

SELENIUM TEST CASE IN ECLIPSE

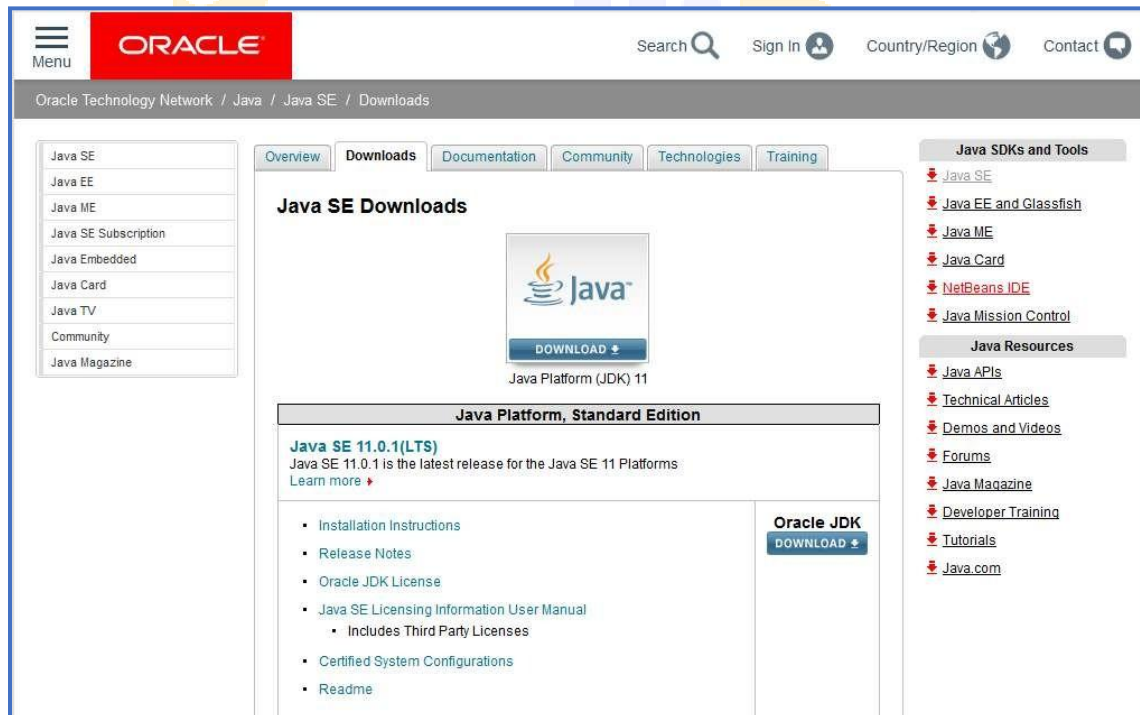
This documentation is divided into three parts:

1. Java JDK installation
2. Eclipse installation
3. Selenium Test Case

1. Install Java JDK

Step 1: Download java jdk.

<https://www.oracle.com/technetwork/java/javase/downloads/index.html>



Then click on the oracle Jdk Download button, you will land on a page as shown below. Accept the License Agreement. Download the .exe file.

Java SE Development Kit 11.0.1

You must accept the [Oracle Technology Network License Agreement for Oracle Java SE](#) to download this software.

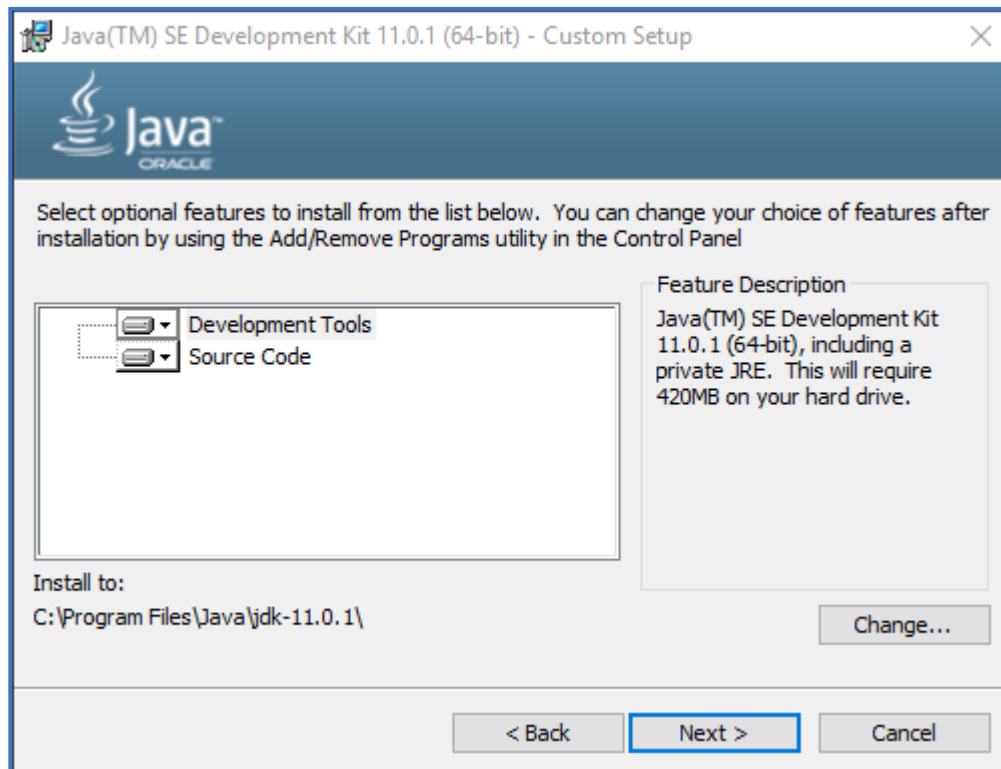
☐ Accept License Agreement ☒ Decline License Agreement

Product / File Description	File Size	Download
Linux	147.4 MB	jdk-11.0.1_linux-x64_bin.deb
Linux	154.09 MB	jdk-11.0.1_linux-x64_bin.rpm
Linux	171.43 MB	jdk-11.0.1_linux-x64_bin.tar.gz
macOS	166.2 MB	jdk-11.0.1_osx-x64_bin.dmg
macOS	166.55 MB	jdk-11.0.1_osx-x64_bin.tar.gz
Solaris SPARC	186.8 MB	jdk-11.0.1_solaris-sparcv9_bin.tar.gz
Windows	150.98 MB	jdk-11.0.1_windows-x64_bin.exe
Windows	170.99 MB	jdk-11.0.1_windows-x64_bin.zip

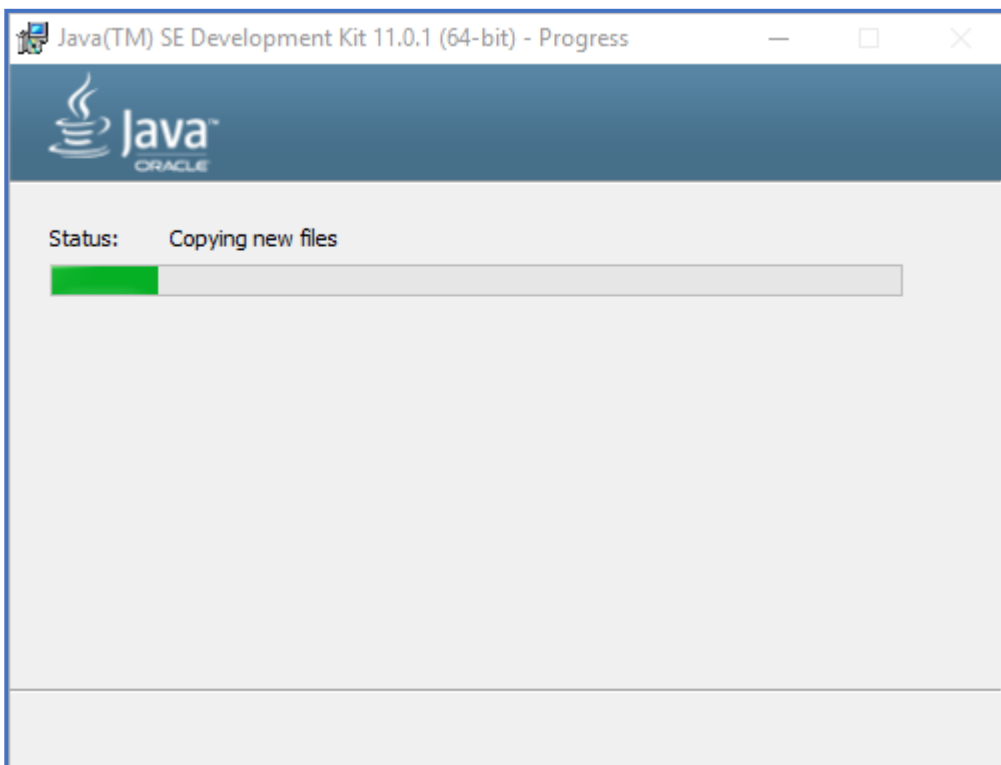
Step 2: Open that downloaded execution file then click on **Next**.



