

Download and Installing Eclipse for Java Developers

Creating a Project, Creating a Class, Running Programs

This document demonstrates how to download, install, and get started with Eclipse for Java developers. Eclipse is a free IDE (Interactive Development Environment, a tool for writing computer programs.)

The example is for Eclipse version 2019 - 6 - R Eclipse IDE for Java Developers and a system that uses Windows. **Please note, this document was created in August of 2019. If a newer version of Eclipse for Java Developers is available, I recommend using the newest, stable version. Likewise, there will be differences in the procedure if you are using a Mac or Linux system.**

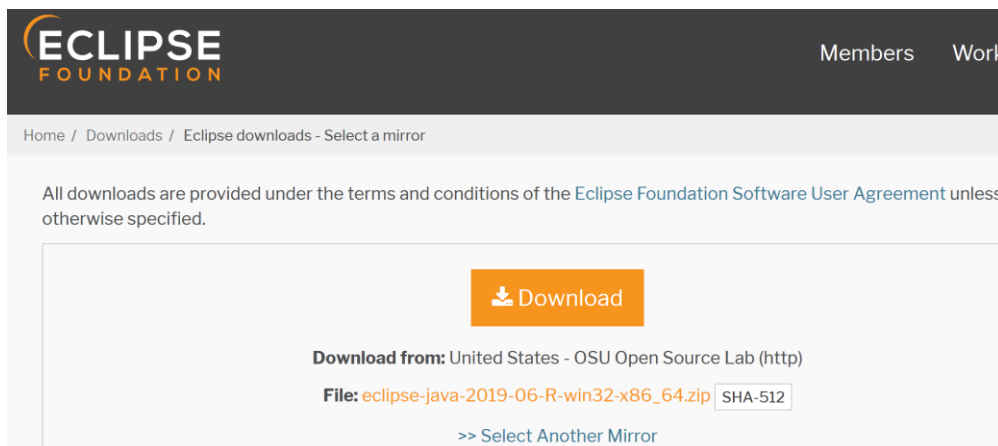
1. Go to <https://www.eclipse.org/downloads/packages/release/2019-06/r/eclipse-ide-java-developers>.



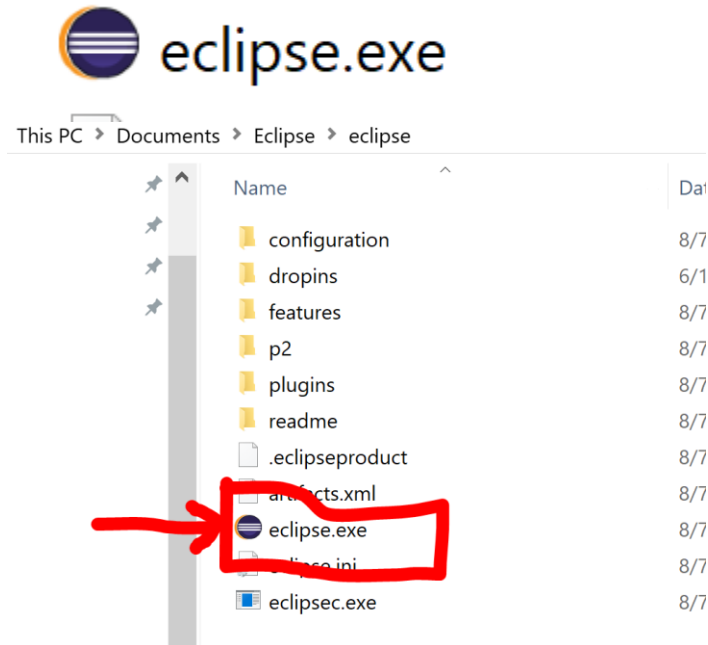
2. Click the link for the correct version of the IDE for your system.



