How to create Java Gradle project in Eclipse

qaautomation.expert/2021/05/02/how-to-create-java-gradle-project-in-eclipse/

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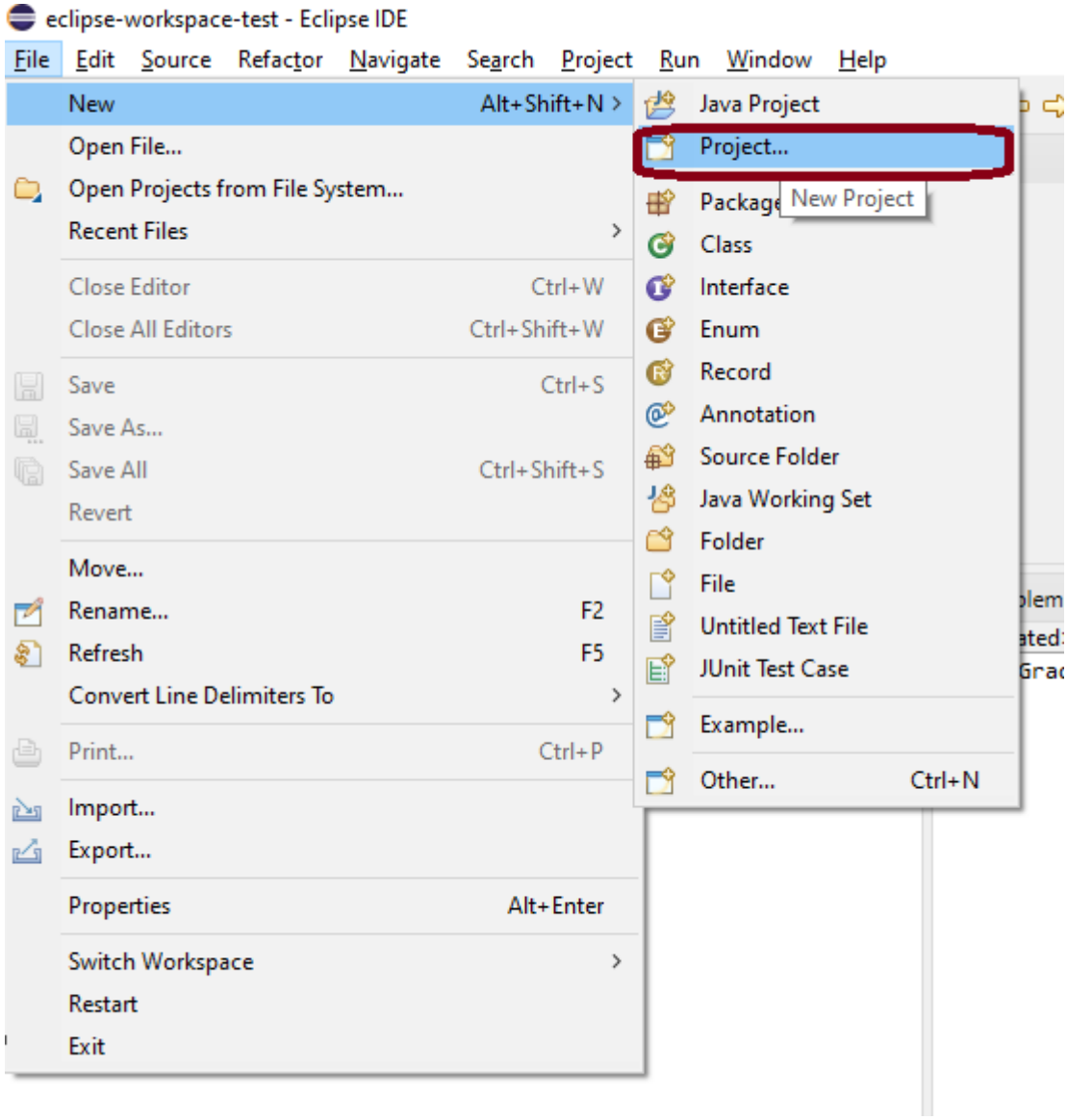
HOME

