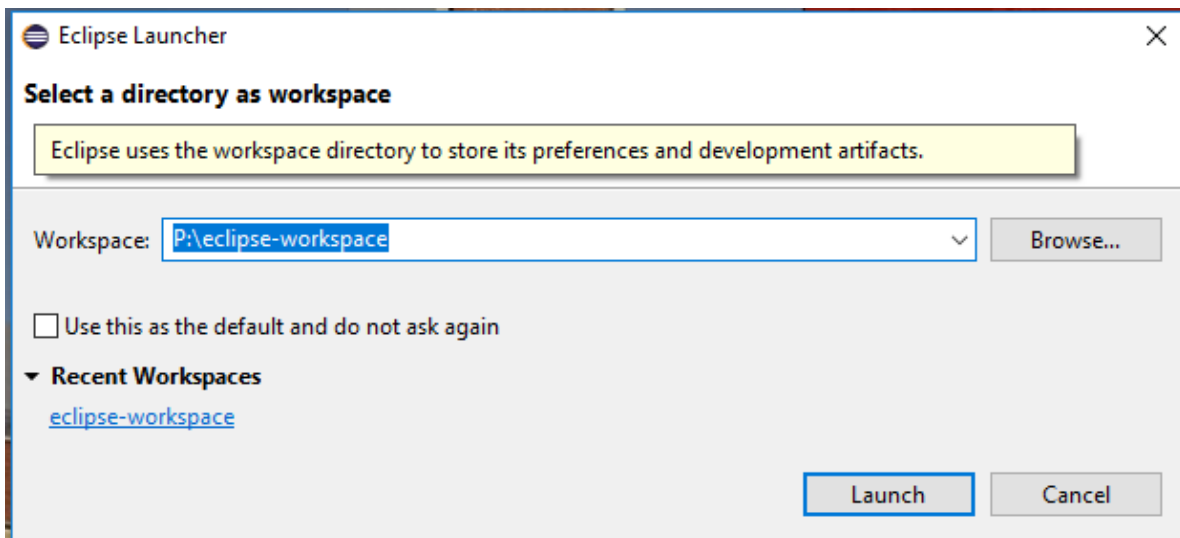


Lab #1: A Quick Introduction to the Eclipse IDE

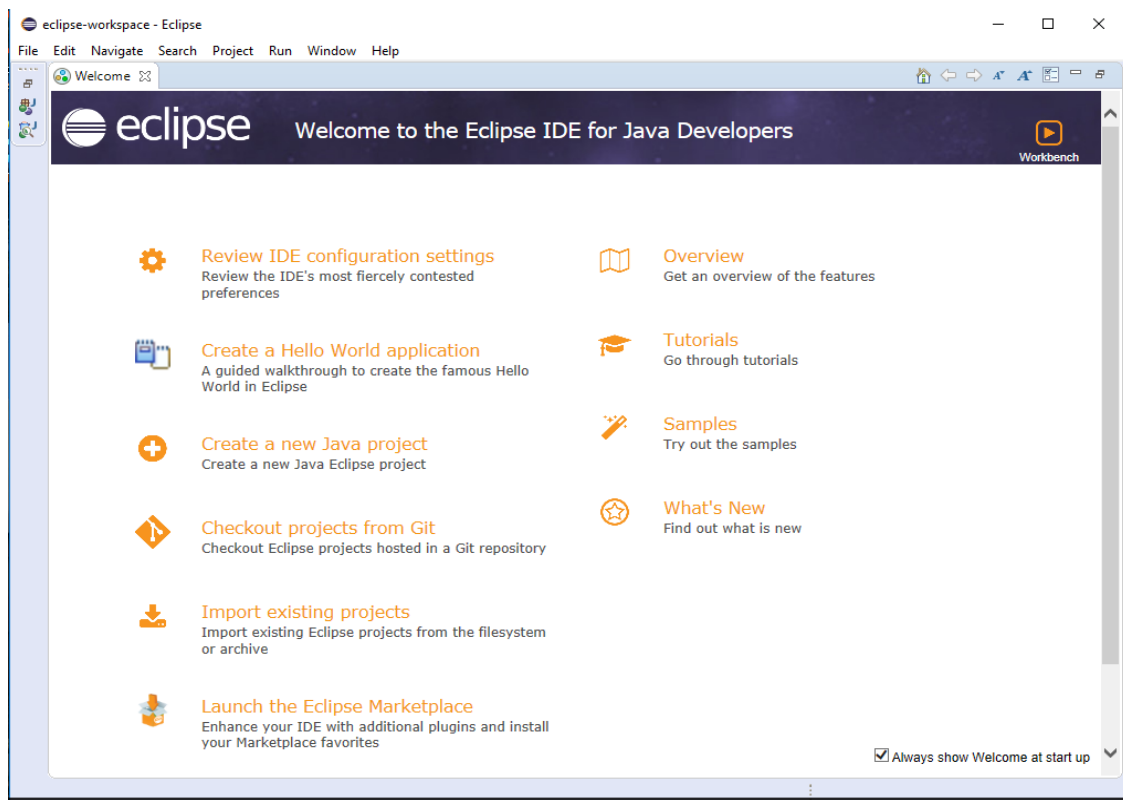
Eclipse is an integrated development environment (IDE) for Java programming. Actually, it is capable of much more than just compiling Java programs but that is primarily what we will be using it for. Eclipse is a professional development environment used by programmers in numerous different fields from mobile app development to medical imaging to rocket guidance systems. There are pros and cons to using a professional development environment. The big pro is that you will be using the same system for learning how to program as you will when you are employed as a programmer, if you go into some area of Java development. The big con is that since this is a professional system there are many options to the system and settings that may not make any sense. We will be using only a small fraction of the options available in Eclipse. This lab is designed to get you started with the basics.

