



COMP2396B: Object-Oriented Programming and Java

Tutorial 1: Getting Started with Eclipse

Mr. Marco Wong



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- Installation Guide of Java SE Development Kit 15
(either 15.0.1 or 15.0.2 is fine)
- Installation Guide of Eclipse
- Start Using Eclipse

Installation Guide of Java SE Development Kit 15

- Step 1) Go to:

<https://www.oracle.com/java/technologies/javase-downloads.html>

- Step 2) Click “**JDK Download**”



Java SE Downloads
Java Platform, Standard Edition

Java SE 15
Java SE 15.0.1 is the latest release for the Java SE Platform

- Documentation
- Installation Instructions
- Release Notes
- Oracle License
 - Binary License
 - Documentation License
- Java SE Licensing Information User Manual
 - Includes Third Party Licenses
- Certified System Configurations
- Readme

Oracle JDK










- **JDK Download**
- Documentation Download

Installation Guide of Java SE Development Kit 15

- Step 3) Download “**Java SE Development Kit 15**” according to your operating system.

Java SE Development Kit 15.0.1

This software is licensed under the [Oracle Technology Network License Agreement for Oracle Java SE](#)


Product / File Description	File Size	Download
Linux ARM 64 RPM Package	141.81 MB	 jdk-15.0.1_linux-aarch64_bin.rpm
Linux ARM 64 Compressed Archive	157.01 MB	 jdk-15.0.1_linux-aarch64_bin.tar.gz
Linux x64 Debian Package	154.79 MB	 jdk-15.0.1_linux-x64_bin.deb
Linux x64 RPM Package	162.02 MB	 jdk-15.0.1_linux-x64_bin.rpm
Linux x64 Compressed Archive	179.33 MB	 jdk-15.0.1_linux-x64_bin.tar.gz
macOS Installer	175.94 MB	 jdk-15.0.1_osx-x64_bin.dmg
macOS Compressed Archive	176.53 MB	 jdk-15.0.1_osx-x64_bin.tar.gz
Windows x64 Installer	159.69 MB	 jdk-15.0.1_windows-x64_bin.exe
Windows x64 Compressed Archive	179.27 MB	 jdk-15.0.1_windows-x64_bin.zip



Installation Guide of Java SEDevelopment Kit 15

- Step 4) Double Click the ***Executable File***.

Note: The one which is shown below is Windows 64 bit operating system and the following slides show the process of installation on Windows 64 bit OS.

 jdk-15.0.1_windows-x...	12/1/2021 12:28	應用程式	163,528 KB
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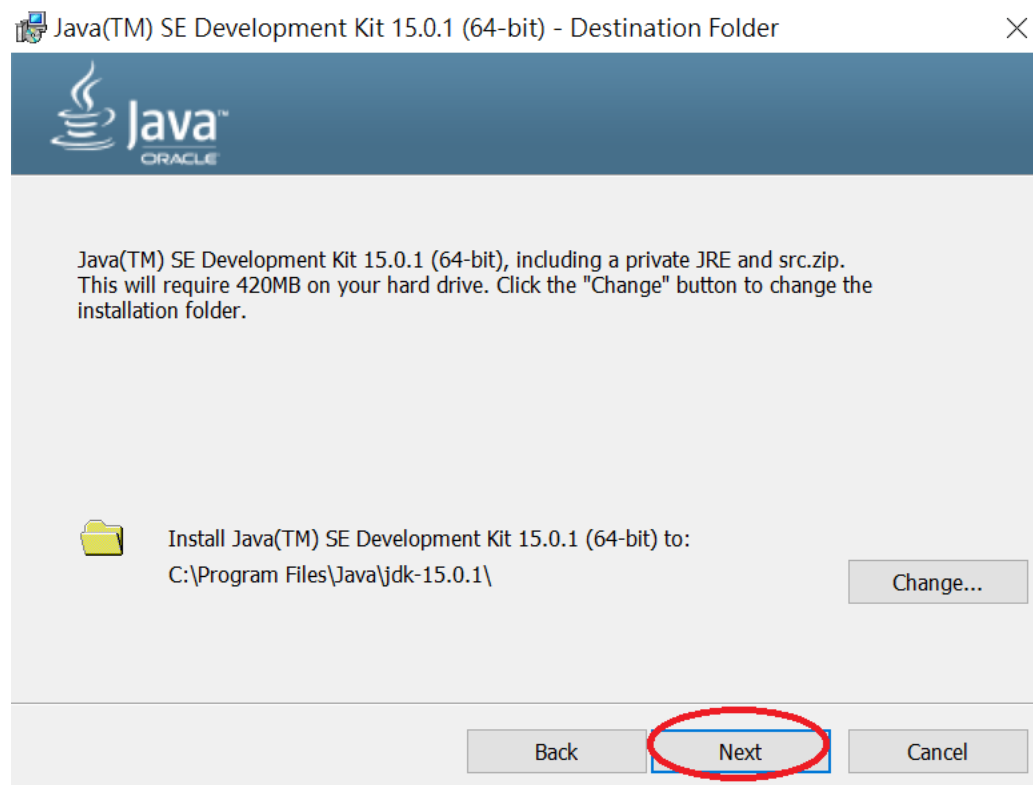
Installation Guide of Java SE Development Kit 15

- Step 5) The Setup Wizard Window will pop-up. Click “Next >”.



Installation Guide of Java SE Development Kit 15

- Step 6) Click “**Next >**” again. The installation process will start. After the installation is completed, click close.



Installation Guide of Eclipse

- Please feel free to **use ANY IDE** (Integrated Development Environment) to code a Java Program.
 - NetBeans
 - Eclipse
 - IntelliJ IDEA Community Edition
 - BlueJ
 - DrJava
 - Others.....
- For demonstration, **Eclipse** is adopted in Tutorials.
 - The current version is: “**2020-12 R**”



Installation Guide of Eclipse

- Step 1) Go to <https://www.eclipse.org/downloads/packages/>
- Step 2) Locate the section “Eclipse IDE for Java Developers”.
- Step 3) Download Eclipse according to your operating system.

Eclipse IDE 2020-12 R Packages

Eclipse IDE for Java Developers



321 MB 356,180 DOWNLOADS

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



Windows x86_64
macOS x86_64
Linux x86_64 | AArch64

Eclipse IDE for Enterprise Java Developers

499 MB 285,379 DOWNLOADS



Tools for developers working with Java and Web applications, including a Java IDE, tools for Web Services, JPA and Data Tools, JavaServer Pages and Faces, Mylyn, Maven and Gradle, Git, and more.

[Click here](#) to file a bug against Eclipse Web Tools Platform.

[Click here](#) to file a bug against Eclipse Platform.

[Click here](#) to file a bug against Maven integration for web projects.

