property ' + property + '.');</n    }
    let controller;
    if (params.color) {
        controller = new ColorController(object, property);
    } else {
        controller = new NumberControllerBox(object, property);
    }
    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 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();
} 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();
} else if (controller instanceOf NumberControllerBox) {
    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 pc = controller[method];
        const pb = box[method];
        controller[method] = function() {
            const args = Array.prototype.slice.call(arguments);
            pb.apply(box, args);
            return pc.apply(controller, args);
        };
    });
    dom.addClass(li, 'has-slider');
    controller.domElement.insertBefore(box.domElement, controller.domElement.firstElementChild);
} else if (controller instanceof NumberControllerBox) {
    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 pc = controller[method];
        const pb = box[method];
        controller[method] = function() {
            const args = Array.prototype.slice.call(arguments);
            pb.apply(box, args);
            return pc.apply(controller, args);
        };
    });
    dom.addClass(li, 'has-slider');
    controller.domElement.insertBefore(box.domElement, controller.domElement.firstElementChild);
}

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 = {};
        // Make sure the map is up to date.
        if (controllerMap === undefined) {
            throw new Error('The object ' + controller.object + ' does not have a remembered controller.');</n        }
        // Keep track of this controller
        controllerMap[controller.property] = controller;
        // Okay, 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 = null;
            if (presetMap[gui.preset]) {
                preset = presetMap[gui.preset];
            } else if (presetMap[DEFAULT_DEFAULT_PRESET_NAME]) {
                preset = presetMap[DEFAULT_DEFAULT_PRESET_NAME];
            } else {
                // Nada.
                return;
            }
            // Did the loaded object remember this property?
            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:
                controller.initialValue = value;
                controller.setValue(value);
            }
        }
    }
}
```javascript
property].concat(params.factoryArgs);\n  controller = ControllerFactory.apply(gui, factoryArgs);\n  if (params.before instanceof Controller) {\n    params.before = params.before._li;\n  }\n  recallSavedValue(gui, controller);\n  dom.addClass(controller.domElement, 'c');\n  const name = document.createElement('span');\n  dom.addClass(name, 'property-name');\n  name.innerHTML = controller.property;\n  const container = document.createElement('div');\n  container.appendChild(name);\n  dom.addClass(controller.domElement, 'c');\n  const li = addToRow(gui, container, params.before);\n  if (params.before instanceof Controller) {\n    params.before = params.before.__li;\n  }\n  recallSavedValue(gui, controller);\n  dom.removeClass(li, GUI.CLASS_CONTROLLER_ROW);\n  dom.addClass(li, controller.color);\n  else {\n    dom.addClass(li, typeof controller.getValue());\n  }\n  augmentController(gui, li, controller);\n  gui._controllers.push(controller);\n  return controller;\n}\n
function getLocalStorageHash(gui, key) {\n  // TODO how does this deal with multiple GUI's?\n  return document.location.href + '.' + key;\n}\n
function addPresetOption(gui, name, setSelected) {\n  const opt = document.createElement('option');\n  opt.innerHTML = name;\n  opt.value = name;\n  gui.__preset_select.appendChild(opt);\n  if (setSelected) {\n    gui.__preset_select.selectedIndex = gui.__preset_select.length - 1;\n  }\n}\n
function showHideExplain(gui, explain) {\n  explain.style.display = gui.useLocalStorage ? 'block' : 'none';\n}\n
function addSaveMenu(gui) {\n  const div = gui.__save_row = document.createElement('li');\n  dom.addClass(gui.domElement, 'has-save');\n  gui.__ul.insertBefore(div, gui.__ul.firstChild);\n  dom.addClass(div, 'save-row');\n  const gears = document.createElement('span');\n  gears.innerHTML = ' ';\n  dom.addClass(gears, 'button gears');\n  const button = document.createElement('span');\n  button.innerHTML = 'Save';\n  dom.addClass(button, 'button');\n  dom.addClass(button, 'save');\n  const button2 = document.createElement('span');\n  button2.innerHTML = 'New';\n  dom.addClass(button2, 'button');\n  dom.addClass(button2, 'save-as');\n  const button3 = document.createElement('span');\n  button3.innerHTML = 'Revert';\n  dom.addClass(button3, 'button');\n  dom.addClass(button3, 'revert');\n  const select = gui.__preset_select = document.createElement('select');\n  if (gui.load && gui.load.remembered) {\n    common.each(gui.load.remembered, function(value, key) {\n      addPresetOption(gui, key, key === gui.preset);\n    });\n  } else {\n    addPresetOption(gui, DEFAULT_DEFAULT_PRESET_NAME, false);\n  }\n  dom.bind(select, 'change', function() {\n    for (let index = 0; index < gui.__preset_select.length; index++) {\n      gui.__preset_select[index].innerHTML = gui.__preset_select[index].value;\n    }\n    gui.preset = this.value;\n  });\n  div.appendChild(select);\n  div.appendChild(gears);\n  div.appendChild(button);\n  div.appendChild(button2);\n  div.appendChild(button3);\n  if (SUPPORTS_LOCAL_STORAGE) {\n    const localStorageBox = document.getElementById('dg-local-storage');\n    const saveLocally = document.getElementById('dg-save-locally');\n    saveLocally.style.display = 'block';\n    if (localStorage.getItem(getLocalStorageHash(gui, 'isLocal')) !== 'true') {\n      localStorageBox.setAttribute('checked', 'checked');\n    }\n    showHideExplain(gui, explain);\n  }\n  // TODO: Use a boolean controller, fool!\n  dom.bind(localStorageBox, 'change', function() {\n    gui.useLocalStorage = !gui.useLocalStorage;\n    showHideExplain(gui, explain);\n  });\n  const newConstructorTextArea = document.getElementById('dg-new-constructor');\n  dom.bind(newConstructorTextArea, 'keydown', function(e) {\n    if (e.metaKey & e.which === 67) {\n      SAVE_DIALOGUE.show();\n    }\n  });\n  const saveLocally = document.getElementById('dg-save-locally');\n  saveLocally.style.display = 'block';\n  if (localStorage.getItem(getLocalStorageHash(gui, 'isLocal')) !== 'true') {\n    localStorageBox.setAttribute('checked', 'checked');\n  }\n  showHideExplain(gui, explain);\n  // TODO: Use a boolean controller, fool!\n  dom.bind(localStorageBox, 'change', function() {\n    gui.useLocalStorage = !gui.useLocalStorage;\n    showHideExplain(gui, explain);\n  });\n  const newConstructorTextArea = document.getElementById('dg-new-constructor');\n  dom.bind(newConstructorTextArea, 'keydown', function(e) {\n    if (e.metaKey & e.which === 67) {\n      SAVE_DIALOGUE.show();\n    }\n  });\n  const saveLocally = document.getElementById('dg-save-locally');\n  saveLocally.style.display = 'block';\n  if (localStorage.getItem(getLocalStorageHash(gui, 'isLocal')) !== 'true') {\n    localStorageBox.setAttribute('checked', 'checked');\n  }\n  showHideExplain(gui, explain);\n  // TODO: Use a boolean controller, fool!\n  dom.bind(localStorageBox, 'change', function() {\n    gui.useLocalStorage = !gui.useLocalStorage;\n    showHideExplain(gui, explain);\n  });\n  const newConstructorTextArea = document.getElementById('dg-new-constructor');\n  dom.bind(newConstructorTextArea, 'keydown', function(e) {\n    if (e.metaKey & e.which === 67) {\n      SAVE_DIALOGUE.show();\n    }\n  });\n  const saveLocally = document.getElementById('dg-save-locally');\n  saveLocally.style.display = 'block';\n  if (localStorage.getItem(getLocalStorageHash(gui, 'isLocal')) !== 'true') {\n    localStorageBox.setAttribute('checked', 'checked');\n  }\n  showHideExplain(gui, explain);\n  // TODO: Use a boolean controller, fool!\n  dom.bind(localStorageBox, 'change', function() {\n    gui.useLocalStorage = !gui.useLocalStorage;\n    showHideExplain(gui, explain);\n  });\n```
