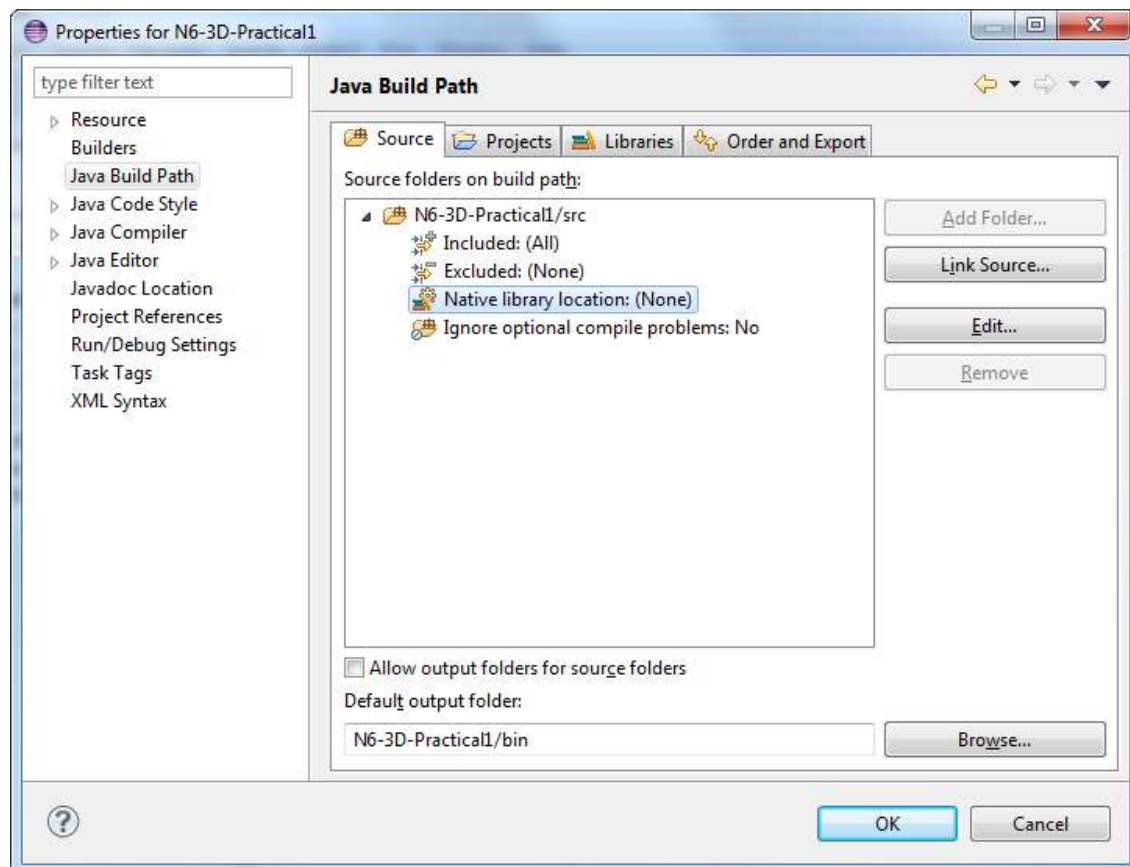


## Enabling Java3D Libraries in Eclipse

The “Supplied Code.zip” file on the module’s Canvas Practicals page (and also the network share \\wsv\CSCU9N6\Code\3D) has a lib directory that contains 3 Java archive (JAR) files and a dynamic link library (DLL). We need to use these in our projects to enable Java3D to work. To use them for a particular project, use the Windows file explorer to copy the JAR and DLL files in the above directory to the top level of your project directory. Now go into Eclipse, select your project and refresh its contents (either by selecting the project, right clicking and selecting *Refresh* or by using the *F5* key). The JAR and DLL files should then appear at the top level of your project.

