## An Introduction to Eclipse

Eclipse IDE for Java Developers

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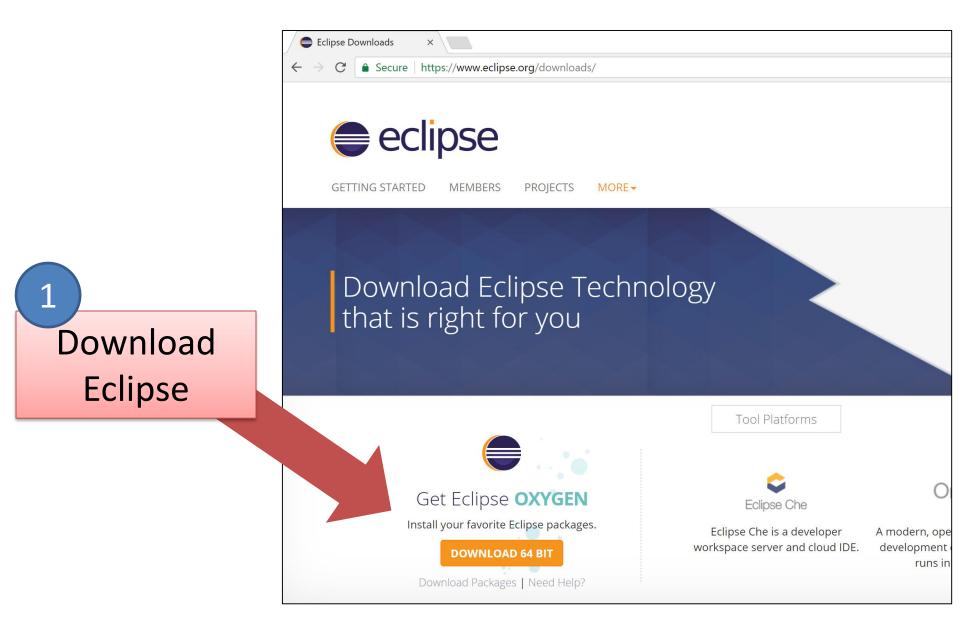


## What is Eclipse?

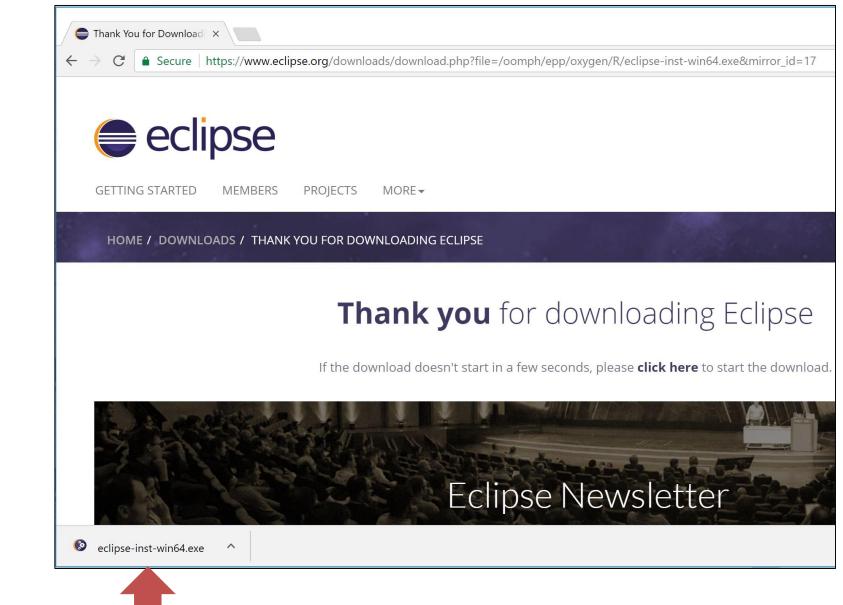
 Eclipse is an integrated development environment (IDE) for developing applications using the Java programming language and other programming languages such as C/C++, Kotlin, HTML/CSS etc.

Eclipse is free to download and install.

Latest version is Oxygen.



https://www.eclipse.org/downloads/



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Double click on the downloaded file to start the installation.

type filter text

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### **Eclipse IDE for Java Developers**

The essential tools for any Java developer, including a Java IDE, a Git client, XML Editor, Mylyn, Maven and Gradle integration



#### Eclipse IDE for Java EE Developers

Tools for Java developers creating Java EE and Web applications, including a Java IDE, tools for Java EE, JPA, JSF, Mylyn, EGit and others.