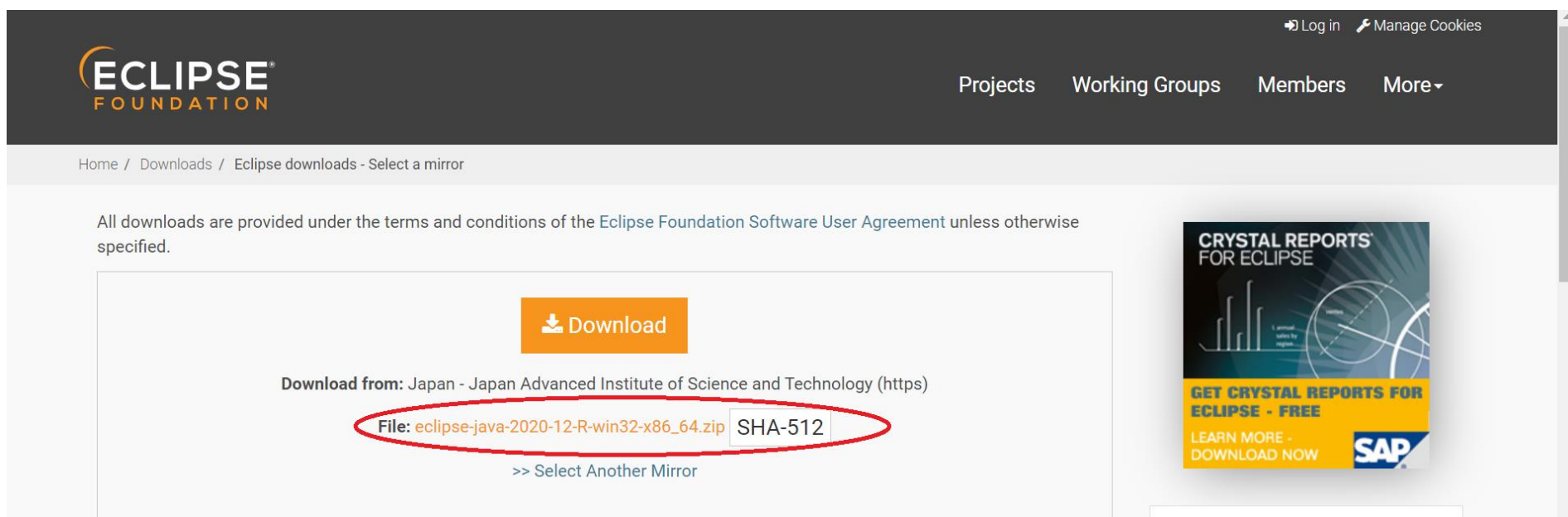
[Click here](#) to report an issue against Eclipse Wild Web Developer (incubating).



Windows x86_64
macOS x86_64
Linux x86_64 | AArch64

Installation Guide of Eclipse

- Step 4) Click the link “[eclipse-java-2020-12-R-win32-x86_64.zip](#)” to start downloading Eclipse. The demonstration here is Windows 64 bit operating system.



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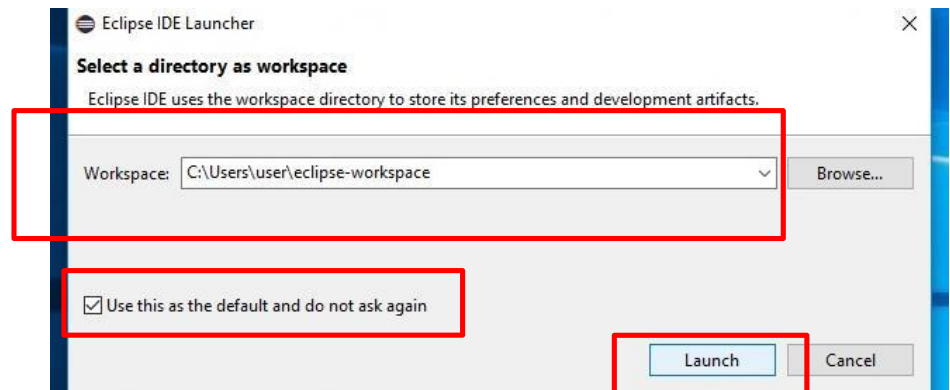
Installation Guide of Eclipse

- Step 5) After downloading Eclipse, please unzip the zipped file.
- Step 6) Double Click “**eclipse.exe**”.

 configuration	12/1/2021 13:14	檔案資料夾	
 dropins	10/12/2020 11:27	檔案資料夾	
 features	12/1/2021 13:14	檔案資料夾	
 p2	12/1/2021 13:09	檔案資料夾	
 plugins	12/1/2021 13:12	檔案資料夾	
 readme	12/1/2021 13:14	檔案資料夾	
 .eclipseproduct	12/1/2021 13:09	ECLIPSEPRODUCT ...	1 KB
 artifacts	12/1/2021 13:09	XML Document	116 KB
 eclipse	12/1/2021 13:09	應用程式	417 KB
 eclipse	12/1/2021 13:09	組態設定	1 KB
 eclipsec	12/1/2021 13:09	應用程式	129 KB

Installation Guide of Eclipse

- Step 7) A window will pop-up with asking you to “**Select a directory as Workspace**” which ***all the Java Projects / Source Code Files will be stored in that location.***
- Step 8) Check the checkbox of “**Use this as the default and do not ask again**”. Then Click “**Launch**”.