Before we open up Eclipse we want to create a place to store our programs. At SU the best place to store files on the university system is on your personal P drive. Open up Windows Explorer, navigate to your P drive and create a new folder called COSC117, this is where you will store all of your programs for this class.

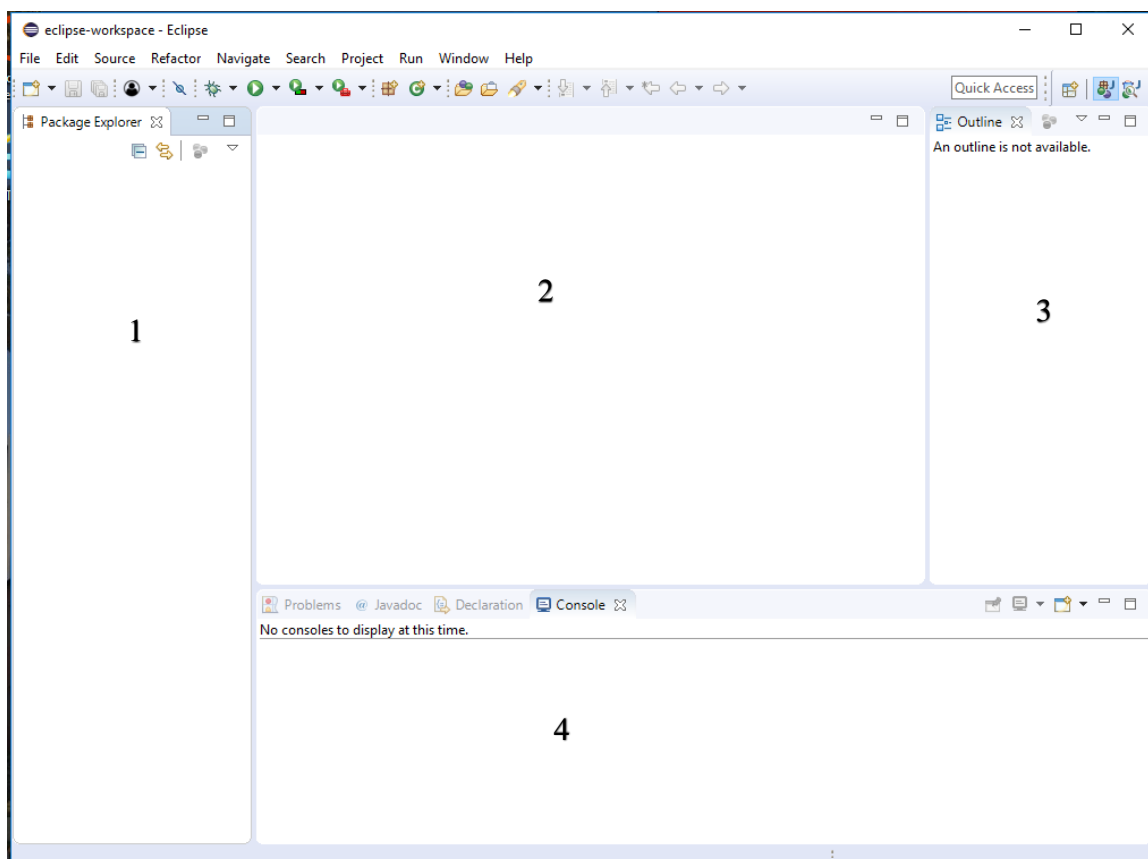
Now launch Eclipse. Eclipse is stored on your desk top. Simply double click the eclipse-java-oxygen.exe file. When you do a Workspace Launcher will appear. **YOUR WORKSPACE IS VERY IMPORTANT!!!!** This is where Eclipse will find all of your programs. If you select the wrong workspace you may not find your files or even worse they could be deleted by others.



