

## Spring Introduction

Spring Framework is a Java platform that provides comprehensive infrastructure support for developing Java applications. Spring handles the infrastructure so you can focus on your application.

Spring enables you to build applications from “plain old Java objects” (POJOs) and to apply enterprise services non-invasively to POJOs. This capability applies to the Java SE programming model and to full and partial Java EE.

### Tomcat Installation:

#### Step 1: Download Tomcat

Click on the link below it will redirect to Apache Tomcat Home Page

<https://tomcat.apache.org/download-90.cgi>

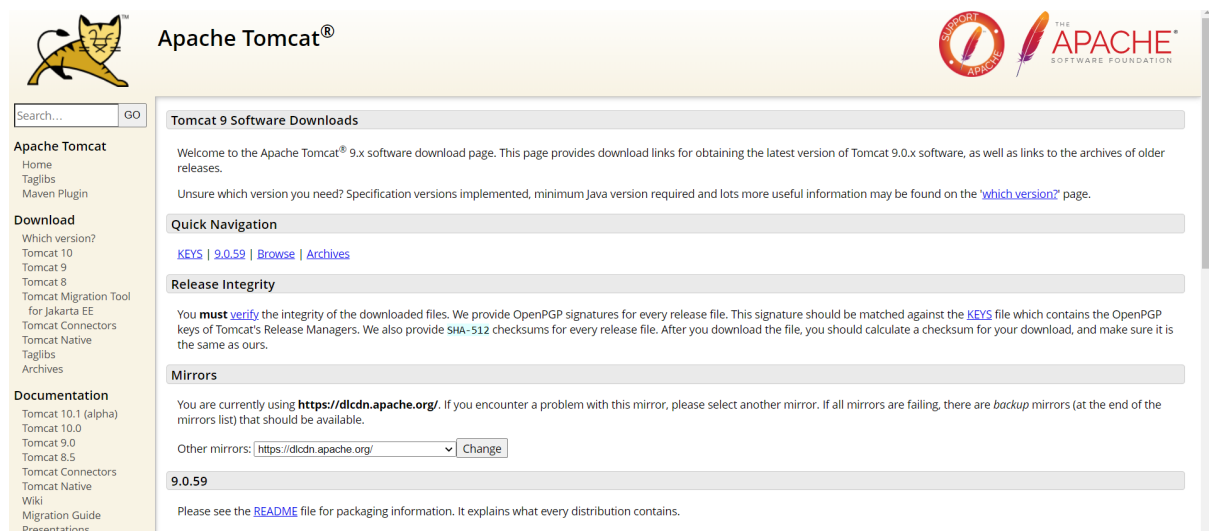
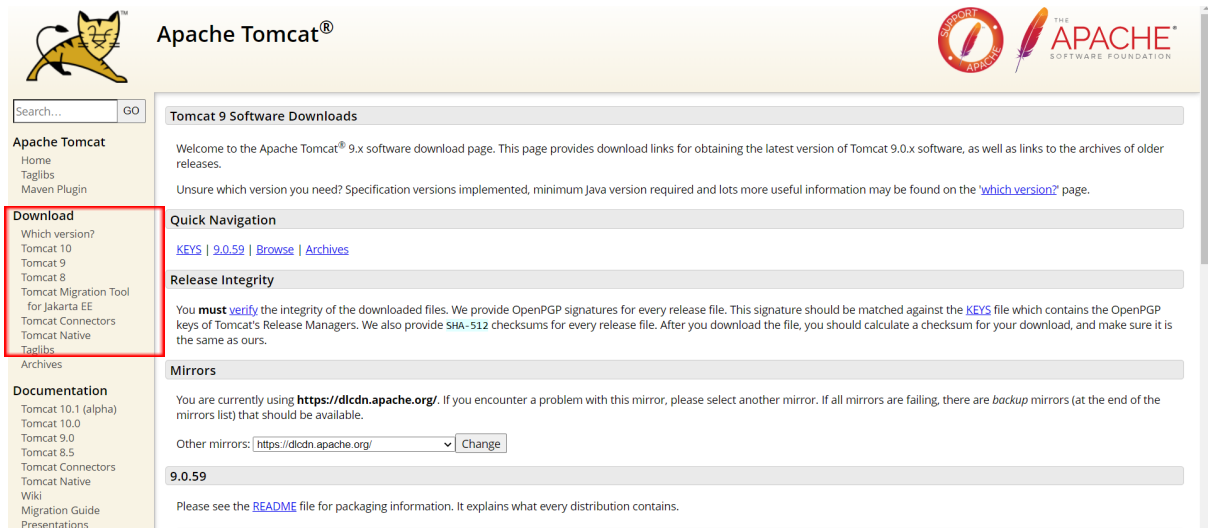


Fig 1: Apache Tomcat Home Page

**Step 2:** In this you will find many version of tomcat in Download section shown below



Apache Tomcat®

Search... GO

Apache Tomcat

- Home
- Taglibs
- Maven Plugin

**Download**

- Which version?
- Tomcat 10
- Tomcat 9
- Tomcat 8
- Tomcat Migration Tool for Jakarta EE
- Tomcat Connectors
- Tomcat Native
- Taglibs
- Archives

**Documentation**

- Tomcat 10.1 (alpha)
- Tomcat 10.0
- Tomcat 9.0
- Tomcat 8.5
- Tomcat Connectors
- Tomcat Native
- Wiki
- Migration Guide
- Presentations

**Tomcat 9 Software Downloads**

Welcome to the Apache Tomcat® 9.x software download page. This page provides download links for obtaining the latest version of Tomcat 9.0.x software, as well as links to the archives of older releases.

Unsure which version you need? Specification versions implemented, minimum Java version required and lots more useful information may be found on the ["which version?"](#) page.

**Quick Navigation**

[KEYS](#) | [9.0.59](#) | [Browse](#) | [Archives](#)

**Release Integrity**

You **must** [verify](#) the integrity of the downloaded files. We provide OpenPGP signatures for every release file. This signature should be matched against the [KEYS](#) file which contains the OpenPGP keys of Tomcat's Release Managers. We also provide [SHA-512](#) checksums for every release file. After you download the file, you should calculate a checksum for your download, and make sure it is the same as ours.

**Mirrors**

You are currently using <https://dlcdn.apache.org/>. If you encounter a problem with this mirror, please select another mirror. If all mirrors are failing, there are *backup* mirrors (at the end of the mirrors list) that should be available.

Other mirrors:

**9.0.59**

Please see the [README](#) file for packaging information. It explains what every distribution contains.

**Step 3:** Here we are going with version 9, once you click on that you will get the page shown below.

Then click on 32-bit/64-bit windows service installer

**9.0.59**

Please see the [README](#) file for packaging information. It explains what every distribution contains.

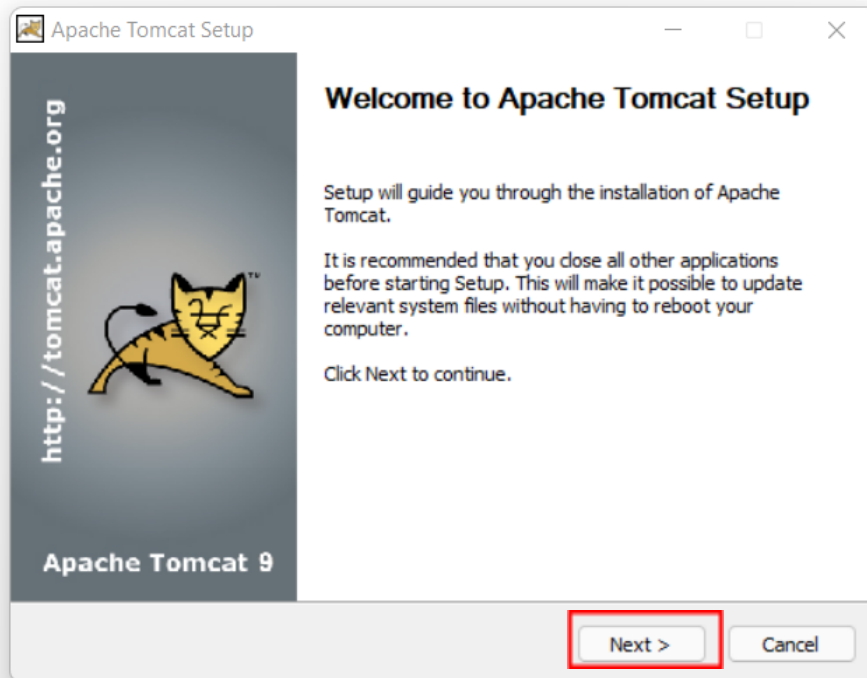
**Binary Distributions**

- Core:
  - [zip \(pgp, sha512\)](#)
  - [tar.gz \(pgp, sha512\)](#)
  - [32-bit Windows zip \(pgp, sha512\)](#)
  - [64-bit Windows zip \(pgp, sha512\)](#)
  - [32-bit/64-bit Windows Service Installer \(pgp, sha512\)](#)
- Full documentation:
  - [tar.gz \(pgp, sha512\)](#)
- Deployer:
  - [zip \(pgp, sha512\)](#)
  - [tar.gz \(pgp, sha512\)](#)
- Embedded:
  - [tar.gz \(pgp, sha512\)](#)
  - [zip \(pgp, sha512\)](#)

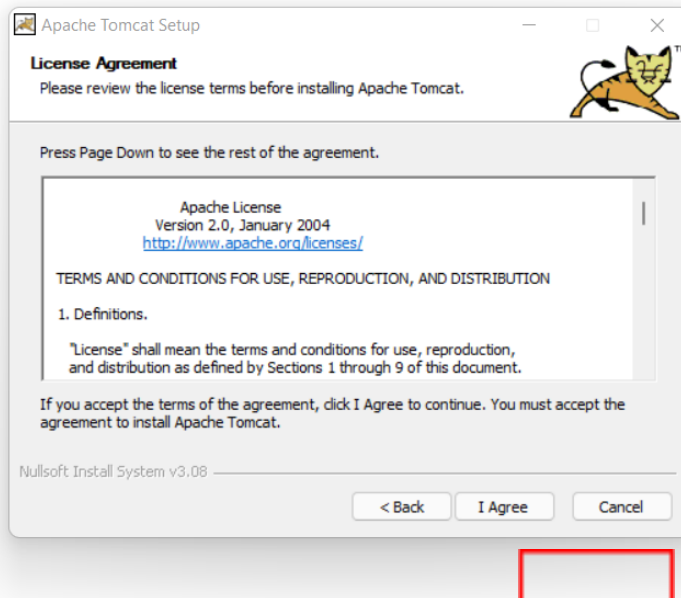
**Source Code Distributions**

- [tar.gz \(pgp, sha512\)](#)
- [zip \(pgp, sha512\)](#)