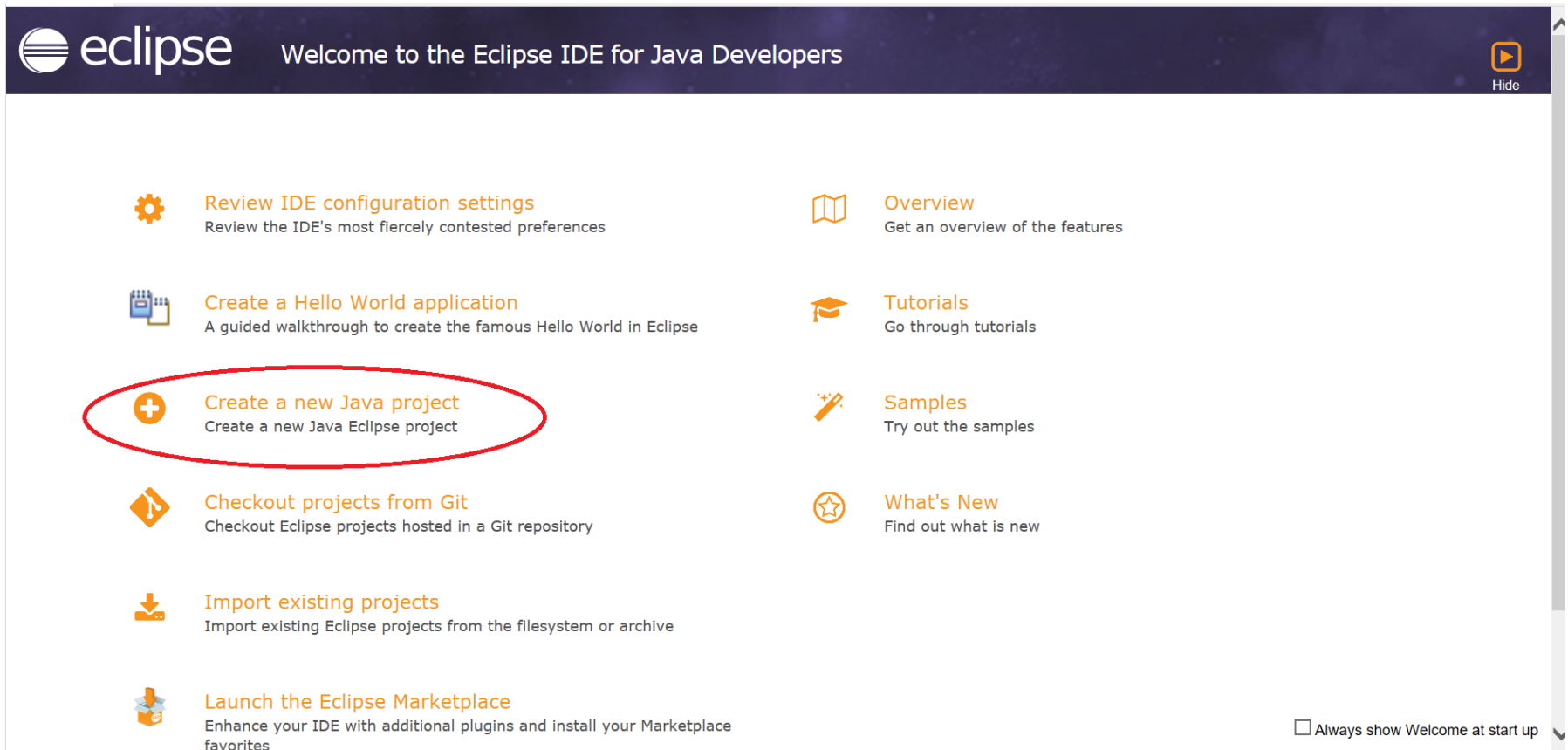
Start Using Eclipse

- We have installed the required softwares for learning and coding in this course.
 - Java SE Development Kit 15
 - Eclipse 2020-12 (IDE)
- Now, we are going to learn how to use Eclipse.
 1. Creating a new Java Project to start coding
 2. Shortcut keys to facilitate your coding
 3. Importing a current Java Project into Workspace
 4. Importing a Java Source Code File into Workspace

Start Using Eclipse

– Creating a new Java Project to start coding

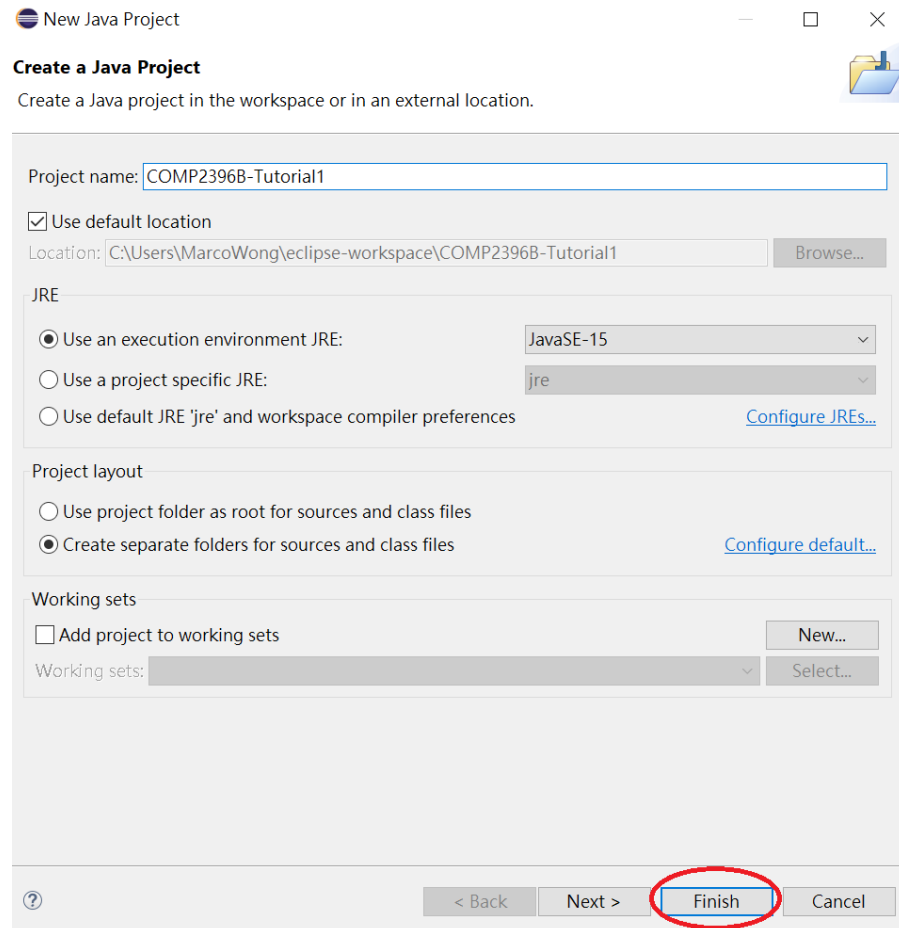
- Step 1) Click **Create a new Java project.**



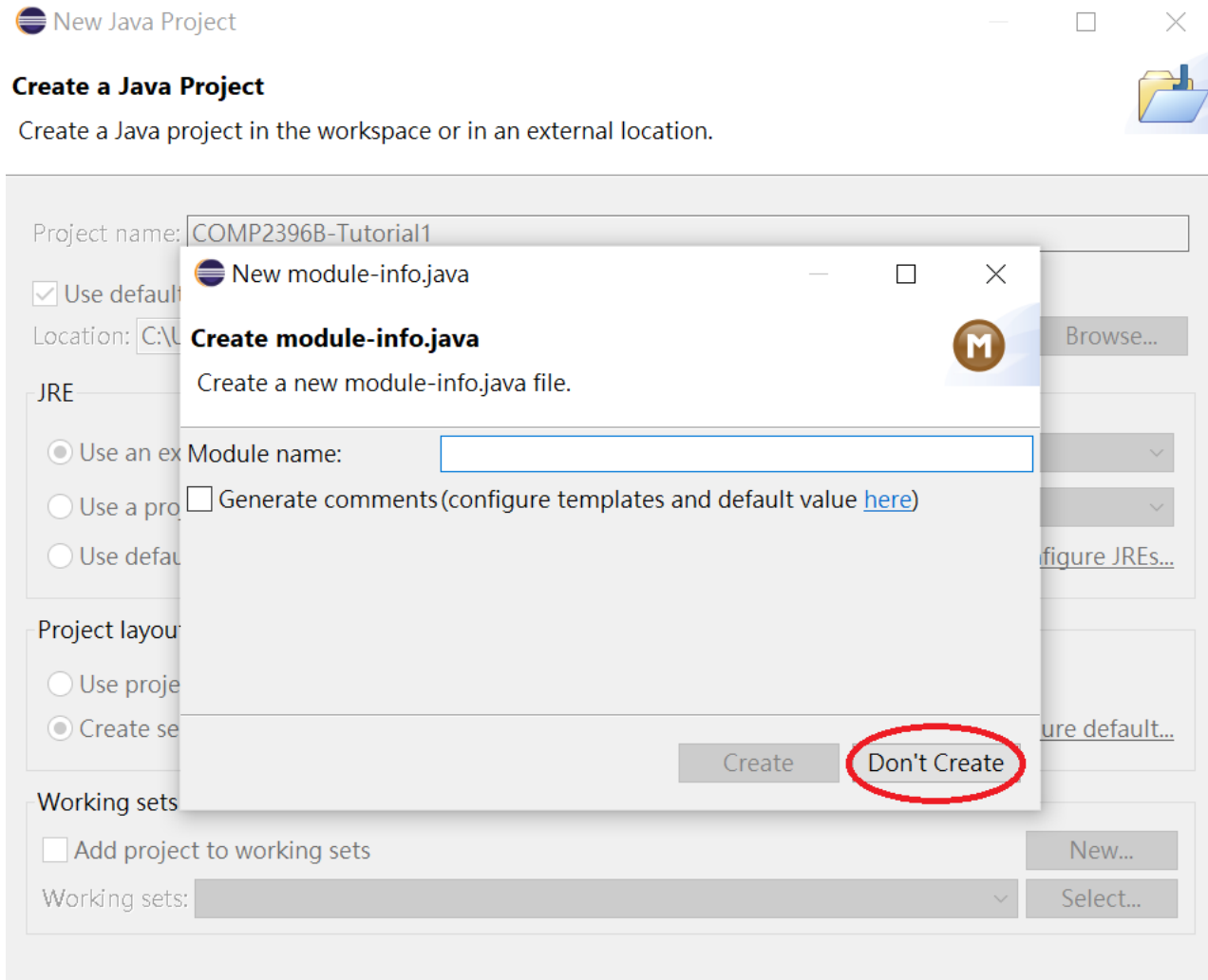
Start Using Eclipse

– Creating a new Java Project to start coding

- Step 2) Input “COMP2396B-Tutorial1” as **Project Name**.
- Step 3) Then Click “**Finish**”.