Click on the Browse... button and select P:\COSC117 (the folder you created above) and then click OK. Leave the “Use this as the default and do not ask again” check box unchecked. At this point you should see the following.



Click the X on the Welcome tab to close the welcome window. Now you should see,

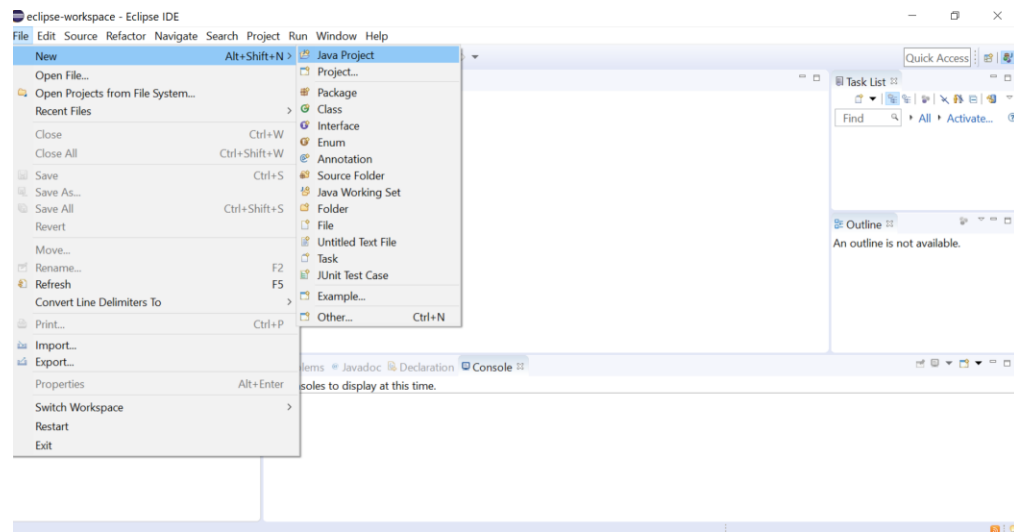


There are four main areas in the interface.

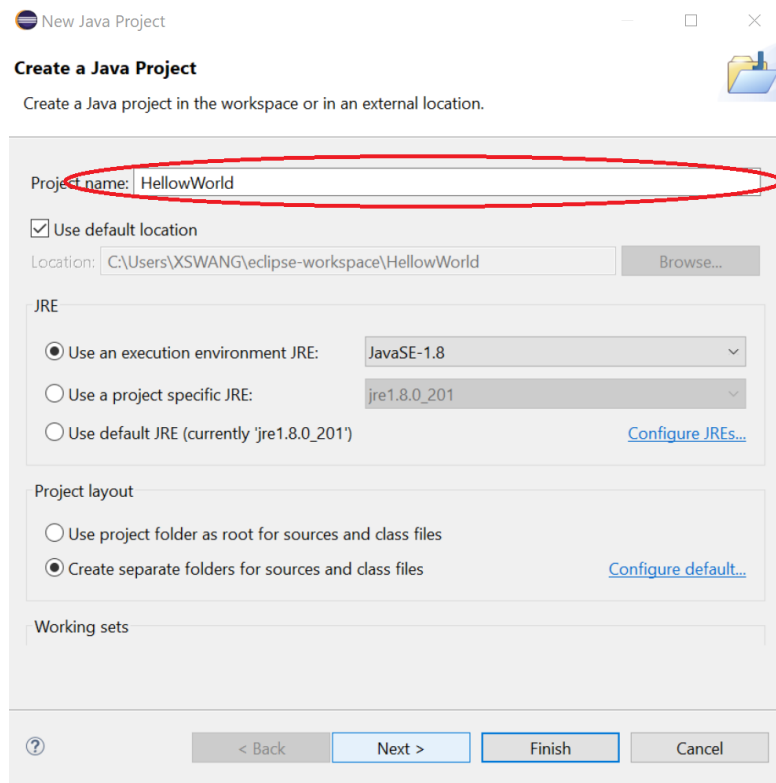
1. **Package Explorer:** This area will hold all of the projects (that is, programs) you write and keep in that workspace. Professional programmers will organize their work by using multiple workspaces but for this class a single workspace holding all of our programs will be sufficient.
2. **Editing Area:** This area is where you will write the code for your programs.
3. **Outline:** This area will contain a sort of outline to your program. That is, it will list all of the “functions” contained in your program and make navigation of your program much easier. This area may not seem too useful at the start when our programs are small but as they get bigger and more complex using the outline area will save you a lot of time.
4. **Output:** The output area has many functions. It is where you will see descriptions of your errors and where you will see “console” output of your programs.

Follow the steps below to create your first Java Program.

