

INSTALLING REQUIRED SOFTWARE

First, prepare the “javagaming” folder:

1. Download the `javagaming.zip` folder available at the “Home → Handouts” section of Canvas.
2. Unzip the folder. It contains the RAGE, JBullet, JInput, and vecmath libraries.
3. Copy the entire folder to a preferred permanent location. In 5029, this folder is at the root of `c`:
4. There are four files in this folder that need to be added to your CLASSPATH:

<code>ray.jar</code>	(inside of the “javagaming\rage165” folder)
<code>jbullet.jar</code>	(inside of the “javagaming\jbullet” folder)
<code>jinput.jar</code>	(inside of the “javagaming\jinput” folder)
<code>vecmath.jar</code>	(inside of the “javagaming\vecmath” folder)

Next, install JOGL:

1. Install latest release of Java SE Development Kit (**JDK**) **version 8** (release 1.8.0_201) which is freely available at:
<http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>
2. Go to <http://jogamp.org>, the open-source community website that hosts JOGL. In the “Builds/Downloads” section, under “Current”, click on **[zip]**. This displays the latest stable JOGL files in a folder named `/deployment/jogamp-current/archive`. Note: there are also more recent versions of JOGL available under other links, but these are not necessarily stable.
3. Download each of the following:

<code>jogamp-all-platforms.7z</code>
<code>jogl-javadoc.7z</code>

Note that the folder also contains files for JOCL and JOAL; be sure to download the **JOGL** files.
4. Inside your “javagaming” folder, add another folder named “jogl”. Then, unzip both of the files downloaded in the previous step, into your new “javagaming/jogl” folder.
5. The unzipped **jogamp-all-platforms** file contains a folder named “jar”. In this **jar** folder you will find two important files: “`jogl-all.jar`” and “`gluegen-rt.jar`”. Add the full path name of each of these two files to your **CLASSPATH** environment variable.
6. Several of the libraries in the javagaming folder include javadocs that you should bookmark.

Compiling and running a RAGE program:

1. Download the default RAGE assets folder named “assets.zip” available at the “Home → Handouts” section of Canvas. You will need to place this folder in the folder from which you launch your RAGE program (as included in the example program “DolphinClick” mentioned below). Any assets your program requires should be placed in the appropriate sub-folder.
2. Download the example program “DolphinClick” available at the “Home → Handouts” section of Canvas. If you did all of the above installation steps properly, it should be possible to compile the sample program by running the “compile.bat” batch file, and then run it with the “run.bat” batch file.

Note: If you get the following error message: **no jinput-raw_64 in java.library.path**, then it means that RAGE was unable to find the jinput DLL. You can likely fix this by adding **C:\javagaming\jinput\lib** to your PATH variable. If you still get the error, it could be because one of the earlier items in your PATH are invalid (which causes the search to terminate before reaching the jinput entry). If you aren't sure which one is invalid, move the jinput entry earlier in the PATH list.

Alternatively, you could copy the entire "javagaming" folder one of the RVR-5029 lab machines, onto your machine, and then add all of the CLASSPATH entries described above.

Finding tech tips:

Tech tips that provide troubleshooting hints, addendums, and discoveries that are made throughout the semester are posted at the "Pages" section of Canvas.