

Exercise 1.1 – Environment Setup

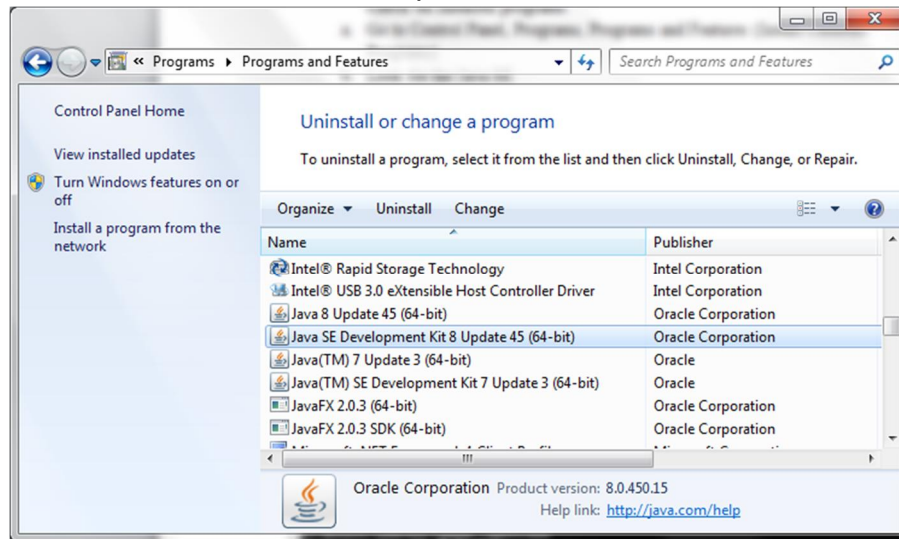
The main objective of this exercise is to make sure that your development environment is working.

A) Installing Java

1. Verify installed Java version

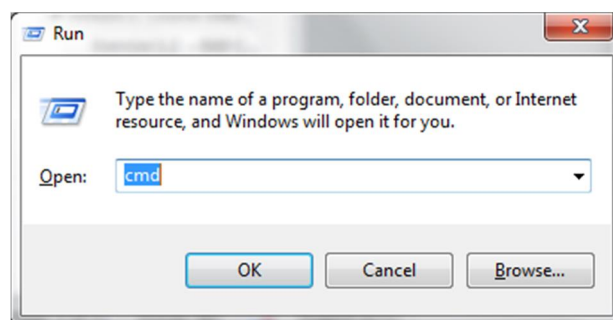
Check on Installed programs

- a. Go to Control Panel, Programs, Programs and Features (Install/Uninstall Programs)
- b. Look for the Java SE Development Kit



2. Check that Java is accessible

- a. Open a command shell



3. Verify that Java version corresponds to the installed version



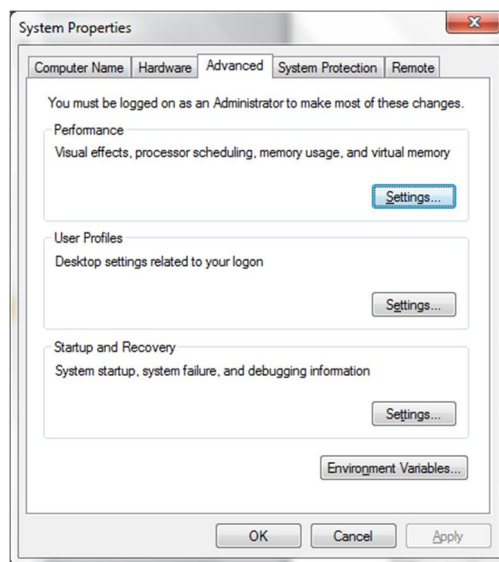
```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\admin1>java -version
java version "1.8.0_45"
Java(TM) SE Runtime Environment (build 1.8.0_45-b15)
Java HotSpot(TM) 64-Bit Server VM (build 25.45-b02, mixed mode)

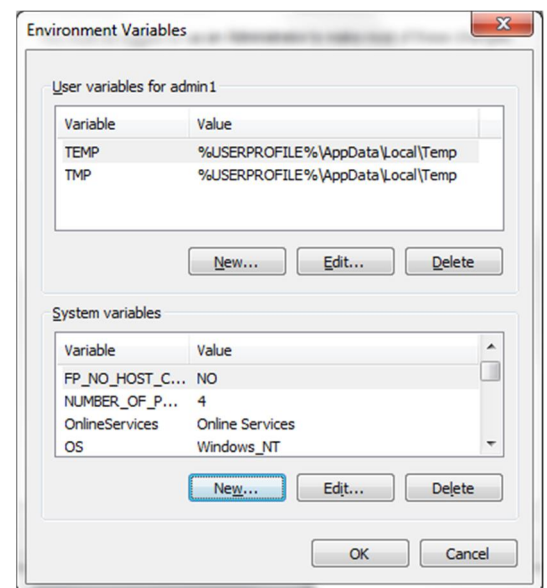
C:\Users\admin1>_
```