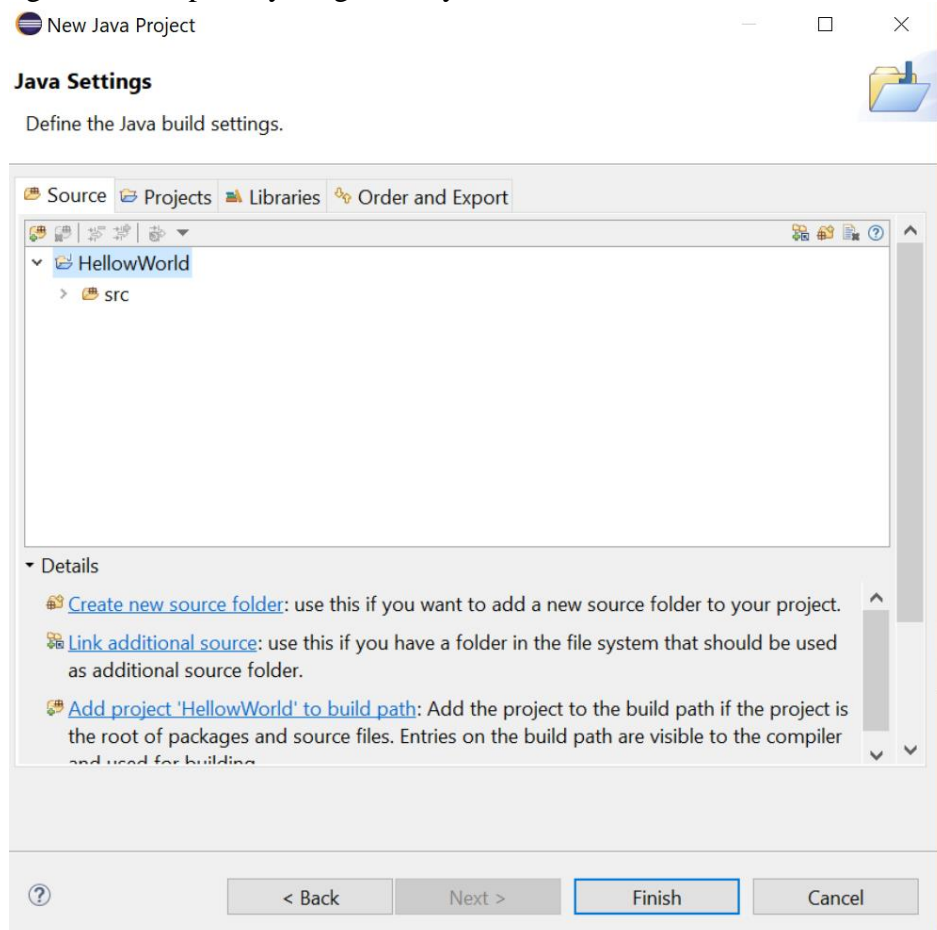
1. Create a Project by Choosing New->Project->Java Project



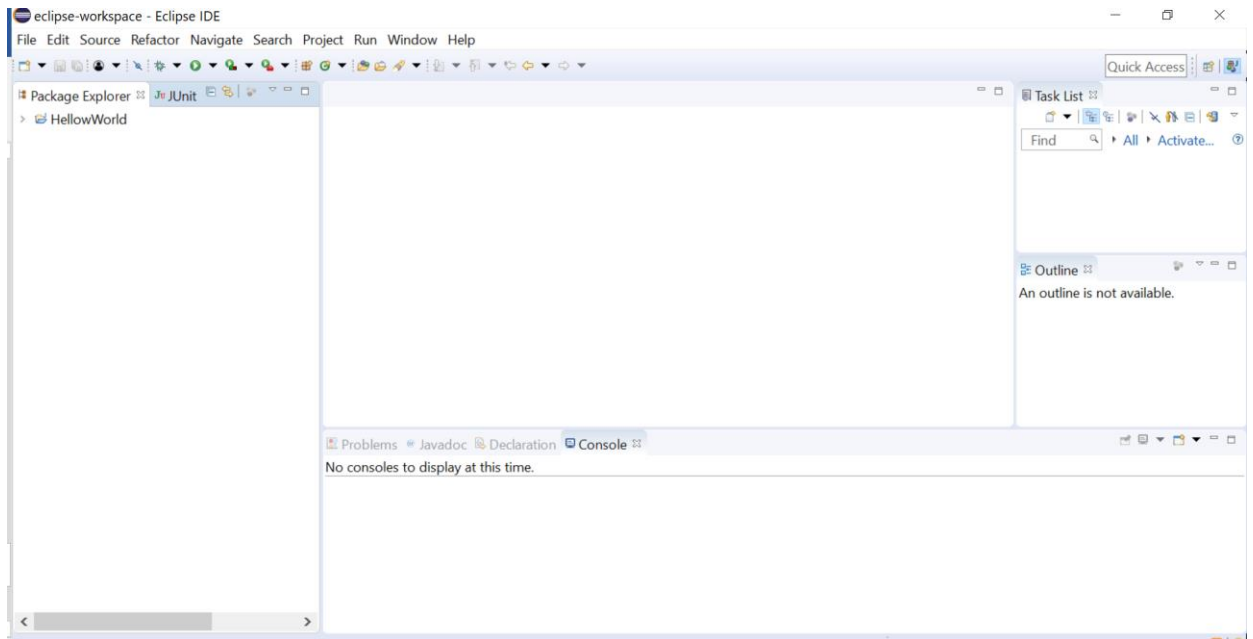
2. After you choose Java Project, you will see the screen below. Enter the name of your project (e.g., HelloWorld) and click Next:



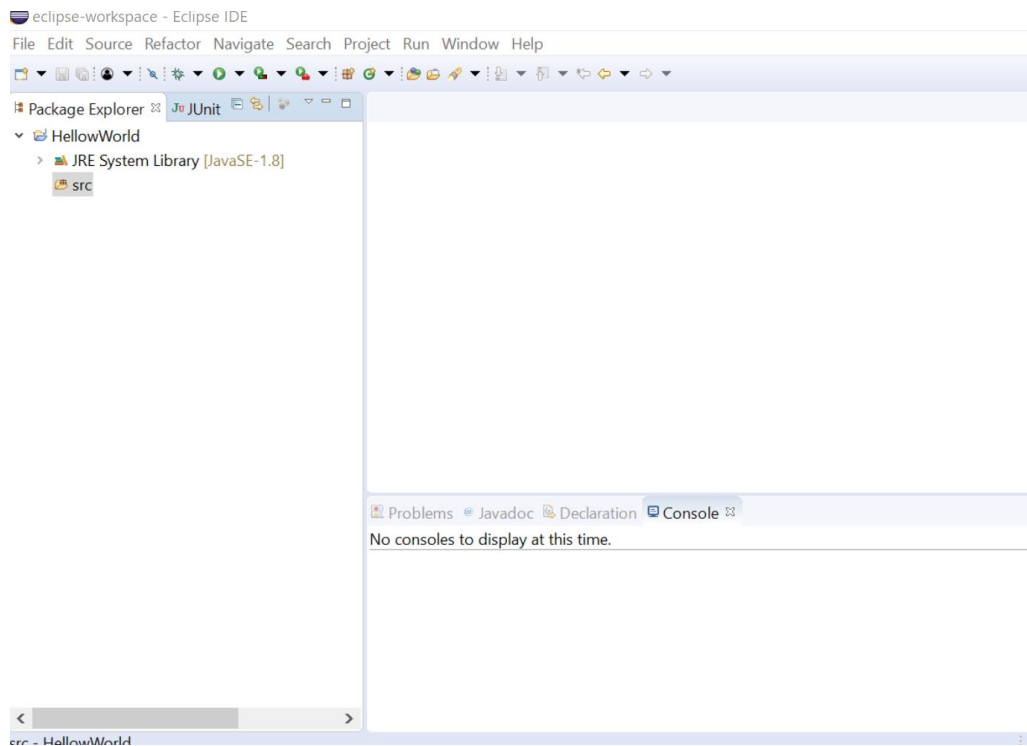
3. When you get here, keep everything the way it is and click Finish



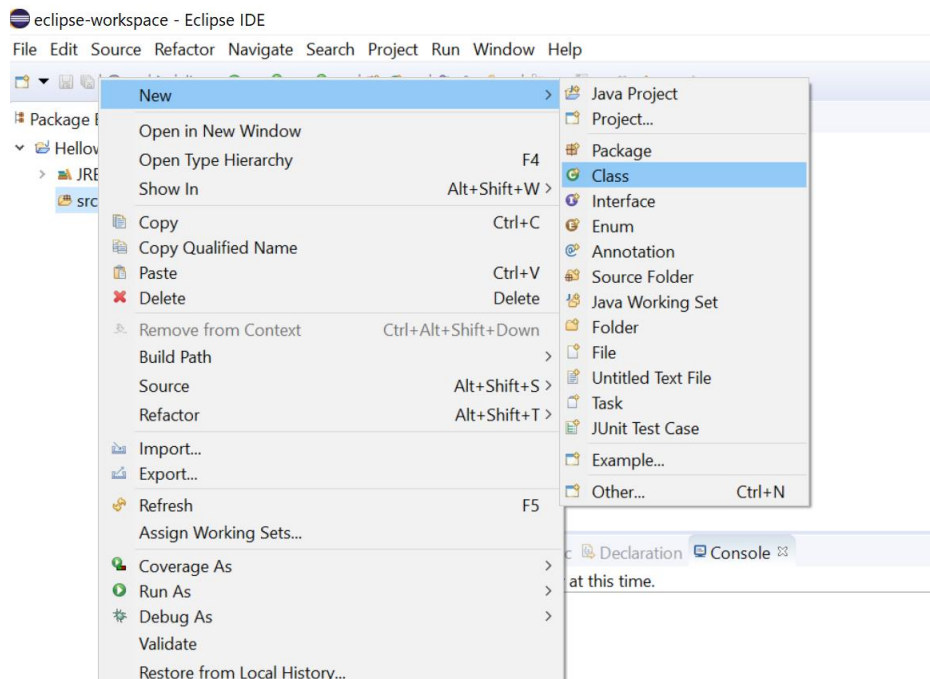
4. Now you will see this. Click > to expand the project folder