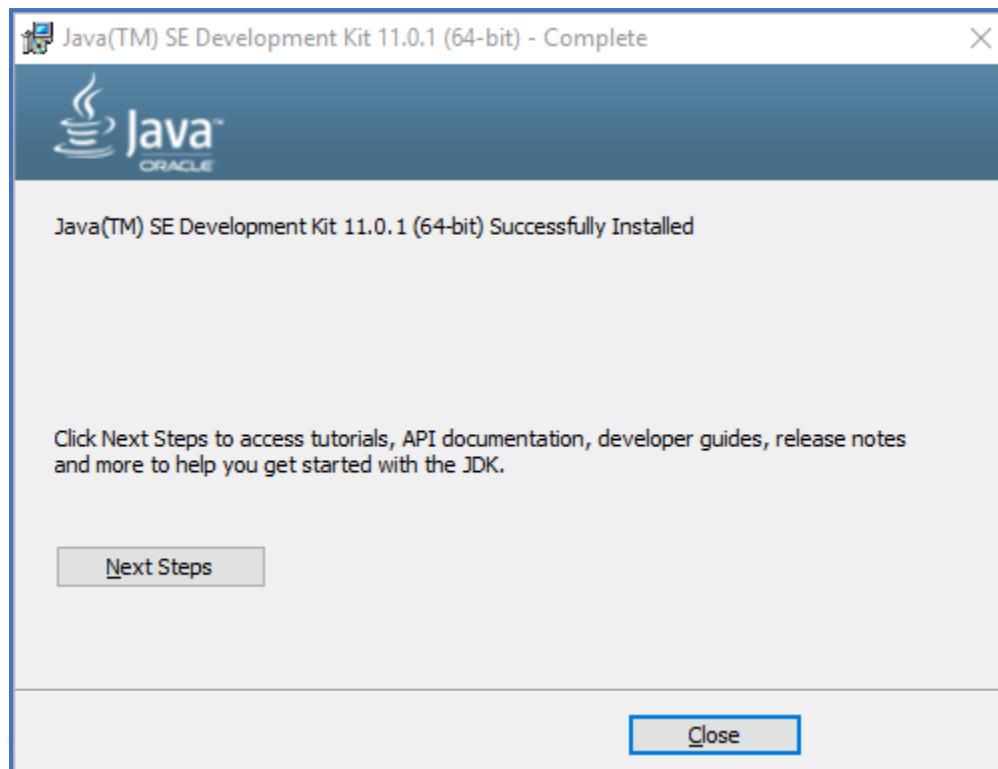
Step 3: Select **Developers Tools** and click **Next**.



Step 4: It will take a few moments to set up jdk in your system

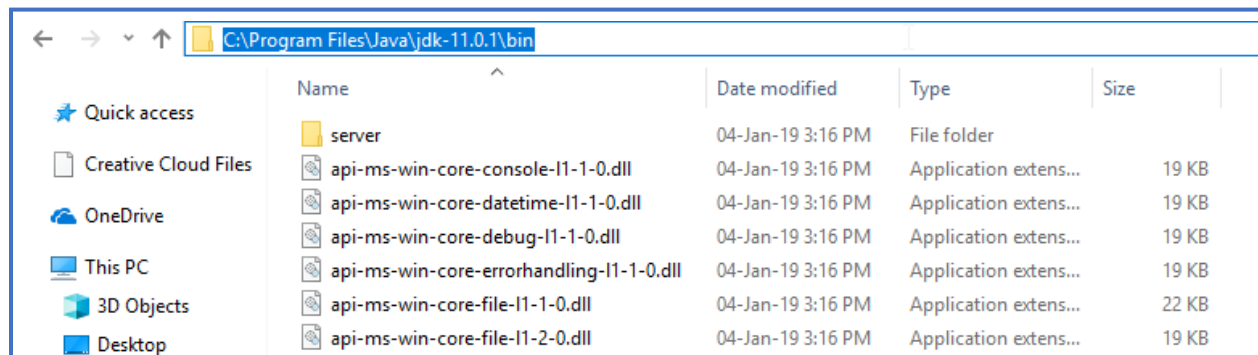


Step 5: Click on close to complete the set up.



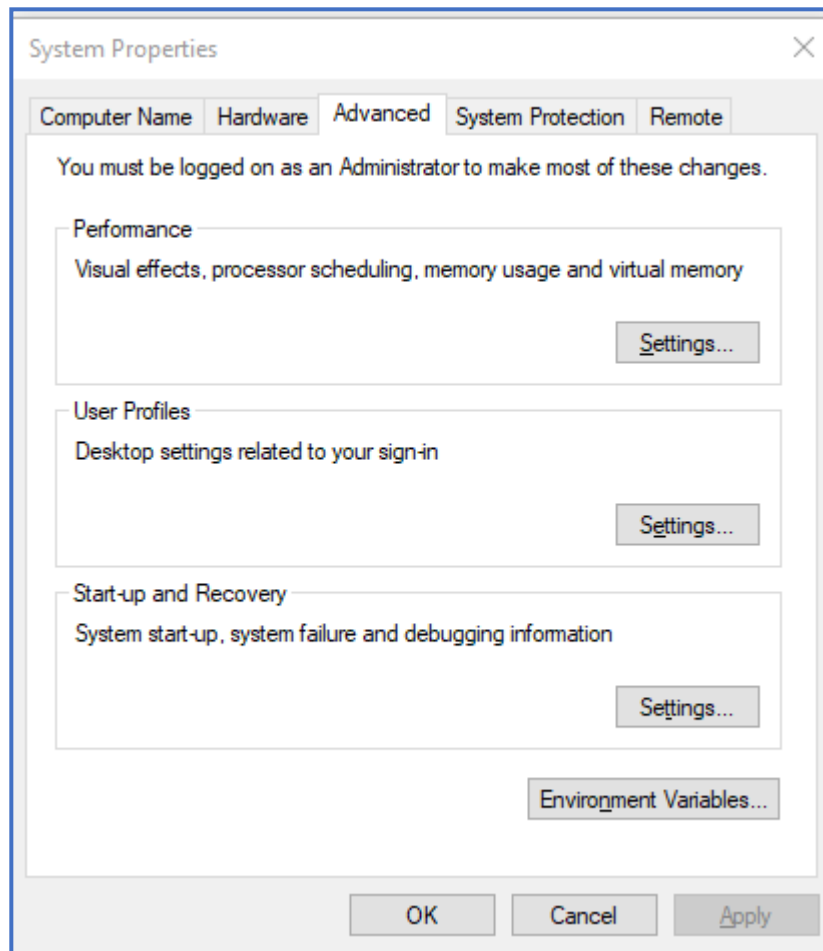
Before moving ahead, we need **to add the environment variables to the path** as follows.

