

Sprint Boot Explanation and Configuration for Basic Web Project

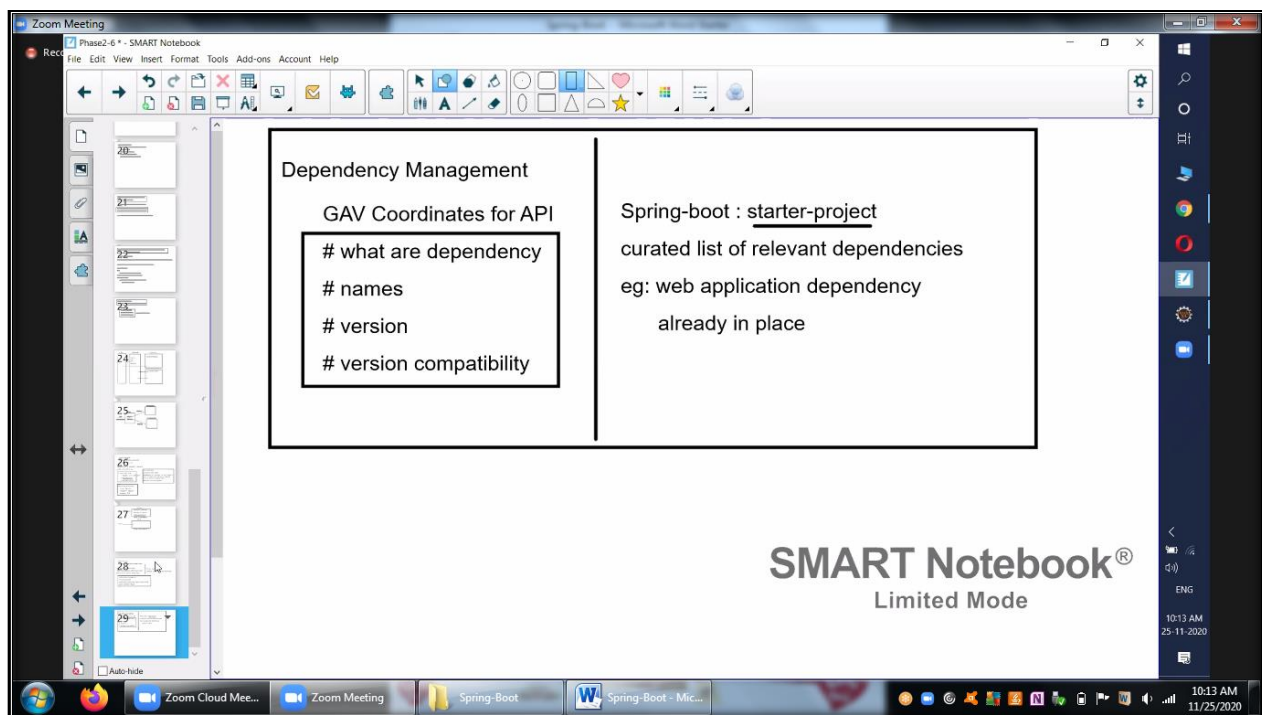
Existing Maven approach and Spring Boot approach for GAV coordinates

Just 1 GAV co-ordinate will take care of the entire dependencies

For Web – only 1 GAV co-ordinate

For Spring Security – only 1 GAV co-ordinate

For DB Sprint Security – only 1 GAV co-ordinate etc.



Auto Configuration

Auto Configuration

- => Dependency : looking at dependencies in pom.xml , default & std config auto done
- => Specialized annotation : auto config

Properties file is a key feature for Spring-Boot

Custom Config : Reduction in boiler-plate code

heavily rely on properties

key-value pair

list of predefined key (spring-boot) : possible value

Self-Sufficient

Current Approach

Self-Sufficient

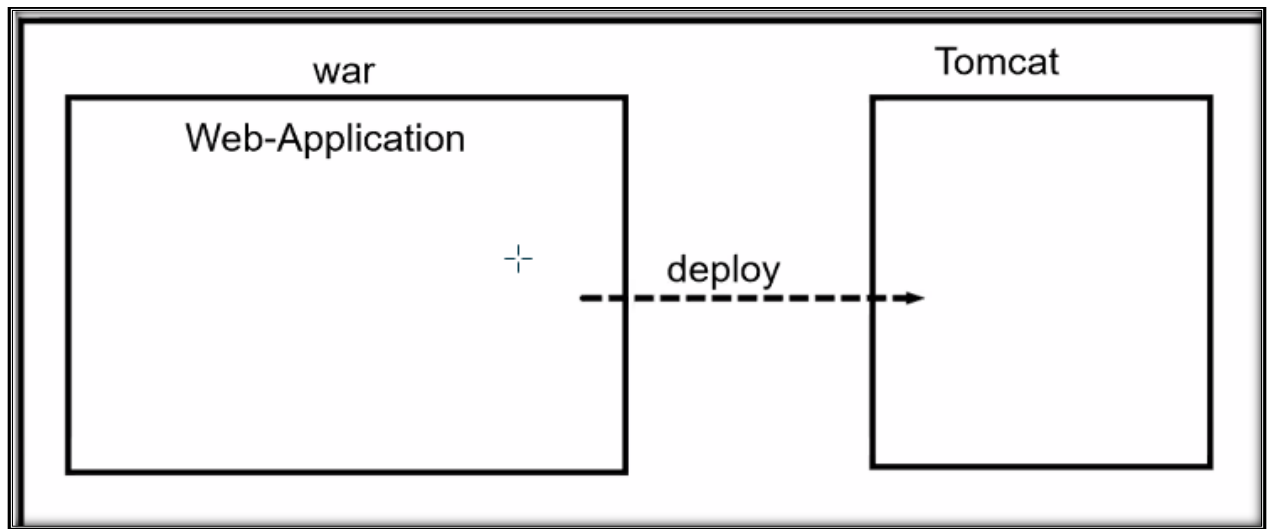
eg: spring web application using maven tool