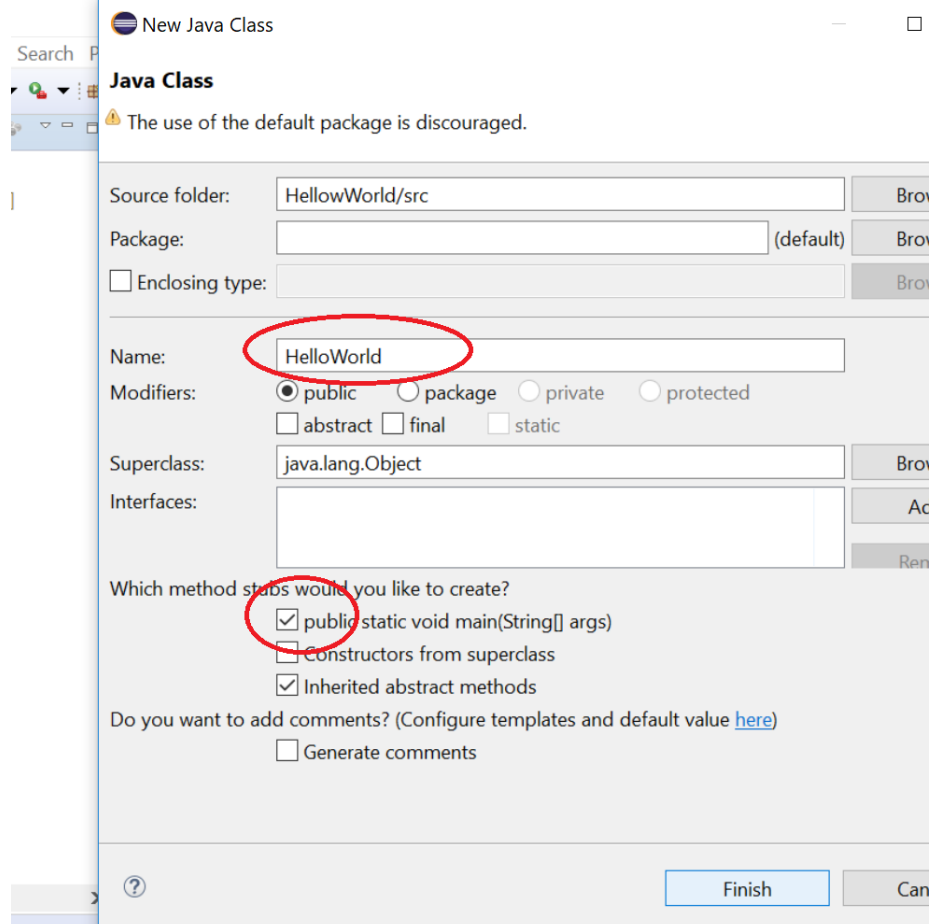
5. Now you will see this. Right click src and choose new -> class