for the specific language governing permissions and limitations under the License.

*/

import*as tf from"@tensorflow/tfjs-core";import{util,tidy,div,sub,buffer,Tensor,browser,pad3d,scalar,concat,tensor2d,tensor}from"@tensorflow/tfjs-core";import{loadGraphModel}from"@tensorflow/tfjs-converters";var VALID_OUTPUT_STRIDES=[8,16,32];function assertValidOutputStride(e){util.assert("number"==typeof e,function(){return"outputStride is not a number"}),util.assert(VALID_OUTPUT_STRIDES.indexOf(e)>=0,function(){return"outputStride of "+e+" is invalid. It must be either 8, 16, or 32"})}function assertValidResolution(e,t){util.assert("number"==typeof e,function(){return"resolution is not a number"}),util.assert((e-1)%t==0,function(){return"resolution of "+e+" is invalid for output stride "+t+"."})}function toFloatIfInt(e){return tidy(function(){return"int32"===e.dtype&&(e=e.toFloat()),e=div(e,127.5),sub(e,1)})}var MobileNet=function(){function e(e,t){this.model=e;var r=this.model.inputs[0].shape;util.assert(-1===r[1]&&-1===r[2],function(){return"Input shape ["+r[1]+", "+r[2]+"] must both be -1"}),this.outputStride=t}return e.prototype.predict=function(e){var t=this;return tidy(function(){var r=toFloatIfInt(e).expandDims(0),n=t.model.predict(r),o=n[0],i=n[1],s=n[2],a=n[3];return {heatmapScores:i.sigmoid(),offsets:o.squeeze(),displacementFwd:s.squeeze(),displacementBwd:a.squeeze()}})},e.prototype.dispose=function(){this.model.dispose()},e}();function half(e){return Math.floor(e/2)}var MaxHeap=function(){function e(e,t){this.priorityQueue=new Array(e),this.numberOfElements=-1,this.getElementValue=t}return e.prototype.enqueue=function(e){this.priorityQueue[++this.numberOfElements]=e,this.swim(this.numberOfElements)},e.prototype.dequeue=function(){var e=this.priorityQueue[0];return this.exchange(0,this.numberOfElements--),this.sink(0),this.priorityQueue[this.numberOfElements+1]=null,e},e.prototype.empty=function(){return-1===this.numberOfElements},e.prototype.size=function(){return this.numberOfElements+1},e.prototype.all=function(){return this.priorityQueue.slice(0,this.numberOfElements+1)},e.prototype.max=function(){return this.priorityQueue[0]},e.prototype.swim=function(e){for(;e>0&&this.less(half(e),e);)this.exchange(e,half(e)),e=half(e)},e.prototype.sink=function(e){for(;2*e<=this.numberOfElements;){var t=2*e;if(t<this.numberOfElements&&this.less(t+1)&&t++,!this.less(e,t))break;this.exchange(e,t),e=t}},e.prototype.getValueAt=function(e){return this.getElementValue(this.priorityQueue[e])},e.prototype.less=function(e,t){return this.getValueAt(e)<this.getValueAt(t)},e.prototype.exchange=function(e,t){var r=this.priorityQueue[e];this.priorityQueue[e]=this.priorityQueue[t],this.priorityQueue[t]=r},e}();function scoreIsMaximumInLocalWindow(e,t,r,n,o,i){for(var s=i.shape,a=s[0],u=s[1],l=!0,f=Math.max(r-o,0),c=Math.min(r+o+1,a),d=f;d<c;++d){for(var p=Math.max(n-o,0),h=Math.min(n+o+1,u),m=p;m<h;++m)if(i.get(d,m,e)>t){l=!1;break}if(!l)break}return l}function buildPartWithScoreQueue(e,t,r){for(var n=r.shape,o=n[0],i=n[1],s=n[2],a=new MaxHeap(function(e){return e.score}),u=0;u<o;++u)for(var l=0;l<i;++l)for(var f=0;f<s;++f){var c=r.get(u,l,f);c<e||scoreIsMaximumInLocalWindow(f,c,u,l,t,r)&&a.enqueue({score:c,part:}),c=r(e,l,f)}}function scoreIsMaximumInLocalWindow(e,t,r,n,o,i){for(var s=i.shape,a=s[0],u=s[1],l=!0,f=Math.max(r-o,0),c=Math.min(r+o+1,a),d=f;d<c;++d){for(var p=Math.max(n-o,0),h=Math.min(n+o+1,u),m=p;m<h;++m)if(i.get(d,m,e)>t){l=!1;break}if(!l)break}return l}function buildPartWithScoreQueue(e,t,r){for(var n=r.shape,o=n[0],i=n[1],s=n[2],a=new MaxHeap(function(e){return e.score}),u=0;u<o;++u)for(var l=0;l<i;++l)for(var f=0;f<s;++f){var c=r.get(u,l,f);c<e||scoreIsMaximumInLocalWindow(f,c,u,l,t,r)&&a.enqueue({score:c,part:});c=r(e,l,f)}}
function getDisplacement(e, t, r) {
  var n = r.shape[2] / 2;
  return { y: r.get(t.y, t.x, e), x: r.get(t.y, t.x, n + e) }
}

function getStridedIndexNearPoint(e, t, r, n) {
  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, n, o) {
  var u = n.shape, l = u[0], f = u[1], c = getDisplacement(e, getStridedIndexNearPoint(t.position, i, l, f), s), d = addVectors(t.position, c.x, c.y, p = p + s + a + p + v); 
  var h = getStridedIndexNearPoint(d, i, l, f), m = getOffsetPoint(h.y, h.x, r, o); 
  return { position: d, part: partNames[r], score: c } 
}

function getInstanceScore(e, t, r) {
  return r.reduce(function(r, n, o) {
    var i = n.position, s = n.score; 
    if (!withinNmsRadiusOfCorrespondingPoint(e, t, i, o)) r += s; 
    return r / r.length 
  })
}

function decodeMultiplePoses(e, t, r, n, o, i) {
  var s = t.shape[2], a = parentToChildEdges.length, u = new Array(s), l = buildPartWithScoreQueue(s, kLocalMaximumRadius, e), f = a * a; 
  if (u.length < i && !l.empty()) {
    var c = l.dequeue(); 
    if (!withinNmsRadiusOfCorrespondingPoint(e, t, c.part.id, o)) return u; 
    var d = decodePose(c, e, t, o, r), p = getInstanceScore(u, f, d); 
    u.push({ keypoints: d, score: p }) 
  }
  return u 
}

__assign = function() {
  return ( __assign = Object.assign || function(e) {
    for ( var t, r = 1, n = arguments.length; r < n; r++ ) {
      for ( var o in t = arguments[r] ) Object.prototype.hasOwnProperty.call(t, o) && ( e[o] = t[o] )
    } 
    return e
  }).apply(this, arguments)
}

// ...
function eitherPointDoesn'tMeetConfidence(e,t,r){return e<r||t<r}function getAdjacentKeyPoints(e,t){return connectedPartIndices.reduce(function(r,n){var o=n[0],i=n[1];return eitherPointDoesn'tMeetConfidence(e[o].score,e[i].score,t)?r:(r.push([e[o],e[i]]),r)},[])}
NEGATIVE_INFINITY=Number.NEGATIVE_INFINITY,POSITIVE_INFINITY=Number.POSITIVE_INFINITY
function getBoundingBox(e){return e.reduce(function(e,t){var r=e.maxX,n=e.maxY,o=e.minX,i=e.minY;return{maxX:r, maxY:n, minX:o, minY:i}})}

function getBoundingBox(e){return e.reduce(function(e,t){var r=e.maxX,n=e.maxY,o=e.minX,i=e.minY;return{maxX:Math.max(r,a),maxY:Math.max(n,b),minX:Math.min(o,a),minY:Math.min(i,b)}})}

function getBoundingBoxBoxIndices(e){return getBoundingBox(e).minX<e.maxX&&getBoundingBox(e).minY<e.maxY&&getBoundingBox(e).maxX>0&&getBoundingBox(e).maxY>0}

function getAdjacentKeyPoints(e,t){return connectedPartIndices.reduce(function(r,n){var o=n[0],i=n[1];return eitherPointDoesn'tMeetConfidence(e[o].score,e[i].score,t)?r:(r.push([e[o],e[i]]),r)},[])}

function getPointsConfidence(e,t){for(var r=t.shape[0],n=new Float32Array(r),o=0;o<r;o++){var i=t.get(o,0),s=t.get(o,1);n[o]=e.get(i,s,o)}return n}
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```javascript
0===t&&(!t(SINGLE_PERSON_INFERENCE_CONFIG)).__awaiter(this, void 0, void 0, function() { var r,n,o,i,s,a,u,l,f,c,d,p,h,m,g,_;return __generator(this,void 0,void 0,(function(){var r=__assign({},SINGLE_PERSON_INFERENCE_CONFIG,t),n=this.baseModel.outputStride,o=this.inputResolution,a=assertValidOutputStride(n),assertValidResolution(o,n),i=getInputTensorDimensions(e),s=i[0],a=i[1],u=padAndResizeTo(e,[o,o]),l=u.resized,f=u.padding,c=this.baseModel.predict(l),d=c.heatmapScores,p=c.offsets,h=c.displacementFwd,m=c.displacementBwd,[4,decodeSinglePose(d,p)];case 1:return g=I.sent(),_=scaleAndFlipPoses([g],s,a,[o,o],f,r.flipHorizontal),d.dispose(),p.dispose(),h.dispose(),m.dispose(),l.dispose(),[2,_[0]]}}))});

export { decodeMultiplePoses, decodeSinglePose, MobileNet, partChannels, partIds, partNames, poseChain, load, PoseNet, VALID_INPUT_RESOLUTION, getAdjacentKeyPoints, getBoundingBox, getBoundingBoxPoints, scalePose }

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

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 = '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_BACKGROUND_CSS, TRY_RESNET_BUTTON_TEXT_CSS);
}

/**
 * Toggles between the loading UI and the main canvas UI.
 */
```
showLoadingUI, loadingDivId = 'loading', mainDivId = 'main') { if (showLoadingUI) {
  document.getElementById(loadingDivId).style.display = 'block';
} else {
  document.getElementById(mainDivId).style.display = 'none';
}

export function drawPoint(ctx, y, x, r, color) {
  ctx.beginPath();
  ctx.arc(x, y, r, 0, 2 * Math.PI);
  ctx.fillStyle = color;
  ctx.fill();
}