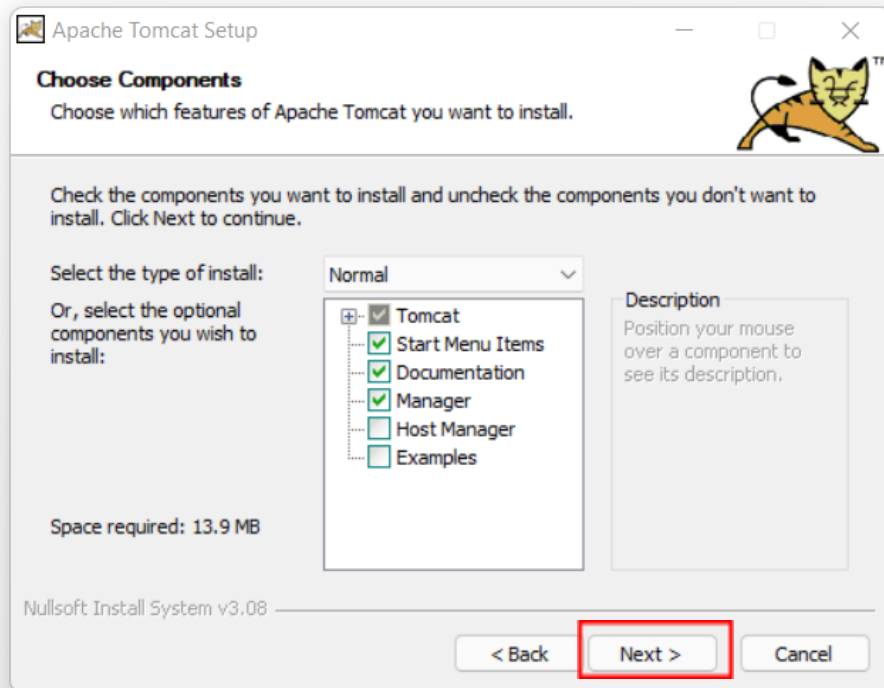
**Step 4:** Once the tomcat is downloaded, to install click on tomcat, you will get the page below click on next



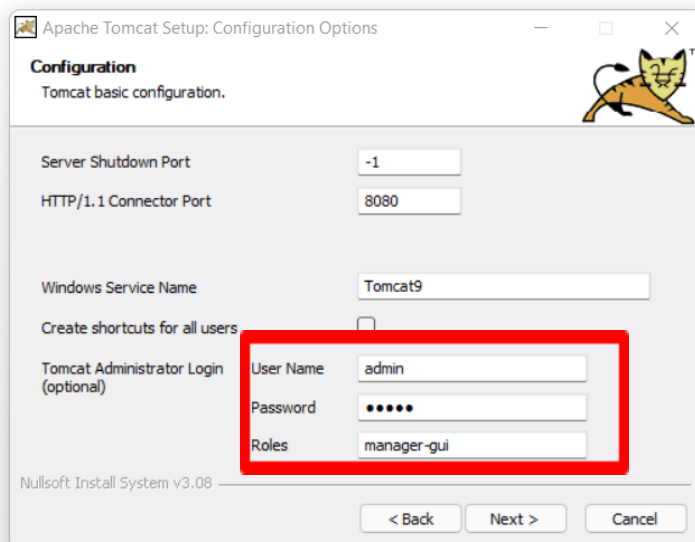
**Step 5:** Next click on I Agree



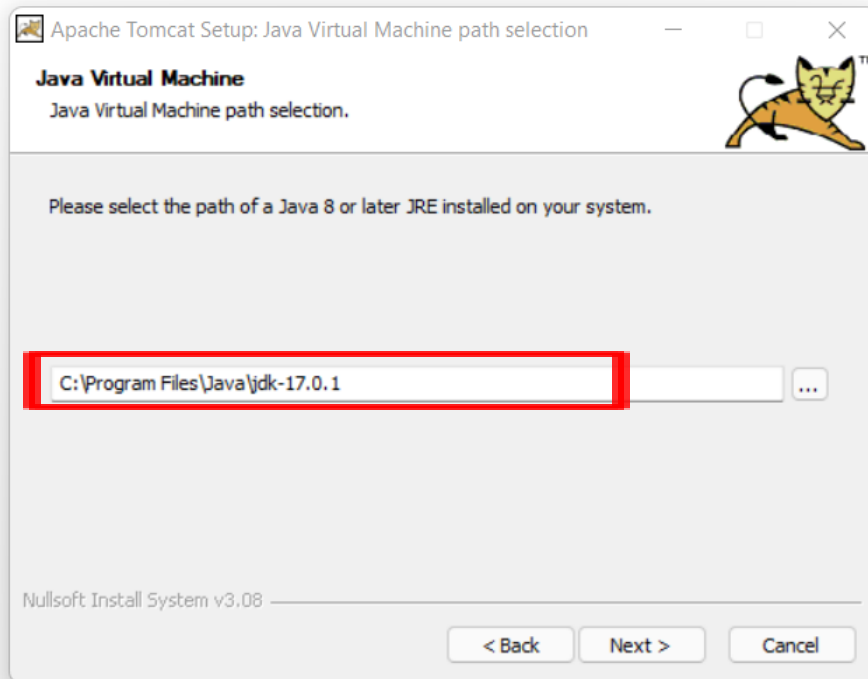
**Step 6:** Click on next Below



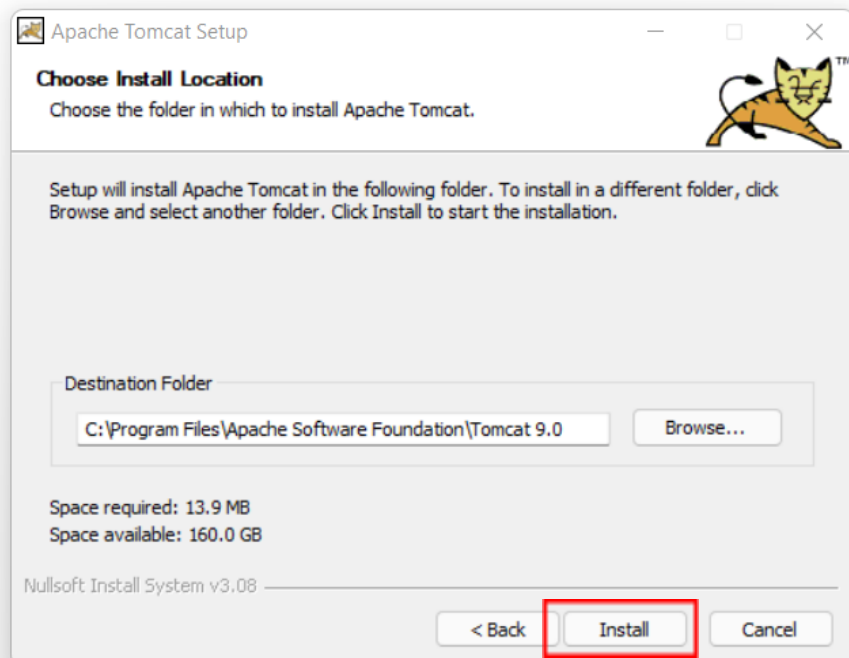
**Step 7:** Next provide username and password as shown below and click on next



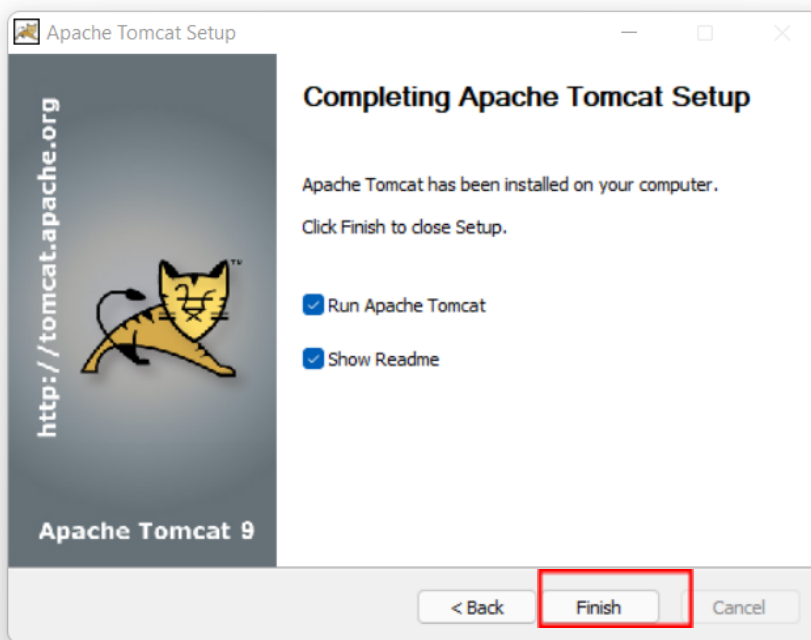
**Step 8:** Here in the below path select the correct JDK path on your system and click on next, else you will get an error message.