=> Maven installed/maven plugin

=> IDE support

=> Tomcat Server

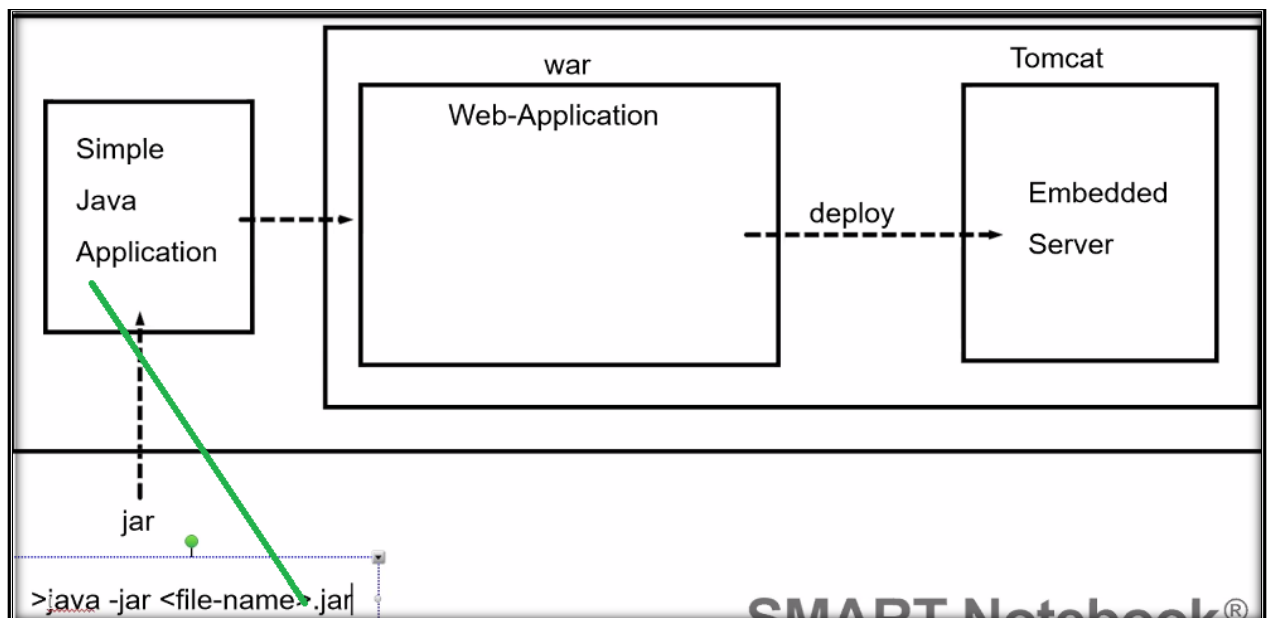
=> Deploying the app



Spring-Boot Approach

Independent and help us to get all the things to get easily, Most of them are in-built

Simple Java file will take care of all the aspects



All requirements embedded in project

- # embed the maven cli command file
- # Text editor (no plugin dependency)
- # embedded tomcat server
- # add support of deploying app