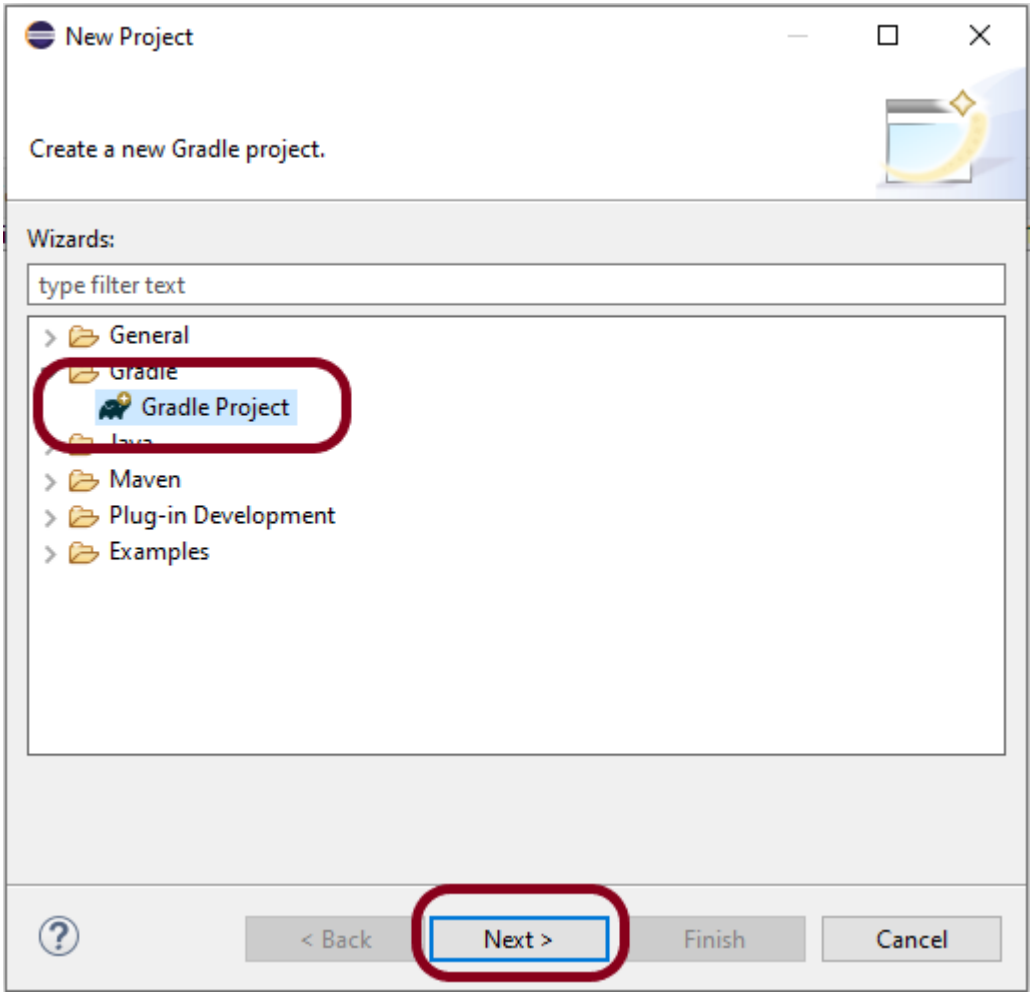
In the previous tutorial, I have explained ***how to create a Java Gradle project in IntelliJ***. In this tutorial, I will explain about creating a Java Gradle project Eclipse. I have used Gradle 6.6 to create the project.