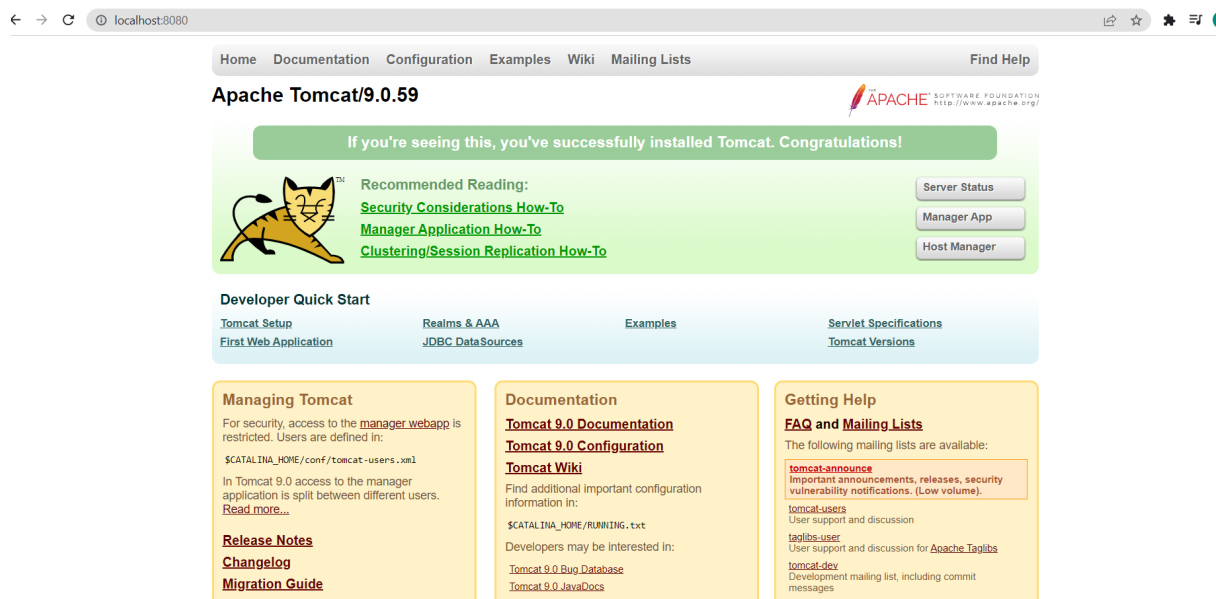
**Step 9:** Next Click on Install below



**Step 10:** Last step click on finish, Tomcat is been installed on your computer



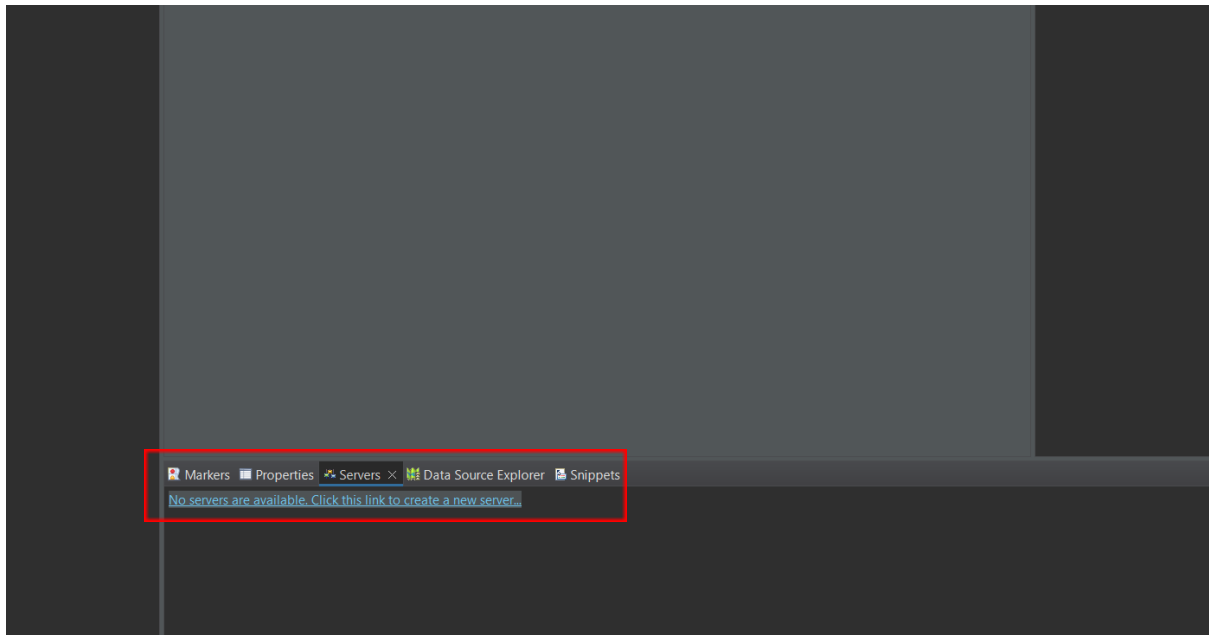
**Step 11:** To check whether it is installed successfully, go to browser and type localhost:8080 you will get page shown below then it



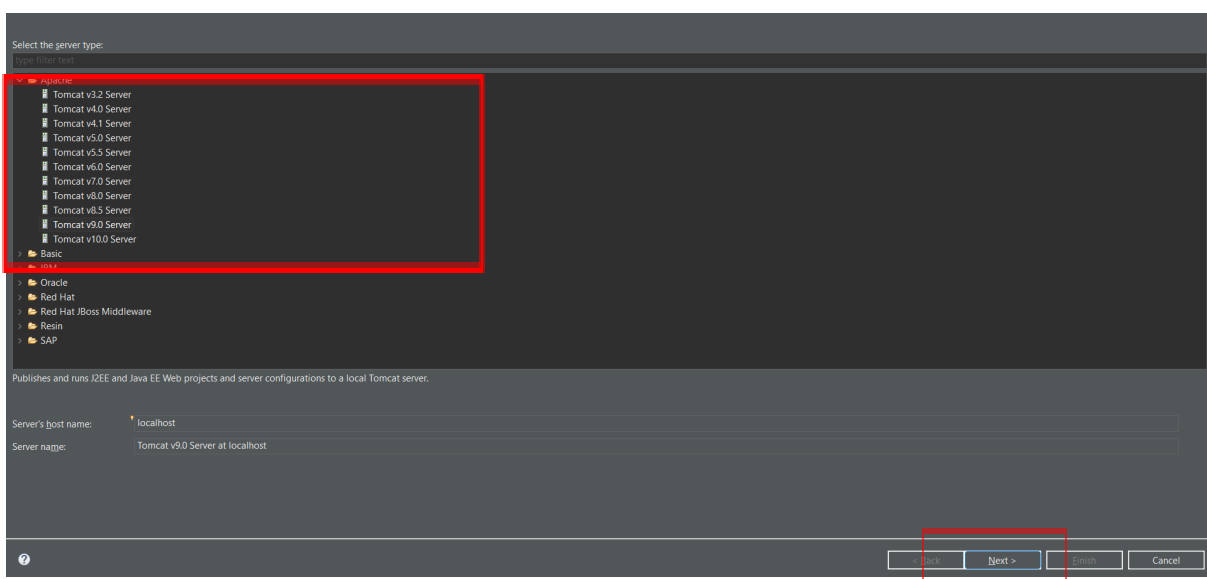
## Connecting Eclipse with Tomcat:

Before we connect tomcat to eclipse, first we need to stop the tomcat server then eclipse should be in java EE perspective

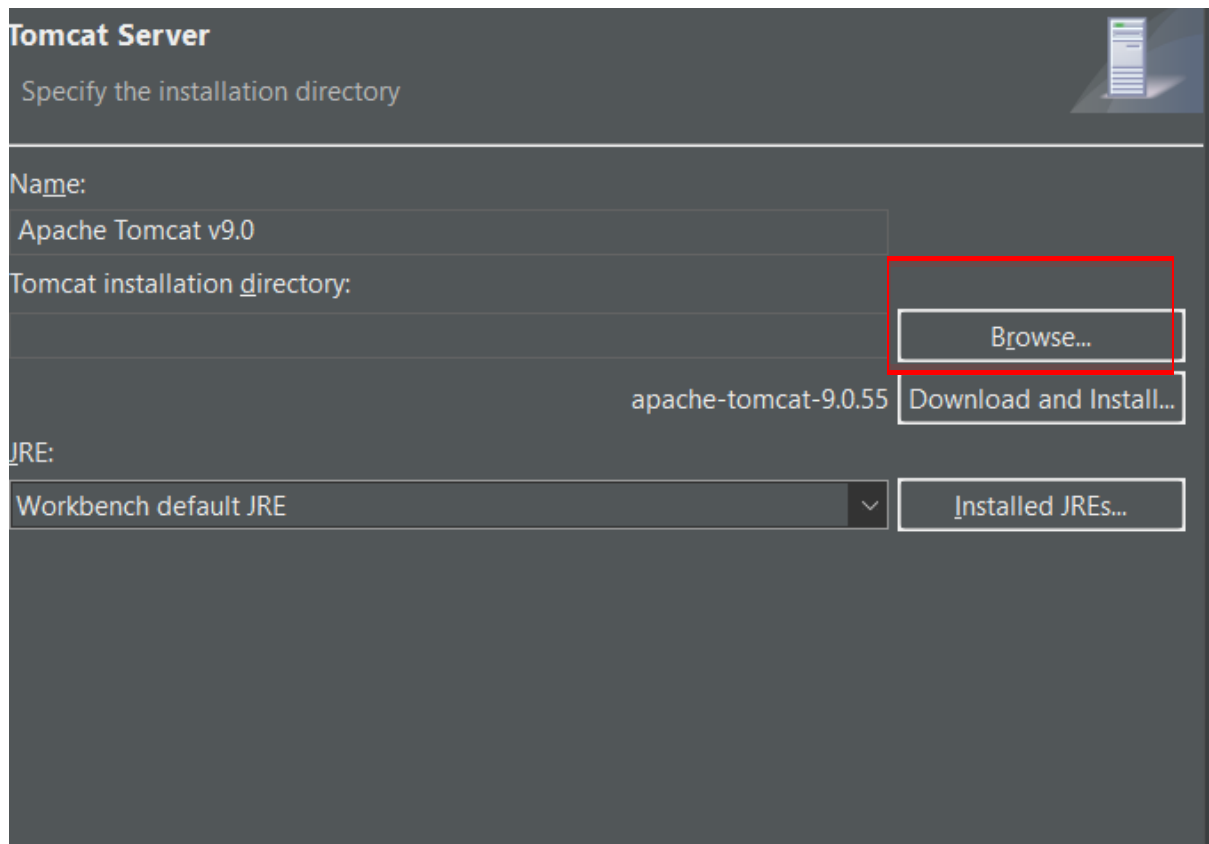
**Step 1:** Now Eclipse is in Java EE perspective, Here go to server section and click on the link



