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**Devops Lab**

Pre-requisite for the lab

JDK – 8/11 should be installed - Find steps at the end of the document.

Maven – latest version should be installed - Find steps at the end of the document.

**Lab1**

Use Case: Create Simple Web Application

Steps to follow

1.Open the link in browser – <https://start.spring.io/>

2. Select the options as in diagram –

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3. Click generate

4.Extract the Zip and keep the project in separate folder

**Lab2**

Use Case: Store the Source code in central repository and version the code

Steps to follow

1.Create new remote repository in Gitlab

2.Push the Lab1 project into the remote repository

3.Perform git pull and after the git push

4.Open pom.xml file from the project in notepad++/eclipse/vscode/ any other editor

5.Update Version, Add Git connection as below image

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Add plugin from <https://mvnrepository.com/>

Search for maven deploy and maven release

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Click on Bold highlighted Option – Select the latest version

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Copy the code into pom.xml as in image below

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6.Save the file

7.Open git bash – and Run command **mvn release:prepare**

**JDK:**

**Step 1)** Go to [link](https://www.oracle.com/java/technologies/javase-downloads.html). Click on JDK Download for Java download JDK 8.

**Step 2)** Next,

1. Accept License Agreement
2. Download Java 8 JDK for your version 32 bit or JDK download 64 bit.
3. Choose MSI installer

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**NOTE:** You will be required to create an Oracle Account to start Java 8 download of the file.

**Step 4)** Once the Java JDK 8 download is complete, run the exe for install JDK. Click Next

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**Step 5)** Select the PATH to install Java in Windows… You can leave it Default. Click next.

**NOTE:** Follow the onscreen instructions in succeeding steps to install Java 8 on Windows 10.

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**Step 6)** Once you install Java in windows, click Close

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**Set Environment Variables in Java: Path and Class path**

**Step 1)** Right Click on the My Computer and Select the properties

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**Step 2)** Click on advanced system settings

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**Step 3)** Click on Environment Variables to set Java runtime environment

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**Step 4)** Click on new Button of User variables

**Step 5)** Type PATH in the Variable name.

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**Step 6)** Copy the path of bin folder which is installed in JDK folder.

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**Step 7)** Paste Path of bin folder in Variable value. Click on OK Button.

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**Note:** In case you already have a PATH variable created in your PC, edit the PATH variable to

PATH = <JDK installation directory>\bin;%PATH%;

**Step 8)**You can follow a similar process to set CLASSPATH.

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**Note:** In case you java installation does not work after installation, change classpath to

CLASSPATH = <JDK installation directory>\lib\tools.jar;

**Step 9)** Click on OK button

**Step 10)** Go to command prompt and type javac commands.

TYPE: javac

**MAVEN**

To install maven on windows, you need to perform following steps:

1. Download maven and extract it
2. Add JAVA\_HOME and MAVEN\_HOME in environment variable
3. Add maven path in environment variable
4. Verify Maven

Download Maven latest Maven software from [Download latest version of Maven](https://maven.apache.org/download.cgi)

## Add MAVEN\_HOME in environment variable –

## Right click on MyComputer -> properties -> Advanced System Settings -> Environment variables -> click new button

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## Verify maven

To verify whether maven is installed or not, open the command prompt and write: mvn −version

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