Steps to follow:-

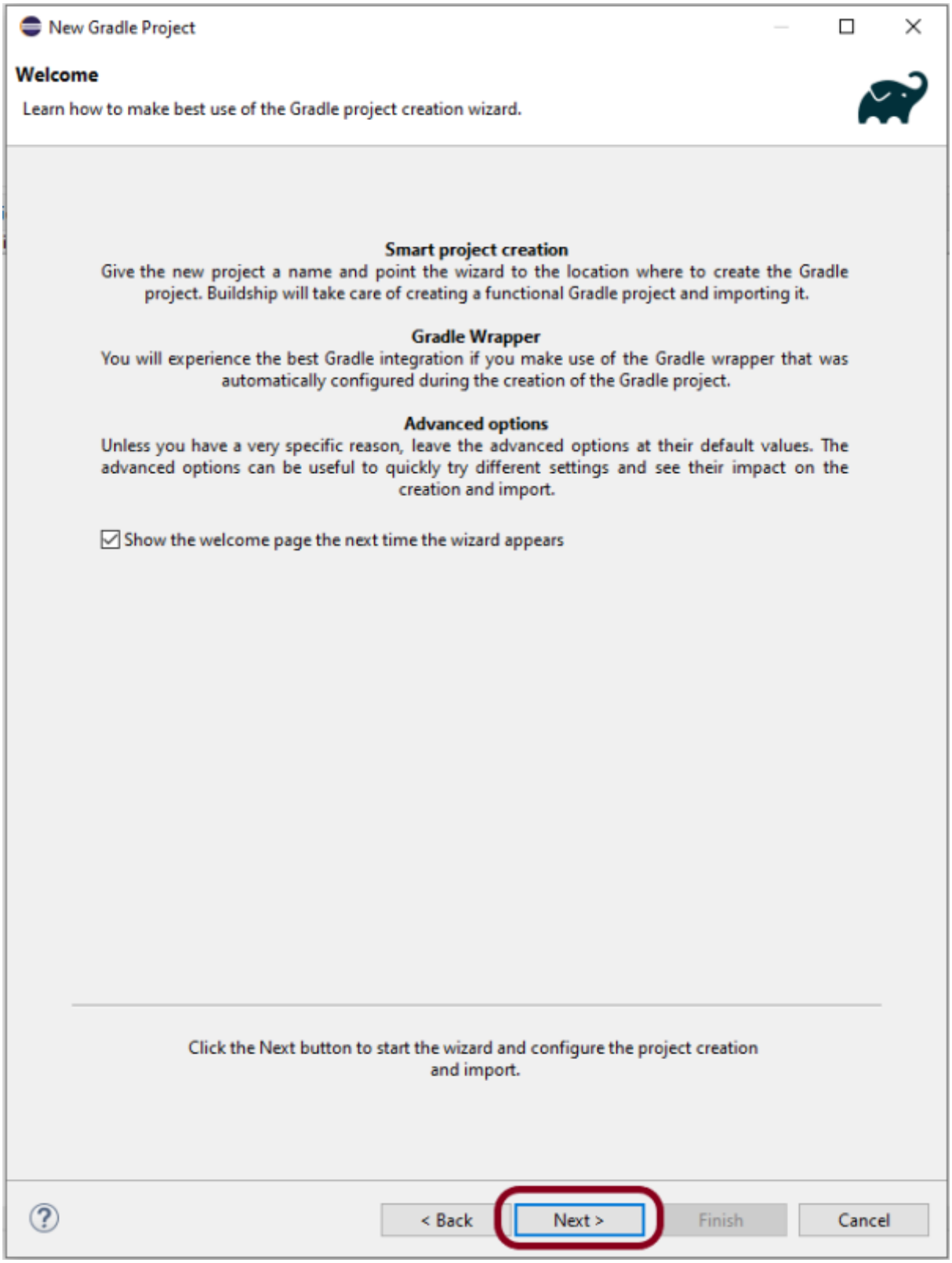
Step 1 – To create a new project – Click on the ***"New"*** and then select – ***"Project"***.