4. If necessary, adjust JAVA_HOME Environment variable

- a. Right-click the **My Computer** icon on your desktop and select **Properties**
- b. Click the **Advanced Systems Settings**



- c. Click the **Environment Variables** button



- d. Under **System Variables**, check if **JAVA_HOME** exists, otherwise click **New**
- e. Enter the variable name as **JAVA_HOME**
- f. Enter the variable value as the installation path for the Java Development Kit

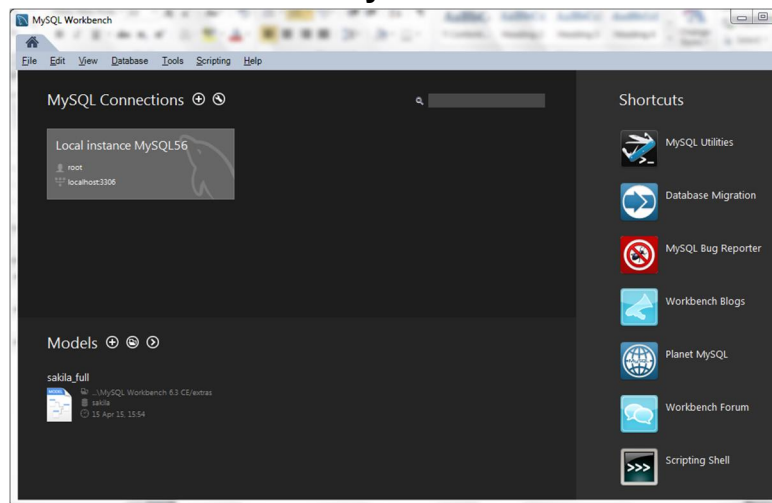
5. Installing Java

Download Java JDK from Oracle web site

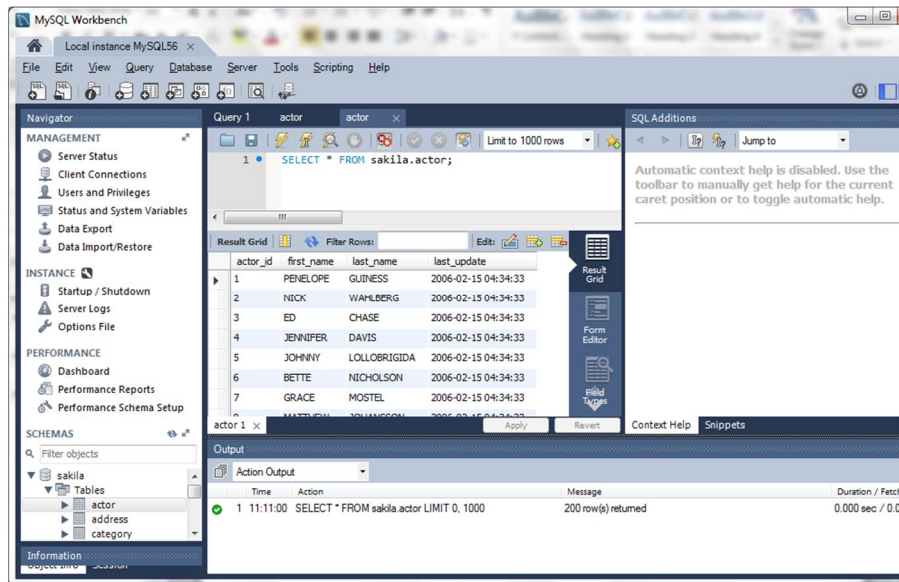
Run the installer and take note of the Java installation path