/**
 * Draws a line on a canvas, i.e. a joint
 */
export function drawSegment([ax, ay], [bx, by], 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();
}

/**
 * Draws a pose skeleton by looking up all adjacent keypoints/joints
 */
export function drawSkeleton(keypoints, minConfidence, ctx, scale = 1) {
  const adjacentKeyPoints = posenet.getAdjacentKeyPoints(keypoints, minConfidence);
  function toTuple({y, x}) {
    return [y, x];
  }
  adjacentKeyPoints.forEach((keypoints) => {
    drawSegment(toTuple(keypoints[0].position), toTuple(keypoints[1].position), COLOR, scale, ctx);
  });
}

/**
 * Draw pose keypoints onto a canvas
 */
export function drawKeypoints(keypoints, minConfidence, ctx, scale = 1) {
  for (let i = 0; i < keypoints.length; i++) {
    const keypoint = keypoints[i];
    if (keypoint.score < minConfidence) {
      continue;
    }
    const {y, x} = keypoint.position;
    drawPoint(ctx, y * scale, x * scale, 3, COLOR);
  }
}

/**
 * Draw the bounding box of a pose. For example, for a whole person standing
 */
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.lineWidth = LINE_WIDTH;
  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;
    imageData.data[j + 0] = data[i + 0];
    imageData.data[j + 1] = data[i + 1];
    imageData.data[j + 2] = data[i + 2];
    imageData.data[j + 3] = 255;
  }
  ctx.putImageData(imageData, 0, 0);
}

/**
 * Draw an image on a canvas
 */
export function renderImageToCanvas(image, size, canvas) {
  canvas.width = size[0];
  canvas.height = size[1];
  const ctx = canvas.getContext('2d');
  ctx.drawImage(image, 0, 0);
}

/**
 * Draw heatmap values, one of the model outputs, on to the canvas
 */
export function drawHeatMapValues(heatMapValues, outputStride, canvas) {
  const ctx = canvas.getContext('2d');
  const radius = 5;
  const scaledValues = heatMapValues.mul(tf.scalar(outputStride, 'int32'));
  const drawPoints(ctx, scaledValues, radius, COLOR);
  used by the drawHeatMapValues method to draw heatmap points on the canvas
  * @function drawPoints
  */
  function toTuple({y, x}) {
    return [y, x];
  }
  for (let i = 0; i < data.length; i++) {
    const pointY = data[i].y;
    const pointX = data[i].x;
    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 offset vectors on the canvas
 */
function drawOffsetVectors(heatMapValues, outputStride, scale = 1, ctx) {
  const data = points.buffer().values;
  for (let i = 0; i < data.length; i++) {
    const x = data[i].x;
    const y = data[i].y;
    if (y != 0 && x != 0) {
      ctx.beginPath();
      ctx.moveTo(x * scale, y * scale);
      ctx.lineTo((x + offsetData[i].x) * scale, (y + offsetData[i].y) * scale);
      ctx.lineWidth = LINE_WIDTH;
      ctx.strokeStyle = color;
      ctx.stroke();
    }
  }
}

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

color schemes generated using d3-scale-chromatic:
https://github.com/d3/d3-scale-chromatic

export const rainbow = [
  [110, 64, 170], [106, 72, 183], [92, 91, 206], [84, 101, 214], [79, 127, 180], [77, 103, 173], [67, 127, 180], [57, 140, 167], [48, 150, 224], [39, 163, 220], [33, 176, 214], [29, 188, 205],
];

export const warm = [
  [110, 64, 170], [106, 72, 183], [92, 91, 206], [84, 101, 214], [79, 127, 180], [77, 103, 173], [67, 127, 180], [57, 140, 167], [48, 150, 224], [39, 163, 220], [33, 176, 214], [29, 188, 205],
];

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, 238, 159], [190, 229, 160], [164, 218, 163], [137, 207, 165], [110, 192, 168], [86, 173, 174], [70, 150, 179], [67, 127, 180], [77, 103, 173],
];

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

```javascript
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');
  const stream = await navigator.mediaDevices.getUserMedia({
    'audio': false,
    'video': true,
  });

  videoElement.srcObject = stream;
  return new Promise((resolve) => {
    videoElement.onloadedmetadata = () => {
      videoElement.width = videoElement.videoWidth;
      videoElement.height = videoElement.videoHeight;
      resolve(videoElement);
    };
  });
}
```

```javascript
async function loadVideo(cameraLabel) {
  try {
    state.video = await setupCamera(cameraLabel);
  } catch (e) {
    let info = document.getElementById('info');
    info.textContent = 'this browser does not support video capture,' +
        'or this device does not have a camera';
    info.style.display = 'block';
    throw e;
  }

  state.video.play();
}
```

```javascript
const defaultQuantBytes = 2;
const defaultMobileNetMultiplier = isMobile() ? 0.50 : 0.75;
const defaultMobileNetInternalResolution = 'medium';
const defaultResNetMultiplier = 1.0;
const defaultResNetInternalResolution = 'low';
const guiState = {
  algorithm: 'multi-person-instance',
  estimate: 'partmap',
  flipHorizontal: true,
  input: {
    architecture: 'MobileNetV1',
    outputStride: 16,
    internalResolution: 'low',
    multiplier: 0.50,
    quantBytes: 2,
  },
}
```

```javascript
function toCameraOptions(cameras) {
  const result = {default: null};

  cameras.forEach(camera => {
    result[camera.label] = camera.label;
  })

  return result;
}
```

```javascript
/**
 * Sets up dat.gui controller on the top-right of the window
 */
function setupGui(cameras) {
  const gui = new dat.GUI({width: 300});

  let architectureController = null;
  guiState[TryResNetButton_Name] = function() {
    architectureController.setValue('ResNet50')
  };
  gui.add(guiState, TryResNetButton_Name).name(TryResNetButton_Text);

  gui.add(guiState, 'camera', toCameraOptions(cameras)).onChange(async function(cameraLabel) {
        state.changingCamera = true;

        await loadVideo(cameraLabel);

        state.changingCamera = false;
      });

  gui.add(guiState, 'flipHorizontal');

  // There are two algorithms 'person' and 'multi-person-instance'.
  // The 'person' algorithm returns one single segmentation mask (or body
  // part map) for all people in the image. The 'multi-person-instance' algorithm
  // returns an array of segmentation mask (or body part map).
  // Each element in the array corresponding to one of the people. In other
  // words, 'multi-person-instance' algorithm does instance-level person
  // segmentation and body part segmentation for every person in the image.
  const algorithmController = gui.add(guiState, 'algorithm', ['person', 'multi-person-instance']);

  // Architecture: there are a few BodyPix models varying in size and
  // accuracy. The input parameters have the most effect on accuracy and speed of the
  // network. The input height and width of the layers in the neural network. The lower the value of the input
  // stride the higher the accuracy but slower the speed, the higher the
  // value the faster the speed but lower the accuracy.
  let outputStrideController = null;
  function updateGuiOutputStride(outputStride, outputStrideArray) {
    let input = gui.addFolder('Input');
    Updates outputStride // Output stride: Internally, this parameter affects the height and width of the layers in the neural network. The lower the value of the output
    // stride the higher the accuracy but slower the speed, the higher the
    // value the faster the speed but lower the accuracy.
  }
```
function updateGuiMultiplier(multiplier, multiplierArray) {
  if (multiplierController) {
    multiplierController.remove();
  }
  guiState.input.multiplier = multiplier;
  multiplierController = input.add(guiState.input, 'multiplier', multiplierArray);
  multiplierController.onChange(function(multiplier) {
    state.changingMultiplier = true;
    guiState.input.multiplier = +multiplier;
  });
}