Step 5: Go to local **C drive** > Program Files > java > **jdk-11.0.1\bin**

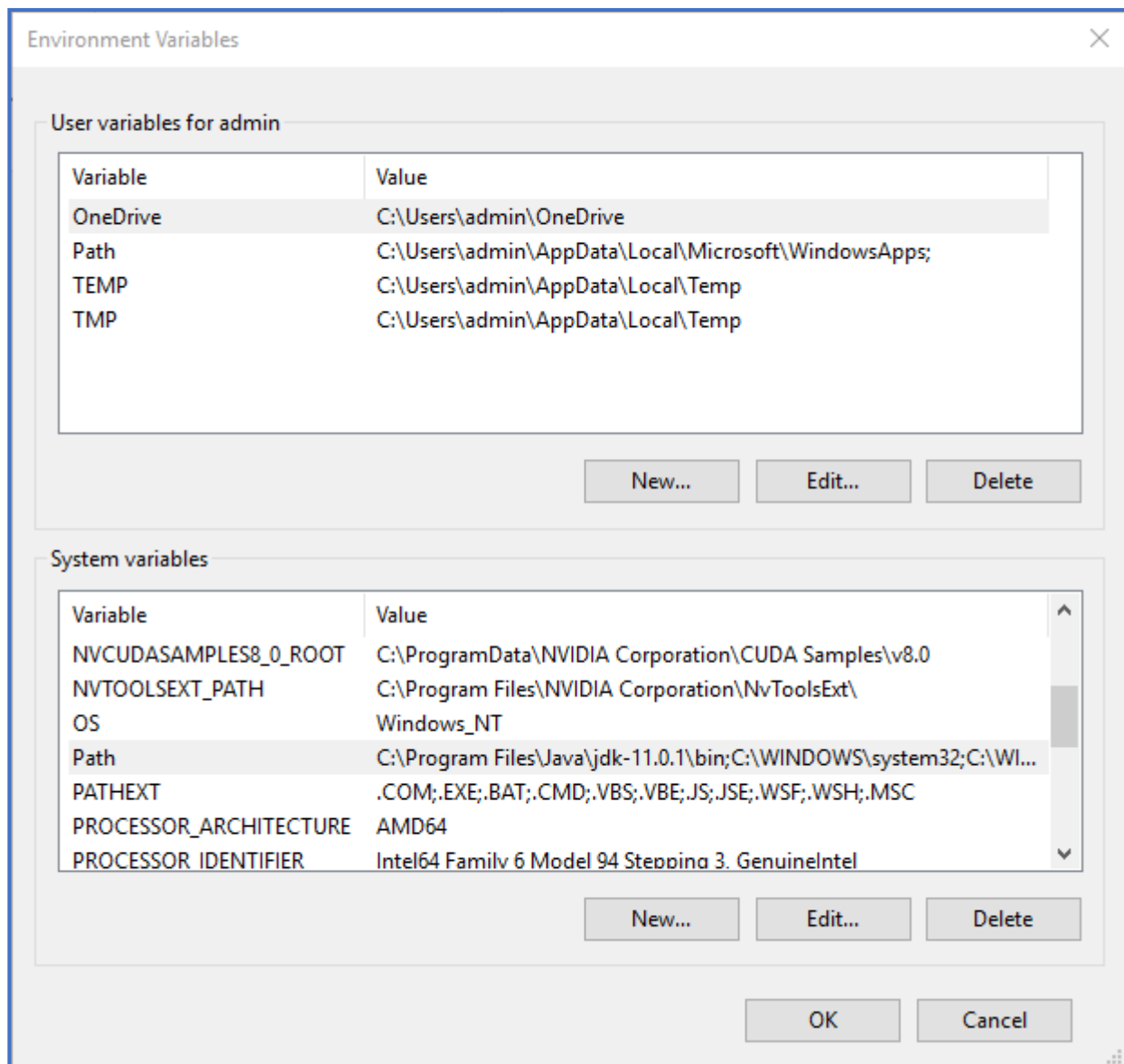


Step 6: Copy the path as shown above.

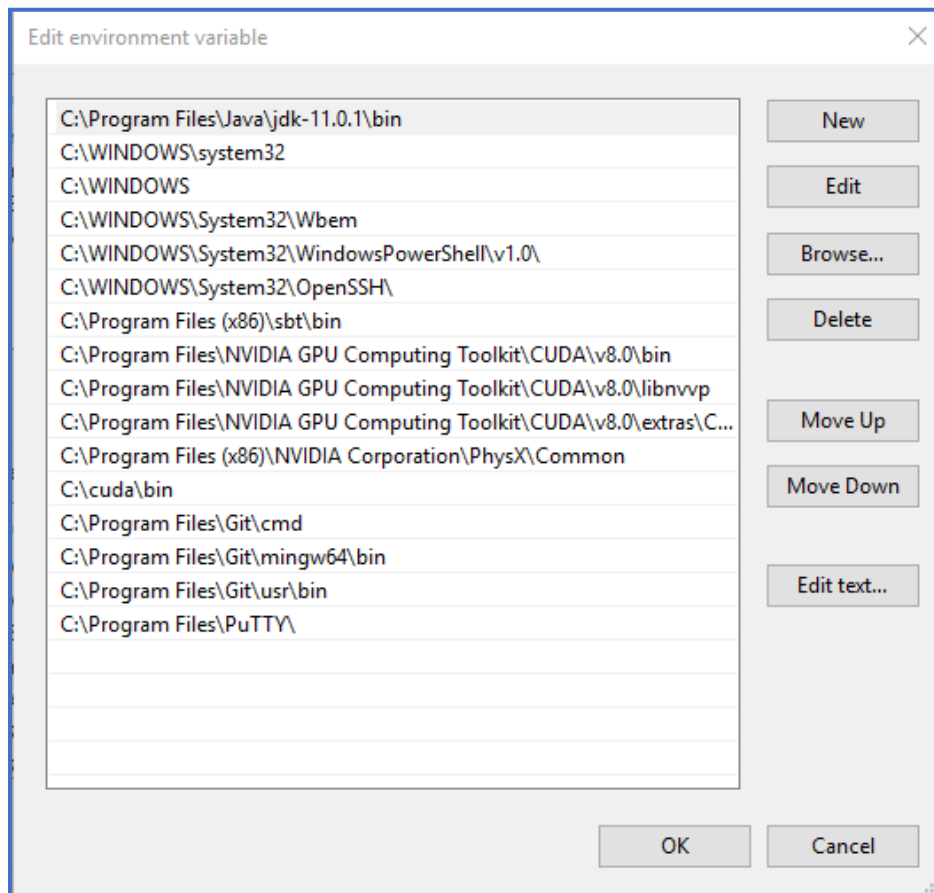
Step 7: Go to **Control Panel** > **System and Security** > **System** > **Advanced System Settings**



Step 8: Click on **Environment Variables**.



Step 9: Click on Path in the System Variables section. And then paste the previously copied path (**C:\Program Files\Java\jdk-11.0.1\bin**) as shown below.



Step 10: Now open **command prompt** and run the following command.

```
java -version
```

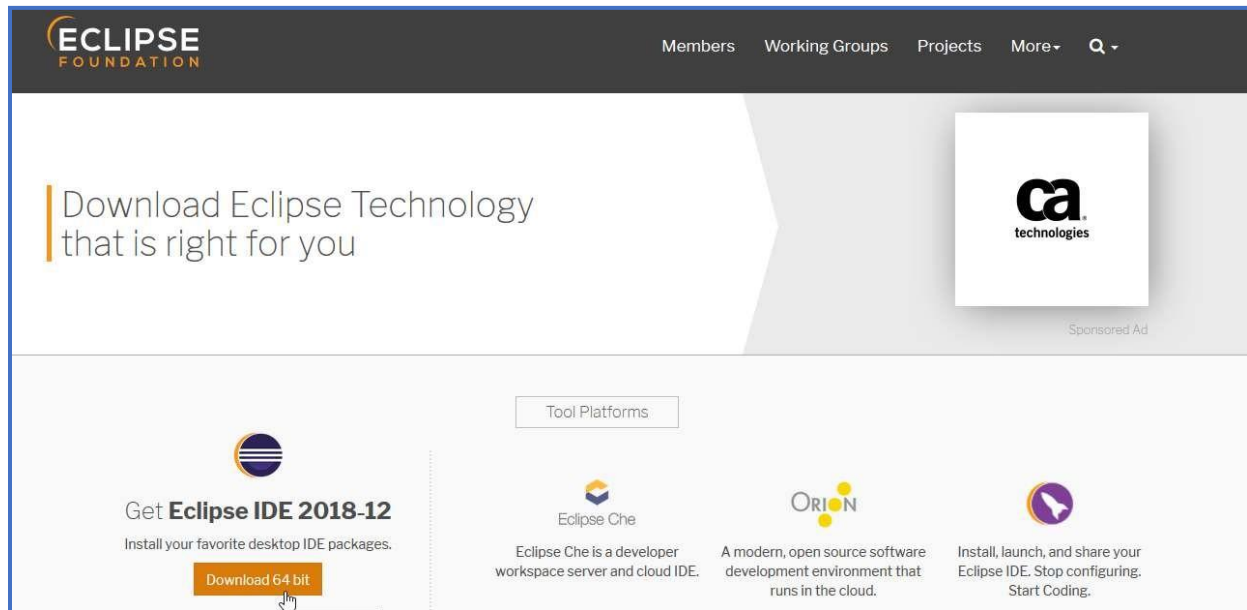
```
Command Prompt
Microsoft Windows [Version 10.0.17134.472]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\INTELLIPAAT>java -version
java version "11.0.1" 2018-10-16 LTS
Java(TM) SE Runtime Environment 18.9 (build 11.0.1+13-LTS)
Java HotSpot(TM) 64-Bit Server VM 18.9 (build 11.0.1+13-LTS, mixed mode)
```