B) Installing MySQL

1. Download Python (this step is a prerequisite to install MySQL Server . we are not going to use Python during the class)
 - a. Run the installer
2. Download the MSI Installer General Available Community Server
 - a. Run installer and select developers version (default)
3. Open MySQL Workbench (at the end of the installation there is a check box for that)
 - a. Select **Local Instance MySQL56** connection

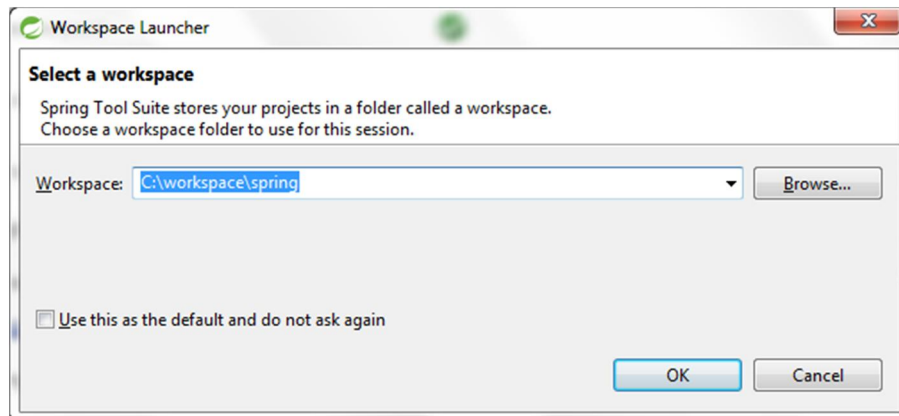


- b. On the Navigator at the left, open the **sakila** database, **Tables**, and right click over **actors**
- c. Choose **Select Rows – limit 1000** the result will be on the grid



C) Installing Spring Tool Suite (STS)

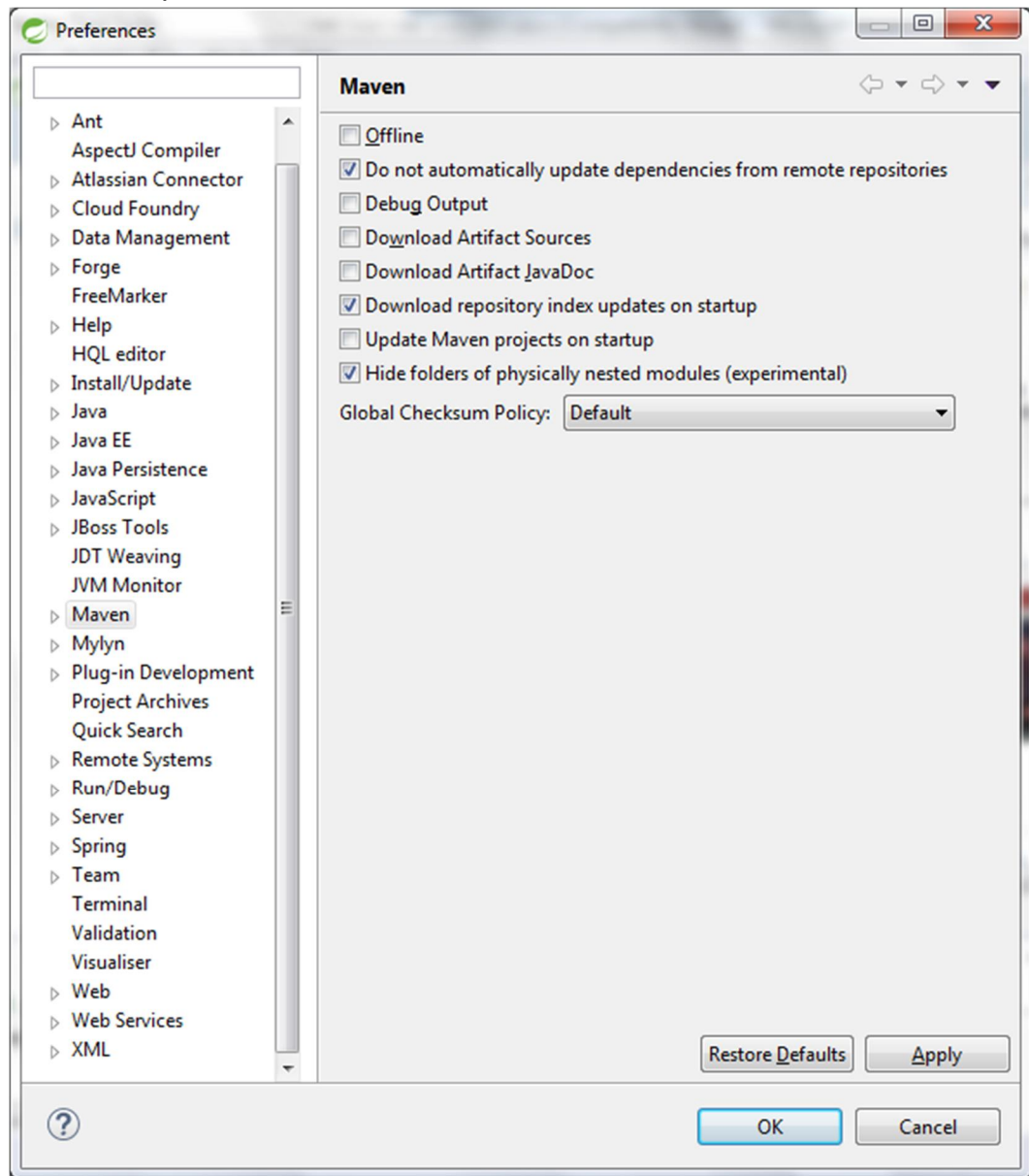
- Download STS from Spring.io
- Unzip STS on a folder outside Program Files
- Create a shortcut for `sts-bundle\sts-3.7.3.RELEASE\STS.EXE`
- Run STS.EXE
- Chose a folder for your projects when prompted to select a workspace