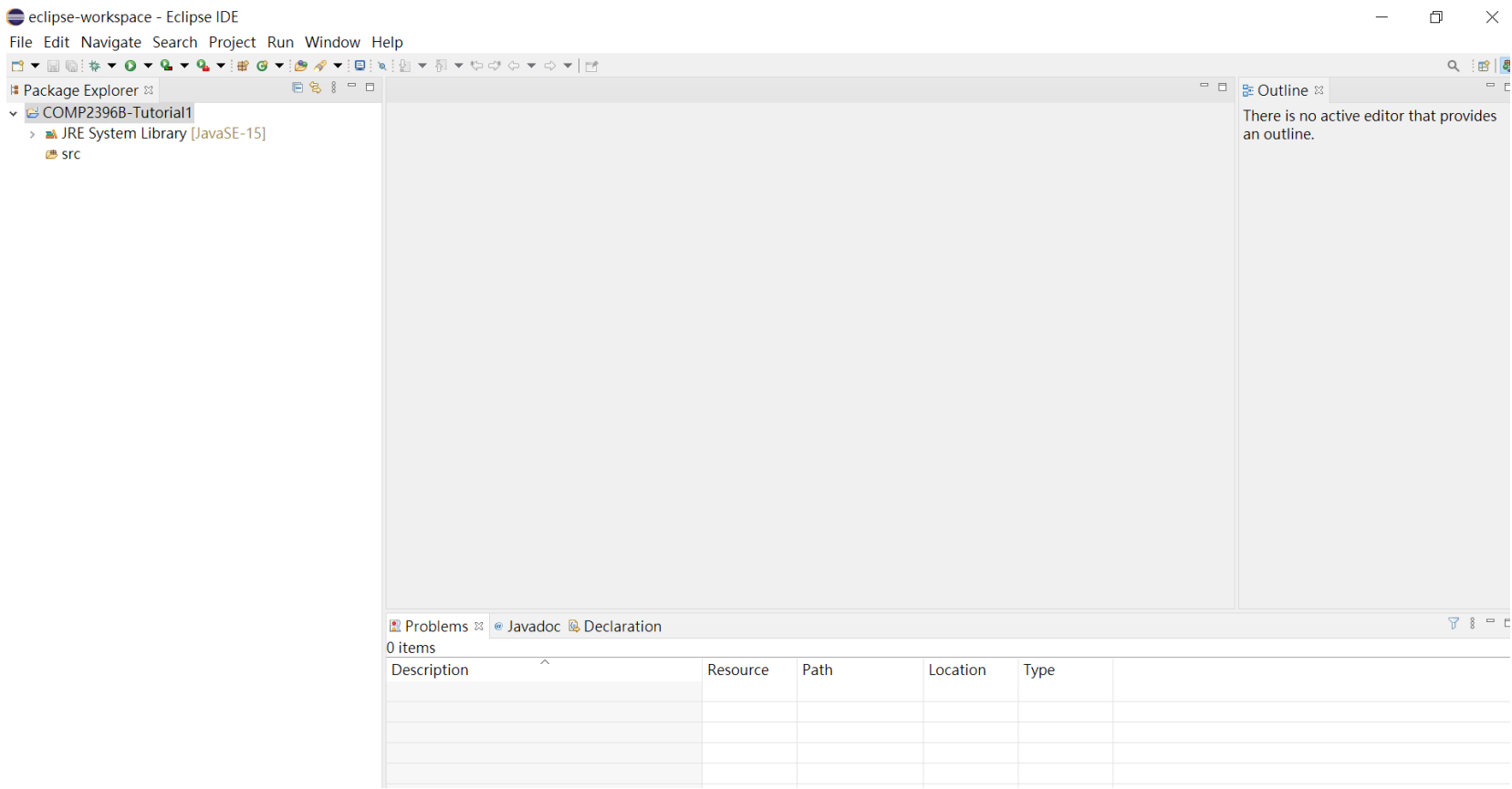
Step 4) Click Don't create in the following windows





Start Using Eclipse

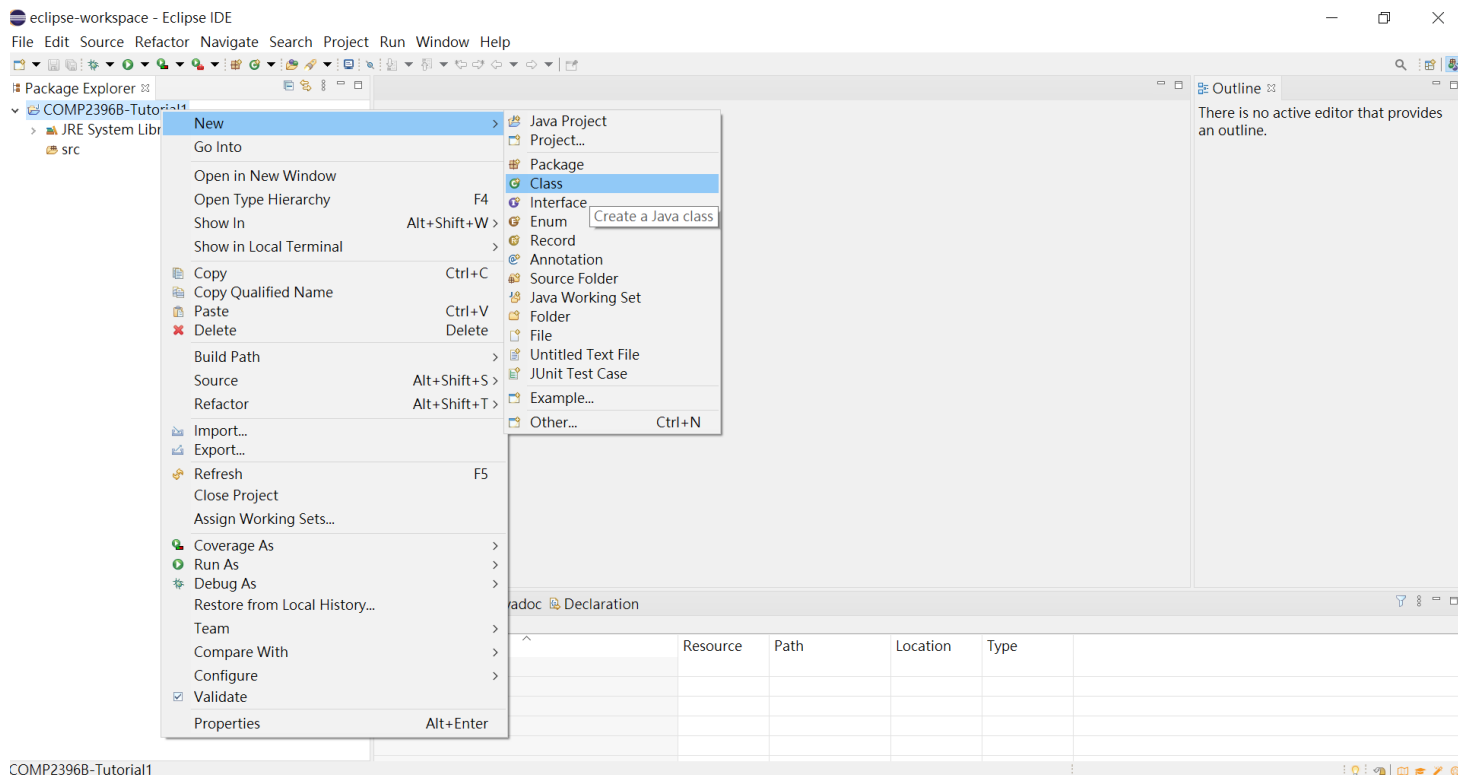
- Creating a new Java Project to start coding
- Step 5) A folder called “COMP2396B-Tutorial1” is created which can be found from **Package Explorer**.