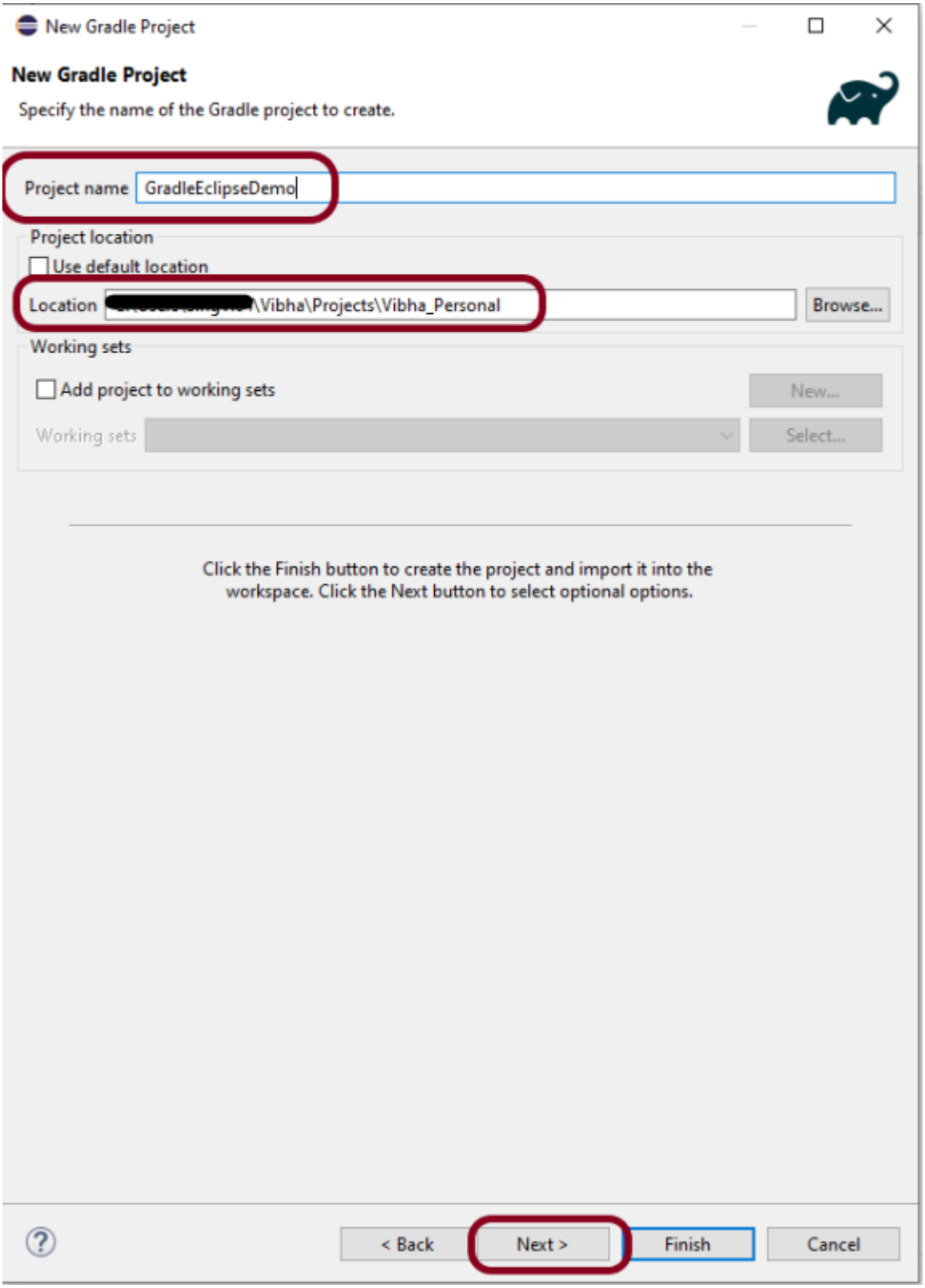
Step 2 – Select the ***"Gradle Project"***and click on the ***"Next"*** button.



Step 3 – A welcome screen will appear. You can uncheck the box – Show the welcome page the next time the wizard appears. This is optional. Click the ***NEXT*** button.