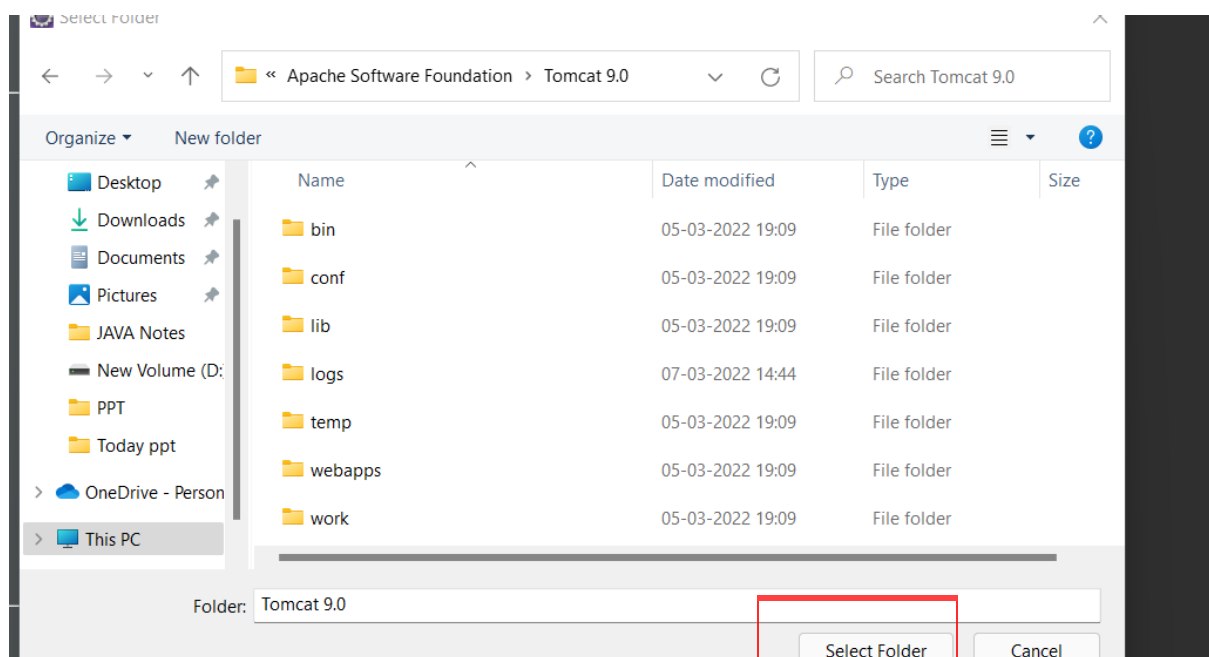
**Step 2:** Here select the version of tomcat that you have downloaded, here we are going with version 9 and then click on next