Start Using Eclipse

– Creating a new Java Project to start coding

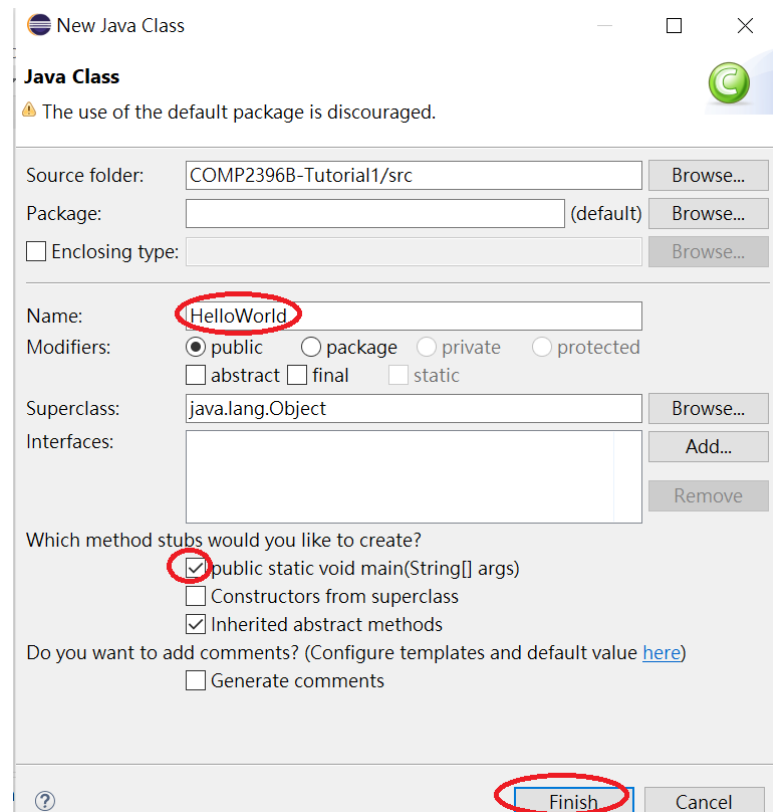
- Step 6) Right-Click the folder “COMP2396B-Tutorial1”.
- Step 7) Move the mouse cursor onto the option “New”.
- Step 8) Select “Class”.



Start Using Eclipse

– Creating a new Java Project to start coding

- Step 9) Type “HelloWorld” as Class Name.
- Step 10) Check the checkbox of “public static void main(String[] args)”.
- Step 11) Then Click “Finish”.



Start Using Eclipse

– Creating a new Java Project to start coding

- Step 12) A Java Source Code File “**HelloWorld.java**” is created. Try to type some programming statements in the main method.

eclipse-workspace - COMP2396B-Tutorial1/src/HelloWorld.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer

- COMP2396B-Tutorial1
 - JRE System Library [JavaSE-15]
 - src
 - (default package)
 - HelloWorld.java

```
1
2 public class HelloWorld {
3
4     public static void main(String[] args) {
5         System.out.println("Hello World");
6     }
7
8 }
9
10
```