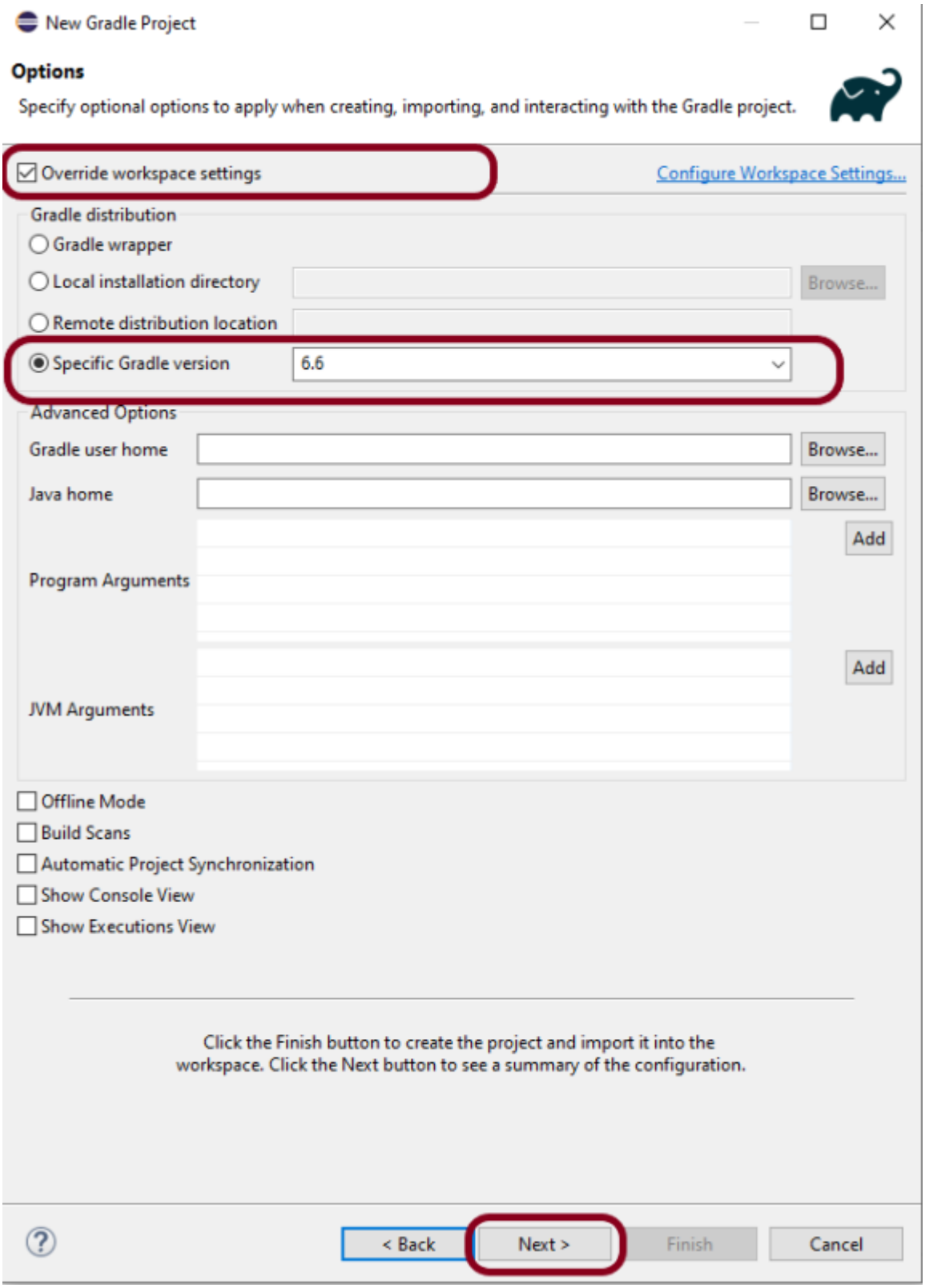


Step 4 – Below the screen will appear. Mention the ***"Project Name – GradleEclipseDemo"***. Mention the location where we want to save the project in the system. Click the ***NEXT*** button.

