

Using Eclipse

This provides an overview of using Eclipse for Java development. Be sure to have downloaded the latest version of the JDK for your appropriate operating system.

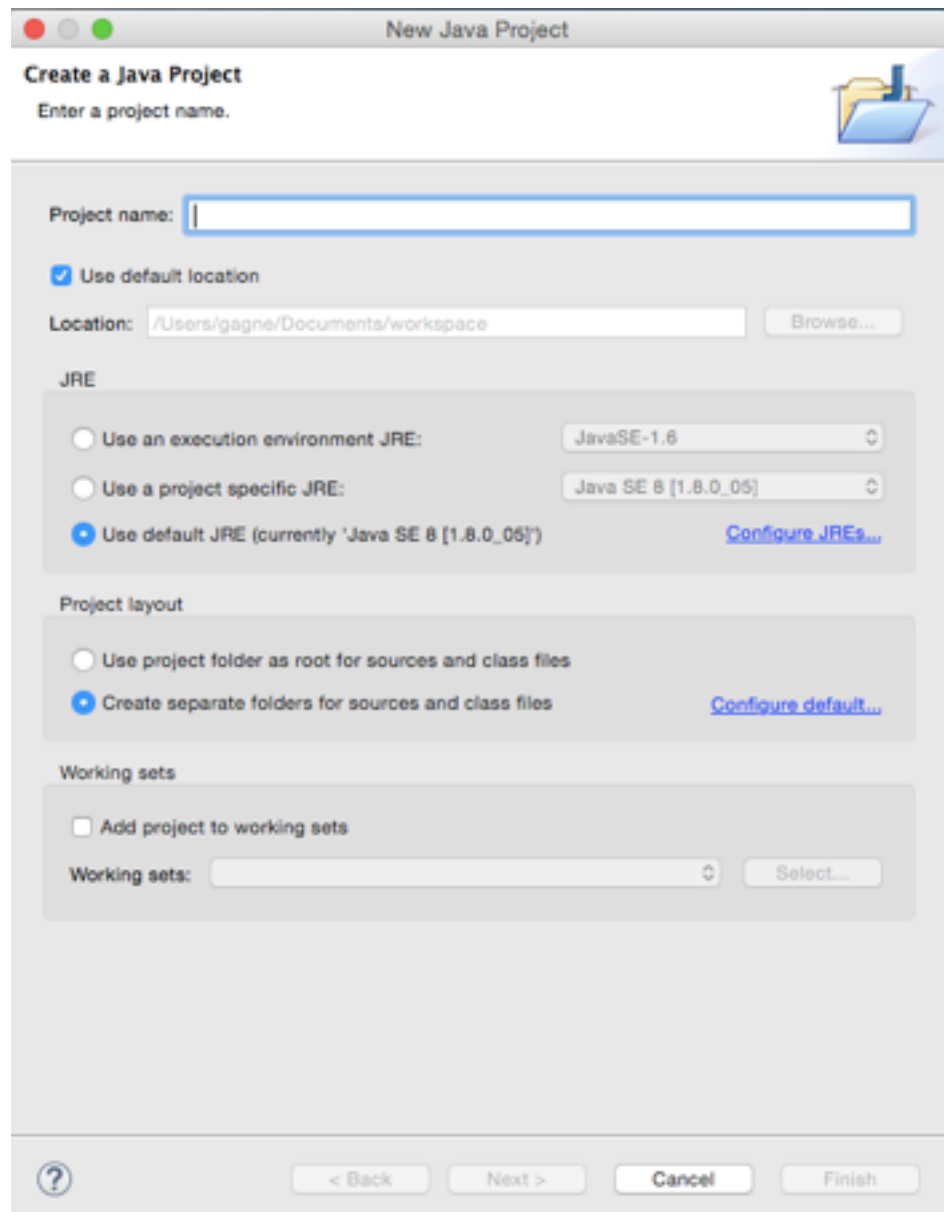
These instructions show screenshots taken using OS X, but apart from a few minor differences, they will appear the same on any computer system.

Projects

Eclipse works by setting up a project for each Java program you wish to run. (Don't confuse programs with classes, a project can and usually will have multiple classes.)