### Eclipse IDE for C/C++ Developers

An IDE for C/C++ developers with Mylyn integration.



#### Eclipse IDE for JavaScript and Web Developers

The essential tools for any JavaScript developer, including JavaScript, HTML, CSS, XML languages support, Git client, and Mylyn.



### Eclipse IDE for PHP Developers

The essential tools for any PHP developer, including PHP language support, Git client, Mylyn and editors for JavaScript, HTML, CSS and XML.

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### Double click on:

Eclipse IDE for Java Developers.

### eclipseinstaller by Oomph





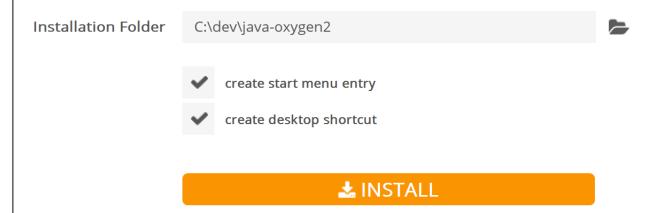
### Eclipse IDE for Java Developers

The essential tools for any Java developer, including a Java IDE, a Git client, XML Editor, Mylyn, Maven and Gradle integration.

4

Enter a desired installation folder (or stick with the default).

Then click the *Install* button.



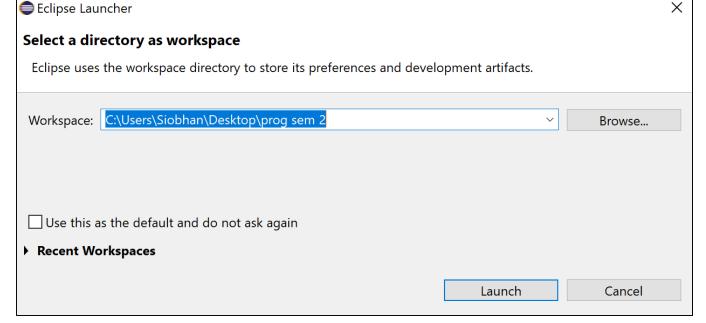


**BACK** 

## Launching Eclipse

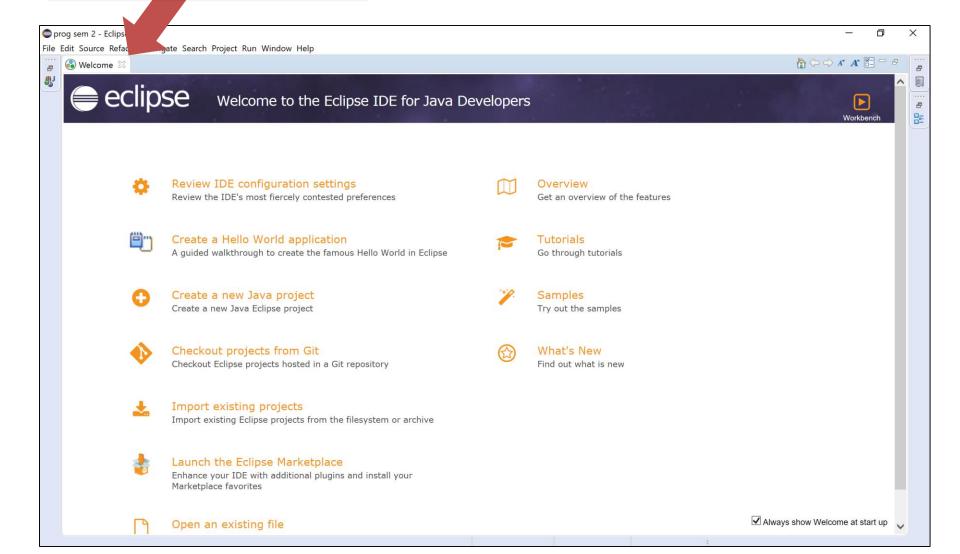
 When you start Eclipse, it prompts you for the location of the workspace folder.