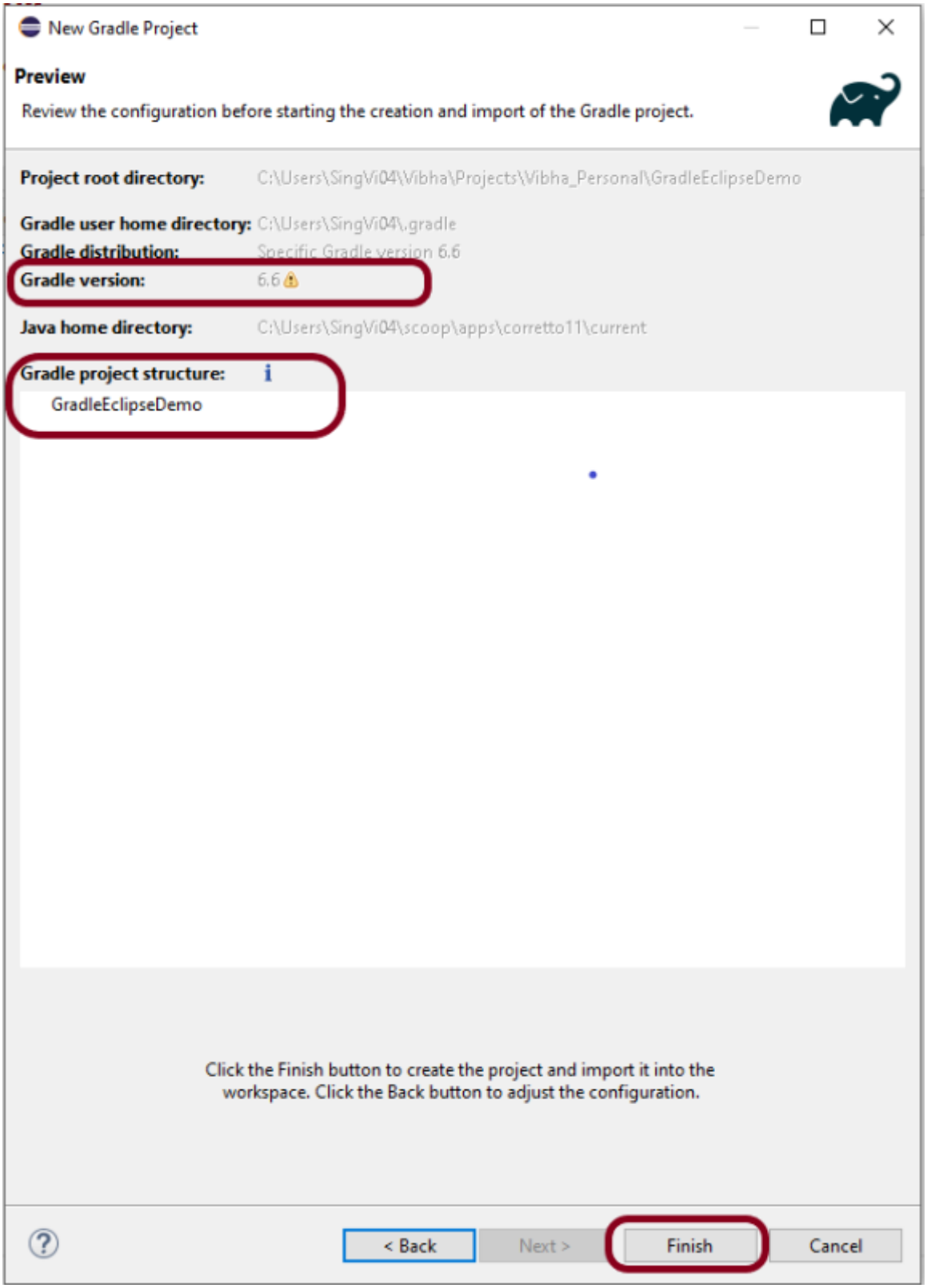


Step 5 – Options screen appear. Make sure you use Gradle version 6.6 to create Gradle project in Eclipse for Version: 2021- 03 (4.19.0).