Outline

- HelloWorld
 - main(String[]) : void

Problems Javadoc Declaration

0 items

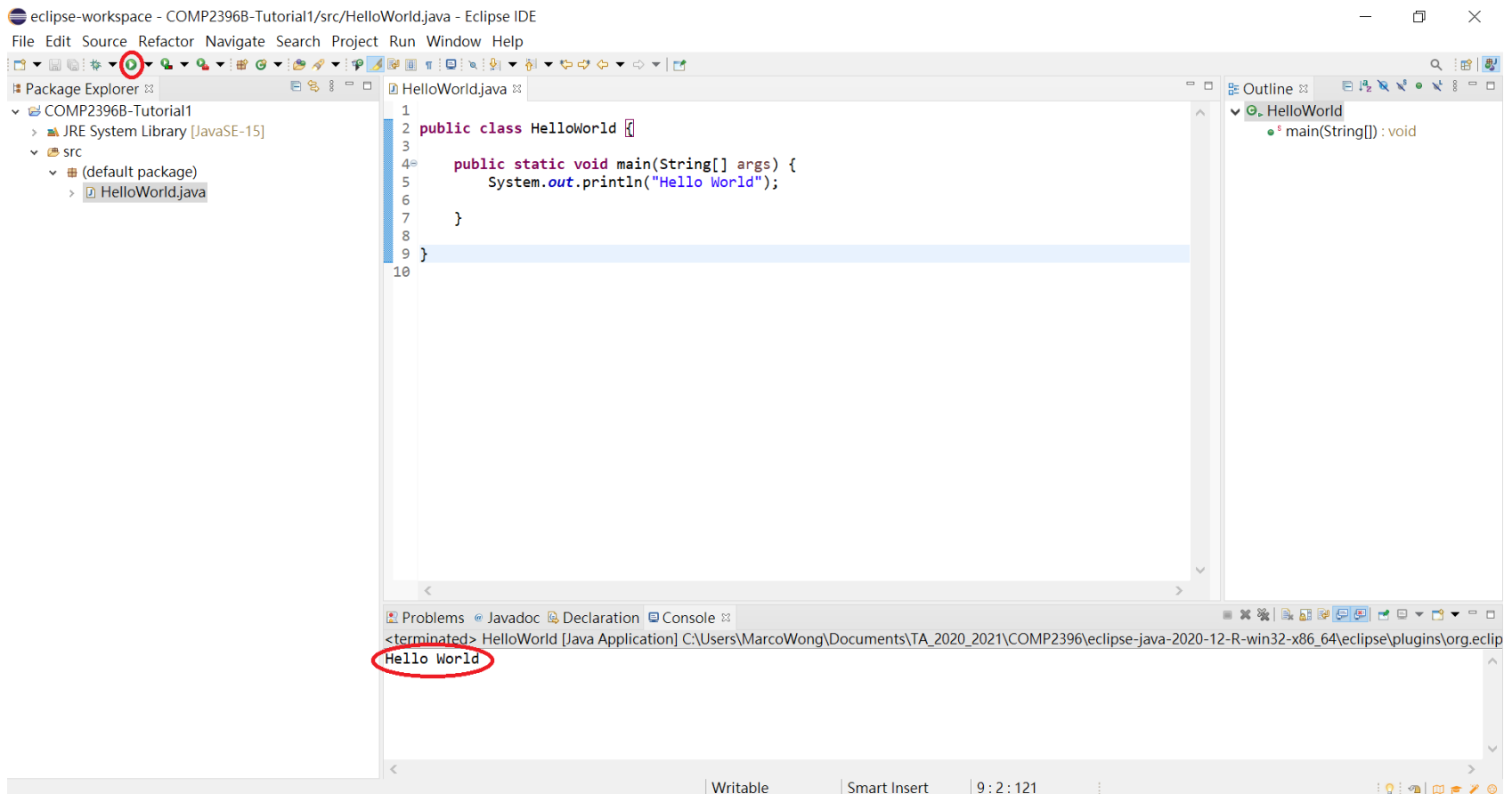
Description	Resource	Path	Location	Type

Writable Smart Insert 9 : 2 : 121

Start Using Eclipse

– Creating a new Java Project to start coding

- Step 13) Run the HelloWorld.java by **clicking the PLAY button**. You can find **the output in Console tab**.



Shortcut keys to facilitate your coding

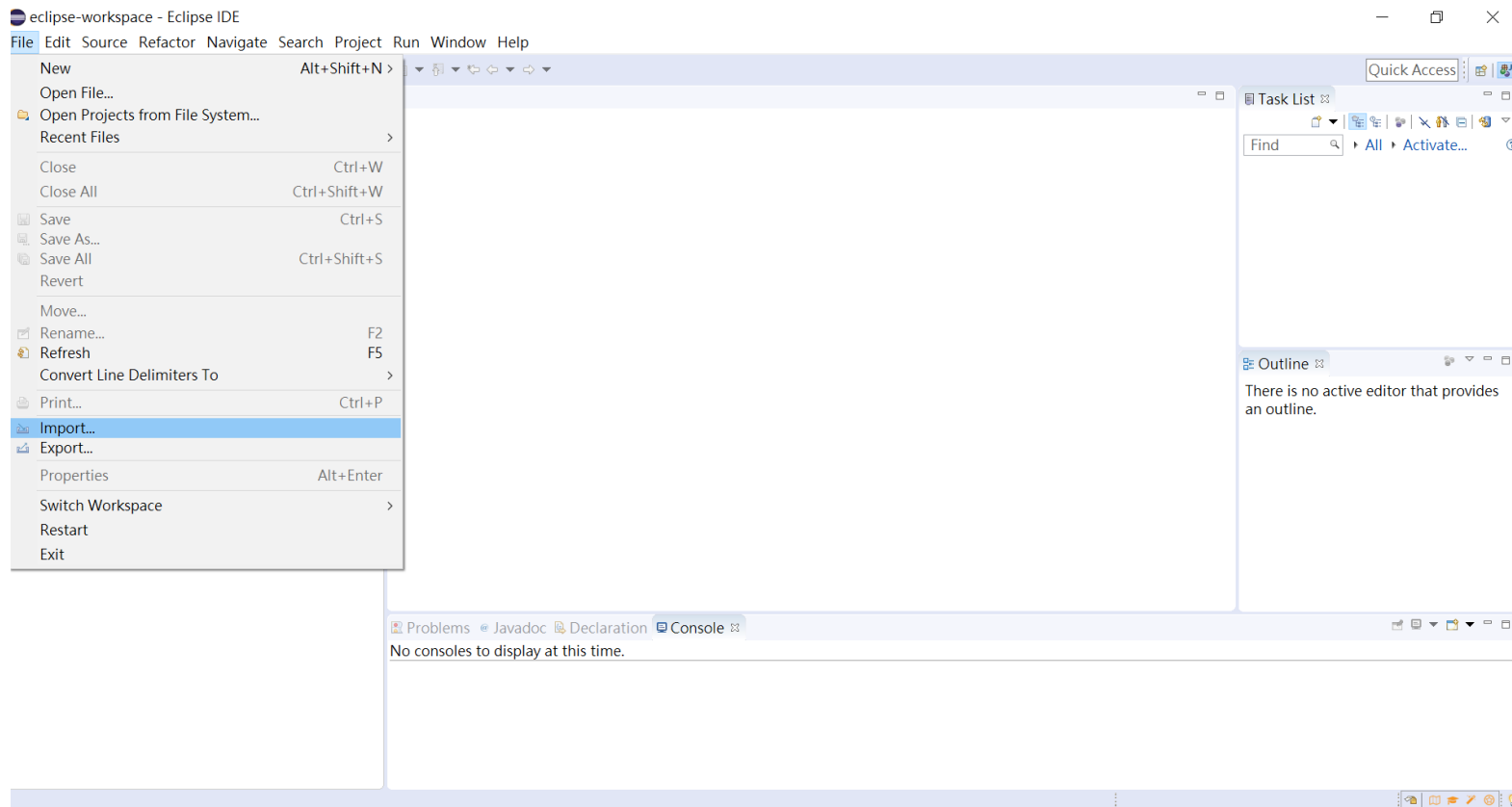
Shortcut Keys	Function
Ctrl + Shift + f	Format all programming statements with appropriate indentation
Ctrl + /	Comment a block of code statements
Ctrl + f	Find / Replace
Ctrl + d	Delete a line of programming statement
Ctrl + c	Copy
Ctrl + x	Cut
Ctrl + v	Paste
Ctrl + s	Save

Start Using Eclipse

– Importing a current Java Project into Workspace

Step 1) Select **File**, then select **Import...**

A zip file called “COMP2396A_import” is uploaded to Moodle, you can download it for try.