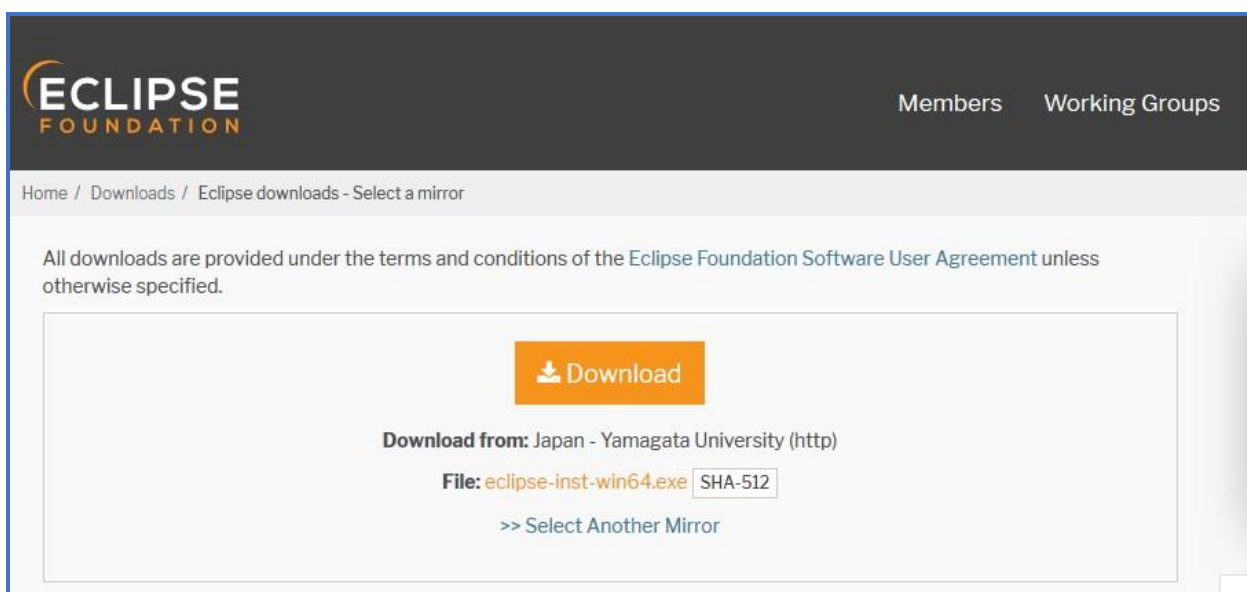
2. Eclipse Installation

Step 1: Go to the eclipse download page.