**Step 3:** Here browse the path where tomcat is located

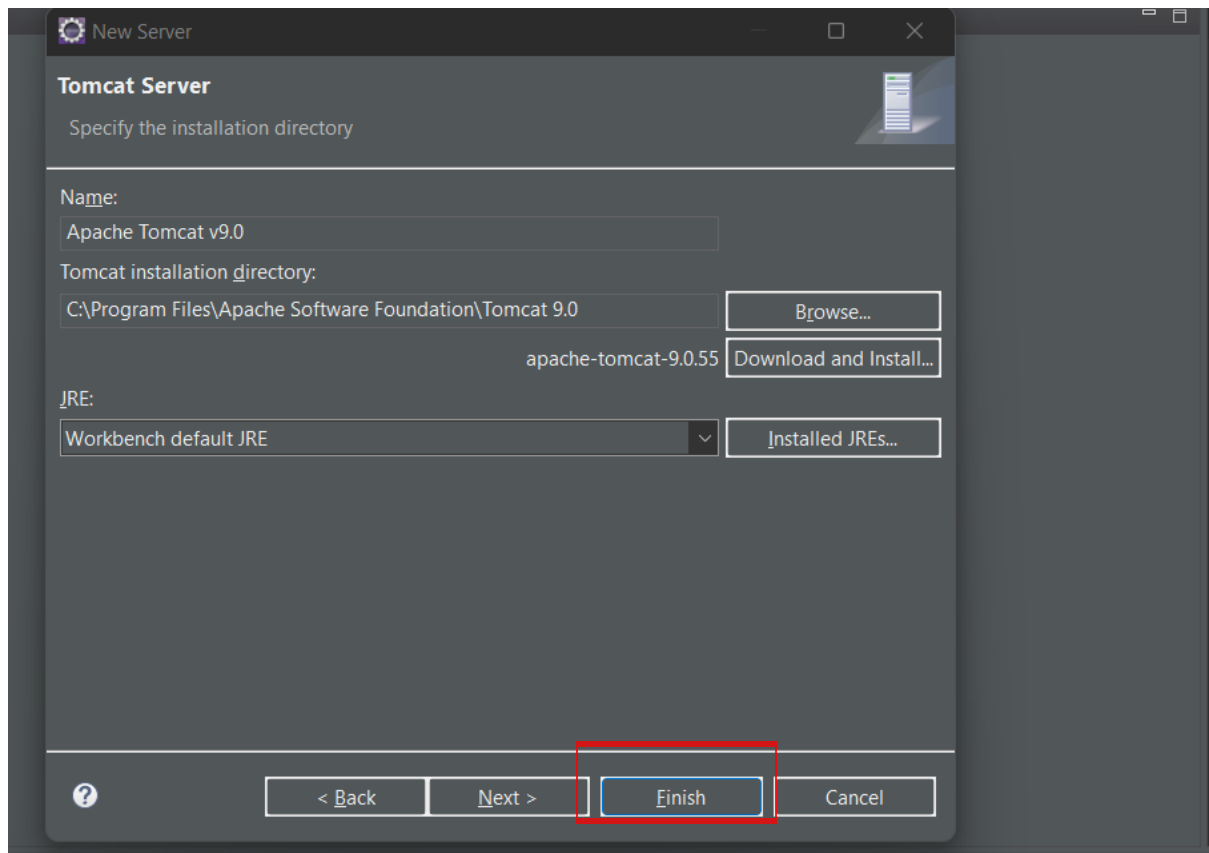


**Step 4:** After browsing click on select folder

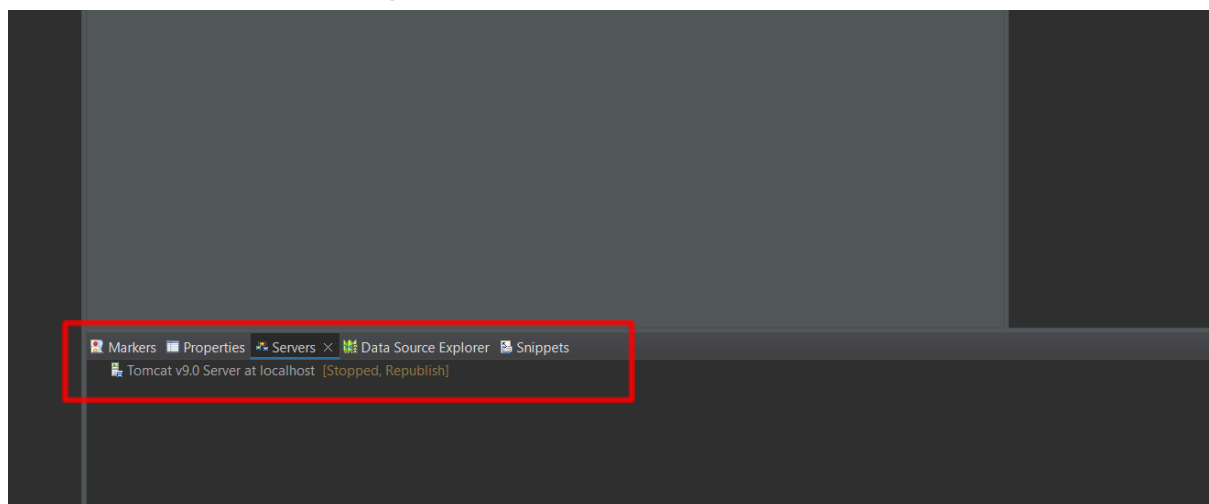


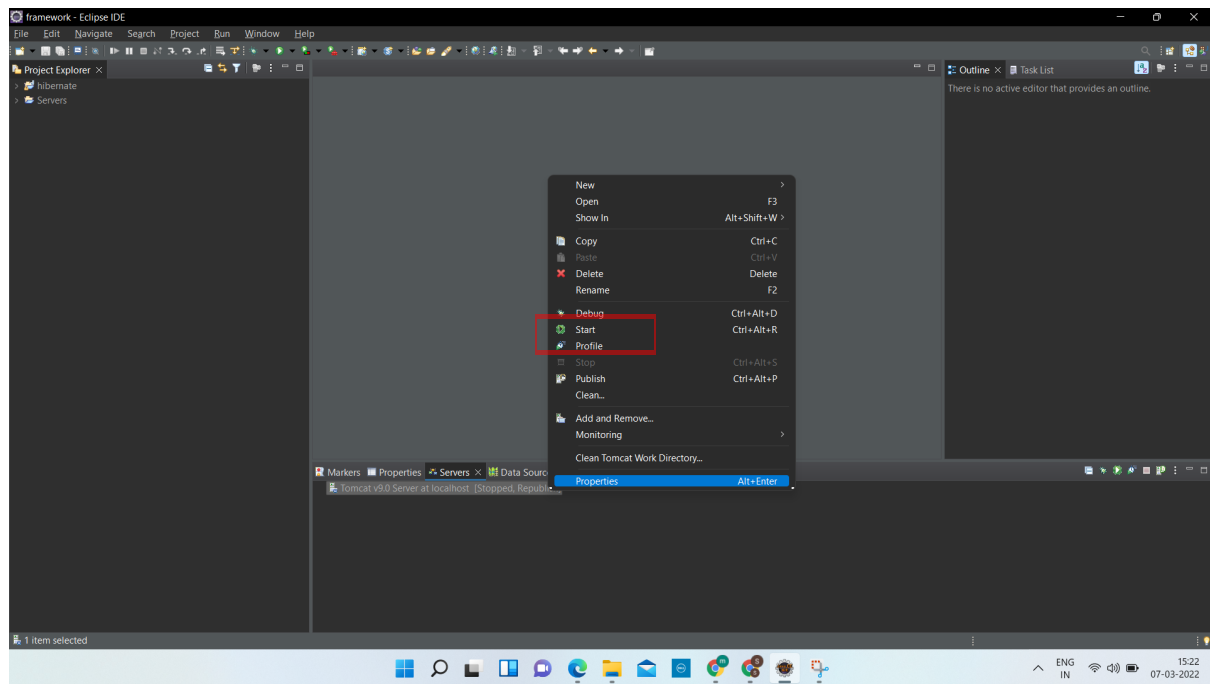


**Step 5:** Next click on Finish



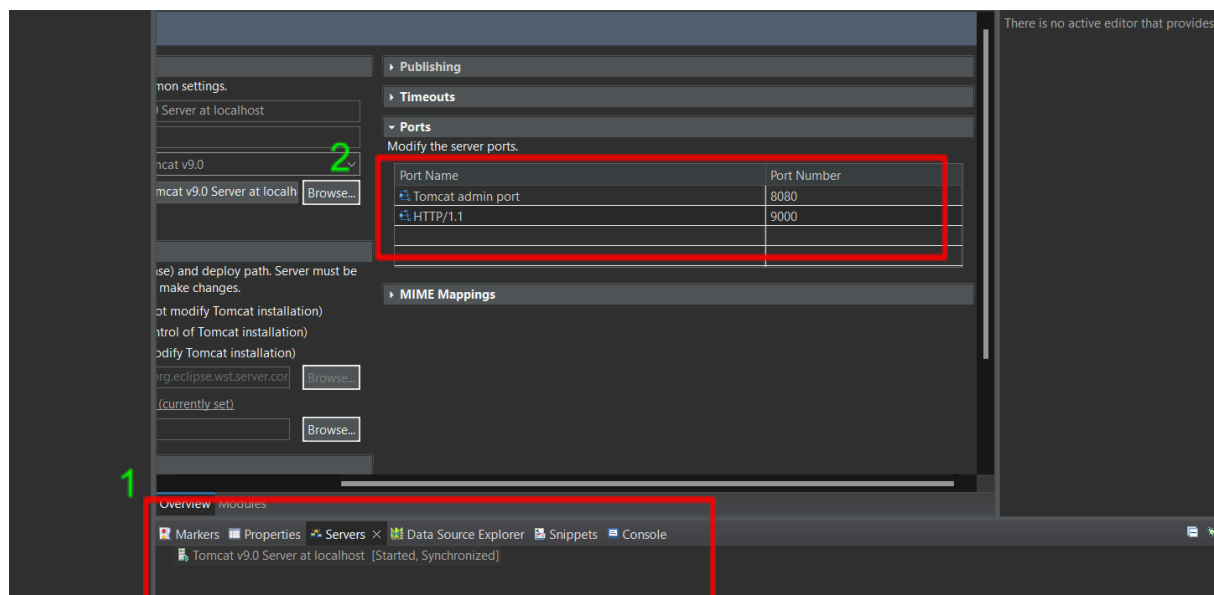
**Step 6:** After you click on finish, the window below appears. It has stopped now. To start the server right click on the server and select start server



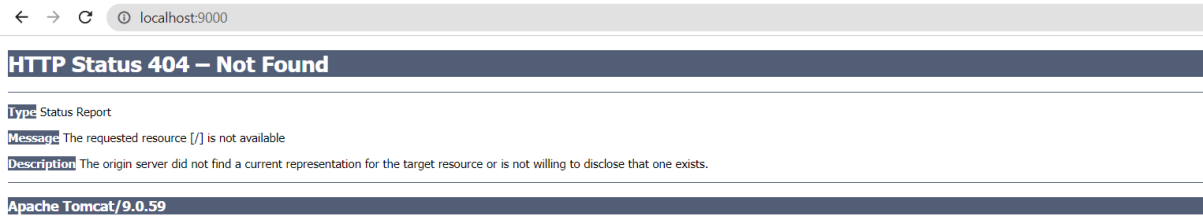


**Step 7:** When you click on start sometimes it will show an error message saying one or more ports are invalid to rectify that set the port numbers as shown below.

- click on the link then set the port number



**Step 8:** To just verify whether the server is running successfully, go to browser then type localhost:9090 / localhost:8080 you will get the window as shown below it means server is running

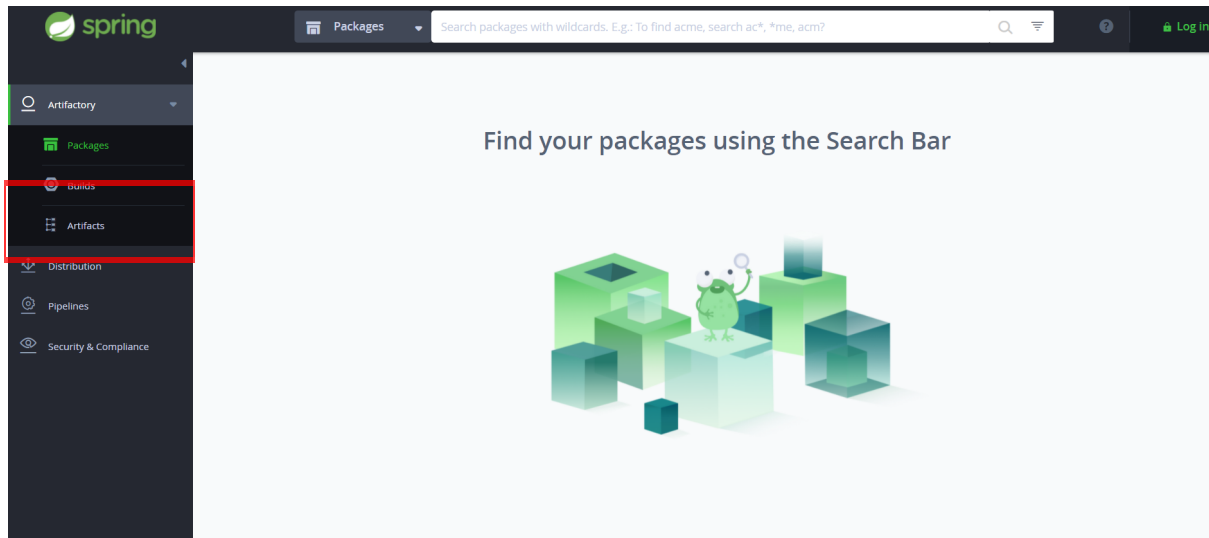


Now we are successful in connecting eclipse to tomcat server

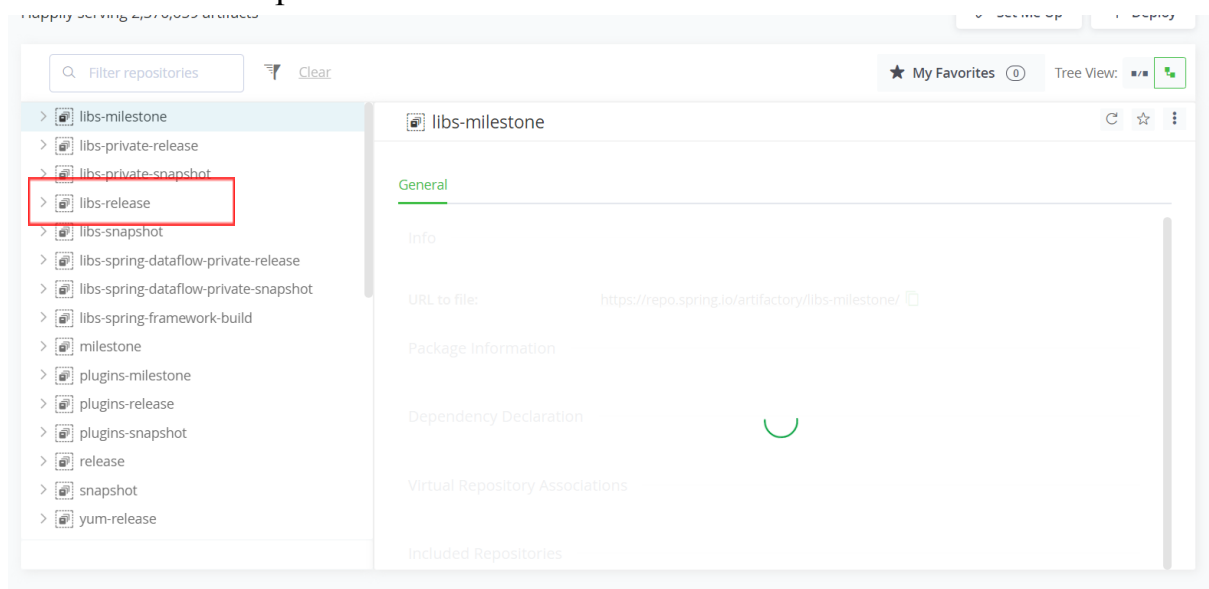
## Setting up SPRING JARs to Eclipse

**Step 1:** Go to [repo.spring.io](https://repo.spring.io) to download the jar files this will redirect to the page below. Here we need to select Artifacts