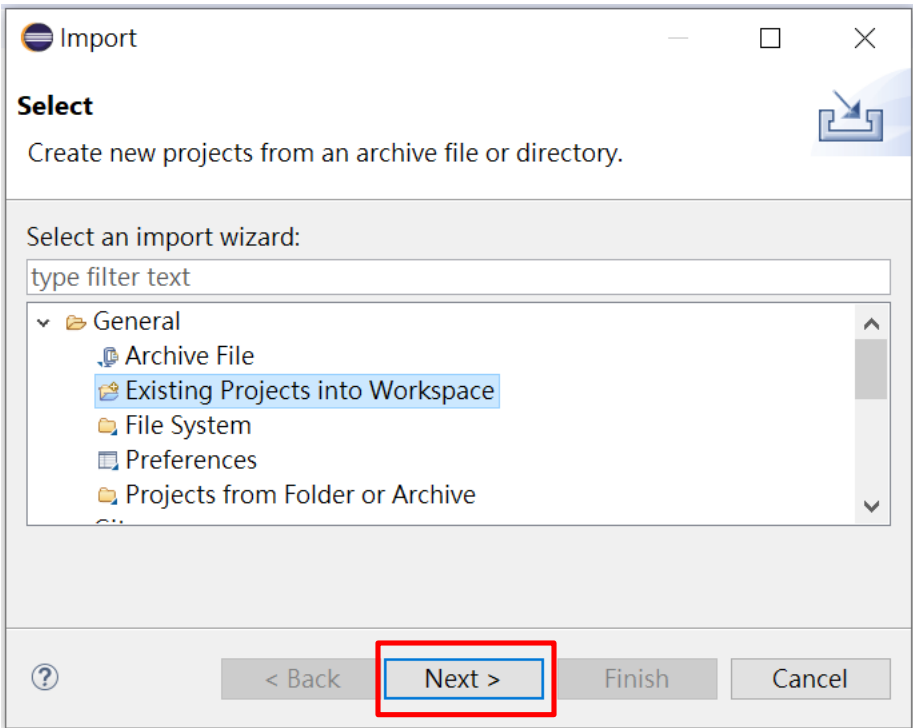
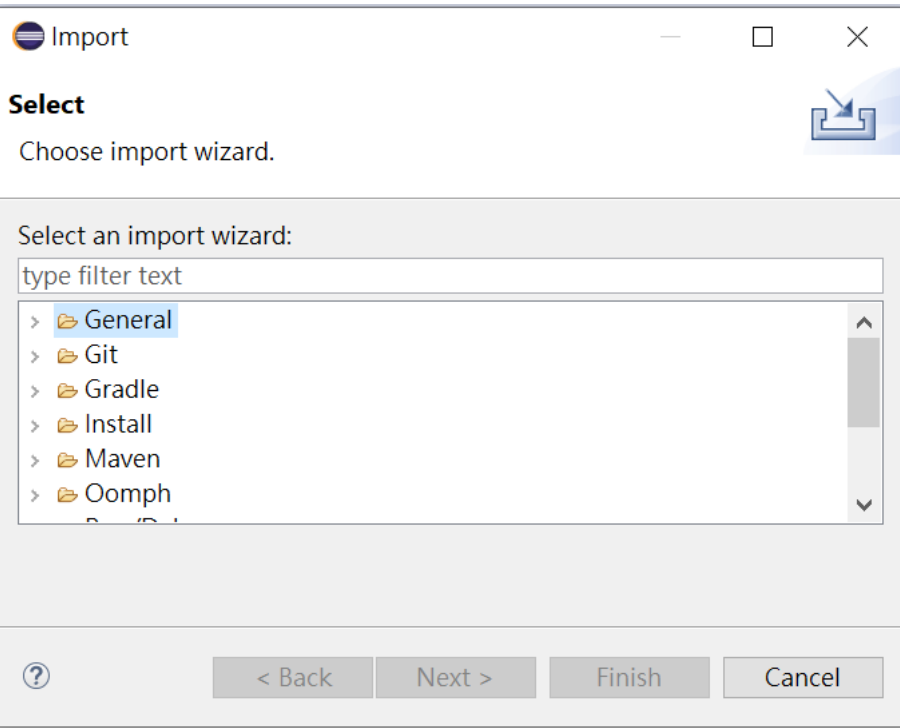
Start Using Eclipse

– Importing a current Java Project into Workspace

Step 2) Unzip the downloaded file.

Step 3) An import wizard window will pop up. Expand “General”.

Step 4) Select “Existing Projects into Workspace”. The Click “Next >”.

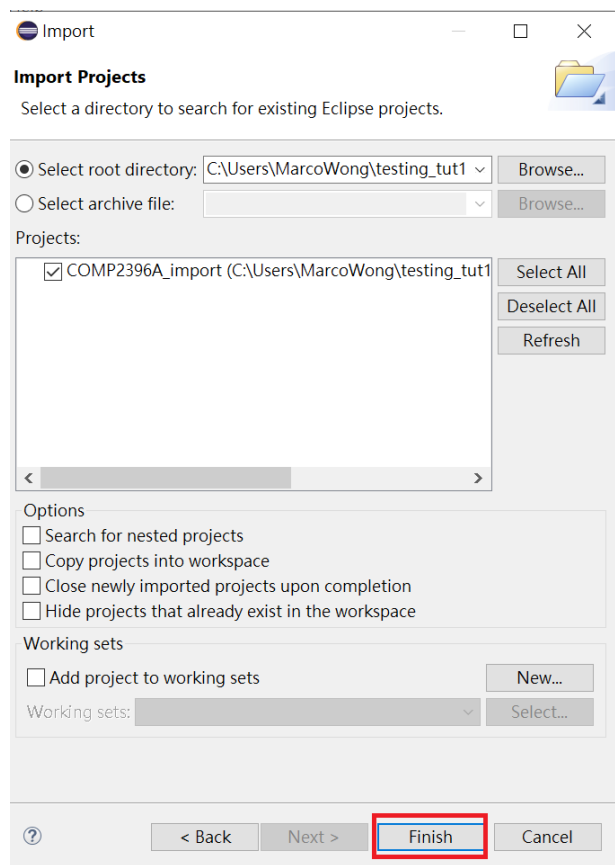
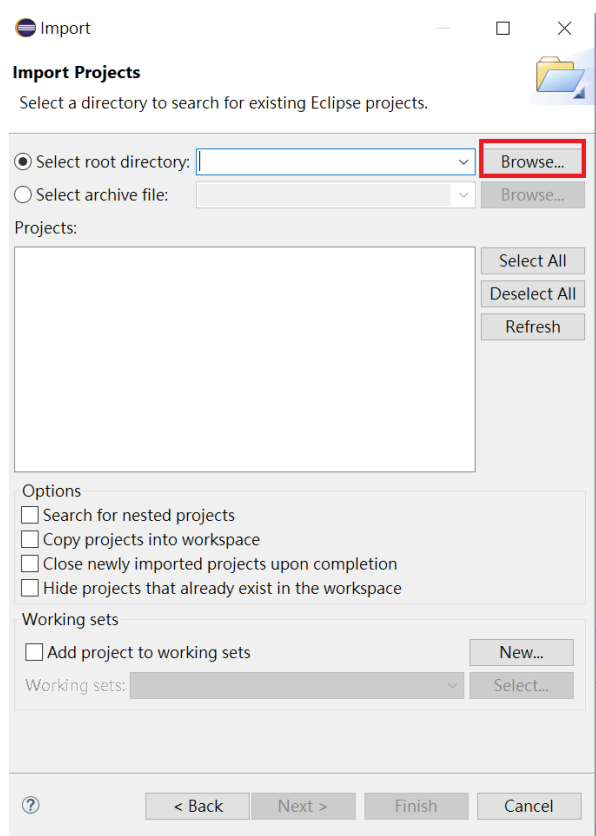




Start Using Eclipse

– Importing a current Java Project into Workspace

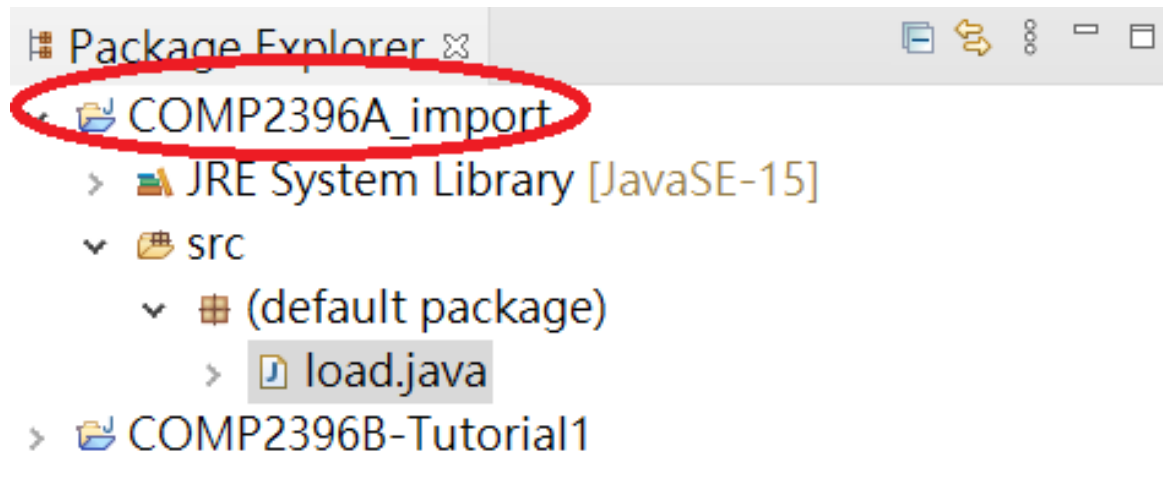
- Step 5) Click “Browse...” to select the path where your Java Project is unzipped. Click “Finish”.