function updateGuiQuantBytes(quantBytes, quantBytesArray) {
  if (quantBytesController) {
    quantBytesController.remove();
  }
  guiState.quantBytes = +quantBytes;
  guiState.input.quantBytes = +quantBytes;
  quantBytesController = input.add(guiState.input, 'quantBytes', quantBytesArray);
  quantBytesController.onChange(function(quantBytes) {
    state.changingQuantBytes = true;
    guiState.input.quantBytes = +quantBytes;
  });
}

function updateGuiInputSection() {
  if (guiState.input.architecture === 'MobileNetV1') {
    updateGuiInternalResolution(defaultMobileNetInternalResolution, ['low', 'medium', 'high', 'full']);
    updateGuiOutputStride(defaultMobileNetStride, [8, 16]);
    updateGuiMultiplier(defaultMobileNetMultiplier, [0.50, 0.75, 1.0]);
  } else { // guiState.input.architecture === "ResNet50"
    updateGuiInternalResolution(defaultResNetInternalResolution, ['low', 'medium', 'high', 'full']);
    updateGuiOutputStride(defaultResNetStride, [32, 16]);
    updateGuiMultiplier(defaultResNetMultiplier, [1.0]);
  }
  updateGuiQuantBytes(defaultQuantBytes, [1, 2, 4]);
}

algorithmController.onChange(function(value) {
  switch (guiState.algorithm) {
    case 'single-person':
      multiPersonDecoding.close();
      singlePersonDecoding.open();
      break;
    case 'multi-person':
      multiPersonDecoding.close();
      singlePersonDecoding.open();
      break;
    default:
      break;
  }
});

const estimateController = gui.add(guiState, 'estimate', ['segmentation', 'partmap']);
let segmentationEffectController = estimateController.add(guiState.segmentation, 'effect', ['mask', 'bokeh']);
let multiPersonDecoding = gui.addFolder('MultiPersonDecoding');
multiPersonDecoding.add(guiState.multiPersonDecoding, 'maxDetections', 0, 20, 1); multiPersonDecoding.add(guiState.multiPersonDecoding, 'scoreThreshold', 0.0, 1.0);

multiPersonDecoding.add(guiState.multiPersonDecoding, 'nmsRadius', 0, 30, 1); multiPersonDecoding.add(guiState.multiPersonDecoding, 'numKeypointForMatching', 1, 17, 1); multiPersonDecoding.add(guiState.multiPersonDecoding, 'refineSteps', 1, 10, 1); multiPersonDecoding.open();

algorithmController.onChange(function(value) {
  switch (guiState.algorithm) {
    case 'single-person':
      multiPersonDecoding.close();
      singlePersonDecoding.open();
      break;
    case 'multi-person':
      singlePersonDecoding.close();
      multiPersonDecoding.open();
      break;
    default:
      break;
  }
});

const darknessLevel = guiState.segmentation.add('opacity', 0.0, 1.0);
const bokehBlurAmount = guiState.segmentation.add('bokehBlurAmount', 0.0, 1.0);
const edgeBlurAmount = guiState.segmentation.add('edgeBlurAmount', 0.0, 1.0);
const maskBlurAmount = guiState.segmentation.add('maskBlurAmount', 0.0, 1.0);

algorithmController.onChange(function(value) {
  switch (guiState.algorithm) {
    case 'single-person':
      multiPersonDecoding.close();
      singlePersonDecoding.open();
      break;
    case 'multi-person':
      singlePersonDecoding.close();
      multiPersonDecoding.open();
      break;
    default:
      break;
  }
});

const darknessLevel = guiState.segmentation.add('opacity', 0.0, 1.0);
const bokehBlurAmount = guiState.segmentation.add('bokehBlurAmount', 0.0, 1.0);
const edgeBlurAmount = guiState.segmentation.add('edgeBlurAmount', 0.0, 1.0);
const maskBlurAmount = guiState.segmentation.add('maskBlurAmount', 0.0, 1.0);
segmentation.add guiState.segmentation, 'maskBackground' else if (effectType === 'bokeh') {
  if (darknessLevel) {
    darknessLevel.remove();
  }
  if (maskBlurAmount) {
    maskBlurAmount.remove();
  }
  if (maskBackground) {
    maskBackground.remove();
  }
  bokehBlurAmount = segmentation.add guiState.segmentation,'backgroundBlurAmount',
    .min(0)
    .max(20)
    .step(1);
  edgeBlurAmount = segmentation.add guiState.segmentation,'edgeBlurAmount',
    .min(0)
    .max(20)
    .step(1);
  edgeBlurAmount = segmentation.add guiState.segmentation,'edgeBlurAmount',
    .min(0)
    .max(20)
    .step(1);

  // manually set the effect so that the options are shown.
  segmentationEffectController.setValue guiState.segmentation.effect;
  let partMap = gui.addFolder('Part Map');
  partMap.add guiState.partMap, 'segmentationThreshold', 0.0, 1.0;
  partMap.add guiState.partMap, 'effect', ['partMap', 'pixelation', 'blurBodyPart'];
  partMap.add guiState.partMap, 'opacity', 0.0, 1.0;
  partMap.add guiState.partMap, 'colorScale', Object.keys(partColorScales);
  partMap.on(\n      onChange(colorScale => {
        setShownPartColorScales(colorScale);
      }));
  gui.add guiState, 'showFps';
  on(\n    showFps => {
      if (showFps) {
        document.body.appendChild(stats.dom);
      } else {
        document.body.removeChild(stats.dom);
      }
    });

  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;
  }
}
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,
});

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 {
  personOrPersonPartSegmentation.allPoses.forEach(pose => {
    if (flipHorizontally) {
      pose = bodyPix.flipPoseHorizontal(pose, personOrPersonPartSegmentation.width);
    }
    drawKeypoints(pose.keypoints, 0.1, ctx);
    drawSkeleton(pose.keypoints, 0.1, ctx);
  });
}
}

async 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);
}

/**
 * Kicks off the
demo
 */
export async function bindPage() {
  // Load the BodyPix model weights with architecture 0.75
  await loadBodyPix();
  document.getElementById('loading').style.display = 'none';
  document.getElementById('main').style.display = 'inline-block';
  await loadVideo(guiState.camera);
  let cameras = await getVideoInputs();
  setupFPS();
  setupGui(cameras);
  segmentBodyInRealTime();
}

// kick off the demo
bindPage();

Found in path(s):
* /opt/cola/permits/1234600288_1638275149.74/0/tensorflow-models-zip/@tensorflow-models/body-
  pix/demos/dist/demos.ab0c720b.js.map

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That's all there is to it!
Here is a list of the main contributors to lm-sensors version 3.

* Frodo Looijaard
  Original author of libsensors, sensors-detect, sensors and isadump.
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Original author of sensord.
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  Configuration file converter.
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  Support for multiple configuration files in libsensors.

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1.382.1 Available under license:
amalgamate.py - Amalgamate C source and header files
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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
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+

```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]
```
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><p align="center"><i>Databases is <a href="https://github.com/encode/databases/blob/master/LICENSE.md">BSD licensed</a> code. Designed & built in Brighton, England.</i></p>

[sqalchemy-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
[aiomysql]: https://github.com/aio-libs/aiomysql
[aiosqlite]: https://github.com/jreese/aiosqlite

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[sanic]: https://github.com/huge-success/sanic
[responder]: https://github.com/kennethreitz/responder
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[tornado]: https://github.com/tornadoweb/tornado
[fastapi]: https://github.com/tiangolo/fastapi

Platform: UNKNOWN
Classifier: Development Status :: 3 - Alpha
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Classifier: Topic :: Internet :: WWW/HTTP
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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: psycopg2
Provides-Extra: mysql
Provides-Extra: mysql+asyncmy
Provides-Extra: sqlite
Provides-Extra: postgresql+aiopg