A workspace allows you to group similar projects

- Go to Help, Check for updates and install them
- Restart application when requested
- Go to Windows, Preferences, Java, Installed JREs
- Remove the installed JRE** that is set to default (if it is not already set to JDK path)
- Press **Add New...**

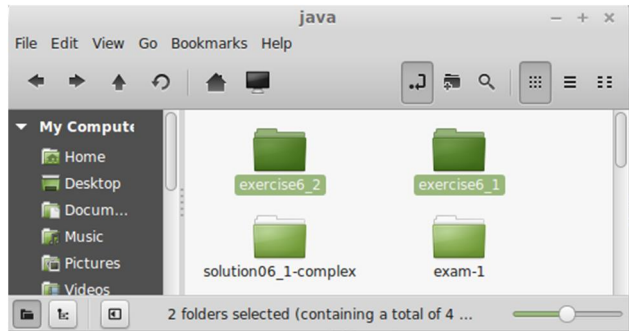
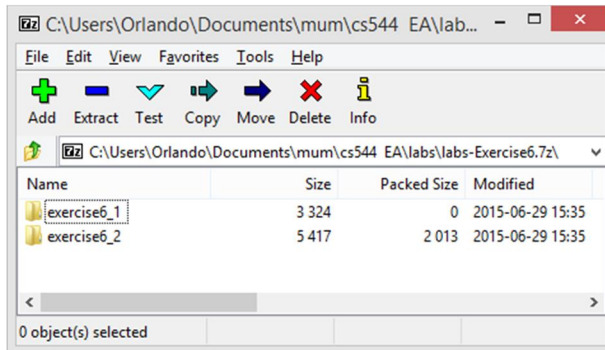
- k. Select directory for the **installed JDK** (for example C:\Program Files\Java\jdk1.8.0_74)
- l. Press **Finish**
- m. Check (on the left boxes in the list) **the new JDK** as the default JRE
- n. On the left panel select **Maven**



- o. Check the **Download repository index updates** option
- p. Press **Ok** to accept the preference changes
- q. Check again for updates and install them if required
- r. Restart STS

Exercise 1.2 – Importing Maven Projects

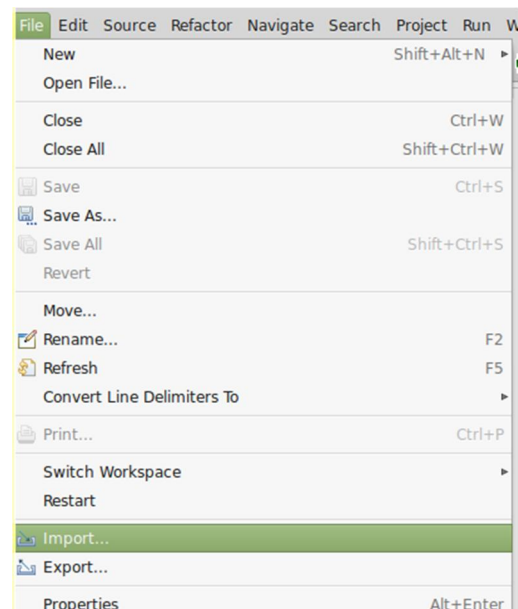
1. Unzip the project folders into your workspace:



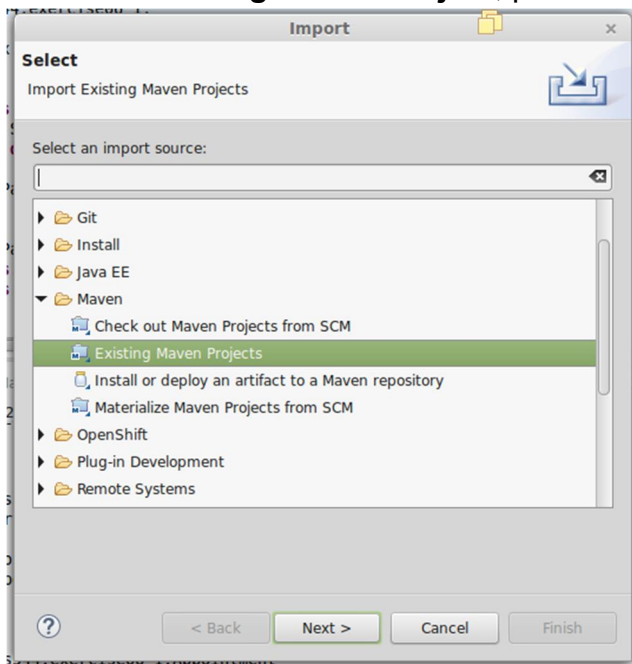
2. On Windows systems, verify that none of the project files are set to hidden

3. Open STS and select the corresponding workspace

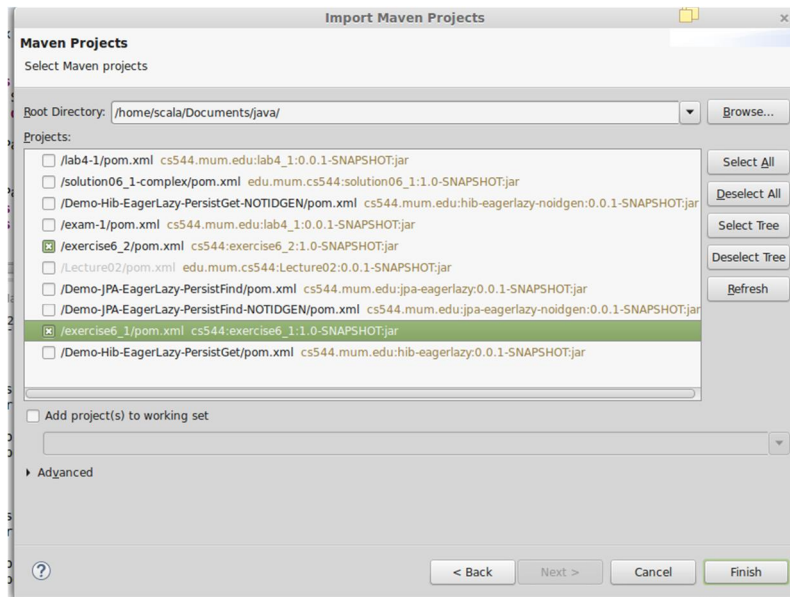
4. Choose the **File / Import...** option