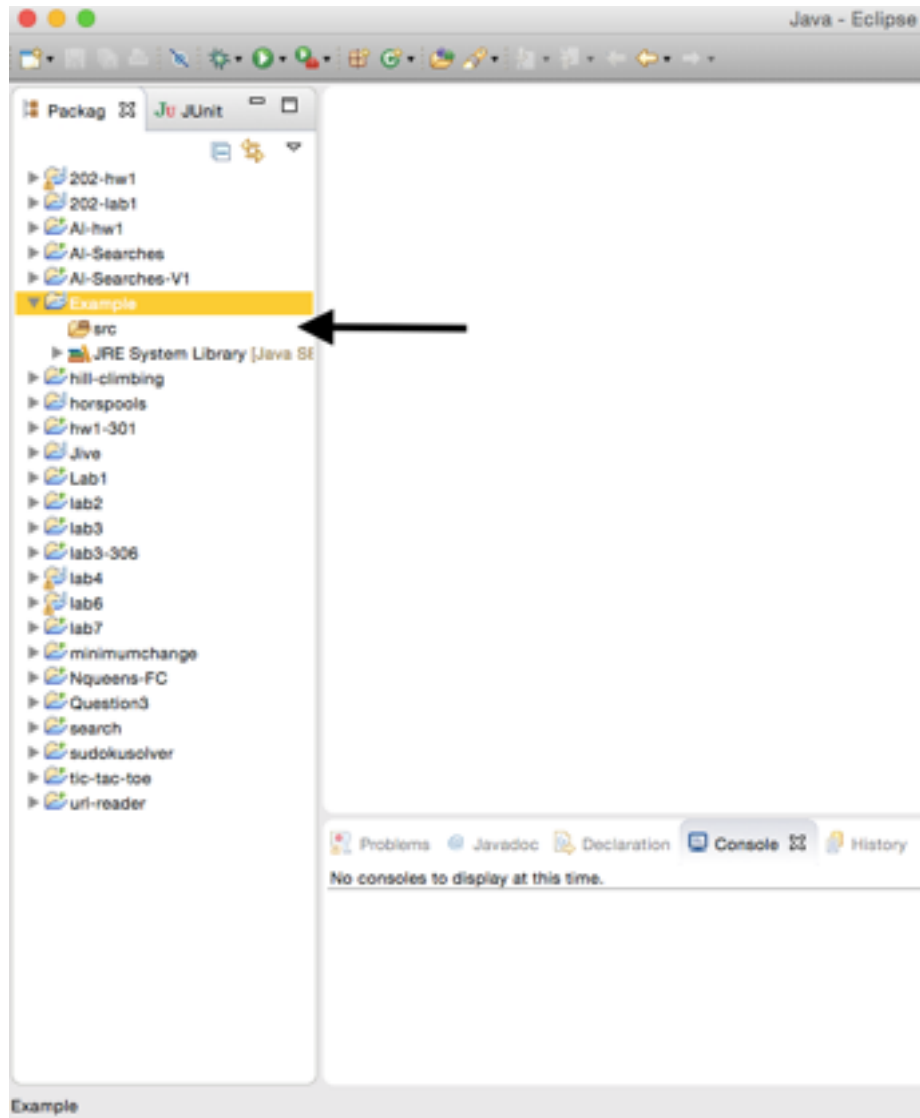
Create a project by clicking **File -> New -> Java Project**.

You will be shown the following screen:



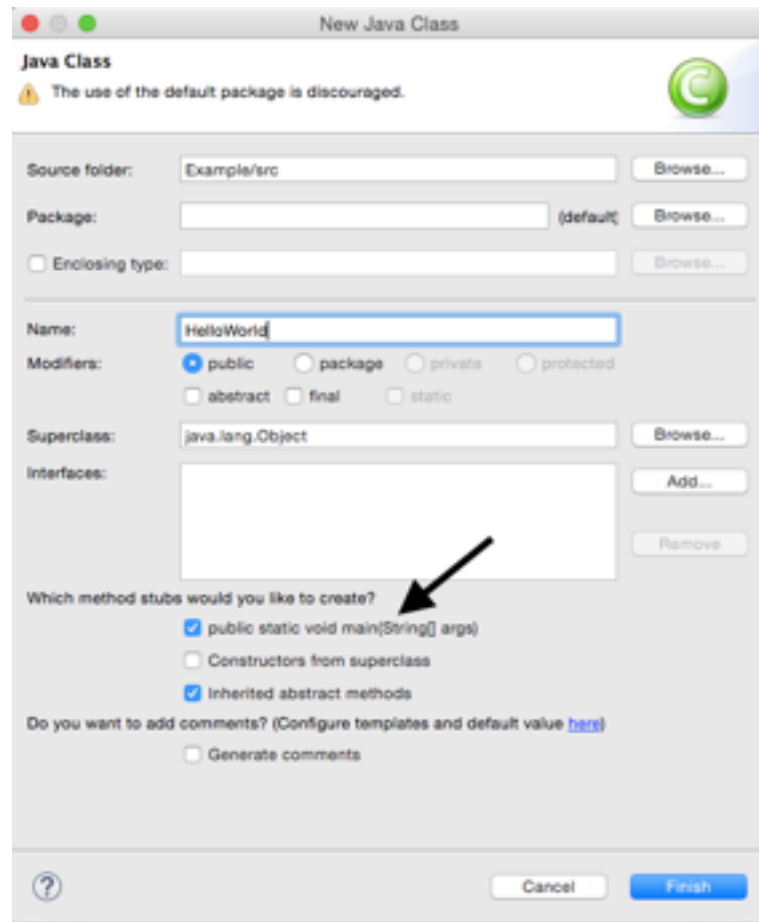
The screenshot shows the 'New Java Project' dialog box in Eclipse. The title bar reads 'New Java Project'. Below the title bar, it says 'Create a Java Project' and 'Enter a project name.' There is a text field for 'Project name:' which is currently empty. Below this, there is a checkbox labeled 'Use default location' which is checked. The 'Location:' field shows the path '/Users/gagne/Documents/workspace' and has a 'Browse...' button next to it. The 'JRE' section has three radio buttons: 'Use an execution environment JRE:' (selected), 'Use a project specific JRE:', and 'Use default JRE (currently 'Java SE 8 [1.8.0_05]')'. The first option has a dropdown menu showing 'JavaSE-1.6'. The second option has a dropdown menu showing 'Java SE 8 [1.8.0_05]'. The third option is selected. There is a 'Configure JREs...' link next to the third option. The 'Project layout' section has two radio buttons: 'Use project folder as root for sources and class files' and 'Create separate folders for sources and class files' (selected). There is a 'Configure default...' link next to the second option. The 'Working sets' section has a checkbox labeled 'Add project to working sets' which is unchecked. Below this, there is a 'Working sets:' field with a dropdown menu and a 'Select...' button. At the bottom, there is a question mark icon, a '< Back' button, a 'Next >' button, a 'Cancel' button, and a 'Finish' button.

Enter the project name (i.e. Example, Lab1, HW5, etc.) and click Finish. The following screen illustrates the Package Explorer for Java projects. I have created a project named **Example**. (There are obviously several other projects as well!)