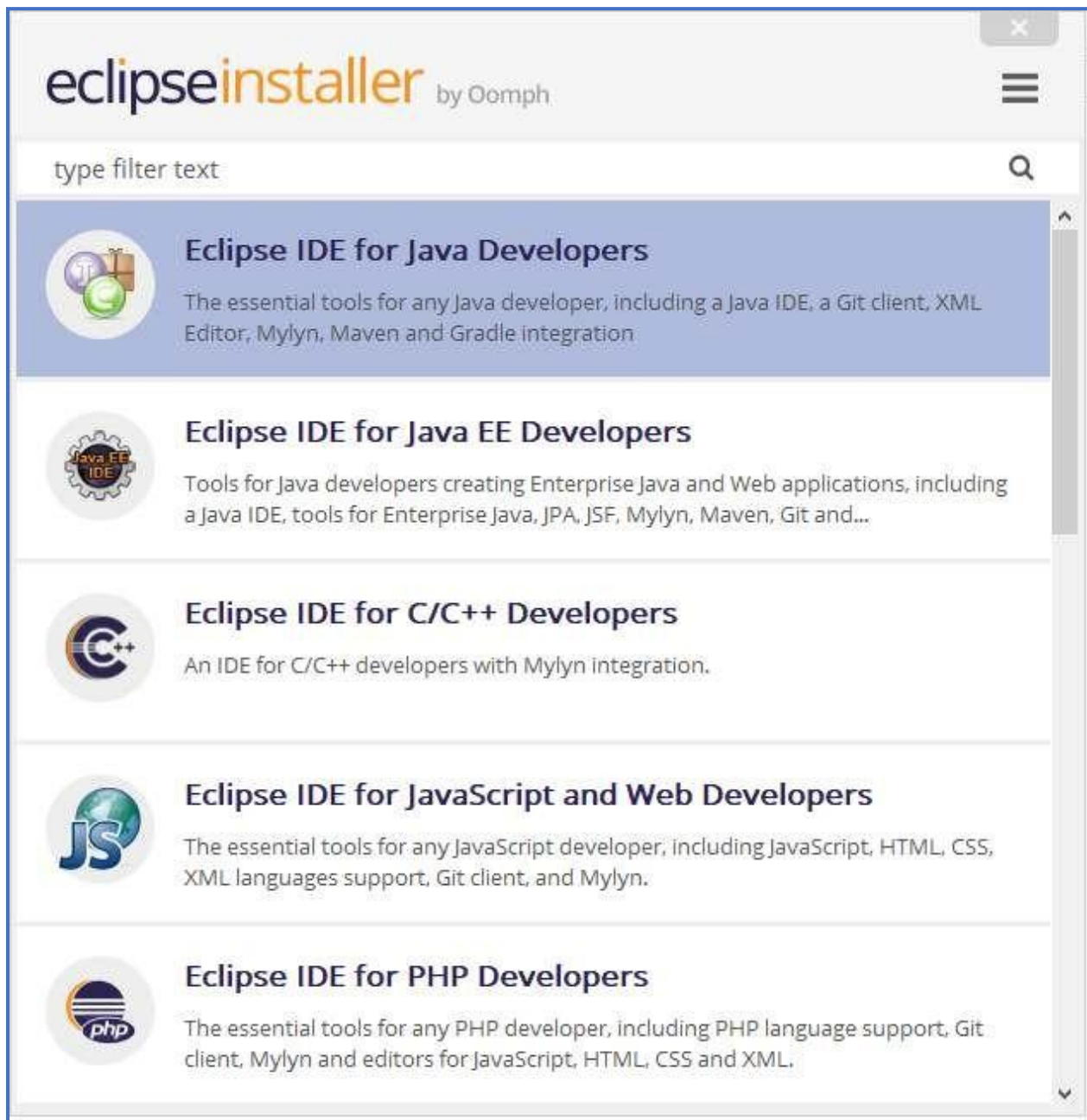
<https://www.eclipse.org/downloads/>



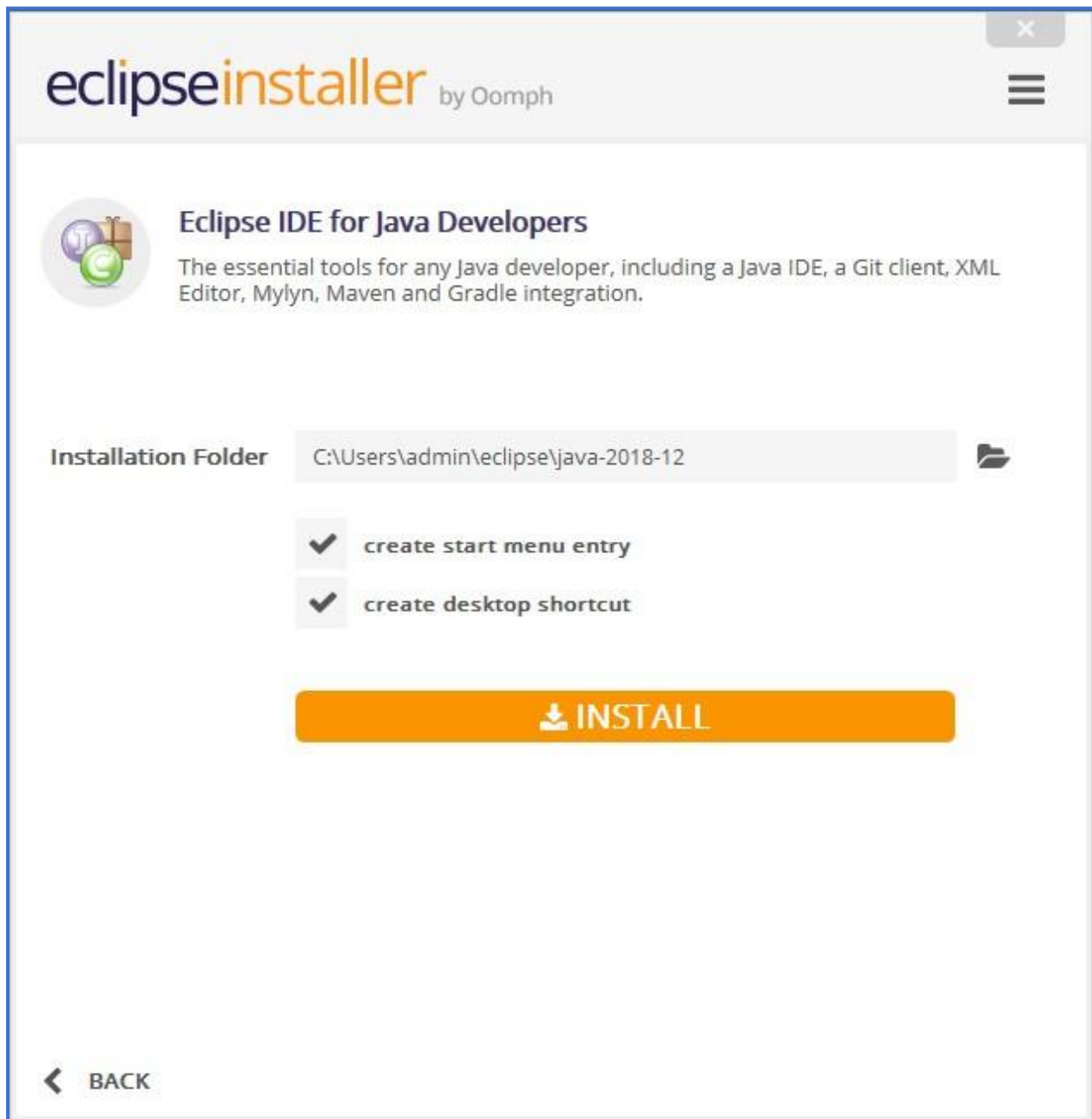
Step 2: Click on the download 64-bit link. You should land on a page as shown.



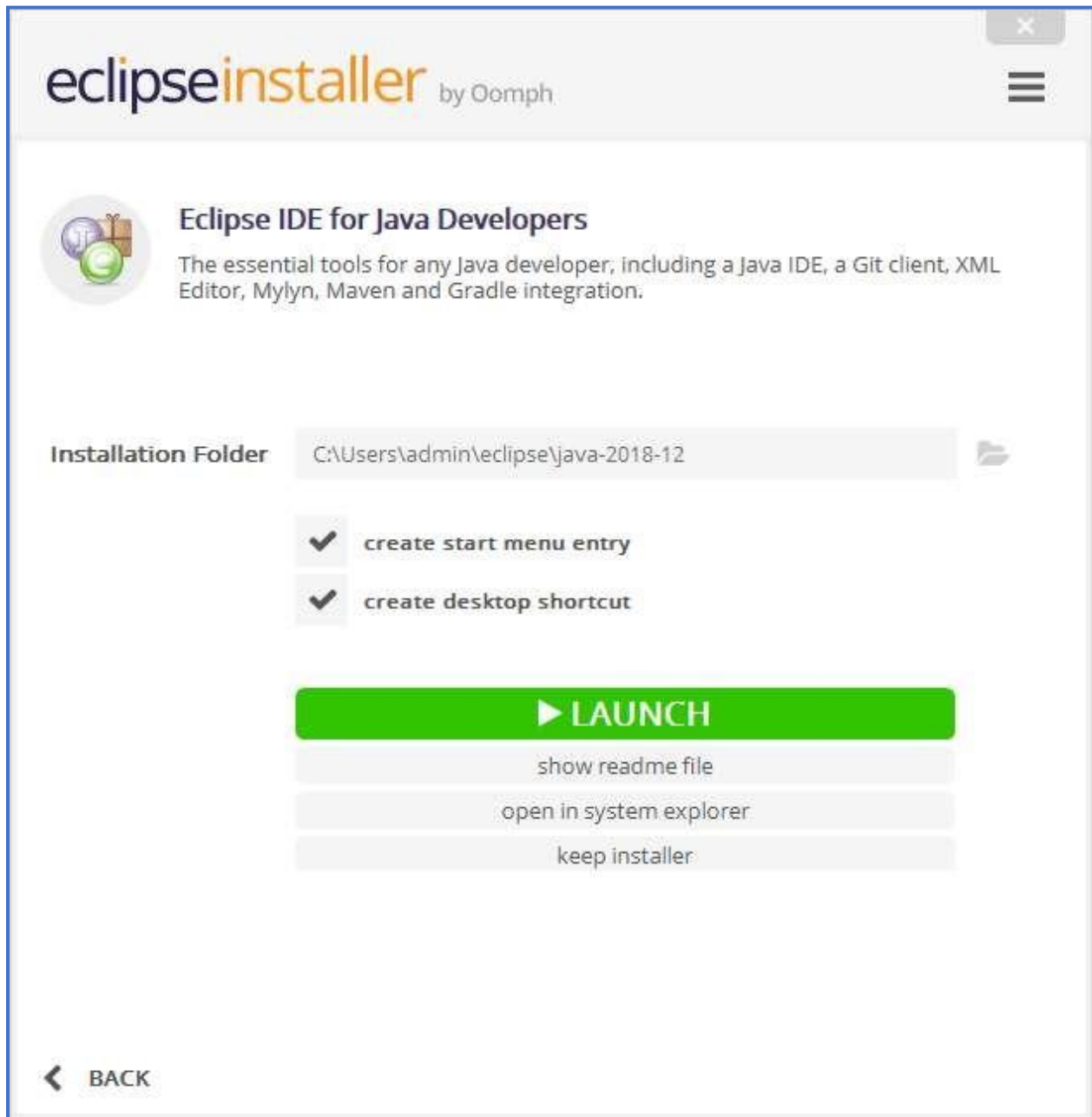
Step 3: Once the download is finished launch the installer.