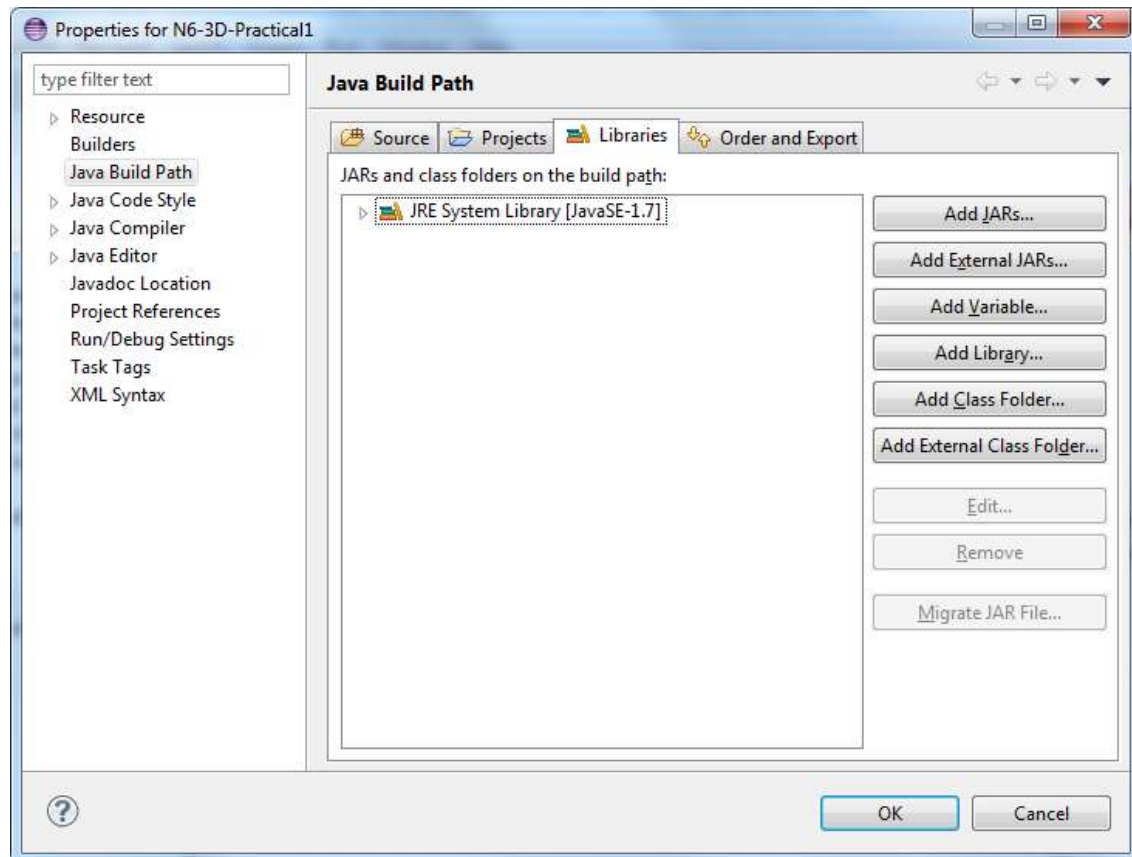
Ensure that your project is still selected in Eclipse’s Package Explorer (the window pane on the left ) then select the menu option Project->Properties. A Properties dialog should appear and you should see a list of various configuration options displayed in a pane on the left. Select the *Java Build Path* option from this list, ensure the *Source* tab is selected from the set of tabs on the right and then expand the yellow folder in the hierarchy pane that is contained in the Source tab. If you have followed these steps correctly, you should see a dialog similar to the following:



Now select the *Native library location* option and click on the *Edit* button on the right. This will present a dialog asking you to locate a native library (in our case it is the DLL file). Click on the *Workspace* button. This will present you with a new dialog showing all the current projects in your workspace. Select the top level of the 3D project you are currently working on (for example your

current 3D practical) and press OK. You should be back at the Native Library Folder Configuration dialog with your specific project selected in it. Now click on the OK button to return to the *Project Properties* dialog. The *Native library location* should now have your project name associated with it.

Our next task is to add the 3D JAR files that we need. Select the *Libraries* tab in *Java Build Path* and click the *Add JARs* button.



You should see your current project listed in the dialog that appears. Expand the project name so that you can see its contents and select the JAR files (use the CTRL key with the mouse to select individual files). Once the relevant files are selected, click the OK key. You should now see the additional JAR files listed alongside the JRE System Library entry. Click OK to close the *Properties* dialog and then run your project to check if the relevant files are now linked properly.

Note that you can use the above process to add any JAR files that your project needs to run and you will find that it is quite common to use this last step to add additional libraries to a project in Eclipse.