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1.385 urllib3 1.26.6-1.ph1
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1.387 spring-aspects 5.2.8.RELEASE
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  jar/org/springframework/retry/policy/SimpleRetryPolicy.java
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  jar/org/springframework/retry/stats/StatisticsListener.java
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  jar/org/springframework/retry/stats/DefaultRetryStatistics.java
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  jar/org/springframework/retry/stats/StatisticsRepository.java
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  jar/org/springframework/retry/policy/CircuitBreakerRetryPolicy.java
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* /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/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/database/sqlserver/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/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/database/DatabaseFactory.java
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- /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/database/redshift/RedshiftTable.java
- /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/database/DefaultExecutionStrategy.java
- /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/resource/NoopResourceProvider.java
- /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/parser/Token.java
- /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/parser/package-info.java
- /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/resolve/package-info.java
- /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/jdbc/package-info.java
- /opt/cola/permits/1100808595_1602883955.19/0/flyway-core-6-4-4-sources-jar/org/flywaydb/core/internal/resolver/java/FixedJavaMigrationResolver.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.jar/io/micrometer/core/instrument/internal/TimedScheduledExecutorService.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources.jar/io/micrometer/core/instrument/binder/jetty/InstrumentedQueuedThreadPool.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources.jar/io/micrometer/core/instrument/binder/jetty/JettyServerThreadPoolMetrics.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources.jar/io/micrometer/core/instrument/binder/jetty/JettyConnectionMetrics.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/mongodb/MongoMetricsConnectionPoolListener.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources.jar/io/micrometer/core/instrument/binder/jetty/JettyServerThreadPoolMetrics.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources.jar/io/micrometer/core/instrument/binder/jetty/JettyConnectionMetrics.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/validate/Validated.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/binder/http/package-info.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/binder/httpcomponents/HttpContextUtils.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/binder/httpcomponents/MicrometerHttpClientInterceptor.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/binder/http/HttpServletRequestTagsProvider.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/binder/http/HttpRequestTags.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/kafka/KafkaMetrics.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
jar/io/micrometer/core/instrument/binder/jetty/JettySslHandshakeMetrics.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/binder/jpa/HibernateQueryMetrics.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/jetty/JettyClientMetrics.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/cache/CacheMeterBinder.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/distribution/TimeWindowMax.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/binder/cache/CaffeineCacheMetrics.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/composite/CompositeLongTaskTimer.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/binder/hystrix/MicrometerMetricsPublisherCommand.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/DistributionSummary.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/distribution/pause/PauseDetector.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/internal/Mergeable.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/binder/system/fileDescriptorMetrics.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/package-info.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/Tags.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/Statistic.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/dropwizard/DropwizardMeterRegistry.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/package-info.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/Metrics.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/composite/CompositeDistributionSummary.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/lang/Nullable.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/binder/jvm/DiskSpaceMetrics.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/composite/CompositeGauge.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/push/package-info.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/step/StepTimer.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/logging/package-info.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/dropwizard/DropwizardFunctionTimer.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1.5.4-sources.jar/io/micrometer/core/instrument/composite/AbstractCompositeMeter.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1.5.4-sources.jar/io/micrometer/core/instrument/search/MeterNotFoundException.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1.5.4-sources.jar/io/micrometer/core/instrument/binder/system/UptimeMetrics.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1.5.4-sources.jar/io/micrometer/core/instrument/distribution/HistogramGauges.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1.5.4-sources.jar/io/micrometer/core/instrument/binder/MeterBinder.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1.5.4-sources.jar/io/micrometer/core/instrument/util/IOUtils.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1.5.4-sources.jar/io/micrometer/core/instrument/binder/hystrix/MicrometerMetricsPublisherThreadPool.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1.5.4-sources.jar/io/micrometer/core/instrument/binder/db/PostgreSQLDatabaseMetrics.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1.5.4-sources.jar/io/micrometer/core/instrument/noop/NoopDistributionSummary.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1.5.4-sources.jar/io/micrometer/core/instrument/config/MeterFilter.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1.5.4-sources.jar/io/micrometer/core/instrument/distribution/PercentileHistogramBuckets.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1.5.4-sources.jar/io/micrometer/core/instrument/system/ProcessorMetrics.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1.5.4-sources.jar/io/micrometer/core/instrument/distribution/ValueAtPercentile.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1.5.4-sources.jar/io/micrometer/core/instrument/distribution/DistributionStatisticConfig.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1.5.4-sources.jar/io/micrometer/core/instrument/FunctionCounter.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1.5.4-sources.jar/io/micrometer/core/instrument/Gauge.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1.5.4-sources.jar/io/micrometer/core/instrument/distribution/Histogram.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1.5.4-sources.jar/io/micrometer/core/instrument/config/MeterFilterReply.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1.5.4-sources.jar/io/micrometer/core/instrument/distribution/CountAtBucket.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1.5.4-sources.jar/io/micrometer/core/instrument/util/DoubleFormat.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1.5.4-sources.jar/io/micrometer/core/instrument/internal/TimedExecutor.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1.5.4-sources.jar/io/micrometer/core/instrument/cumulative/CumulativeDistributionSummary.java
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* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/util/StringUtils.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/noop/NoopFunctionTimer.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/step/StepCounter.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/binder/jvm/JvmMemoryMetrics.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/dropwizard/DropwizardTimer.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/composite/CompositeFunctionCounter.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/composite/CompositeCounter.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/dropwizard/DropwizardRate.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/search/Search.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/micrometer-core-1-5-4-sources-jar/io/micrometer/core/instrument/function/FunctionTimer.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/package-info.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/Slf4JLogger.java
* /opt/ws_local/PERMITS_SQL/1089949011_1600184760.1/0/micrometer-core-1-5-4-sources.jar/io/micrometer/core/util/internal/logging/InternalLogger.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/JdkLoggerFactory.java

1.397 ldns 1.7.1
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```
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# Provide generalized library-building support services.
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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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1.399 swagger-integration 2.1.9

1.399.1 Available under license:

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Manifest-Version: 1.0
Bundle-Description: swagger-integration
Automatic-Module-Name: io.swagger.v3.oas.integration
Bundle-License: "Apache License 2.0",link="http://www.apache.org/licenses/LICENSE-2.0.html"
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

Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Bundle-Developers: fehguy;email="fehguy@gmail.com";name="Tony Tam",web ron;email="webron@gmail.com";name="Ron Ratovsky"
url: https://github.com/swagger-api/swagger-core/modules/swagger-integration
mode: development
Bundle-Name: swagger-integration
Bundle-Version: 2.1.9
Created-By: Apache Maven 3.6.3
Build-Jdk: 1.8.0_282

Found in path(s):
* /opt/cola/permits/1165124366_1631831566.71/0/swagger-integration-2-1-9-jar/META-INF/MANIFEST.MF

1.400 ehcache-xml 3.8.1

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* /opt/cola/permits/1258059276_1643027393.71/0/ehcache-xml-3-8-1-sources-jar/org/ehcache/xml/BaseConfigParser.java
* /opt/cola/permits/1258059276_1643027393.71/0/ehcache-xml-3-8-1-sources-jar/org/ehcache/xml/service/OffHeapDiskStoreConfigurationParser.java
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1.401 expat 2.2.0

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1.402 libununistring 0.9.10 2

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1.406 ical4j 3.0.19

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1.407 docker-cli v19.03.5

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Protocol Buffers for Go with Gadgets

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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/* 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_nicstart() 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 work on the initial Linux DVB driver

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for his contributions to the dvb-net driver
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for CyberLogin for Linux which allows logging onto EON
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for the nxt2004 frontend driver

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for merging the nxt2002 and nxt2004 modules into a
single nxt200x frontend driver.

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jar/org/springframework/security/web/authentication/session/ConcurrentSessionControlAuthenticationStrategy.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/csrf/CookieCsrfTokenRepository.java
* /opt/ws_local/PERMITS_SQL/1081949352_1599626384.45/0/spring-security-web-5-3-4-release-sources.jar/org/springframework/security/web/csrf/LazyCsrfTokenRepository.java

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1.416 libjpeg 8d
1.416.1 Available under license :
This is Debian's prepackaged version of the `jpeg library' by the Independent JPEG Group.

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

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

Current Debian maintainer is Bill Allombert <ballombe@debian.org>.

LEGAL ISSUES [ from README supplied with source - MM ]

============
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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.

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1.417 libjpeg 6b
1.417.1 Notifications :
This software is based in part on the work of the Independent JPEG Group.

1.417.2 Available under license :
The Independent JPEG Group's JPEG software

README for release 6b of 27-Mar-1998

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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
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This file contains the following sections:

OVERVIEW General description of JPEG and the IJG software.
LEGAL ISSUES Copyright, lack of warranty, terms of distribution.
REFERENCES Where to learn more about JPEG.
ARCHIVE LOCATIONS Where to find newer versions of this software.
RELATED SOFTWARE Other stuff you should get.
FILE FORMAT WARS Software *not* to get.
TO DO Plans for future IJG releases.

Other documentation files in the distribution are:

User documentation:
install.doc How to configure and install the IJG software.
usage.doc Usage instructions for cjpeg, djpeg, jpegtran, rdjpgcom, and wrjpgcom.
*.1 Unix-style man pages for programs (same info as usage.doc).
wizard.doc Advanced usage instructions for JPEG wizards only.
change.log Version-to-version change highlights.

