

# Installing Java related software's



- ★ Downloading and installing Java 16 software (Java Development Kit – 16)
- ★ Downloading and installing Tomcat 10 software
- ★ Downloading and installing Maven 3.8.1 software
- ★ Setting the Path variables
- ★ Writing and executing the Servlet 4.0 and Jakarta 5.0 programs
- ★ Writing and executing the Spring 5 programs
- ★ Issues with Tomcat 10 or Issues because of move from Java EE to Jakarta EE

**NOTE :** I am doing this on Windows 10 – 64 Bit Operating System. Please consider this point while doing on your PC.

In case, your operating system is Ubuntu 20 – 64 Bit then you have to download Ubuntu related software's.

# Download and install JDK 16



- Open the browser
- Type download jdk 16 → Open Oracle official website → Click on download JDK 16
- Double click on downloaded JDK exe file → Click on next → next → Finish
- Take the jdk installation folder
- Go to,
  - Type Env in the search bar → Click on Edit the system environment variables
  - Click on Environment variables → Click on New... under System variables
  - Enter JAVA\_HOME as Variable name and JDK home directory as Variable value and click on Ok → click on Ok → click on Ok
  - Click on Environment variables again → Select Path → Click on Edit...
  - Click on New → Add %JAVA\_HOME% \bin → click on Ok → click on Ok → click on Ok

# Download and install Apache Tomcat 10



- Open the browser →
- Type download Apache Tomcat 10 → Open Apache official website
- Click on download on Tomcat 10
- Double click on downloaded file → Click on next → next → Finish
- Take the Tomcat installation folder
- Go to,
  - Type Env in the search bar → Click on Edit the system environment variables
  - Click on Environment variables → Click on New... under System variables
  - Enter TOMCAT\_HOME as Variable name **and** Tomcat home directory as Variable value **and** click on Ok → click on Ok → click on Ok
  - Click on Environment variables again → Select Path → Click on Edit...
  - Click on New → Add %TOMCAT\_HOME% \bin → **and** click on Ok → click on Ok → click on Ok

# Download and install Apache Maven 3.8.1



- Open the browser
- Type download Apache Maven 3.8.1 → Open Apache official website
- Click on download on Maven 3.8.1 → Extract Maven 3.8.1 ZIP File
- Go to,
  - Type Env in the search bar → Click on Edit the system environment variables
  - Click on Environment variables → Click on New... under System variables
  - Enter MAVEN\_HOME as Variable name **and** Extracted folder of Maven home directory as Variable value and click on Ok → click on Ok → click on Ok
  - Click on Environment variables again → Select Path → Click on Edit...
  - Click on New → Add %MAVEN\_HOME% \bin → click on Ok → click on Ok → click on Ok

**NOTE :** Set the path for M2\_HOME as well, like MAVEN\_HOME

## Download the source code from GIT



Please download the source code from below GIT repository URL :

Enter this URL on browser - <https://github.com/ChandraKodam5/jakartaservletEE5>

Click on **Code** Drop-down → Click on **Download ZIP** → Open eclipse IDE

Goto **File** → **Import** → Existing projects into workspace → **Next** → click on **checkbox** (select archive file) → click on **Browse** → choose the downloaded **Spring5MVCExampleWithAnnotationConfig** and **JakartaServletEE5Project** ZIP files.

**OR**

Type the below command in git bash

```
$ git clone https://github.com/ChandraKodam5/jakartaservletEE5.git
```

Goto **File** → **Import** → Existing projects into workspace → **Next** → click on **checkbox** (select archive file) → click on **Browse** → choose the downloaded **JakartaServletEE5Project** ZIP file.

## Issues with Tomcat 10 & Spring 5



Spring MVC 5 does not run on Tomcat 10 because of the package renaming from javax.\* to jakarta.\*.

After further research, I was able to find the answer to my question. Spring MVC 5 does currently work on Tomcat 10. This is because Tomcat 10 is based on Jakarta EE 9 where package names for APIs have changed from javax.\* to jakarta.\*. But, Spring has not changed the packages from javax.\* to jakarta.\* till the version of Spring 5.3.7.

Please **[click here](#)** or below for further confirmation,

**[spring-mvc-5-on-tomcat-10-deployment-problems](#)**

# Thank You



## **GIT Repository URL**

<https://github.com/ChandraKodam5/jakartaservletEE5>

## **References**

<https://www.youtube.com/watch?v=Rx8uoPmaVvE>