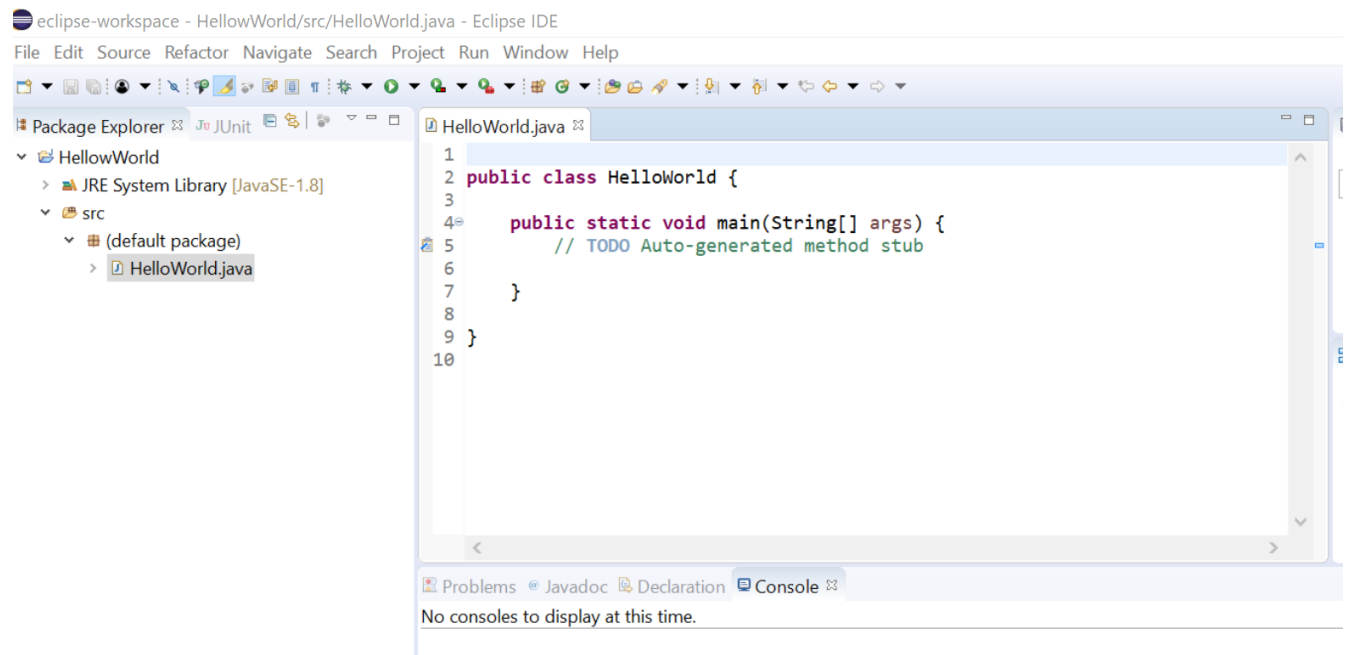
5. You will get this:



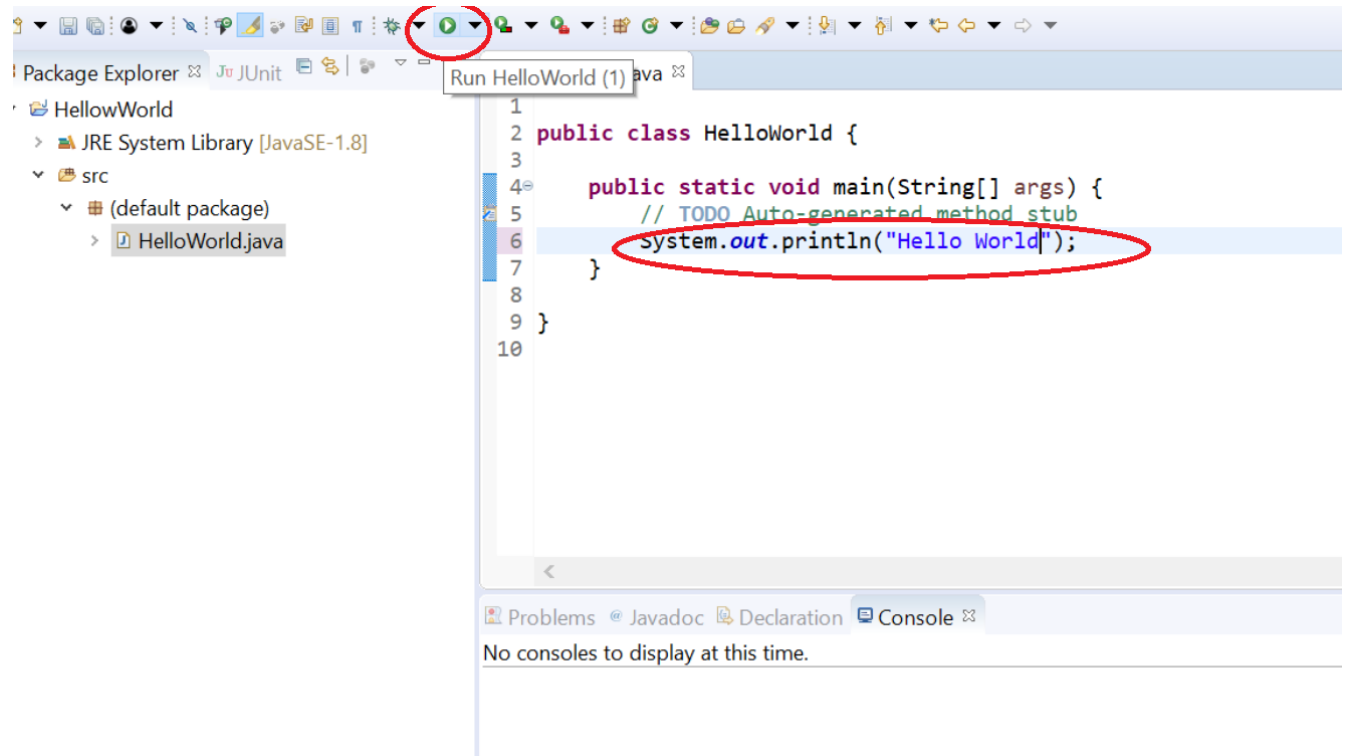
6. Select Class and you will have this. Give a name for your new class (e.g., HelloWorld), make sure “public static void main” is checked and then click Finish.