Programmer and internal documentation:
libjpeg.doc How to use the JPEG library in your own programs.
example.c Sample code for calling the JPEG library.
structure.doc Overview of the JPEG library's internal structure.
filelist.doc Road map of IJG files.
coderules.doc Coding style rules --- please read if you contribute code.

Please read at least the files install.doc and usage.doc. Useful information can also be found in the JPEG FAQ (Frequently Asked Questions) article. See ARCHIVE LOCATIONS below to find out where to obtain the FAQ article.

If you want to understand how the JPEG code works, we suggest reading one or more of the REFERENCES, then looking at the documentation files (in roughly the order listed) before diving into the code.

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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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.

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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:

Literture 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

ARCHIVE LOCATIONS
=================
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
If you don't have Web or FTP access, send e-mail to mail-server@rtfm.mit.edu with body
send usenet/news.answers/jpeg-faq/part1
send usenet/news.answers/jpeg-faq/part2

RELATED SOFTWARE
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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.

1.418 ipmi-tool 1.8.18
1.418.1 Available under license:

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1.419 lvm2 2.02.79
1.419.1 Available under license :

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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
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@c Local Variables:
@c ispell-local-pdict: "ispell-dict"
@c End:

1.421 packaging 20.4

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* /opt/cola/permits/1129909879_1612394249.98/0/flyway-core-7-3-1-sources-jar/org/flywaydb/core/internal/configuration/package-info.java
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* /opt/cola/permits/1129909879_1612394249.98/0/flyway-core-7-3-1-sources-jar/org/flywaydb/core/internal/scanner/classpath/ClassPathScanner.java
* /opt/cola/permits/1129909879_1612394249.98/0/flyway-core-7-3-1-sources-jar/org/flywaydb/core/internal/database/cockroachdb/CockroachDBConnection.java
* /opt/cola/permits/1129909879_1612394249.98/0/flyway-core-7-3-1-sources-jar/org/flywaydb/core/internal/database/base/SchemaObject.java
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* /opt/cola/permits/1129909879_1612394249.98/0/flyway-core-7-3-1-sources.jar/org/flywaydb/core/internal/logging/slf4j/Slf4jLog.java
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* /opt/cola/permits/1129909879_1612394249.98/0/flyway-core-7-3-1-sources.jar/org/flywaydb/core/core/internal/exception/FlywayDbUpgradeRequiredException.java
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* /opt/cola/permits/1129909879_1612394249.98/0/flyway-core-7-3-1-sources-jar/org/flywaydb/core/core/InformixTable.java
* /opt/cola/permits/1129909879_1612394249.98/0/flyway-core-7-3-1-sources-jar/org/flywaydb/core/core/DerbyDatabaseType.java
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jar/org/flywaydb/core/api/resolver/ResolvedMigration.java
* /opt/cola/permits/1129909879_1612394249.98/0/flyway-core-7-3-1-sources.jar/org/flywaydb/core/internal/database/postgresql/PostgreSQLCopyParsedStatement.java
* /opt/cola/permits/1129909879_1612394249.98/0/flyway-core-7-3-1-sources.jar/org/flywaydb/core/internal/database/db2/DB2Parser.java
* /opt/cola/permits/1129909879_1612394249.98/0/flyway-core-7-3-1-sources.jar/org/flywaydb/core/internal/database/firebird/FirebirdTable.java
* /opt/cola/permits/1129909879_1612394249.98/0/flyway-core-7-3-1-sources.jar/org/flywaydb/core/internal/database/firebird/FirebirdDatabase.java
* /opt/cola/permits/1129909879_1612394249.98/0/flyway-core-7-3-1-sources.jar/org/flywaydb/core/internal/database/oracle/OracleConnection.java
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* /opt/cola/permits/1129909879_1612394249.98/0/flyway-core-7-3-1-sources.jar/org/flywaydb/core/internal/database/db2/DB2DatabaseType.java
* /opt/cola/permits/1129909879_1612394249.98/0/flyway-core-7-3-1-sources.jar/org/flywaydb/core/internal/database/sqlserver/synapse/SynapseDatabase.java
* /opt/cola/permits/1129909879_1612394249.98/0/flyway-core-7-3-1-sources.jar/org/flywaydb/core/internal/database/postgresql/PostgreSQLType.java
* /opt/cola/permits/1129909879_1612394249.98/0/flyway-core-7-3-1-sources.jar/org/flywaydb/core/internal/package-info.java
* /opt/cola/permits/1129909879_1612394249.98/0/flyway-core-7-3-1-sources.jar/org/flywaydb/core/internal/resource/ResourceType.java
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  * /opt/cola/permits/1135888174_1613626055.99/0/spring-aop-5-2-8-release-sources-1-jar/org/springframework/aop/framework/JdkDynamicAopProxy.java
  * /opt/cola/permits/1135888174_1613626055.99/0/spring-aop-5-2-8-release-sources-1-jar/org/springframework/aop/framework/autoproxy/InfrastructureAdvisorAutoProxyCreator.java
jar/org/springframework/aop/support/AopUtils.java
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jar/springframework/aop/aspectj/TypePatternClassFilter.java
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jar/org/springframework/context/ApplicationObjectSupport.java
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jar/org/springframework/scripting/config/ScriptingDefaultsParser.java
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jar/org/springframework/context/index/CandidateComponentsIndexLoader.java
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jar/org/springframework/context/ApplicationObjectSupport.java
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/**
 * [@link FactoryBean] that obtains a WebSphere [@link javax.management.MBeanServer] reference through WebSphere's proprietary [@code AdminServiceFactory] API,
 * available on WebSphere 5.1 and higher.
 *
 * <p>Exposes the [@code MBeanServer] for bean references.
 *
 * <p>This [@code FactoryBean] is a direct alternative to [@link MBeanServerFactoryBean],
 * which uses standard JMX 1.2 API to access the platform's [@link MBeanServer].
 *
 * <p>See the javadocs for WebSphere's
 * and
 *
 * @author Juergen Hoeller
 * @author Rob Harrop
 * @since 2.0.3
 * @see javax.management.MBeanServer
 * @see MBeanServerFactoryBean
 */

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* /opt/ cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/context/index/CandidateComponentsIndex.java
* /opt/ cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/context/annotation/ScannedGenericBeanDefinition.java
* /opt/ cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/context/annotation/ImportSelector.java

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jar/org/springframework/jmx/export/UnableToRegisterMBeanException.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/ui/context/HierarchicalThemeSource.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/jmx/MBeanServerNotFoundException.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/scheduling/support/DelegatingErrorHandlingRunnable.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/remoting/support/RemoteInvocationBasedAccessor.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/context/ApplicationContextAware.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/ejb/config/JndiLookupBeanDefinitionParser.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/context/NoSuchMessageException.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/jmx/JmxException.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/remoting/rmi/RmiClientInterceptor.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/validation/BindingErrorProcessor.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/scheduling/Trigger.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/remoting/rmi/CodebaseAwareObjectInputStream.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/jmx/export/assembler/MBeanInfoAssembler.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/jmx/access/InvocationFailureException.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/context/annotation/AnnotationConfigBeanDefinitionParser.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/remoting/rmi/RmiBasedExporter.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/framework/format/FormatterRegistrar.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/ui/context/support/UiApplicationContextUtils.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/framework/context/event/ContextClosedEvent.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/framework/context/event/ContextStartedEvent.java
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* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-
  jar/org/springframework/remoting/support/RemoteInvocationFactory.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-
  jar/org/springframework/jmx/export/metadata/ManagedOperationParameter.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-
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* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/context/event/EventPublicationInterceptor.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/format/datetime/joda/JodaTimeFormatterRegistrar.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/context/support/DelegatingMessageSource.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/context/event/SourceFilteringListener.java
jar/org/springframework/cache/interceptor/SimpleCacheErrorHandler.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/context/expression/BeanFactoryAccessor.java
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* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/scheduling/config/ScheduledTaskHolder.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/validation/validation/beanvalidation/CustomValidatorBean.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/jndi/jndi/TypeMismatchNamingException.java
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* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/scheduling/annotation/AnnotationAsyncExecutionInterceptor.java
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* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/validation/support/BindingAwareModelMap.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/remoting/support/RemoteExporter.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/scheduling/config/FixedDelayTask.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/validation/DefaultMessageCodesResolver.java
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* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/context/annotation/AspectJAutoProxyRegistrar.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/scheduling/config/datetime/DateTimeFormatterFactoryBean.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/jmx/export/metadata/ManagedMetric.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/validation/support/EmbeddedValueResolutionSupport.java
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jar/org/springframework/ui/ExtendedModelMap.java
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* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-jar/org/springframework/scheduling/config/ContextLifecycleScheduledTaskRegistrar.java
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 */
/**
 * Indicates that a component is only eligible for registration when all
 * { [@linkplain #value specified conditions] match.
 *
 * <p>A <em>condition</em> is any state that can be determined programatically
 * 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>
 */

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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.