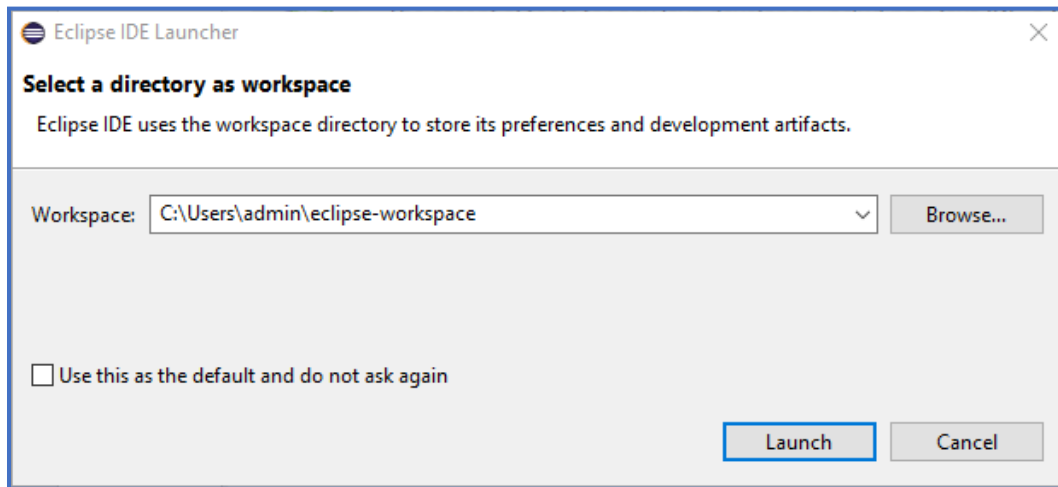
Step 4: Click on **Eclipse IDE for Java Developers**.



Step 5: Once done, click on LAUNCH.



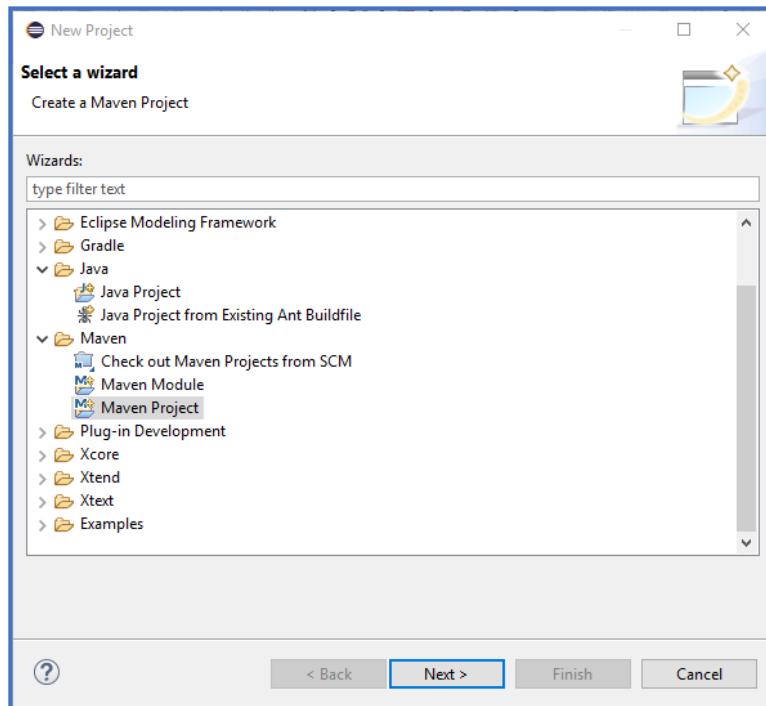
Step 6: Click on Launch.



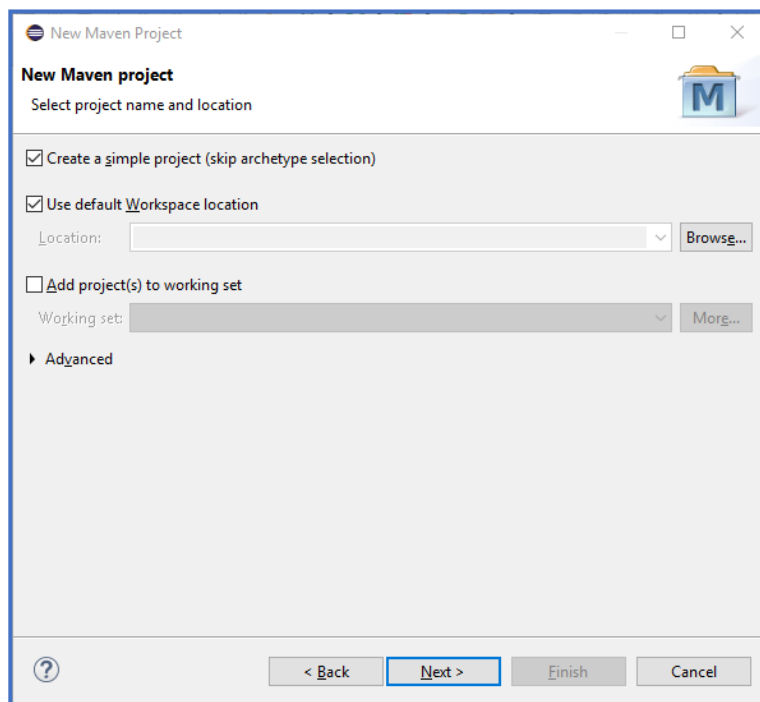
Now that we have successfully set up Java and Eclipse in our environment, we will be Performing a Selenium Test Case using Maven.

3. Selenium Test Case:

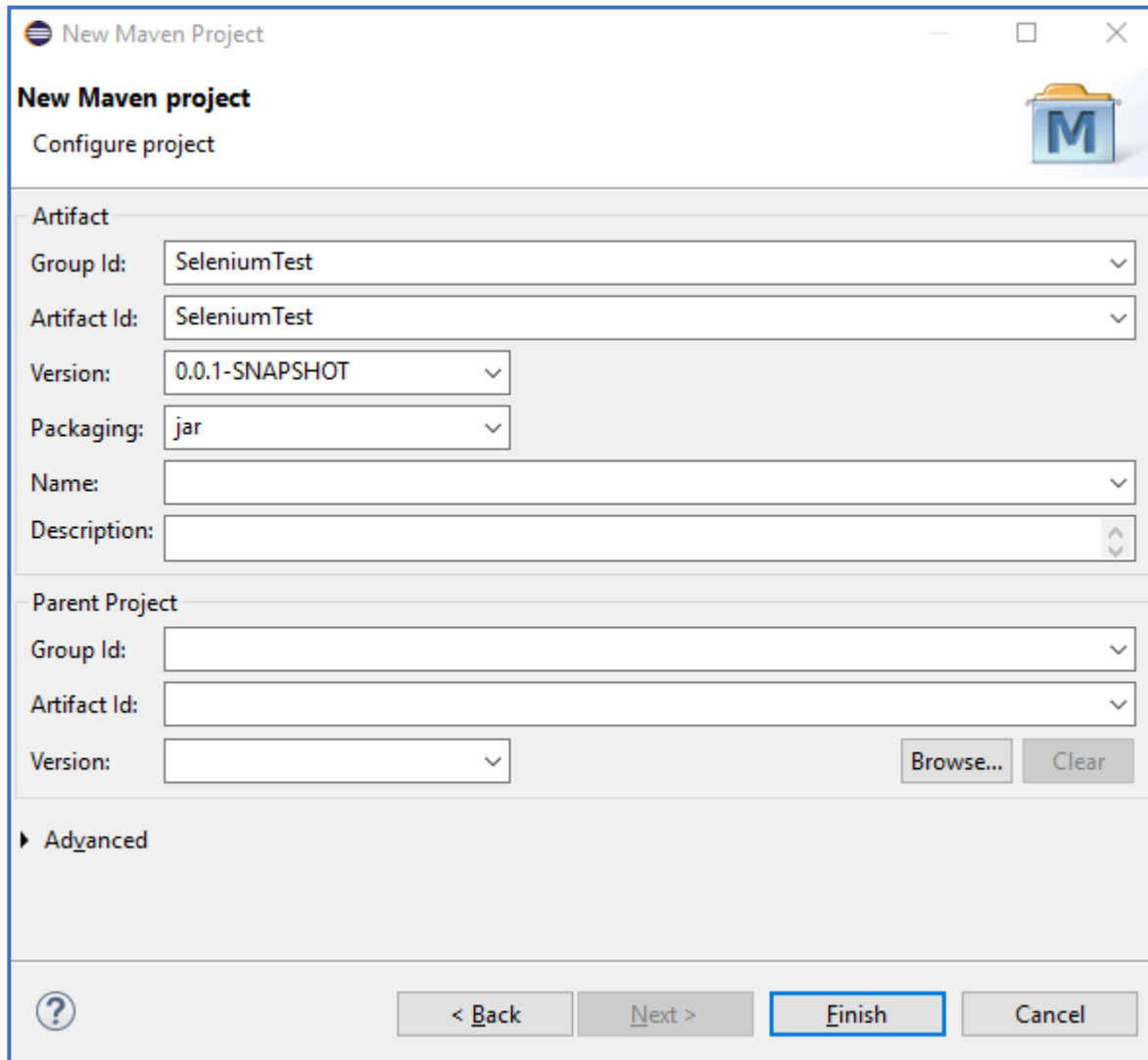
Step 1: Start a new Maven Project.