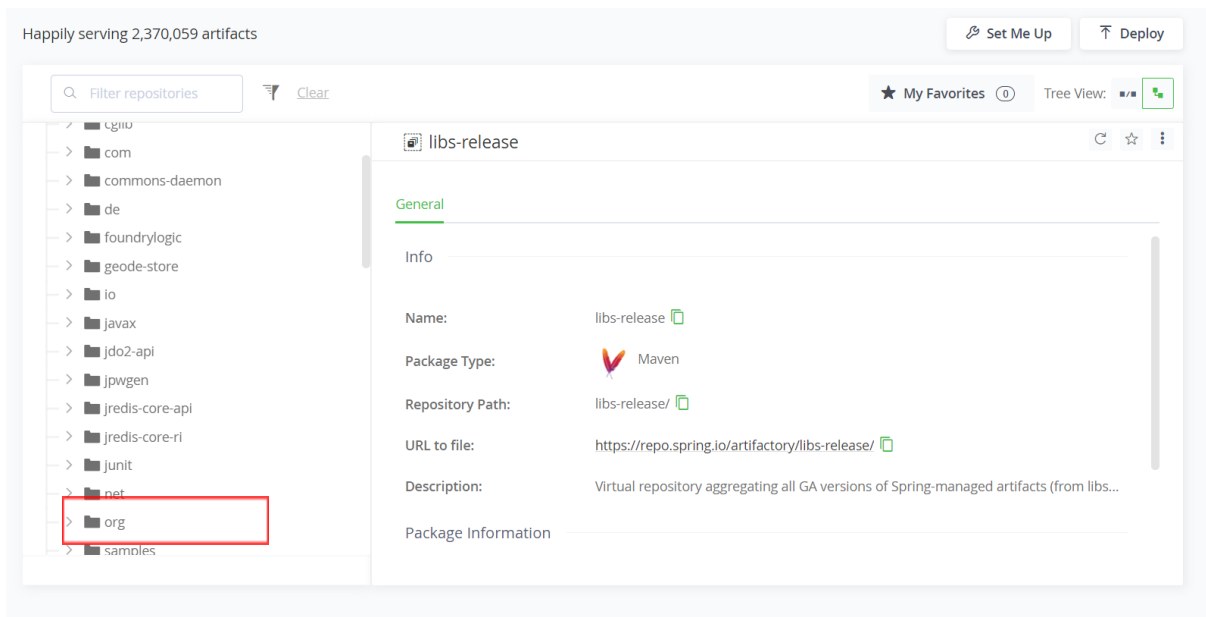
<https://repo.spring.io/ui/>



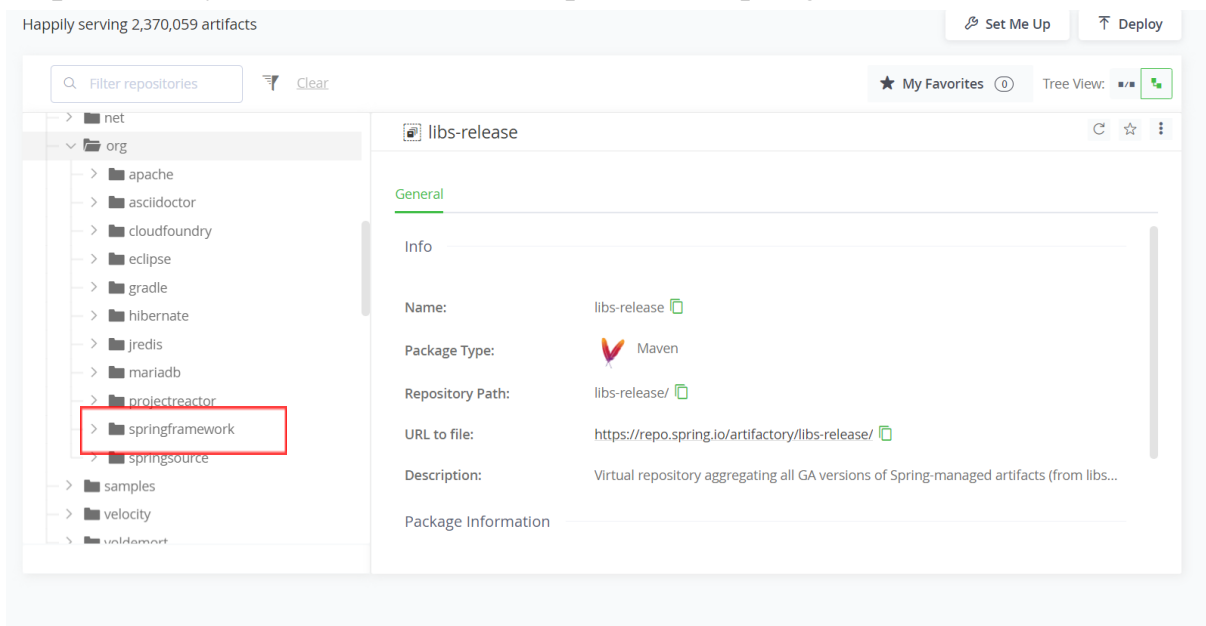
**Step 2:** Once you click on artifacts you will get the page below, here you need to click on the drop down of libs-release



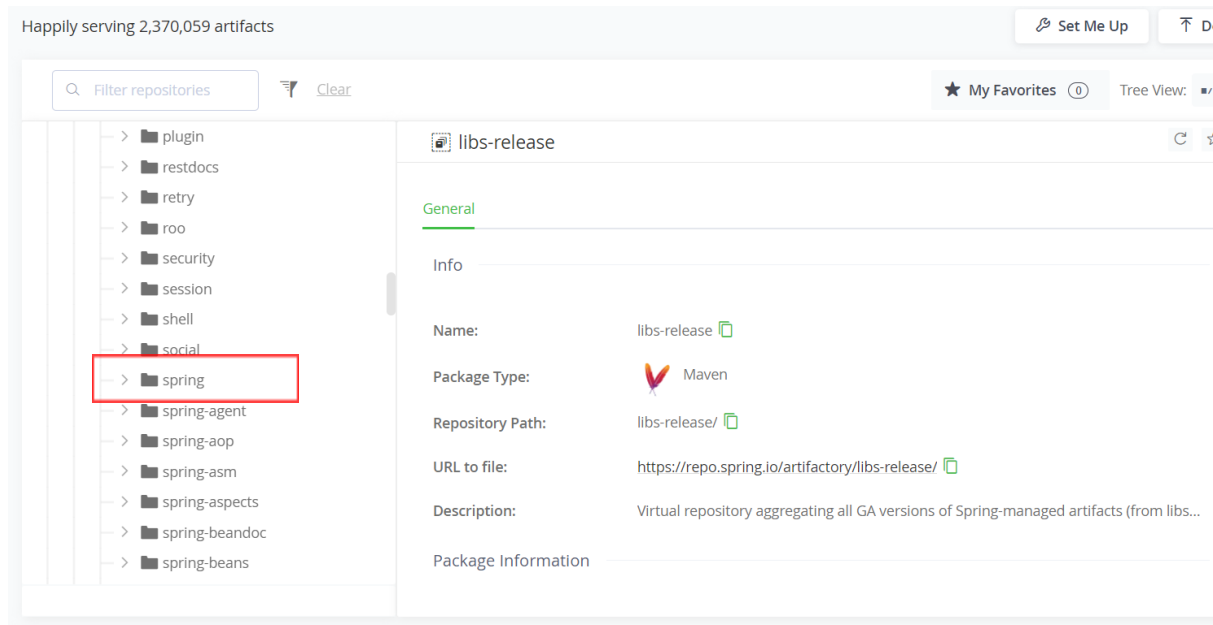
**Step 3:** Once you click on that you will get so many options, now you need to click on org dropdown



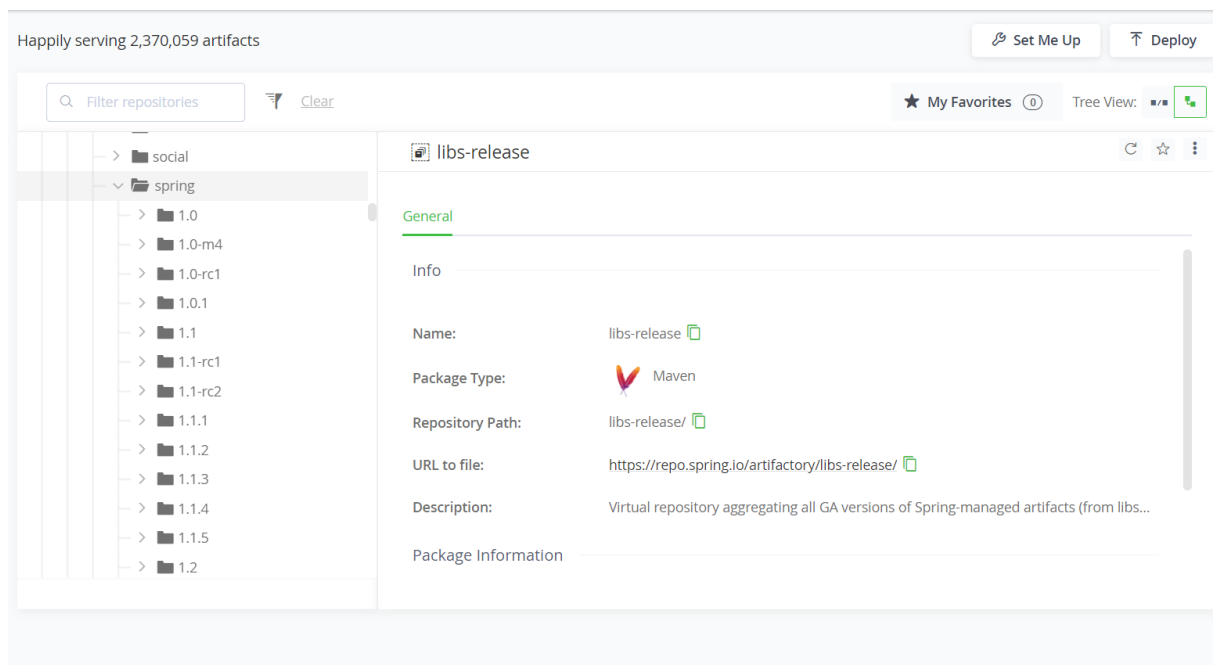
**Step 4:** Now you need to click on drop down of springframework



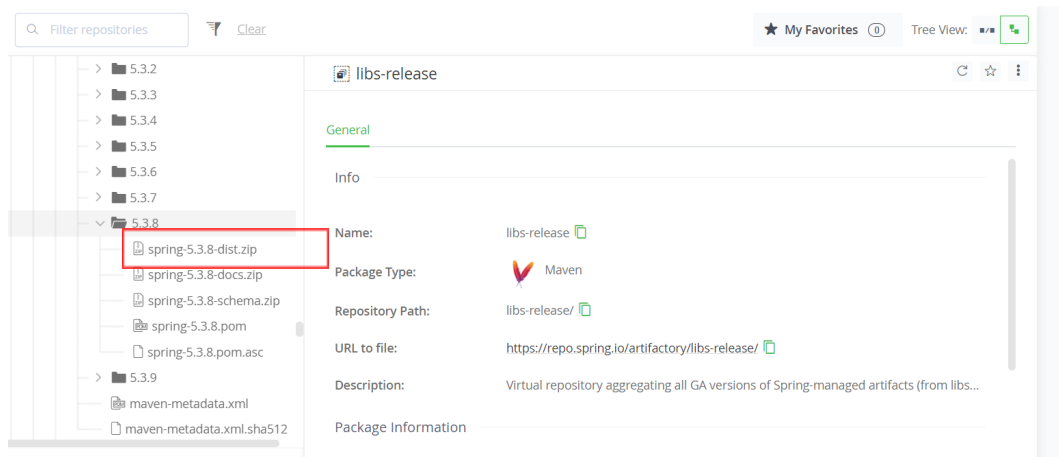
**Step 5:** Here you will get many options, now you need to select the drop down of spring



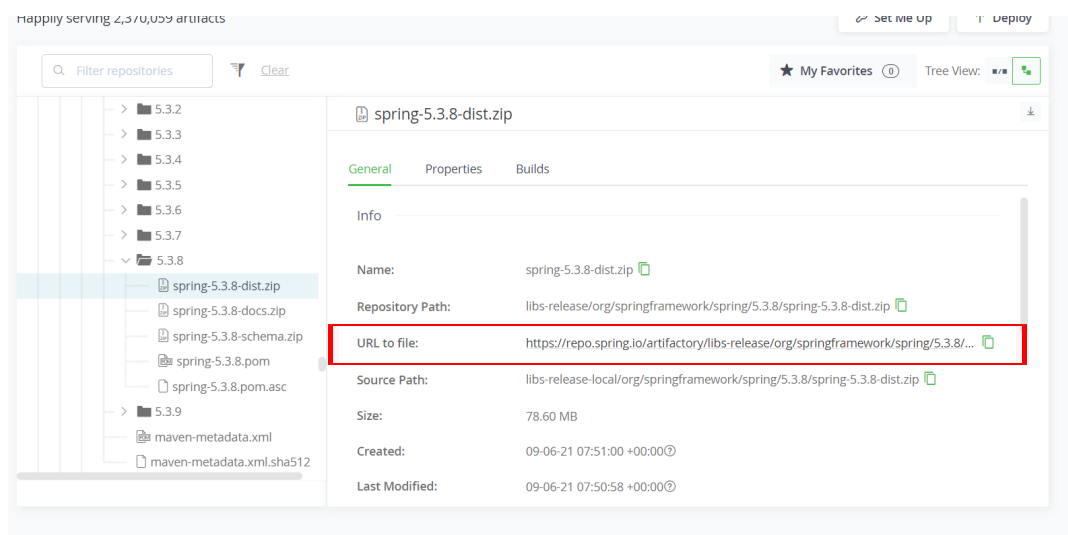
**Step 6:** When you click on that there are different versions you will get, go to the latest version. Here we are going with 5.3.8 version