Start Using Eclipse

– Importing a current Java Project into Workspace

- You will find the selected Java Project is in Workspace now.

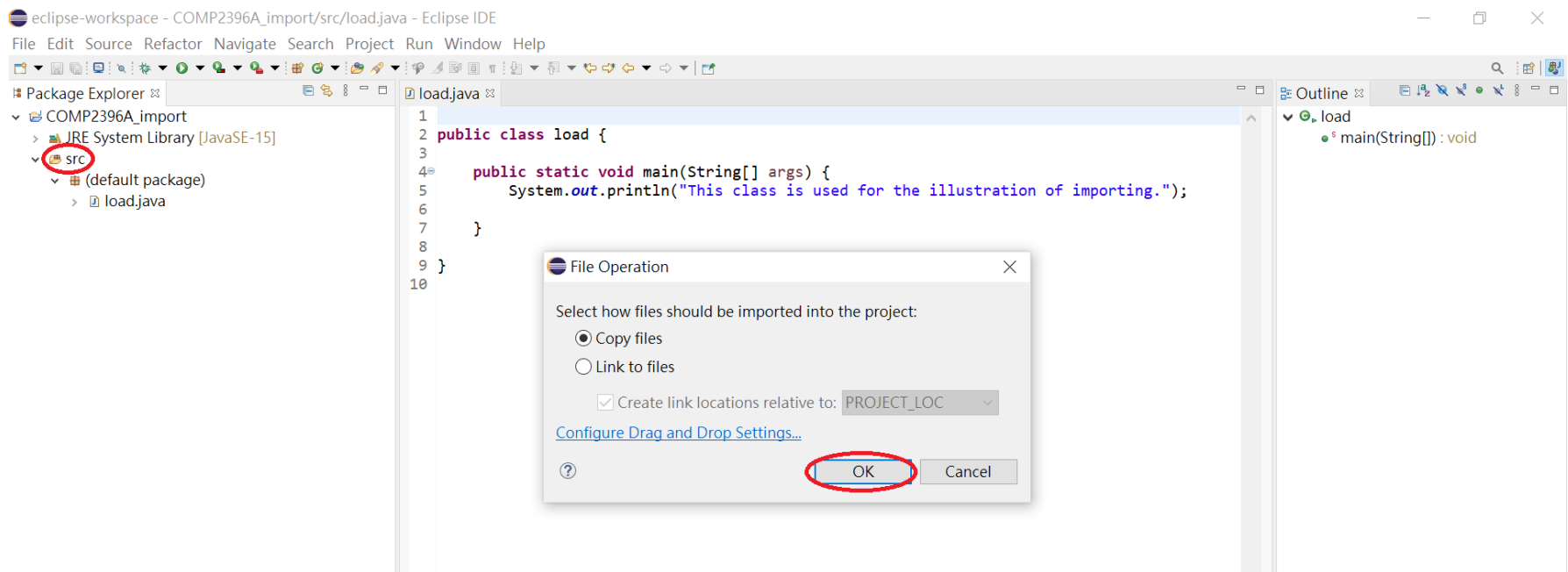


Start Using Eclipse

– Importing a Java Source Code File into Workspace

- If you want to import a Java Source Code File, you can drag and drop it into any existing Java Project.

➤ **Important:** Put them under the “**src**” folder **with default package**.

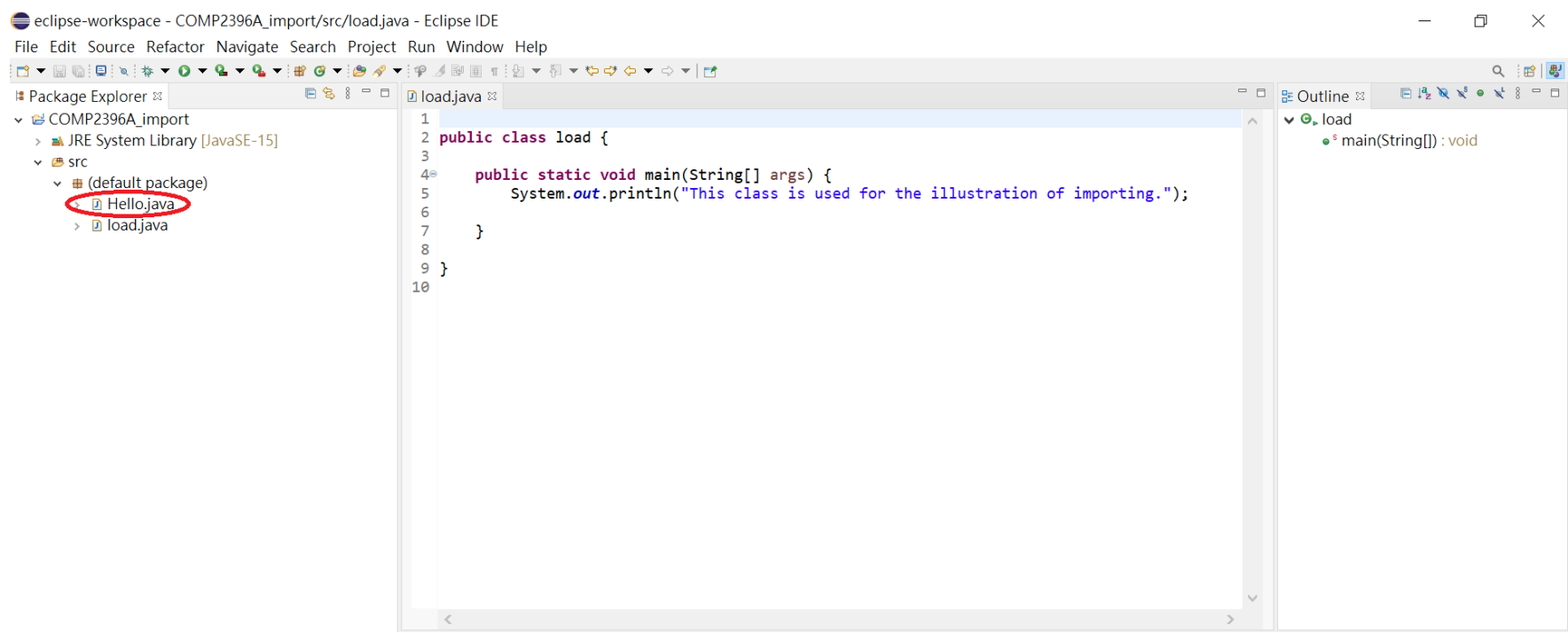




Start Using Eclipse

– Importing a Java Source Code File into Workspace

The Java Source Code File “Hello.java” is imported.





References

This tutorial is modified from COMP2396A: Object-Oriented Programming and Java

Tutorial 1: Getting Started with Eclipse by Mr. Justin Yum