Step 2: Check the **Create a Simple Project** box. And click **Next**.

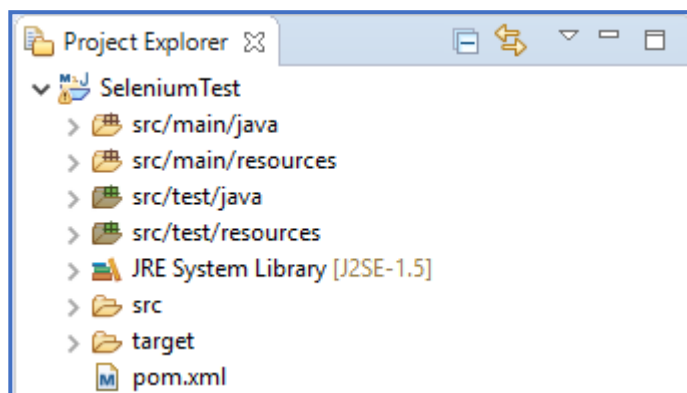


Step 3: Enter **Group Id** and **Artifact Id**. And click on **Finish**.

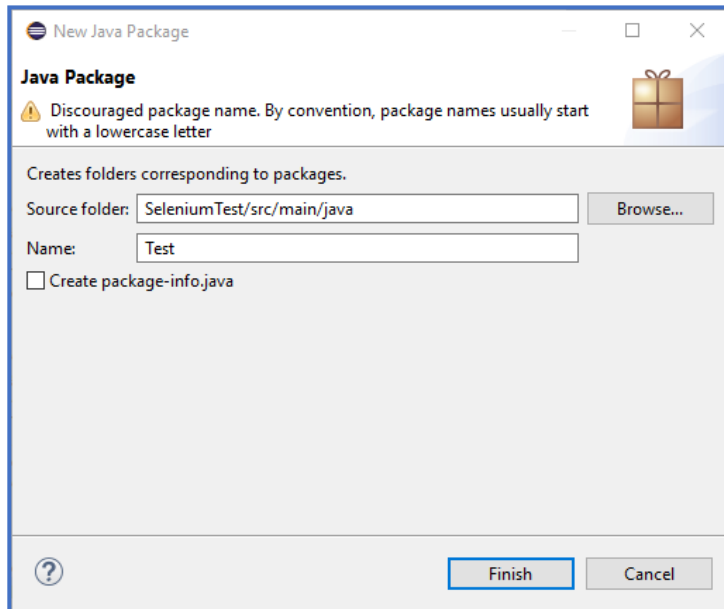


The image shows the "New Maven Project" dialog box in an IDE. The title bar says "New Maven Project". Below the title, it says "New Maven project" and "Configure project". There is a Maven logo icon. The dialog is divided into sections: "Artifact", "Parent Project", and "Advanced". In the "Artifact" section, the "Group Id" is set to "SeleniumTest", "Artifact Id" is "SeleniumTest", "Version" is "0.0.1-SNAPSHOT", and "Packaging" is "jar". The "Name" and "Description" fields are empty. In the "Parent Project" section, the "Group Id", "Artifact Id", and "Version" fields are empty. There are "Browse..." and "Clear" buttons next to the "Version" field. The "Advanced" section is collapsed. At the bottom, there are buttons for "< Back", "Next >", "Finish" (highlighted with a blue border), and "Cancel". A help icon (?) is also present.

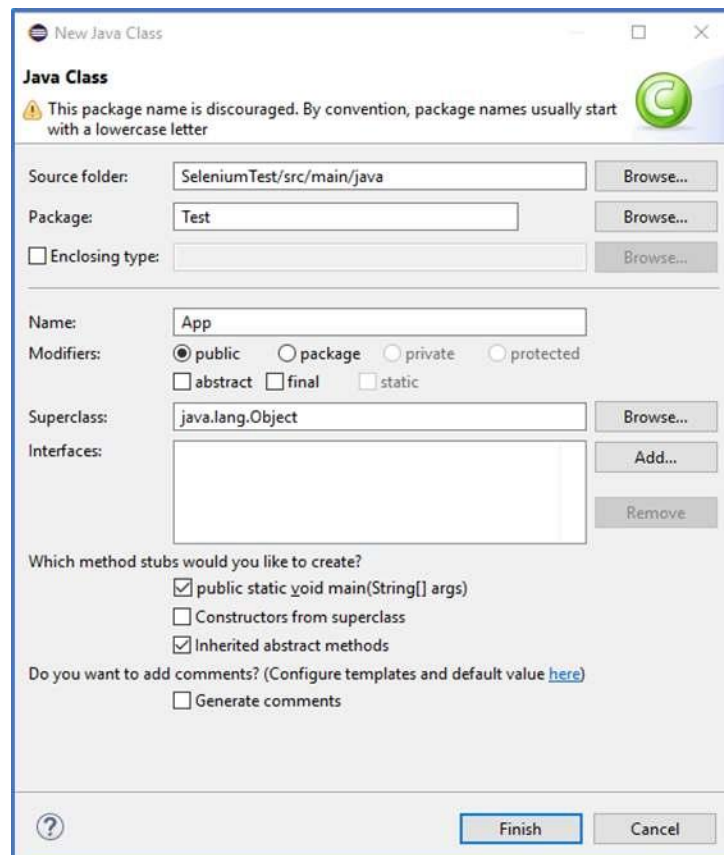
Step 4: Your project should appear in the **Project Explorer** section as shown below.



Step 5: Right click on **src/main/java** and create a **java package**. Enter a **Package Name** (**Test** in this case). Then click on **Finish**.



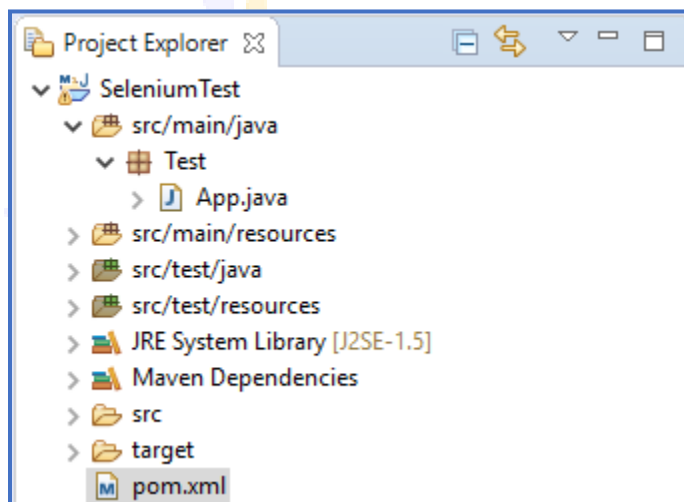
Step 6: Now create a **Java Class** by right clicking on **test package**, name the class as **App**. Check the **Public static void main(String[] args)** box. And click on **Finish**.



Step 7: Now, your eclipse workspace should look like this.

```
1 package Test;
2
3 public class App {
4
5     public static void main(String[] args) {
6         // TODO Auto-generated method stub
7
8     }
9
10 }
```

Before moving on to the scripting part we need to **configure the Maven Dependencies to perform Selenium in Eclipse**. We will be adding the **Maven Dependencies** to the **Pom.xml** file under **target** folder.