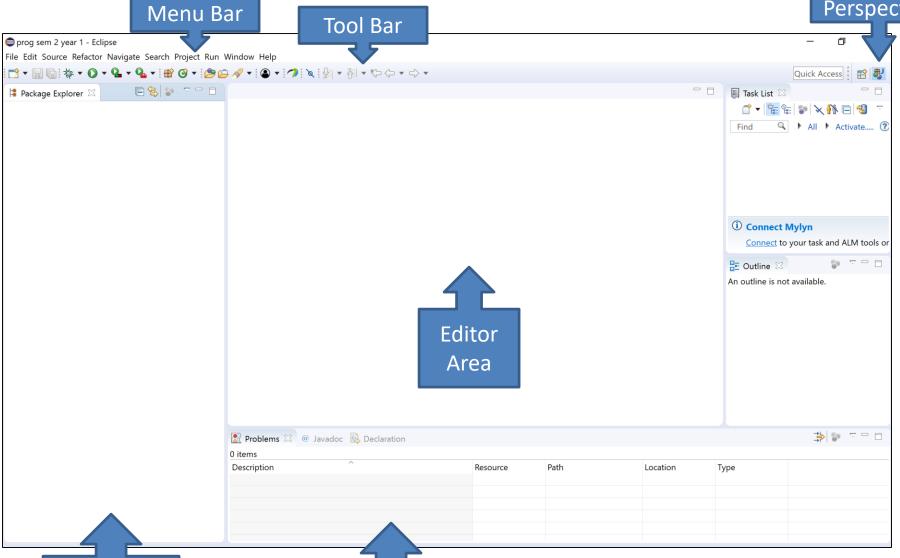
 All your projects will be stored in a workspace folder(s).



# Click on the "X" to exit the welcome screen.

## The Welcome Screen

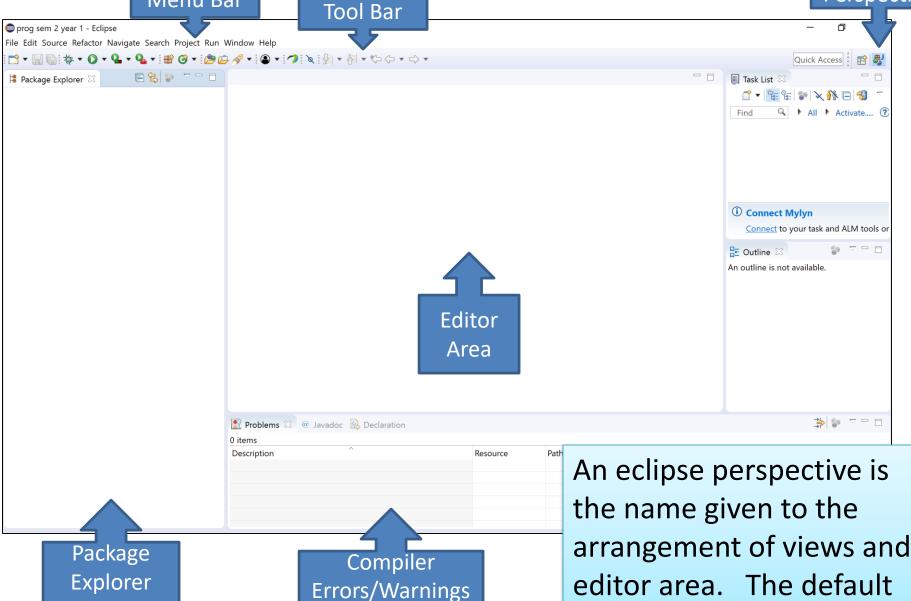




Package Explorer View

Compiler
Errors/Warnings
View

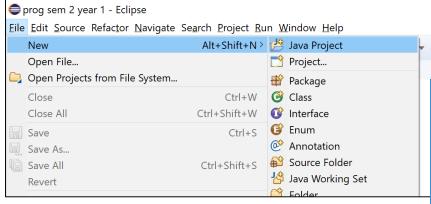
perspective is called **java**.