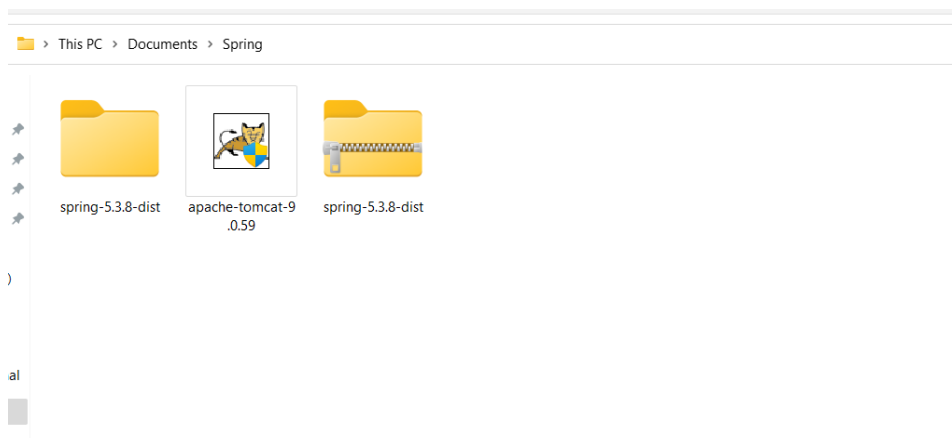
**Step 7:** Here you need to select first option



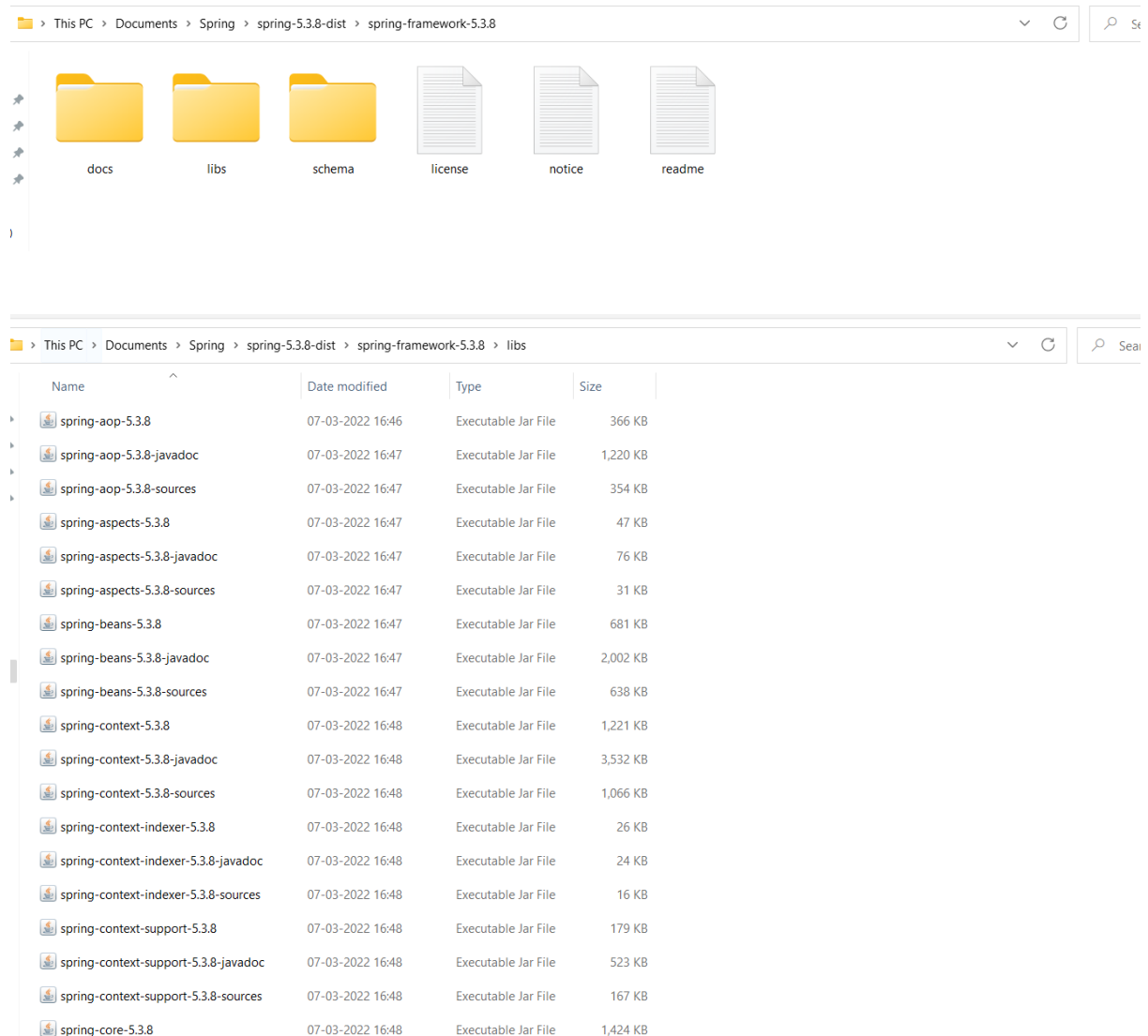
**Step 8:** Here you need to click on link of url to file shown below it will start downloading the jar files



**Step 9:** Open the folder where the extracted zip file is there

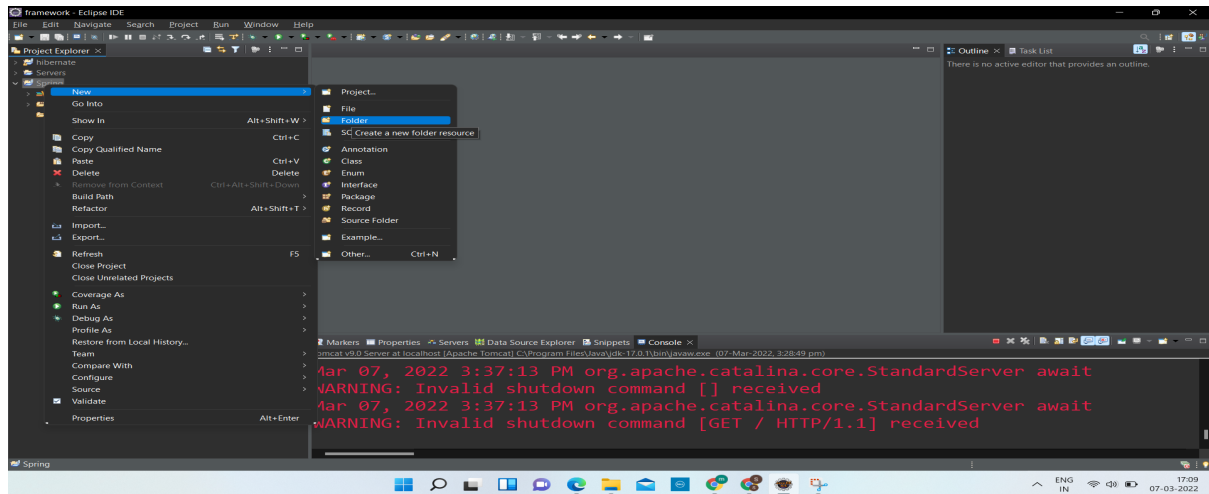


**Step 10:** if click on that you will libs folder click on that you will find all the jar files





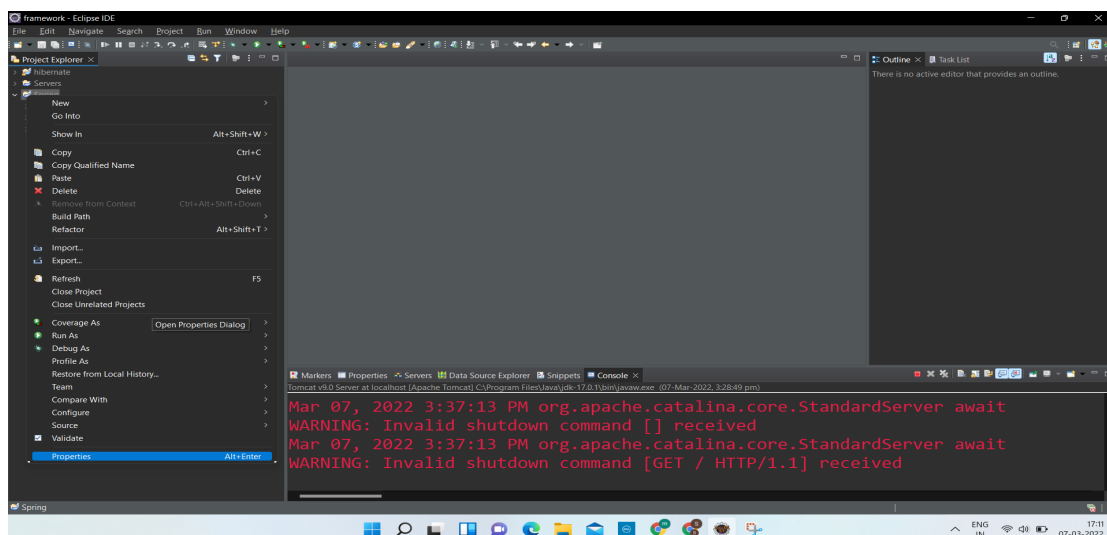
**Step 11:** Go to eclipse create new project then create a folder called lib