Before adding the dependencies, the Pom.xml file looks like this:

```
1 <project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/200
2     <modelVersion>4.0.0</modelVersion>
3     <groupId>SeleniumTest</groupId>
4     <artifactId>SeleniumTest</artifactId>
5     <version>0.0.1-SNAPSHOT</version>
6 </project>
```


Step 8: Now go ahead and add the below dependencies to the **pom.xml** file.

```
<dependencies>
  <!-- Selenium -->
  <dependency>
    <groupId>org.seleniumhq.selenium</groupId>
    <artifactId>selenium-java</artifactId>
    <version>3.4.0</version>
  </dependency>
  <!-- TestNG -->
  <dependency>
    <groupId>org.testng</groupId>
    <artifactId>testng</artifactId>
    <version>6.8</version>
    <scope>test</scope>
  </dependency>
  <!-- Selenium Server-->
  <dependency>
    <groupId>org.seleniumhq.selenium</groupId>
    <artifactId>selenium-server</artifactId>
    <version>3.141.59</version>
  </dependency>
</dependencies>
```

Add the dependencies in between **<project>** **</project>** tags.

Refer to the below given image.

```
5 <version>0.0.1-SNAPSHOT</version>
6 <dependencies>
7 <!-- Selenium -->
8 <dependency>
9 <groupId>org.seleniumhq.selenium</groupId>
10 <artifactId>selenium-java</artifactId>
11 <version>3.4.0</version>
12 </dependency>
13 <!-- TestNG -->
14 <dependency>
15 <groupId>org.testng</groupId>
16 <artifactId>testng</artifactId>
17 <version>6.8</version>
18 <scope>test</scope>
19 </dependency>
20 <dependency>
21 <groupId>org.seleniumhq.selenium</groupId>
22 <artifactId>selenium-server</artifactId>
23 <version>3.141.59</version>
24 </dependency>
25 </dependencies>
26 </project>
```

Step 9: Now, add the below given script to the **main()** function to the **App.java** file.

```
System.setProperty("webdriver.chrome.driver", "D:\\Selenium\\driver\\chromedriver.exe");
WebDriver driver = new ChromeDriver();
driver.get("http://www.gmail.com/");
System.out.println("Test Successful");
```

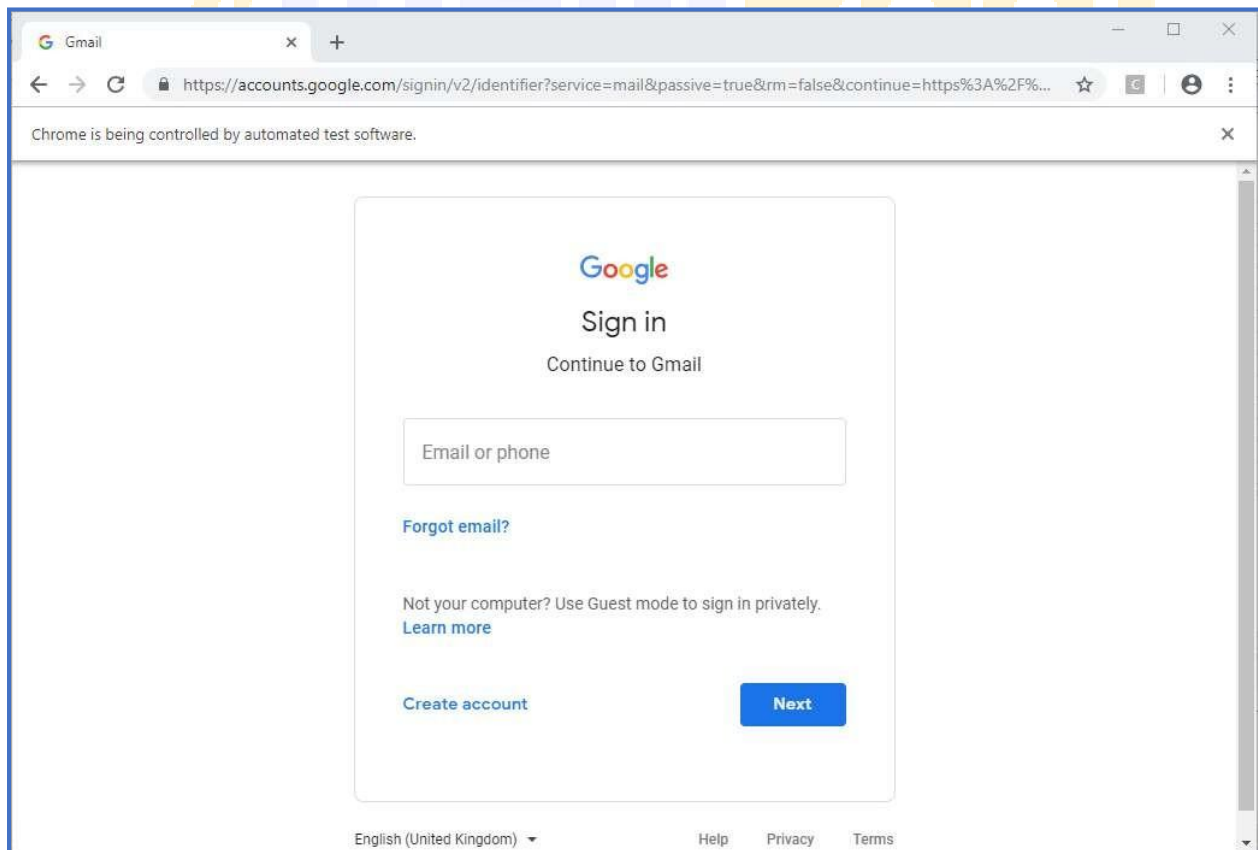
Step 10: To make this run properly we need to import **org.openqa.selenium.WebDriver** and **org.openqa.selenium.chrome.ChromeDriver**

```
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
```

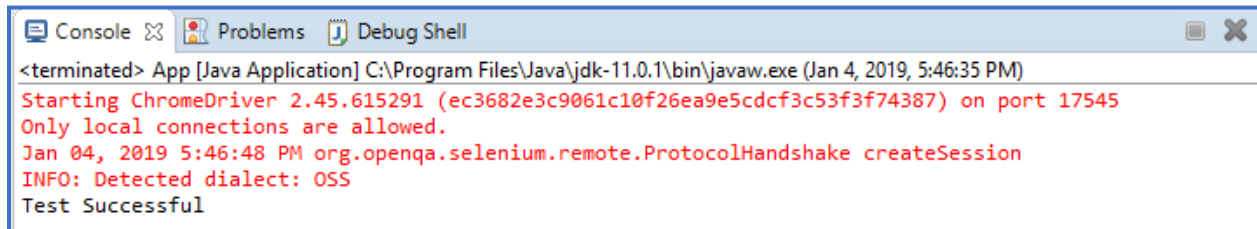
It should look like this.

```
1 package Test;
2
3 import org.openqa.selenium.WebDriver;
4 import org.openqa.selenium.chrome.ChromeDriver;
5
6 public class App {
7
8     public static void main(String[] args) {
9         System.setProperty("webdriver.chrome.driver", "D:\\Selenium\\driver\\chrome
10         WebDriver driver = new ChromeDriver();
11         driver.get("http://www.gmail.com/");
12         System.out.println("Test Successful");
13     }
14 }
15 }
16
```

Step 11: Now run **App**. Chrome browser window will pop up with Gmail sign in page.



Step 12: Go to Eclipse again and see the console. You should see the Test Successful message appearing in there.

A screenshot of the Eclipse IDE's console window. The window has tabs for "Console", "Problems", and "Debug Shell". The console output shows the following text:

```
<terminated> App [Java Application] C:\Program Files\Java\jdk-11.0.1\bin\javaw.exe (Jan 4, 2019, 5:46:35 PM)
Starting ChromeDriver 2.45.615291 (ec3682e3c9061c10f26ea9e5cdcf3c53f3f74387) on port 17545
Only local connections are allowed.
Jan 04, 2019 5:46:48 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: OSS
Test Successful
```