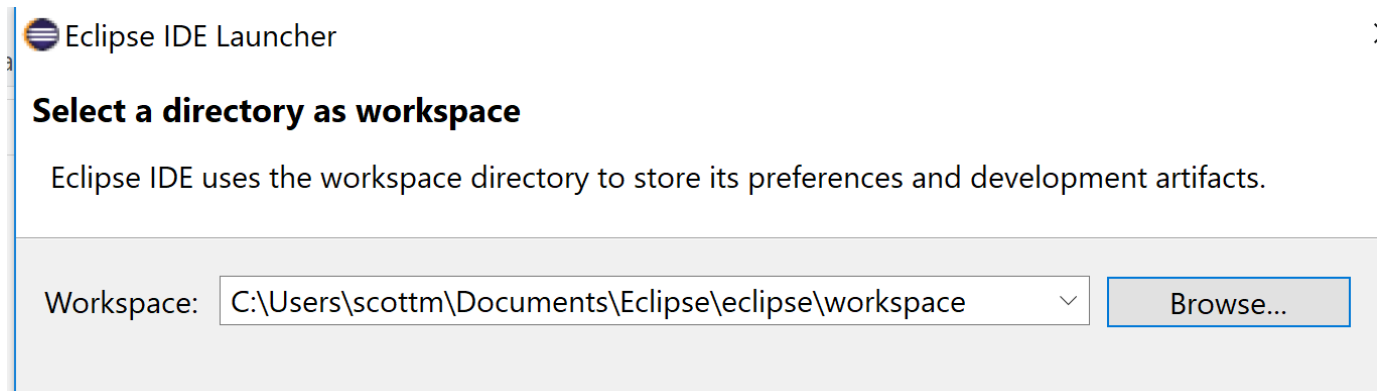
3. Download the installer from the download page.



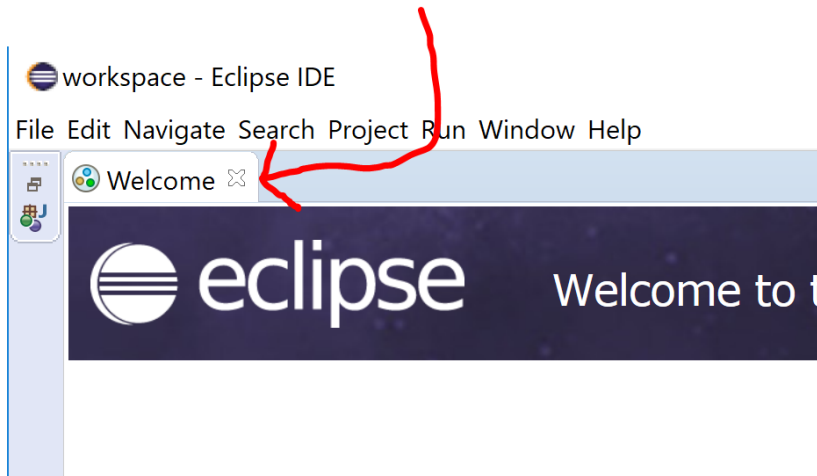
4. After the file is downloaded go the location your downloaded it to. If you didn't download the file to a convenient location such as your user directory on your machine I recommend moving the file to a more convenient location.
5. Typically, the download file is a zip file. Unzip it. I recommend adding it to its own directory with a meaningful name such as EclipseIDE or Eclipse.
6. After unzipping, open the directory and click on the Eclipse icon.



7. The first time you run Eclipse it will ask where you want to place the initial *workspace*. The workspace is a directory that contains your Eclipse projects, which are in turn sub directories. Again, pick a convenient location that you can remember. You will have to navigate to the workspace when you turn in programming assignments to upload your Java programs. I had to create the directory before I was able to select it.



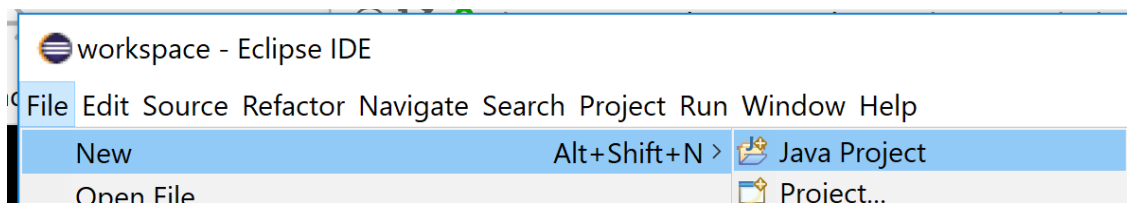
8. When Eclipse starts for the first time it displays a Welcome screen. Close this screen.