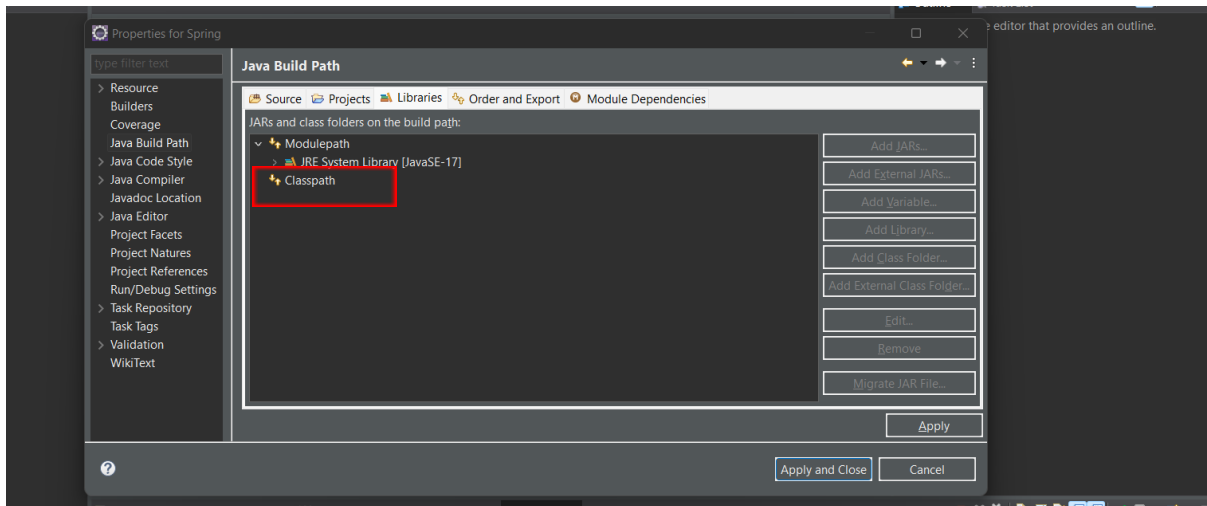
**Step 12:** copy all the jar files and paste it in jar folder



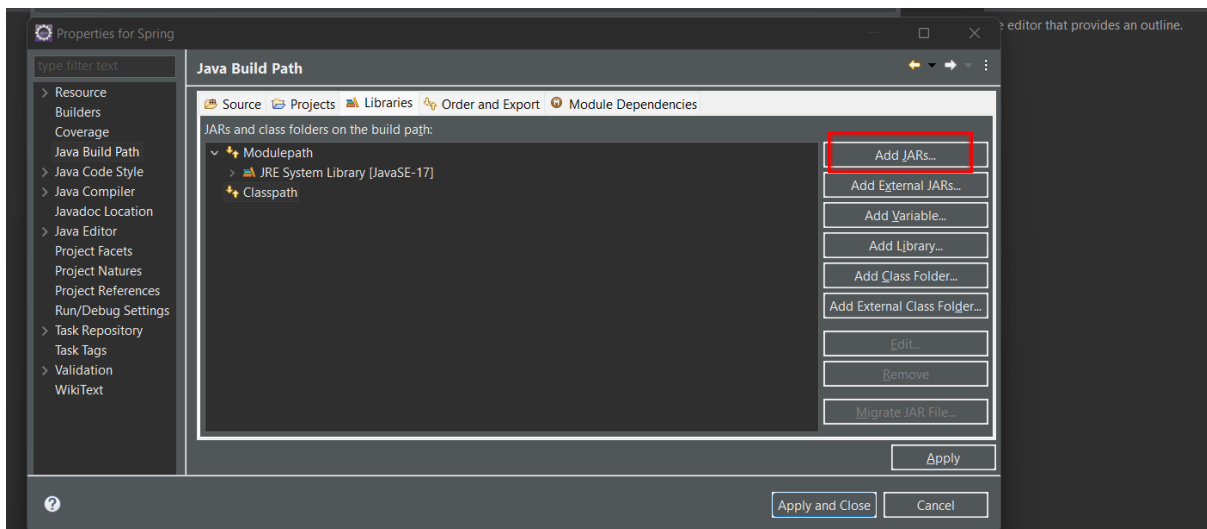
**Step 13:** Now right click on the project folder and go to properties



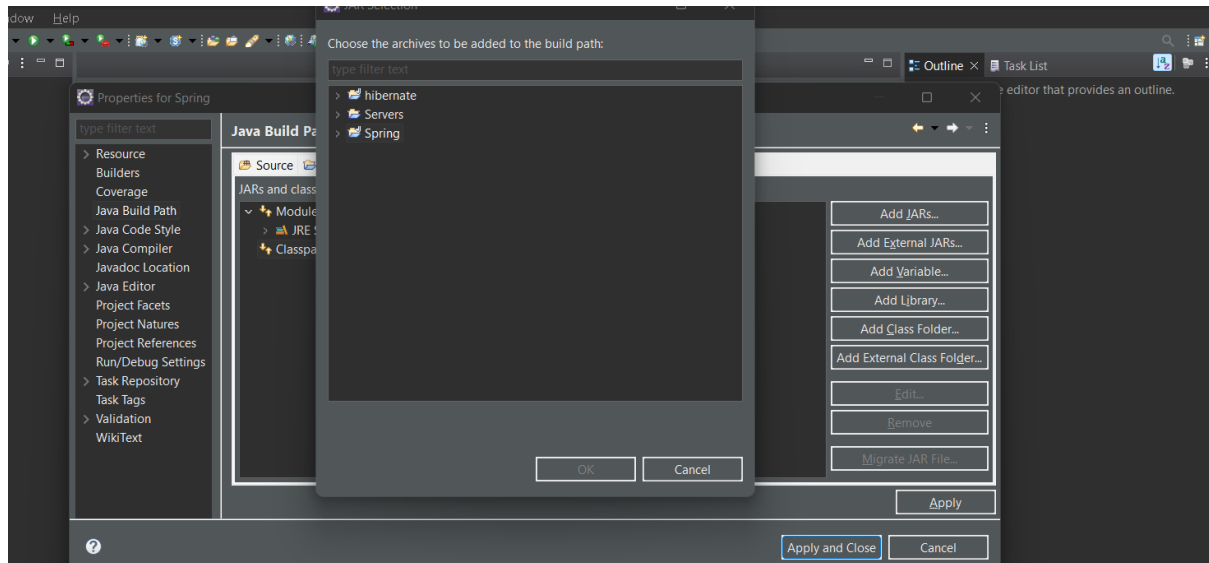
**Step 14:** Now you are inside the libraries, click on Classpath



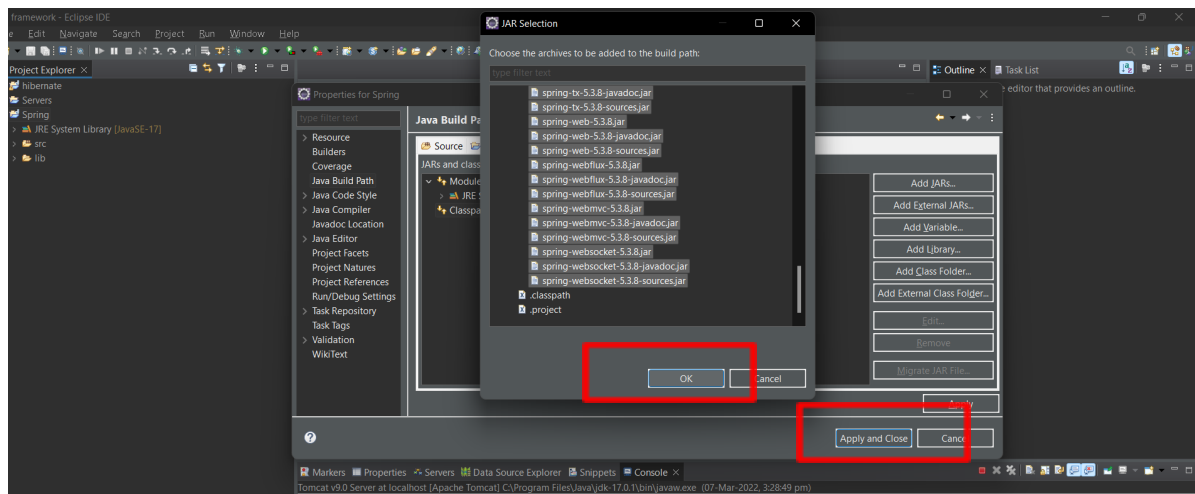
**Step 15:** Now click on Add JARs

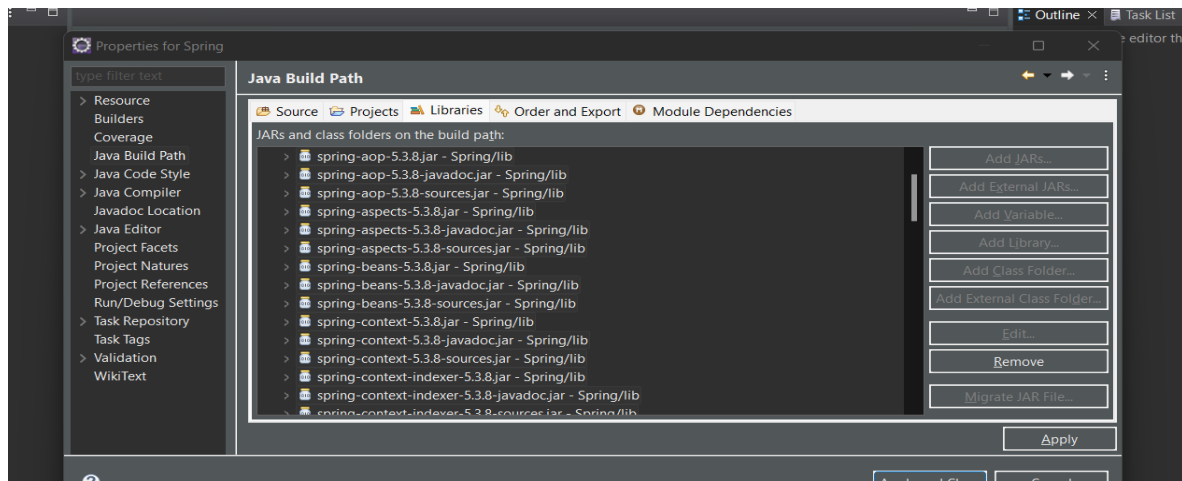


**Step 16:** Here click on the dropdown of the project, next click on lib folder where you have added jar files



**Step 17:** Copy all the jar files that is available in the lib folder then click on ok, next Apply and close





**Step 18:** Now check is Referenced Libraries is created in the project, if it is then all the jar files is added successfully

