

Setup of JOGL in Eclipse

3D Computer Graphics

Prerequisites

This tutorial assumes you have already set up

1. Java Platform, Standard Edition Development Kit (JDK)
2. Eclipse as an Integrated Development Environment (IDE)

If not, download and install the latest JDK and Eclipse IDE from

<http://www.oracle.com/technetwork/java/javase/downloads/index.html>

and

<http://www.eclipse.org/downloads/>

respectively.

Setup of a project using JOGL in Eclipse

Import the project into Eclipse

1. Open Eclipse.
2. Click **File > Import > General > Existing Projects into Workspace**.
3. Click **Select archive file:** and browse for the file `3DCG_Lab1.jar`.
4. Click **Open** and **Finish**.

The `src` package contains source code written in Java which makes use of Java OpenGL (JOGL). JOGL is a wrapper library which allows OpenGL to be used in the Java programming language. A lot of compiler errors are present in the imported project because you have not specified yet where Eclipse can find JOGL to compile the source code successfully.

Add JOGL as a user library in Eclipse

1. Download the JOGL's zip file for your operating system from

<http://download.java.net/media/jogl/builds/archive/jsr-231-2.0-beta10/>

2. Unzip this zip file into a directory of your choice, e.g. the **workspace** directory in which you imported the project.
3. Right-mouse click (or double-click) on the name of the imported project in the Package Explorer in Eclipse and select **Properties**.
4. Select **Build Path > Add Libraries....**
5. Select **User Library > Next > User Libraries... > New....**
6. Typ **jogl-2.0** as User Library name and click **OK**.
7. Make sure the user library **jogl-2.0** is selected and click **Add JARs**.
8. Browse to the **lib** folder in the unzipped jogl folder, select the following four files:
 - (a) **gluegen-rt.jar**,
 - (b) **jogl.all.jar**,
 - (c) **nativewindow.all.jar**,
 - (d) **newt.all.jar**and select **Open**.
9. Expand the **jogl.all.jar** node in the **User Libraries** window.
10. Click **Native library location: (None) > Edit > External Folder**, select the **lib** folder in the unzipped jogl folder and click **OK** (three times).
11. Make sure **jogl-2.0** is selected in the **User Library** window so that it is added to the classpath and click **Finish**.

If you carried out the above steps successfully, all compiler errors should disappear and you should be able to run **App1.java** in the **src/app1** package of the imported project. If you get an **UnsatisfiedLinkError**, this is most likely because you downloaded the wrong JOGL's zip file for your system. If you get a nicely coloured figure on your screen, you know your system is set up for the next lab session...