Software Technologies Required – Versions and Links

- Java 8 JDK 1.8 – download link
- Eclipse Mars for Java EE – download link
- Apache Tomcat 8 – download link
- Apache TomEE 1.7.3 – download link
- Apache Maven – download link
- Oracle XE – download link
- Oracle SQL Developer – download link
- JSTL jar – download link

Java 8 Installation Guide

- Download the installer
- Run the JDK installer (you must have administrative permissions)
- Create/Update the **JAVA_HOME** and **PATH** environment variables (Windows7):
  - Click Start -> Control Panel -> System and Security
  - Click System -> Advanced system and settings
  - Click Environment variables
  - Press **New…** in the System variables -> fill the fields with the following:
    - Variable name – **JAVA_HOME**
    - Variable value – **C:\Program Files\Java\jdk1.8.0_65** (typical path)
  - Select **Path** variable from System variables -> edit
  - Add **%JAVA_HOME%\bin** at the **beginning** (system variables values are ; separated)
- Check if the variables are correct:
  - Click Start -> type **cmd** in the search -> press Enter
  - Type **javac –version**
  - Result should be **javac 1.8.0_XX**

Eclipse Mars Installation Guide

- Download the archive
- Unarchive the file into folder of your choosing
- **Eclipse doesn't need installation – run from the Eclipse icon** in the folder

- Start Eclipse -> Select workspace (where your projects will be placed) -> Close the welcome screen
- From the main menu choose **Window** -> **Preferences**
- Select **Java** -> **Editor** -> **Save Actions**
- Check the following:
  - **Perform the selected actions on save**
  - **Format source code -> Format all lines**
  - **Organize imports**
  - **Additional actions**
- Press **Apply** -> **OK**

Apache Tomcat Installation Guide

- Download the archive
- Unarchive the file into folder of your choosing
- **Apache Tomcat doesn't need installation – we will run it from Eclipse**

- Start Eclipse -> Select workspace (where your projects will be placed) -> Close the welcome screen
- Click on the servers tab in the bottom section -> Press **No servers are available. Click this link to create a new server…**
- Select **Apache** -> **Tomcat 8** -> Press **Next**
- Press **Browse** -> Locate the server's installation directory -> Press **OK**
- In the JRE section select **jdk1.8.0_XX** (Press **Installed JREs…** and locate your JDK if it's not shown) -> **Finish**
- Double Click on the server
- In the Server Locations section choose **Use Tomcat Installation…**
- In the **Ports** section change **HTTP/1.1** port from **8080** to **8085**
- Press **Ctrl+S** to save the configuration
- To run the Tomcat Server – **Right Click** on the server -> **Start**

Apache TomEE Installation Guide

- Download the archive
- Unarchive the file into folder of your choosing
- **Apache TomEE doesn't need installation – we will run it from Eclipse**

- Start Eclipse -> Select workspace (where your projects will be placed) -> Close the welcome screen
- Click on the servers tab in the bottom section -> Press **No servers are available. Click this link to create a new server…**
- Select **Apache** -> **Tomcat 7** -> Press **Next**
- Press **Browse** -> Locate the server's installation directory -> Press **OK**
- In the JRE section select **jdk1.8.0_XX** (Press **Installed JREs…** and locate your JDK if it's not shown) -> **Finish**
- Double Click on the server
- In the **Server Locations** section choose **Use Tomcat Installation…**
- In the **Ports** section change **HTTP/1.1** port from **8080** to **8085**
- Press **Ctrl+S** to save the configuration
- To run the Tomcat Server – **Right Click** on the server -> **Start**

Apache Maven Installation Guide

- Download the archive
- Unarchive the file into folder of your choosing
- Create/Update the **M2_HOME** and **PATH** environment variables (Windows7):
  - Click **Start** -> **Control Panel** -> **System and Security**
  - Click **System** -> **Advanced system and settings**
  - Click **Environment variables**
  - Press **New…** in the System variables -> fill the fields with the following:
    - Variable name – **M2_HOME**
    - Variable value – **C:\Program Files\apache-maven-3.3.9** (example path)

o   Select **Path** variable from **System variables** -> **edit**
o   Add the ***%M2_HOME%\bin*** after the **JAVA_HOME** (system variables values are ; separated)
- Check if the variables are correct:
  o   Click Start -> type **cmd** in the search -> press **Enter**
  o   Type **mvn --version**
  o   Result should be detailed list of installed maven and java versions

Oracle XE Installation Guide

- Download the archive
- Unarchive the file into folder of your choosing
- Run the installer – run from the setup icon in the folder
- Install using the default settings -> Set up the following password: **User!0958**
- Access the Console at **http://127.0.0.1:8080/apex/apex_admin**
  o   Username: **admin**
  o   Password: **User!0958**
  o   Change the password to: **DBCourse01!**
- Create new workspace:
  o   Press **Manage Workspaces** -> Press **Create Workspace**
  o   Enter workspace name: **<project name>** -> Press **Next**
  o   Fill the fields (used to access the DB from the SQL Developer):
    ▪   Schema Name: **<project name>**
    ▪   Schema Password: **<project name>**
    ▪   Press **Next**
  o   Fill the fields (used to access the DB as admin – not used during the course):
    ▪   Admin Username: **admin**
    ▪   Admin Password: **admin**
    ▪   Email: **a@a.a**
    ▪   Press **Next**
  o   Press **Create Workspace**

Oracle SQL Developer Installation Guide

- Download the archive
- Unarchive the file into folder of your choosing
- **Oracle SQL Developer doesn't need installation – run from the sqldeveloper icon** in the folder
- Connect to the DB:
  o   Right click on **Connections** -> **New Connection...**
  o   Fill the fields:
    ▪   Connection Name: **<project name>**
    ▪   Username: **<project name>**
    ▪   Password: **<project name>**
    ▪   Hostname: **localhost**
    ▪   Port: **1521**
    ▪   SID: **xe**
    ▪   Check **Save Password**
    ▪   Click **Test** -> Click **Connect** (if test fails check the fields data)