**NOTE**: 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 `@Inherited`. Furthermore, any custom composed annotation that is meta-annotated with `@Conditional` must not be declared as `@Inherited`.

@since 4.0
@see Condition
* @author Stephane Nicoll
* @since 4.1
*/

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* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/context/i18n/TimeZoneAwareLocaleContext.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/context/i18n/TimeZoneAwareLocaleContext.java
jar/org/springframework/format/datetime/joda/LocalTimeParser.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1-
jar/org/springframework/format/datetime/joda/DateTimeParser.java
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jar/org/springframework/context/support/MessageSourceResourceBundle.java
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* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/context/support/SimpleThreadScope.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/jndi/support/SimpleJndiBeanFactory.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/jmx/support/ConnectorServerFactoryBean.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/context/event/ApplicationListenerMethodAdapter.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/context/event/SimpleApplicationEventMulticaster.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/context/ApplicationEventPublisher.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/jmx/export/annotation/AnnotationJmxAttributeSource.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/context/annotation/ClassPathBeanDefinitionScanner.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/context/support/ApplicationContextAwareProcessor.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/context/support/AnnotationConfigRegistry.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/context/support/ResourceBundleMessageSource.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/context/cache/Cache.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/context/event/ApplicationEventMulticaster.java

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* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/context/support/ReloadableResourceBundleMessageSource.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/jmx/access/MBeanClientInterceptor.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/context/event/EventListenerMethodProcessor.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/context/event/ResourceLoaderAware.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/cache/annotation/SpringCacheAnnotationParser.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/jmx/support/MBeanServerConnectionFactoryBean.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/jmx/support/MBeanServerFactoryBean.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/validation/DataBinder.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/context/event/EventExpressionEvaluator.java
* /opt/cola/permits/1135888116_1613626154.75/0/spring-context-5-2-8-release-sources-1.jar/org/springframework/context/support/GenericApplicationContextExtensions.kt
1.430 jakarta xml bind api 2.3.3
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**1.433 ipmi-tool 1.8.18**

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1.434 systemd 245.4-4ubuntu3.15

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1.435 python-multipart 0.0.5

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1.436 libmnl 1.0.3

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30 ctime=1338052482.808834269

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1.437 libpng 1.6.37

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---------------------------------------------------------------------------

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image/x-portable-bitmappbm

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image/x-portable-anymappnm

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# RapidTransit compressed audio (Fast Man)
application/fastmanlcc
# Realaudio (Progressive Networks)
application/x-pn-realaudio ram
# MIDI music data
x-music/x-midi mid
# Koan music data (SSeyo)
application/vnd.koan skp
# Speech synthesis data (MVP Solutions)
text/x-speechtalk

# VIDEO TYPES

# MPEG video
video/mpegmpeg mpg mpe
# MPEG-2 video
video/mpeg-2mpv2 mp2v
# Macintosh Quicktime
video/quicktimeqt mov
# Microsoft video
video/x-msvideoavi
# SGI Movie format
video/x-sgi-moviemovie
# VDOlive streaming video (VDoNet)
video/vdovdo
# Vivo streaming video (Vivo software)
video/vnd.vivoviv

# SPECIAL HTTP/WEB APPLICATION TYPES

# Proxy autoconfiguration (Netscape browsers)
application/x-ns-proxy-autoconfigpac
# Netscape Cooltalk chat data (Netscape)
x-conference/x-cooltalkice

# TEXT-RELATED

# PostScript
text/ps
application/postscript
text/eps
# Microsoft Rich Text Format
text/rtf
application/rtf
# Adobe Acrobat PDF
text/pdf
application/pdf
# Maker Interchange Format (FrameMaker)
text/vnd.mif
application/vnd.mif
# Troff document
text/troff
text/tr
application/x-troff
# Troff document with MAN macros
text/roff
application/x-troff-man
# Troff document with ME macros
text/meme
application/x-troff-me
# Troff document with MS macros
text/ms
application/x-troff-ms
# LaTeX document
text/latex
application/x-latex
# Tex/LateX document
text/tex
application/x-tex
# GNU TexInfo document
text/texinfo
application/x-texinfo
# TeX dvi format
text/dvi
application/x-dvi
# MS word document
text/doc
application/msword
# Office Document Architecture
application/oda
# Envoy Document
application/envoy

# ARCHIVE/COMPRESSED ARCHIVES

# Gnu tar format
text/tar
application/x-gtar
# 4.3BSD tar format
text/tar
application/x-tar
# POSIX tar format
text/ustar
application/x-ustar
# Old CPIO format
text/cpio
application/x-cpio
# POSIX CPIO format
text/cpio
application/x-cpio
# UNIX sh shell archive
application/x-shar
# DOS/PC - Pkzipped archive
application/zip
# Macintosh Binhexed archive
application/mac-binhex40
# Macintosh Stuffit Archive
application/x-stuffitsit
# Fractal Image Format
application/fractalsfif
# "Binary UUencoded"
application/octet-stream
# PC executable
application/octet-stream
# "WAIS "sources"
application/x-wais-sourcessrc
# NCSA HDF data format
application/hdf

# DOWNLOADABLE PROGRAM/SCRIPTS

# Javascript program
text/javascript
# UNIX bourne shell program
application/x-sh
# UNIX c-shell program
application/x-csh
# Perl program
application/x-perl
# Tcl (Tool Control Language) program
application/x-tcl

# ANIMATION/MULTIMEDIA

# FutureSplash vector animation (FutureWave)
application/futuresplash
# mBED multimedia data (mBED)
application/mbedlet
# PowerMedia multimedia (RadMedia)
application/x-rad-powermedia

# PRESENTATION

# PowerPoint presentation (Microsoft)
application/mspowerpoint
# ASAP WordPower (Software Publishing Corp.)
application/x-asap
# Astound Web Player multimedia data (GoldDisk)
application/astound
# SPECIAL EMBEDDED OBJECT

# OLE script e.g. Visual Basic (Ncompass)
application/x-olescriptaxs

# OLE Object (Microsoft/NCompass)
application/x-oleobjectods

# OpenScape OLE/OCX objects (Business@Web)
x-form/x-openscapeopp

# Visual Basic objects (Amara)
application/x-webbasicwba

# Specialized data entry forms (Alpha Software)
application/x-alpha-formfrm

# client-server objects (Wayfarer Communications)
x-script/x-wfxclientwfx

# GENERAL APPLICATIONS

# Undefined binary data (often executable progs)
application/octet-stream exe com

# Pointcast news data (Pointcast)
application/x-pcnpcn

# Excel spreadsheet (Microsoft)
application/vnd.ms-excelxls

# PowerPoint (Microsoft)
application/vnd.ms-powerpointppt

# Microsoft Project (Microsoft)
application/vnd.ms-projectmpp

# SourceView document (Dataware Electronics)
application/vnd.svd svdsvd

# Net Install - software install (20/20 Software)
application/x-net-installins

# Carbon Copy - remote control/access (Microcom)
application/ccvccv

# Spreadsheets (Visual Components)
workbook/formulaonevts

# 2D/3D DATA/VIRTUAL REALITY TYPES

# VRML data file
x-world/x-vrmlwrl vrml

# WIRL - VRML data (VREAM)
x-world/x-vreamvrrw

# Play3D 3d scene data (Play3D)
application/x-p3dp3d

# Viscape Interactive 3d world data (Superscape)
x-world/x-svrsvr

# WebActive 3d data (Plastic Thought)
x-world/x-wvrwvr
# QuickDraw3D scene data (Apple)
x-world/x-3dmf3dmf

# SCIENTIFIC/MATH/CAD TYPES

# Mathematica notebook
application/mathematica
# Computational meshes for numerical simulations
x-model/x-meshmsh
# Vis5D 5-dimensional data
application/vis5dv5d
# IGES models -- CAD/CAM (CGM) data
application/igesigs
# Autocad WHIP vector drawings
drawing/x-dwfdwf

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/ opt/ cola/ permits/ 1136838417_1613931142. 36/ 0/ spring- context- support- 5- 2- 8- release- sources- jar/ org/ springframework/ scheduling/ quartz/ JobMethodInvocationFailedException. java