5. Chose **Existing Maven Project**, press **Next**



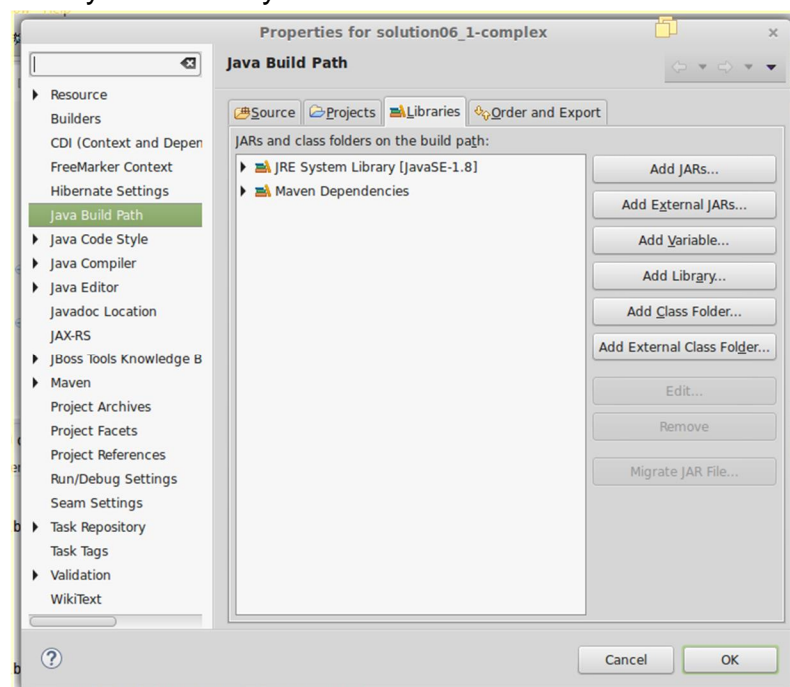
6. Select your workspace as the Root Directory (Use the Browse... button to refresh the list of projects)



7. **Deselect All** and mark the projects that you would like to import. Press **Finish**

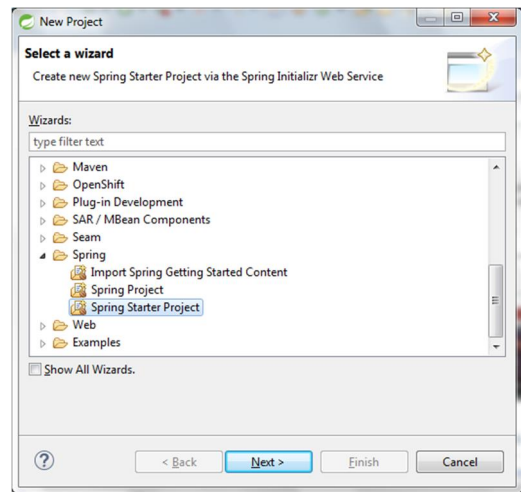
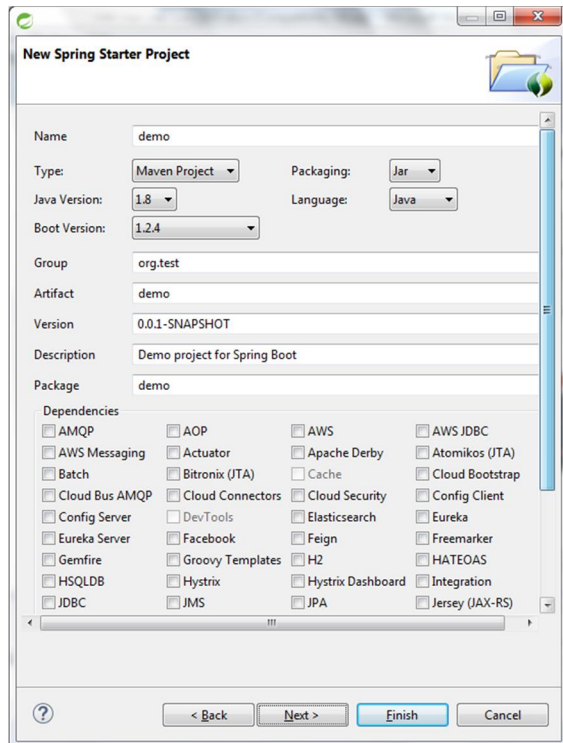
8. **Run As / Maven Clean** to clear the target folder and then **Run As / Maven Install** to download jar dependencies and compile code.

NOTE: In some cases you may need to **Configure the Build Path** for your project to set the correct JRE System Library



Exercise 1.3 – Spring boot application Using STS

1. Create a **New / Project... / Spring Starter Project**
2. Set the project and artifact values



3. Press **Next** and **Finish**
4. Reproduce the Hello Person sample project used on Lesson 1

Exercise 1.4 – EA3 Cube Approach

Go to the EA Pad web site (<https://eapad.dk/ea3-cube/overview/>) and read about the EA3 Cube.

On your assignment report, include a brief description of:

1. Why do you consider EA3 methodology useful in a company?
2. Who do you think should participate and promote this methodology?