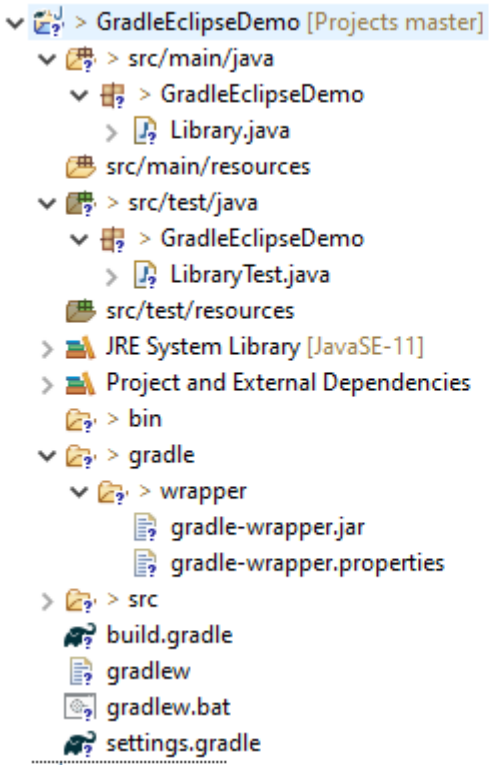
Note:- If you will try to use version higher than 6.6, then Gradle project structure will have a Gradle project with the nested project with a lib subproject in it.



Step 6 – Verify the Gradle Version and Gradle project structure name.



Step 7 – Below is the structure of Gradle project. The `init` task generates the new project with the following structure:-



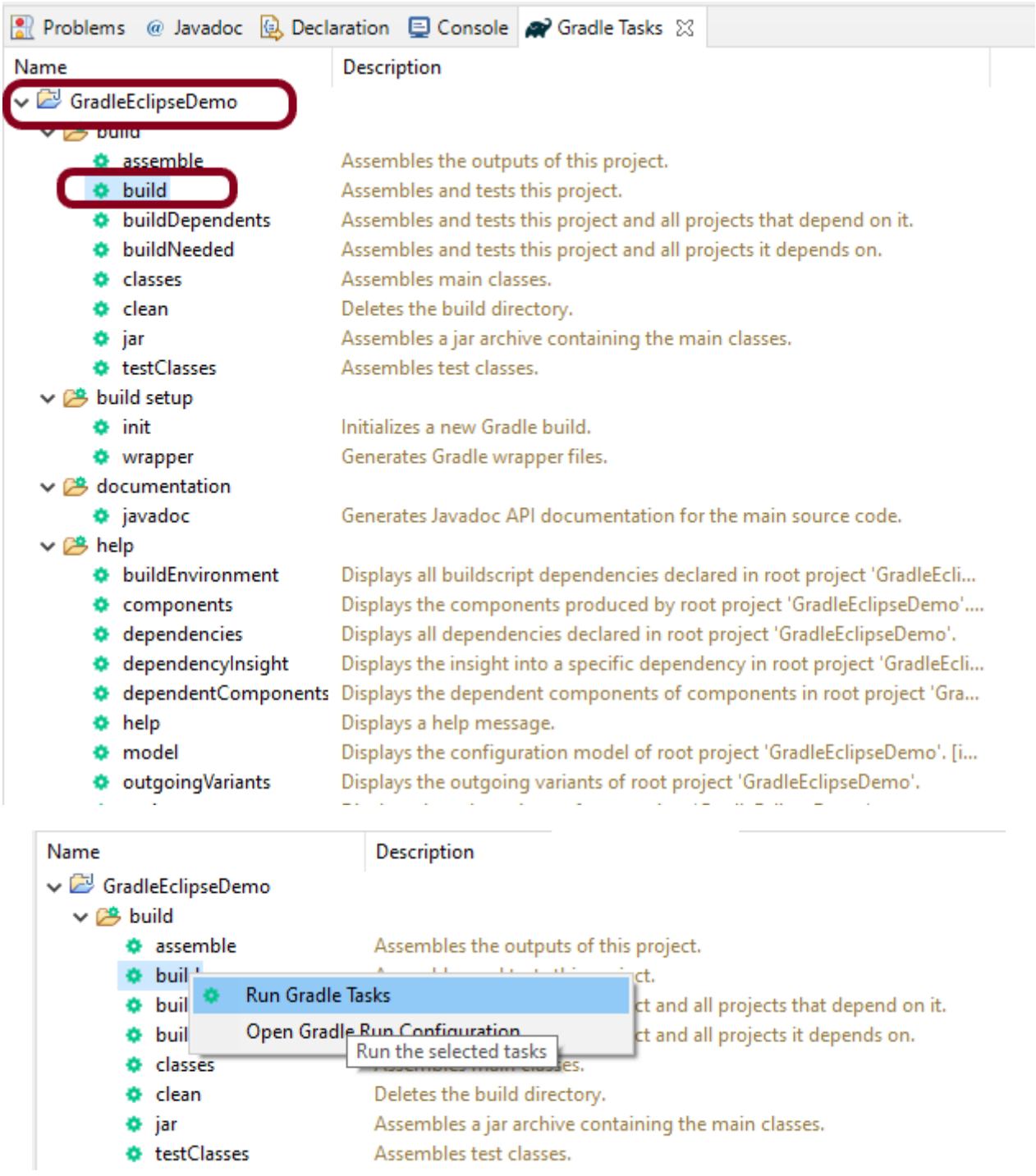
1. Generated folder for wrapper files -wrapper
2. Gradle wrapper start scripts – gradlew, gradlew.bat
3. Settings file to define build name and subprojects – settings.gradle
4. Build script of lib project – build.gradle
5. Default Java source folder – src/main/java
6. Default Java test source folder – src/test/java