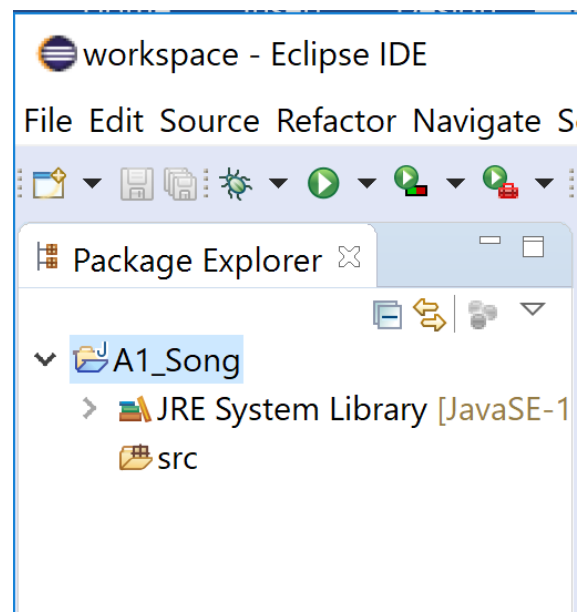
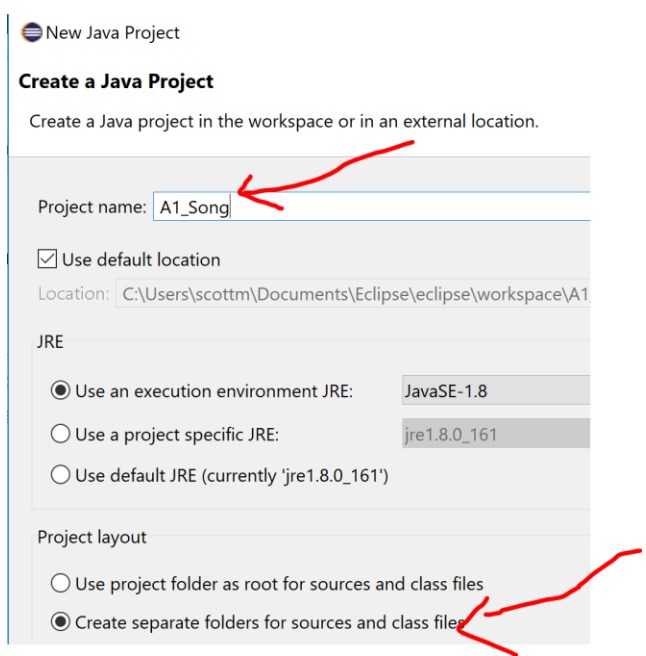
9. Eclipse maintains source code (computer programs) in projects. Each project is a sub directory under your workspace directory. Eclipse adds many files automatically to this directory. I recommend creating a different project for each assignment.

10. Create a new project. For CS312 you could call it A1_Song. For CS314 you could call it A1_Code_Camp. The name is up to you, but I suggest making it meaningful.

In the Eclipse menu select **File -> New -> Java Project**.

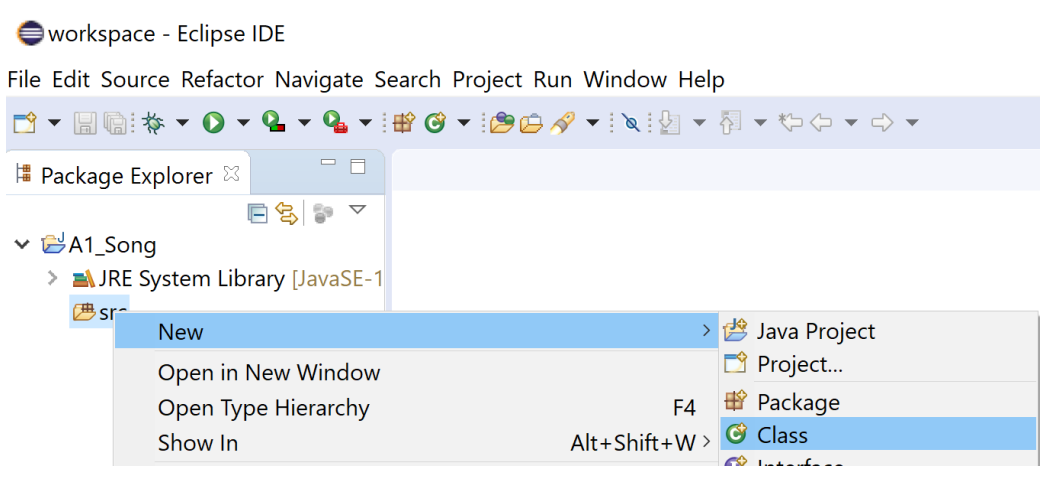


11. A window pops up. Type in your name for the project. In this example I pick A1_Song. The default values for the other settings for the project are typically acceptable. Note, the current default is to create a separate folder for your source code (your Java programs) named src. This is where you want to create or add Java files.