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* /opt/cola/permits/1136838417_1613931142.36/0/spring-context-support-5-2-8-release-sources.jar/org/springframework/cache/jcache/interceptor/DefaultCacheKeyInvocationContext.java
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* /opt/cola/permits/1136838417_1613931142.36/0/spring-context-support-5-2-8-release-sources.jar/org/springframework/scheduling/quartz/SchedulerFactoryBean.java
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* /opt/cola/permits/1136838417_1613931142.36/0/spring-context-support-5-2-8-release-sources.jar/org/springframework/cache/jcache/interceptor/JCacheInterceptor.java
* /opt/cola/permits/1136838417_1613931142.36/0/spring-context-support-5-2-8-release-sources.jar/org/springframework/cache/jcache/interceptor/AnnotationJCacheOperationSource.java
* /opt/cola/permits/1136838417_1613931142.36/0/spring-context-support-5-2-8-release-sources.jar/org/springframework/cache/jcache/interceptor/AbstractJCacheKeyOperation.java
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* /opt/cola/permits/1136838417_1613931142.36/0/spring-context-support-5-2-8-release-sources.jar/org/springframework/scheduling/quartz/MethodInvokingJobDetailFactoryBean.java
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1.439 go 1.8

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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/debug/SecurityDebugBeanFactoryPostProcessor.java

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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/web/servlet/session/SessionConcurrencyDsl.kt
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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/http/OAuth2ClientBeanDefinitionParser.java
- /opt/ws_local/PERMITS_SQL/1081949386_1599626452.65/0/spring-security-config-5-3-4-release-sources-jar/org/springframework/security/config/web/server/ServerHttpSecurity.java
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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/web/servlet.headers/RefererrerPolicyDsl.kt
- /opt/ws_local/PERMITS_SQL/1081949386_1599626452.65/0/spring-security-config-5-3-4-release-sources-jar/org/springframework/security/config/web/servlet.headers/XssProtectionConfigDsl.kt
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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/web/servlet/SecurityMarker.kt
- /opt/ws_local/PERMITS_SQL/1081949386_1599626452.65/0/spring-security-config-5-3-4-release-sources-jar/org/springframework/security/config/web/servlet/oauth2/resourceserver/JwtDsl.kt
- /opt/ws_local/PERMITS_SQL/1081949386_1599626452.65/0/spring-security-config-5-3-4-release-sources-jar/org/springframework/security/config/web/servlet/oauth2/resourceserver/OpaqueTokenDsl.kt
- /opt/ws_local/PERMITS_SQL/1081949386_1599626452.65/0/spring-security-config-5-3-4-release-sources-jar/org/springframework/security/config/web/servlet/oauth2/login/RedirectionEndpointDsl.kt
- /opt/ws_local/PERMITS_SQL/1081949386_1599626452.65/0/spring-security-config-5-3-4-release-sources-jar/org/springframework/security/config/web/servlet/oauth2/login/UserInfoEndpointDsl.kt
- /opt/ws_local/PERMITS_SQL/1081949386_1599626452.65/0/spring-security-config-5-3-4-release-sources-jar/org/springframework/security/config/web/servlet/oauth2/login/TokenEndpointDsl.kt
- /opt/ws_local/PERMITS_SQL/1081949386_1599626452.65/0/spring-security-config-5-3-4-release-sources-jar/org/springframework/security/config/web/servlet/session/SessionFixationDsl.kt
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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/web/servlet/oauth2/login/RedirectEndpointDsl.kt
- /opt/ws_local/PERMITS_SQL/1081949386_1599626452.65/0/spring-security-config-5-3-4-release-sources-jar/org/springframework/security/config/web/servlet/oauth2/login/UserInfoEndpointDsl.kt
- /opt/ws_local/PERMITS_SQL/1081949386_1599626452.65/0/spring-security-config-5-3-4-release-sources-jar/org/springframework/security/config/web/servlet/oauth2/login/TokenEndpointDsl.kt
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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/web/servlet/SessionFixationDsl.kt
- /opt/ws_local/PERMITS_SQL/1081949386_1599626452.65/0/spring-security-config-5-3-4-release-sources-jar/org/springframework/security/config/web/servlet/client/AuthorizationCodeGrantDsl.kt
- /opt/ws_local/PERMITS_SQL/1081949386_1599626452.65/0/spring-security-config-5-3-4-release-sources-jar/org/springframework/security/config/http/SecurityFilters.java
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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/annotation/rsocket/EnableRSocketSecurity.java
* /opt/ws_local/PERMITS_SQL/1081949386_1599626452.65/0/spring-security-config-5-3-4-release-sources.jar/org/springframework/security/config/annotation/rsocket/PayloadInterceptorOrder.java

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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/ldap/LdapUserServiceBeanDefinitionParser.java
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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/annotation/web/configurers/DefaultLoginPageConfigurer.java
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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/annotation/method/MethodSecurityMetadataSourceBeanDefinitionParser.java
* /opt/ws_local/PERMITS_SQL/1081949386_1599626452.65/0/spring-security-config-5-3-4-release-sources-jar/org/springframework/security/config/core/GrantedAuthorityDefaults.java
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* /opt/ws_local/PERMITS_SQL/1081949386_1599626452.65/0/spring-security-config-5-3-4-release-sources-
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figurator.java
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Julian Seward, Cambridge, UK.
jseward@bzip.org
bzip2/libbzip2 version 1.0.4 of 20 December 2006
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GNU LIBICON(53,635),(965,956)

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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http://www.gnu.org/software/libiconv/

Bug reports to
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<bug-gnu-libiconv@gnu.org>

Bruno Haible <bruno@clisp.org>

1.451 jackson-module-parameter-names

2.11.2

1.451.1 Available under license :
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1.452 gzip 1.10 0ubuntu4

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1.453 e2fsprogs 1.43.1

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*/
Index: tdba/tdb.c
===================================================================
--- tdba.orig/tdb.c
+++ tdba/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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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 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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# 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:$ (BSDLIB)

$(BSDLIB): $(OBJ)
(cd pic; ld -Bshareable -o $(BSDLIB) $(LDFLAGS_SHLIB) $(OBJ))
$(RM) -f ../$(BSDLIB)

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

install-strip: install

install-shlibs-strip: install-shlibs

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

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:
tsx-11.mit.edu:/pub/linux/packages/ext2fs/

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Gadi Oxman, August 1995

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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
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/CDATA.java
* /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/io/DOMReader.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j/QName.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j/VisitorSupport.java
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* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/io/ElementStack.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/node/NodeFilter.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/dom/XPathException.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/tree/FlyweightText.java
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* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/dtd/ExternalEntityDecl.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/swing/XMLTableDefinition.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/io/SAXEventWriter.java
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* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/datatype/NamedTypeResolver.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/tree/SingleIterator.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/dom/DOMAttribute.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/rule/RuleManager.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/tree/DefaultElement.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/dom/DOMElement.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/rule/RuleSet.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/Branch.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/Text.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/io/DOMDocumentResult.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/io/DispatchHandler.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/io/SAXModifyContentHandler.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/util/AttributeHelper.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/io/DOMSAXContentHandler.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/dom/DOMElement.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/io/JAXPHelper.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/io/JAXPHelper.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/Element.java

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* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/tree/SingleIterator.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/dom/DOMAttribute.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/rule/RuleManager.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/tree/DefaultElement.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/dom/DOMElement.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/rule/RuleSet.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/Branch.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/Text.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/io/DOMDocumentResult.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/io/DispatchHandler.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/io/SAXModifyContentHandler.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/util/AttributeHelper.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/io/DOMSAXContentHandler.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/dom/DOMElement.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/io/JAXPHelper.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/io/JAXPHelper.java
* /opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/Element.java
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*/opt/ws_local/PERMITS_SQL/1034543185_1588830303.8/0/dom4j-2-1-3-sources-jar/org/dom4j/DocumentHelper.java
1.455 springdoc-openapi-ui 1.5.9

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1.456 icu 65
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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
   SHAREDLIBCPPFLAGS = -DPI

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

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1.462 rrule 2.6.8

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1.464 xorg-randr 1.5.0

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1.467 python-requests 2.22.0

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1.468 libvmtools 9.4.0.25793

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 *
 * Author: Adam Dunkels <adam@sics.se>
 *
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**1.470 ffmpeg 4.3.1**

**1.470.1 Available under license:**

```
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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/tex2pod.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_fspp.c`
  - `vf_histeq.c`
  - `vf_hqdn3d.c`
  - `vf_kerndeint.c`
- `vf_lensfun.c` (GPL version 3 or later)
- `vf_mcddeint.c`
- `vf_mpdecimate.c`
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- `vf_pp7.c`
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- `vf_repeatfields.c`
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- `vf_spp.c`
- `vf_stereo3d.c`
- `vf_super2xsai.c`
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- `vf_uspp.c`
- `vf_vaguedenoiser.c`
- `vsrc_mptestsrc.c`

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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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1.473 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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1.474 libpcap 1.7.4

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1.475 bzip2 1.0.6

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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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   libb2.dll test program.
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   usage: minibz2 [-d] [-{1,2,..9}] [[srcfilename] destfilename]
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