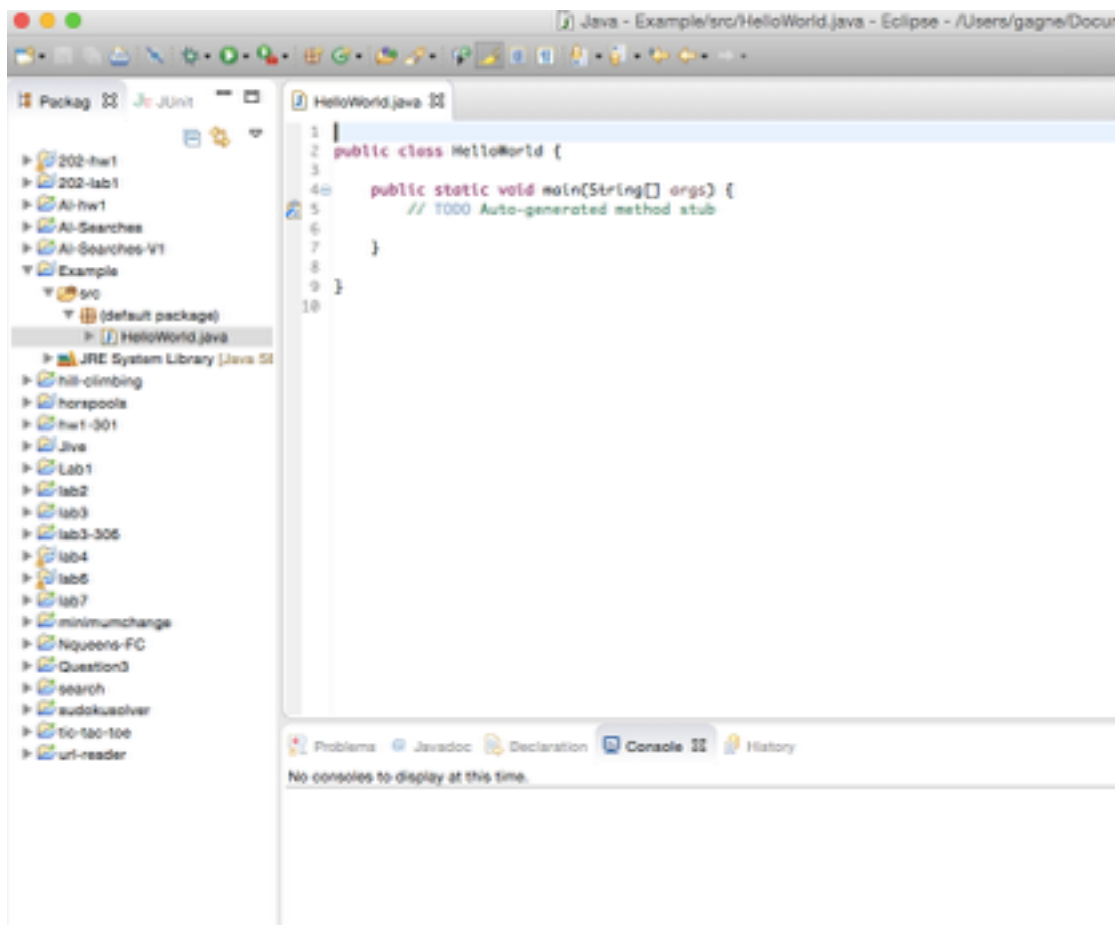


Creating a Class

To create a new class, enter **File -> New -> Class** and the following screen will appear. This illustrates creating a class named HelloWorld. Also notice I have clicked the checkbox to automatically create the main() method.

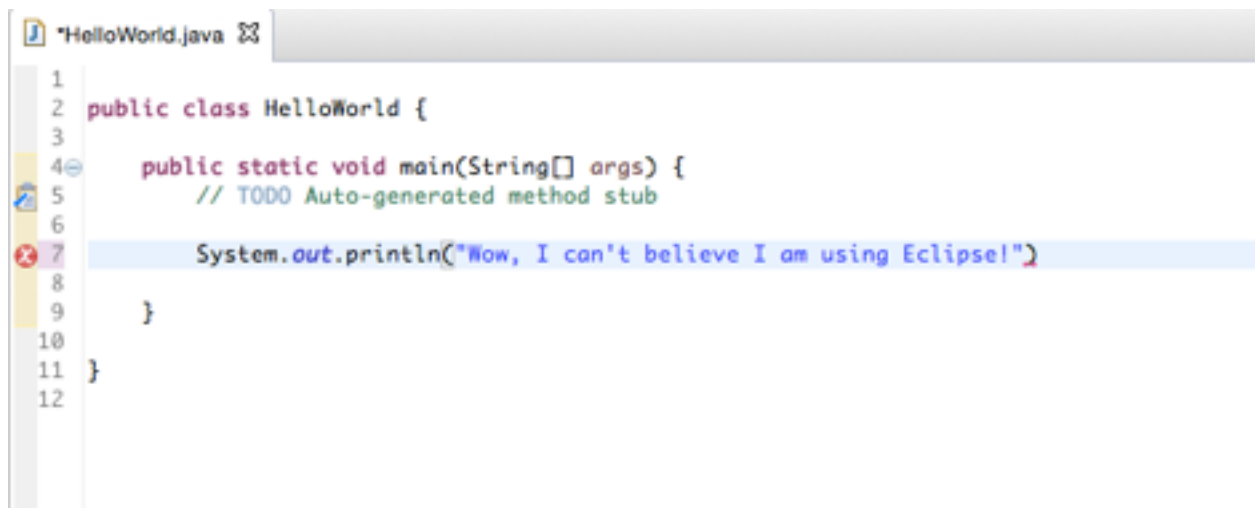


A nice thing about Eclipse is that it does a lot of busy work for you. The following shows the resulting screen where you can begin editing:



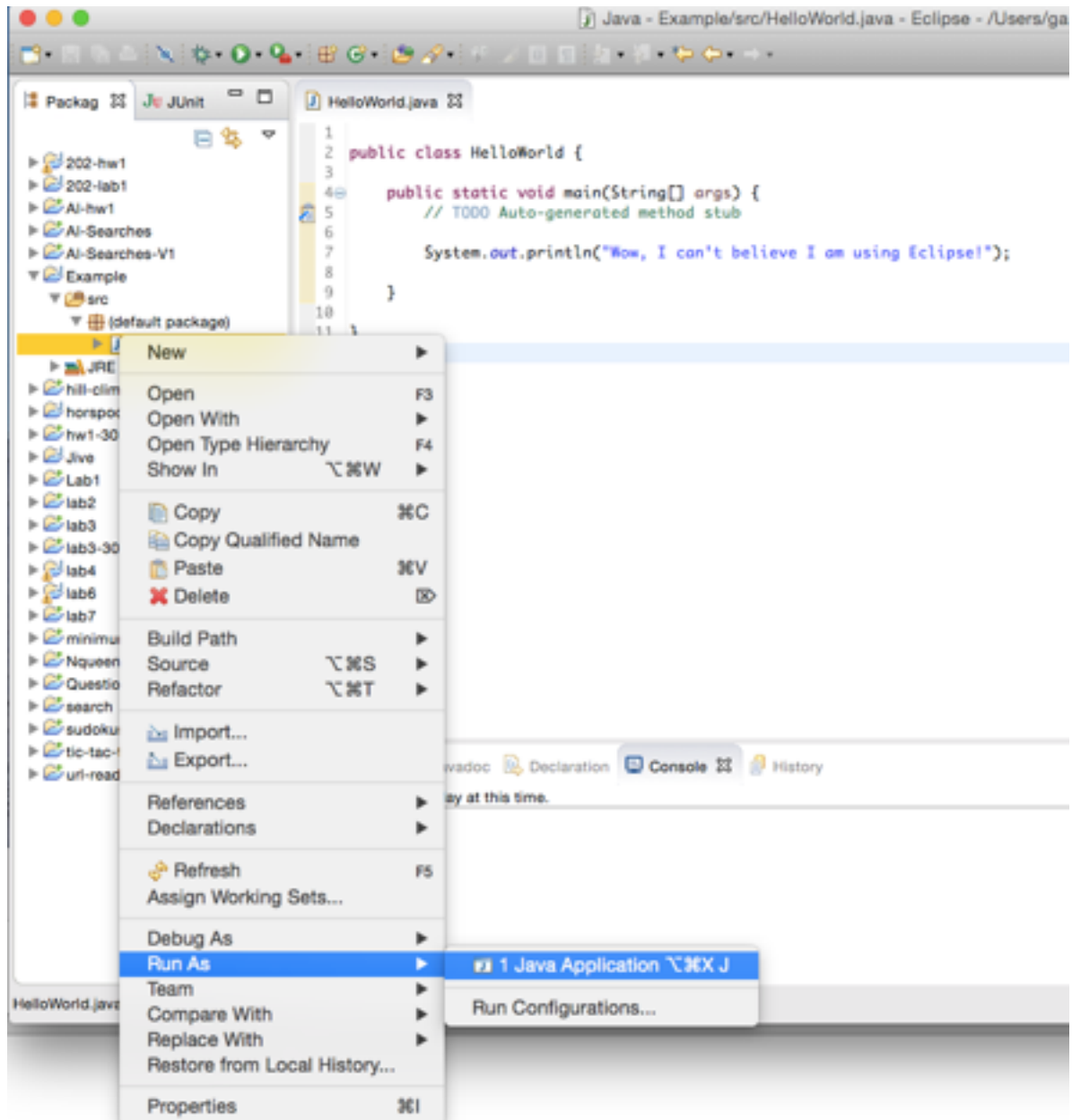
Compiling

An interesting thing about Eclipse is that it auto-compiles code for you as you type. If you have an error, Eclipse will indicate with a red X on the line where the error occurs. (Ugh, I always forget those pesky semi-colons!)



Running Your Program

Once your program is compiling correctly, you can run it by highlighting the class that contains the **main()** method, and right-clicking (control-click for OS X folks) that file. You will be presented with the following dialog window:



Choose **Run As -> Java Application**. You should see the output in the console window at the bottom of the Eclipse Application.

Copying Existing Files to Eclipse

It is easy to copy existing files to Eclipse by simply dragging them to the src folder of your project.

Other Resources

There are so many other issues that this document does not cover, and Eclipse is a rather complicated piece of software to use at times. Be patient, ask others, and be patient. After a few weeks you will be comfortable with it and will appreciate the power of Java software development on this platform.

There are numerous resources online for help with Eclipse. I typically ask my question as a Google query and often use results from Stackoverflow. There is a really good chance that whatever question you have, someone has asked it before!