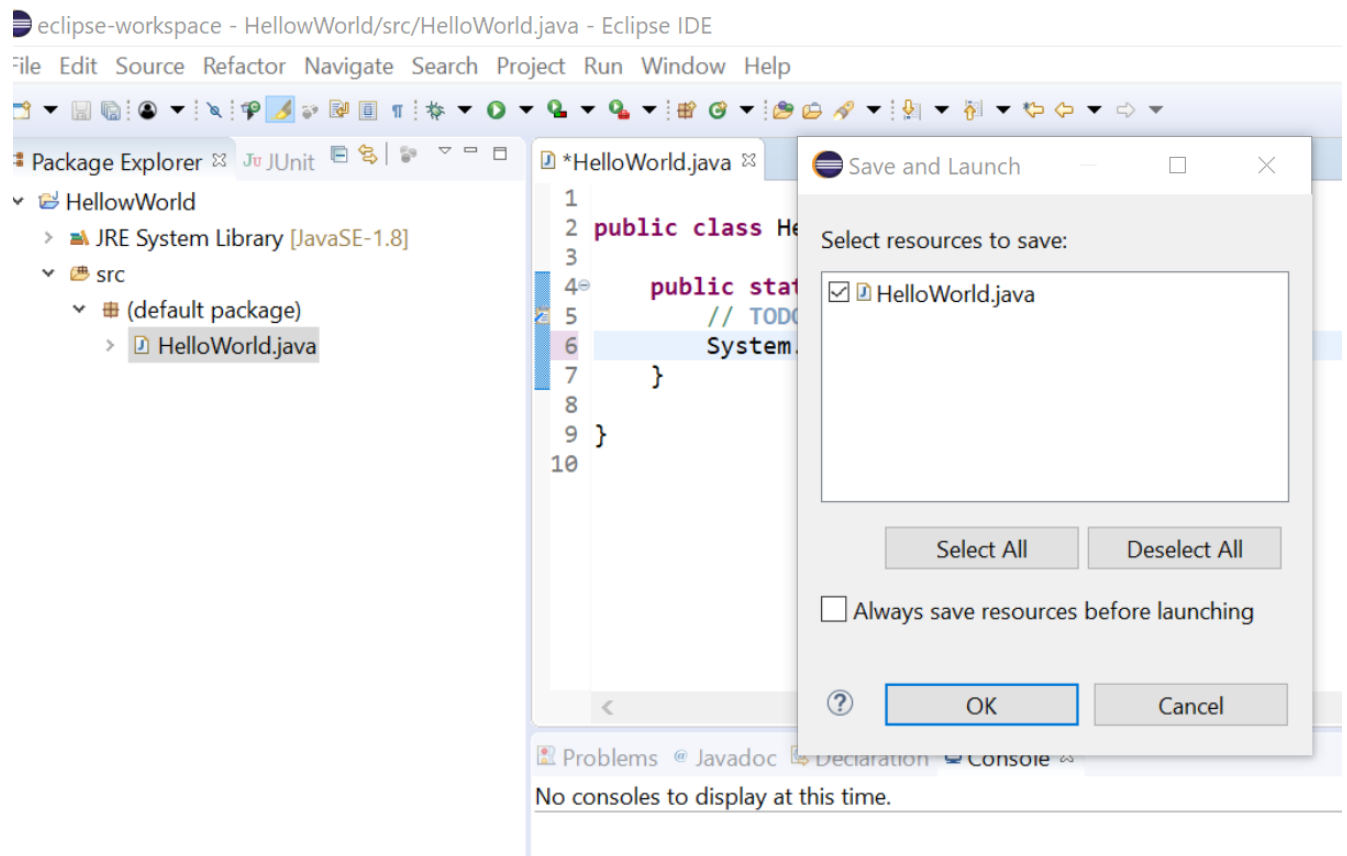
7. Here is what you should see:



8. Enter your code in the editing area and click the green arrow on the top:



9. You will have the screen like below pop up. Click OK.



10. Ta Ta! You have completed your first Java program, which display “Hello World” in the output window.