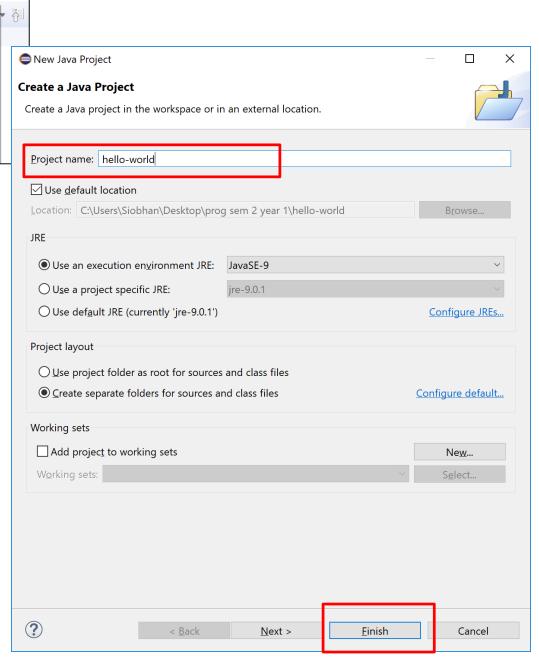
View

Menu Bar

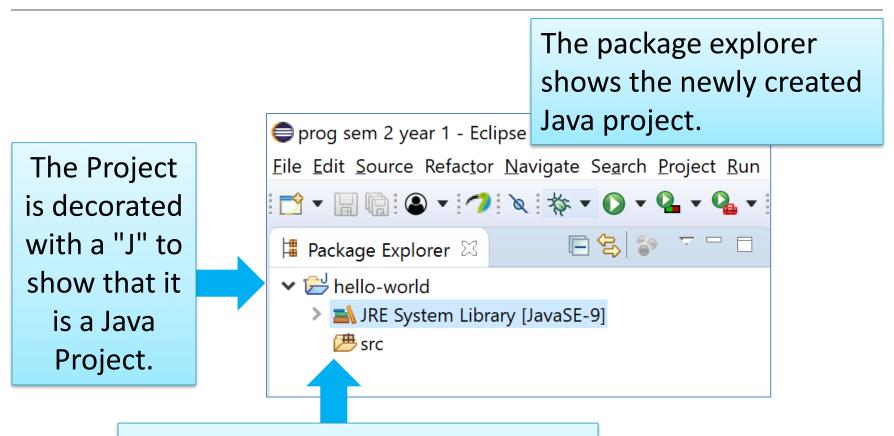
View



## New Project Wizard

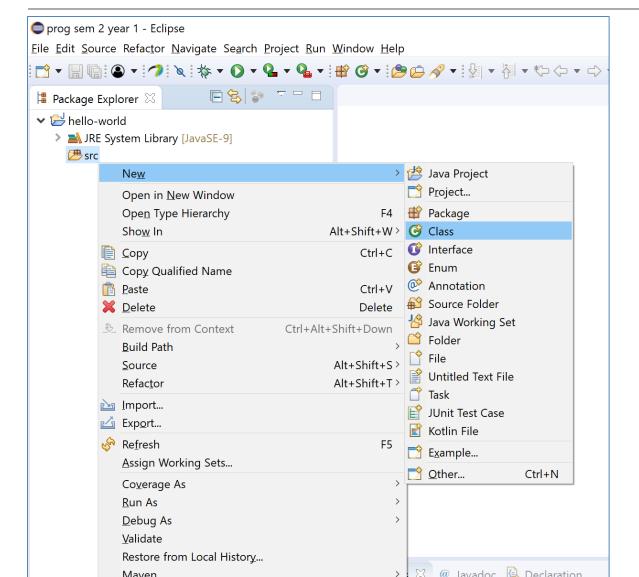


## Viewing the New Project



The folder icon is decorated to show that it is a Java source folder.

### New Java Class

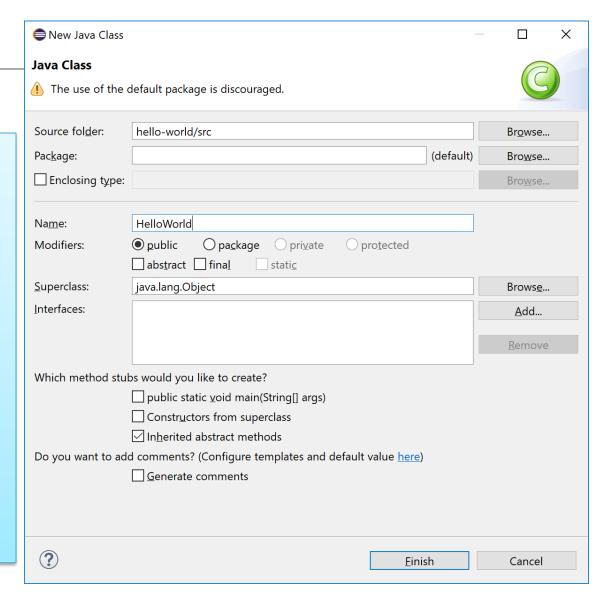


Right click on the **src** folder.

When the context menu appears, select **New**, followed by **Class**.

## New Java Class Wizard

- The source folder should be defaulted as helloworld/src
- Enter the class name
- If your class will hold the main method, you check the appropriate box to include it automatically.
- Click the Finish button when done.



