Full Stack Development
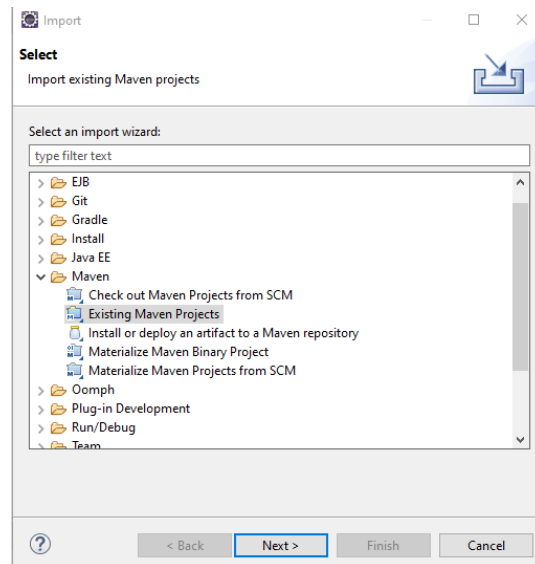## Lab Maven 3

Maven and Eclipse

1. Lab objectives

Maven is supported in all the major IDEs. In this lab, you will import the Maven project you created in the last lab into Eclipse. You can also try this in IntelliJ if you want or VSCode, but those are out of scope of this lab.

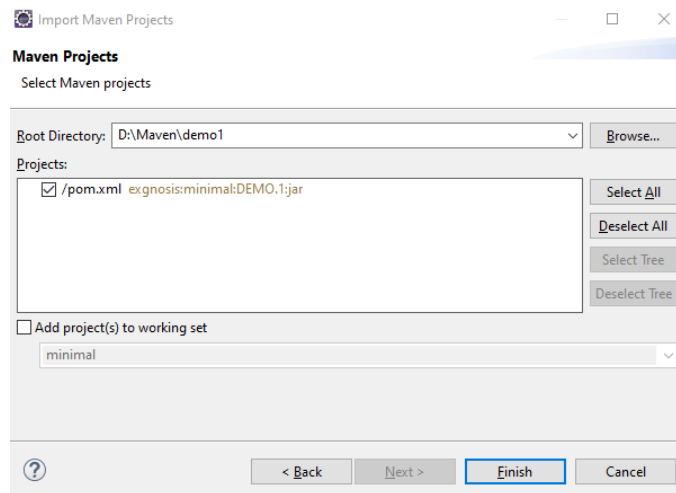### 2. Starting Eclipse and importing your project

Start up Eclipse with a new workspace and use the Java perspective.

Select the **file>import** option and select the option for existing Maven projects.

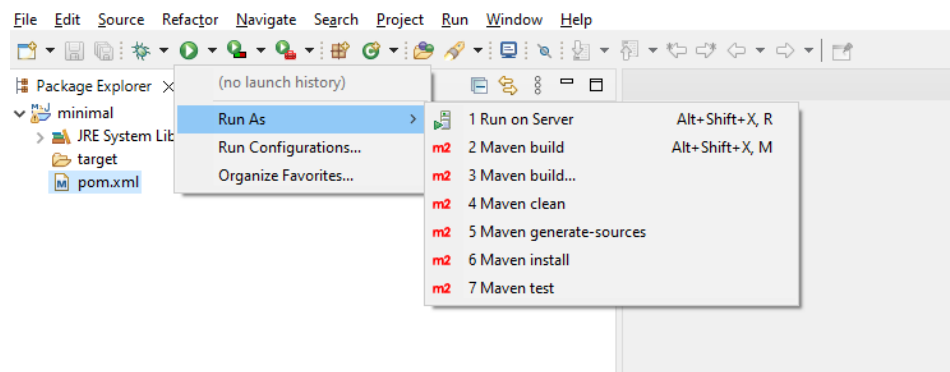Select **next>** and browse to select your project directory.

After selecting the directory, you should see Eclipse identifying the pom file.

Select **finish** and the project should import into Eclipse. Notice that there will be several warnings about the version of the compiler. You will fix this in the next lab.

2. Running Maven commands

In the **run as** menu option, you can run various Maven commands. Notice that you have to have the pom.xml file selected in order to get this menu.

Run the Maven clean command and notice the output appears in the console at the bottom of the screen
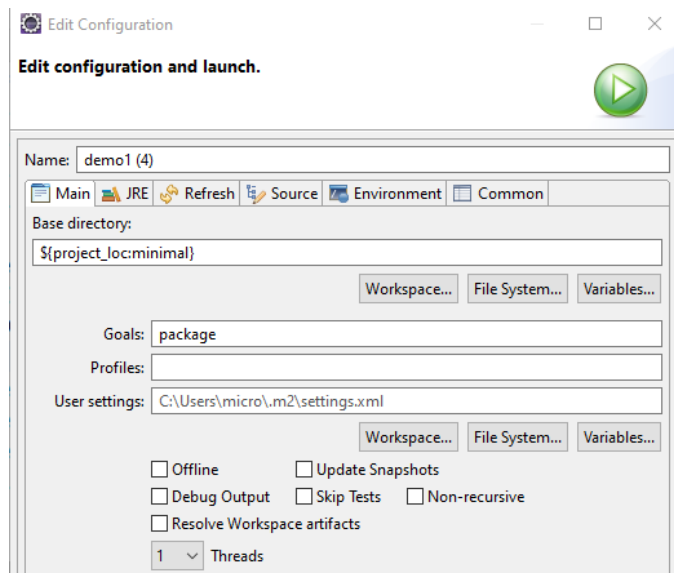
```
Overview | Dependencies | Dependency Hierarchy | Effective POM | pom.xml
 Problems  @ Javadoc   Declaration   Console  ×
<terminated> C:\tools\java\Java18\bin\javaw.exe (Nov. 16, 2022, 8:02:56 p.m.) [pid: 17052]
[INFO] Scanning for projects...
[INFO]
[INFO] -----------------------< exgnosis:minimal >-----------------------
[INFO] Building minimal DEMO.1
[INFO] --------------------------------[ jar ]---------------------------------
[INFO]
[INFO] --- maven-clean-plugin:2.5:clean (default-clean) @ minimal ---
[INFO] Deleting D:\Maven\demo1\target
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time:  0.148 s
[INFO] Finished at: 2022-11-16T20:02:57-05:00
[INFO] ------------------------------------------------------------------------
```

The same menu is available if you open the pom.xml in an editor window and right click on the editor window.
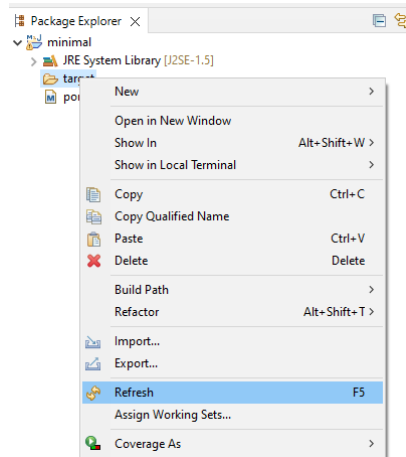
3. Running other Maven commands

The Maven commands **validate** and **package** you used in the last lab are not directly available. However, you can execute them using the option **build…** with the ellipsis. Selecting this opens a dialogue box where you can enter the commands you want to execute as "goals." For example, run the **mvn package** command like this.

And then just select **run** (not shown on the screen grab)**.**

You should see the same output you saw in the previous lab, including a warning that the jar file is empty.

If you don't see the jar file in the file explorer, you may need to refresh the display.

Run clean again to see the target directory emptied.

End of Lab