12. Expand the project and you will see the src folder.


13. To create a new Java file, bring up a [context menu](#) by hovering your pointer over the src directory (right click on Windows machines, control and mouse click or w finger track pad click on Macs.) Select **New** -> **Class** from the context menu.



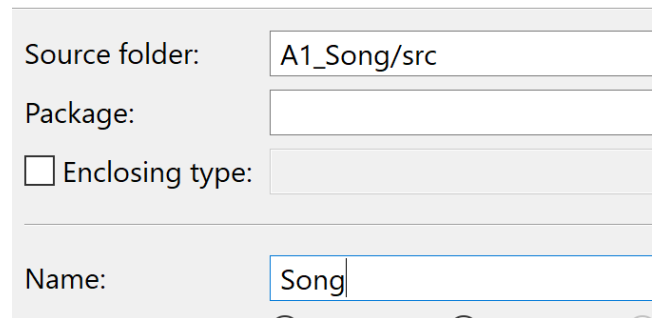
14. Name the program correctly. Do not add the .java extension, Eclipse does that for you.

 New Java Class

Java Class

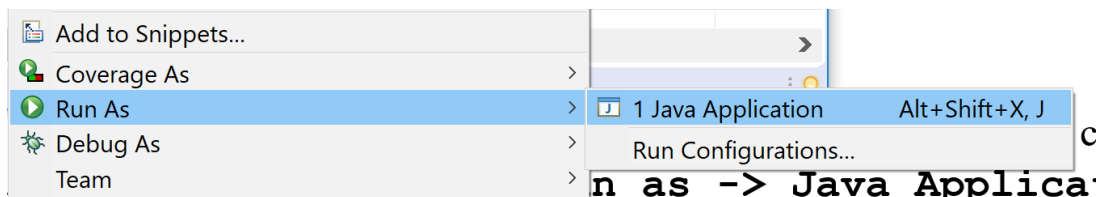
 The use of the default package is discouraged.

15. Note, you can also drag and drop Java programs and files into the src folder. If you are provided initial programs (.java files) for the assignment, download them from the class webpage, open a file explorer, navigate to the directory with the downloads, and then drag and drop the file icons into the src folder in the Eclipse project.

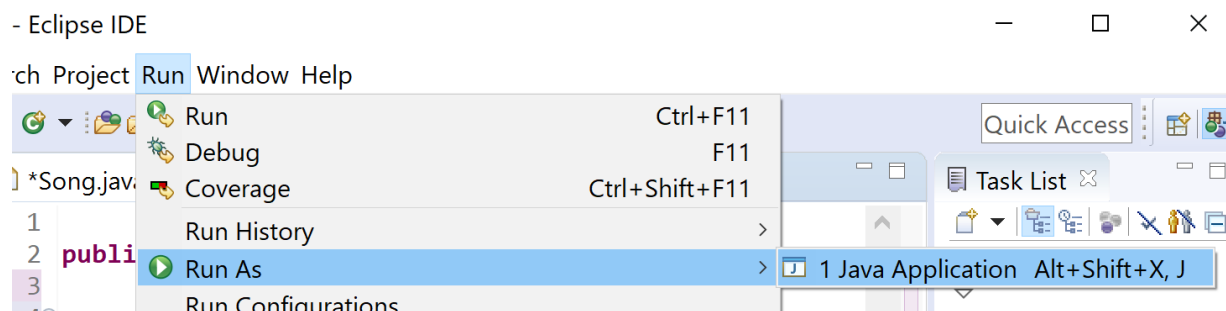


Source folder: A1_Song/src
Package:
 Enclosing type:
Name: Song

16. Edit your program. When you are ready to run it You can bring up a context menu in the window with the program and select **Run as -> Java Application**.



Or you can select **Run** from the top menu. **Run -> Run as -> Java Application**.



Or you can use the shortcut **Alt + Shift + X**, then **J**.

17. After running the program the first time you can run it later simply by selecting the run icon.