## Viewing the New Class

```
prog sem 2 year 1 - hello-world/src/HelloWorld.java - Eclipse
File Edit Source Refactor Navigate Search Project Run Window Help
Package Explorer Signature
```

## Writing the New Class

 Add a main method to the code that will print "Hello World!" to the console.

```
eprog sem 2 year 1 - hello-world/src/HelloWorld.java - Eclipse
<u>File Edit Source Refactor Navigate Search Project Run Window Help</u>
□ Package Explorer 

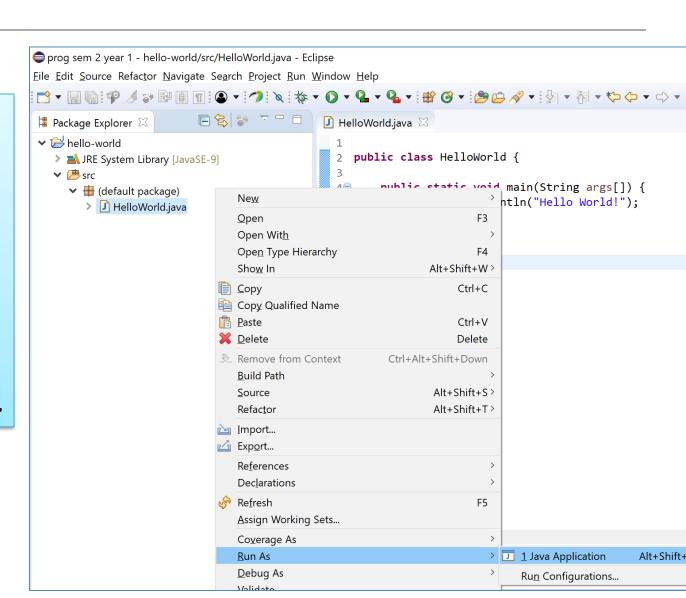
☑ HelloWorld.java 
☒
public class HelloWorld {
  > | JRE System Library [JavaSE-9]
                                  3
  public static void main(String args[]) {
                                  40
    System.out.println("Hello World!");
     }
```

## Running a Java Program

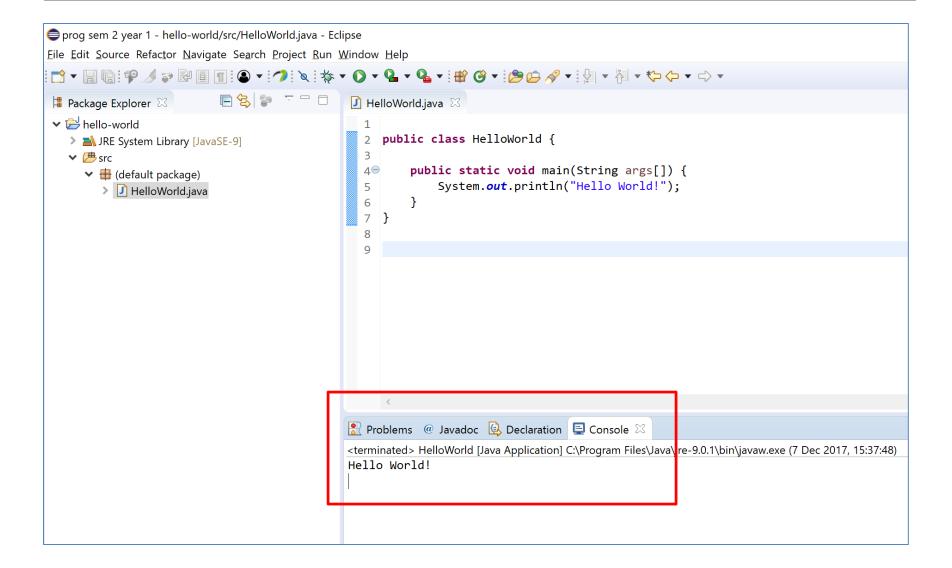
In the Package Explorer view:

Right click on the java class that contains the *main* method.

Select **Run As** > **Java Application.** 



## Running a Java Program



## Printing to the Console

```
prog sem 2 year 1 - hello-world/src/HelloWorld.java - Eclipse

Eile Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer 

HelloWorld.java

HelloWorld.java

public class HelloWorld 

public static void main(String args[]) {
    System.out.println("Hello World!");
    HelloWorld!");
}
```

- In Processing, we just wrote print and println. Processing did a lot in the background for us.
- In Java, we write:

```
System.out.println();
System.out.print();
```

# Questions?