Step 8 – Below is the structure and content of the ***build.gradle.***

```
/*
 * This file was generated by the Gradle 'init' task.
 *
 * This generated file contains a sample Java Library project to get you started.
 * For more details take a look at the Java Libraries chapter in the Gradle
 * User Manual available at
https://docs.gradle.org/6.6/userguide/java_library_plugin.html
 */

plugins {
    // Apply the java-library plugin to add support for Java Library
    id 'java-library'
}

repositories {
    // Use jcenter for resolving dependencies.
    // You can declare any Maven/Ivy/file repository here.
    jcenter()
}

dependencies {
    // This dependency is exported to consumers, that is to say found on their
compile classpath.
    api 'org.apache.commons:commons-math3:3.6.1'

    // This dependency is used internally, and not exposed to consumers on their
own compile classpath.
    implementation 'com.google.guava:guava:29.0-jre'

    // Use JUnit test framework
    testImplementation 'junit:junit:4.13'
}
```

1. **plugins** – Apply the java-library plugin for API and implementation separation.
2. **jcenter** – Use JCentral for resolving dependencies. JCenter is a central repository on JFrog Bintray platform for finding and sharing popular JVM language packages in Maven format
3. **api** – This dependency is exported to consumers, that is to say found on their compile classpath.
4. **implementation** – This dependency is used internally, and not exposed to consumers on their own compile classpath.
5. **testImplementation** – Use JUnit test framework.

Step 9 – To check if the project is created successfully. In gradle tasks tab -> navigate to the project -> expand build folder -> right click on build -> Select Run Gradle tasks.



This will be the output of the Gradle Run.

```
Working Directory: [redacted]\Vibha\Projects\Vibha_Personal\GradleEclipseDemo
Gradle user home: [redacted].gradle
Gradle Distribution: Specific Gradle version 6.6
Gradle Version: 6.6
Java Home: [redacted]scoop\apps\corretto11\current
JVM Arguments: None
Program Arguments: None
Build Scans Enabled: false
Offline Mode Enabled: false
Gradle Tasks: build

> Task :compileJava UP-TO-DATE
> Task :processResources NO-SOURCE
> Task :classes UP-TO-DATE
> Task :jar
> Task :assemble
> Task :compileTestJava UP-TO-DATE
> Task :processTestResources NO-SOURCE
> Task :testClasses UP-TO-DATE
> Task :test
> Task :check
> Task :build

BUILD SUCCESSFUL in 1s
4 actionable tasks: 2 executed, 2 up-to-date
```

That’s it. We have successfully created a Gradle Java project in Eclipse.

Congratulations on making it through this tutorial and hope you found it useful! Happy Learning!! Cheers!!