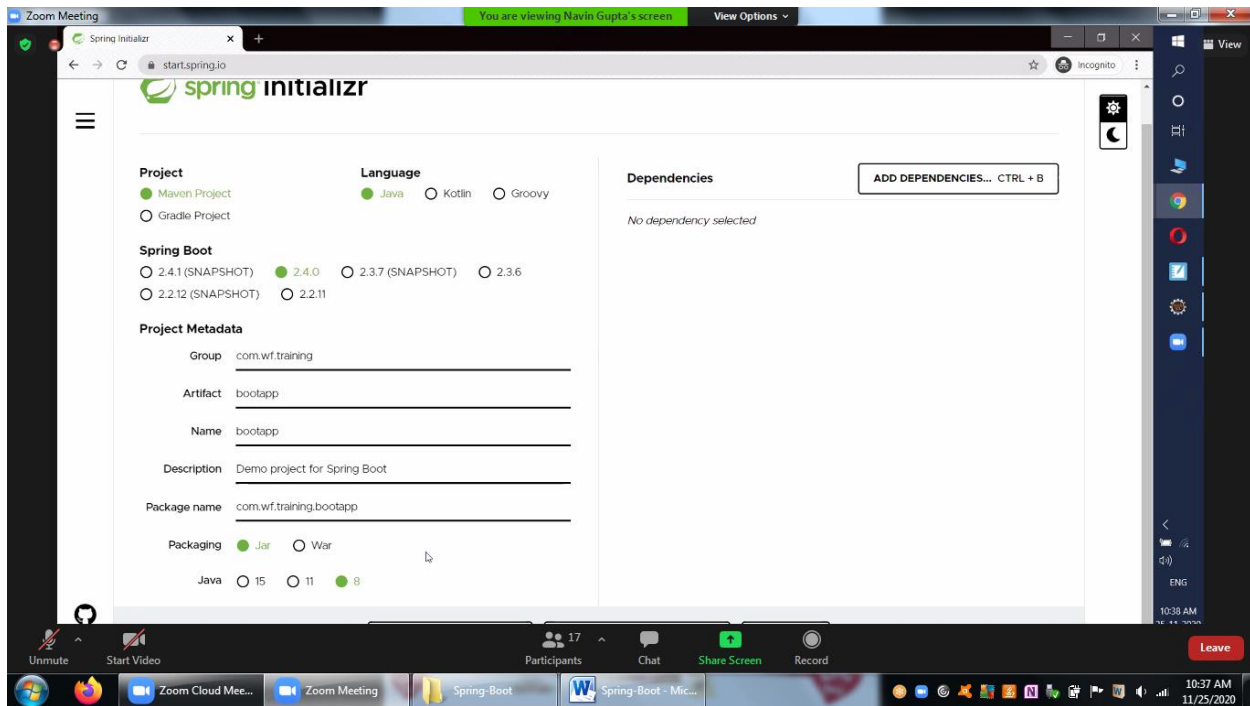
Spring Boot:

- # online platform : spring initializr

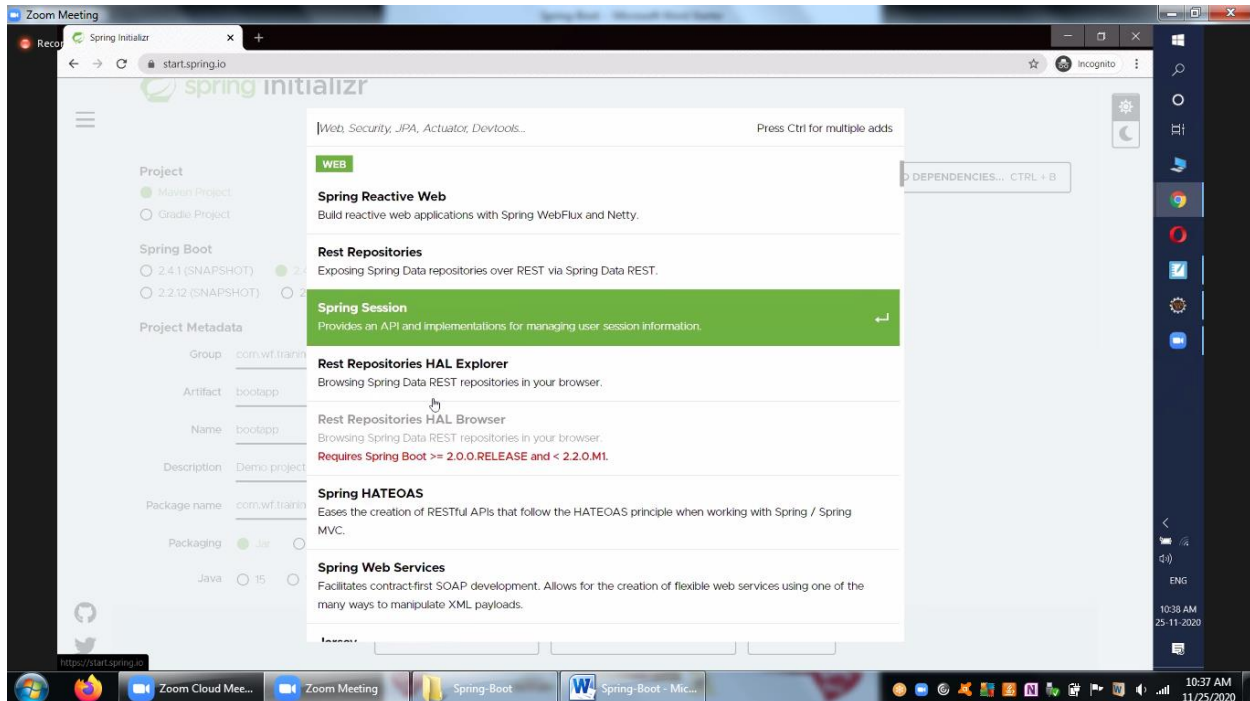
- ask you req of application, create a skeleton, download it..

- # spring-boot plugins

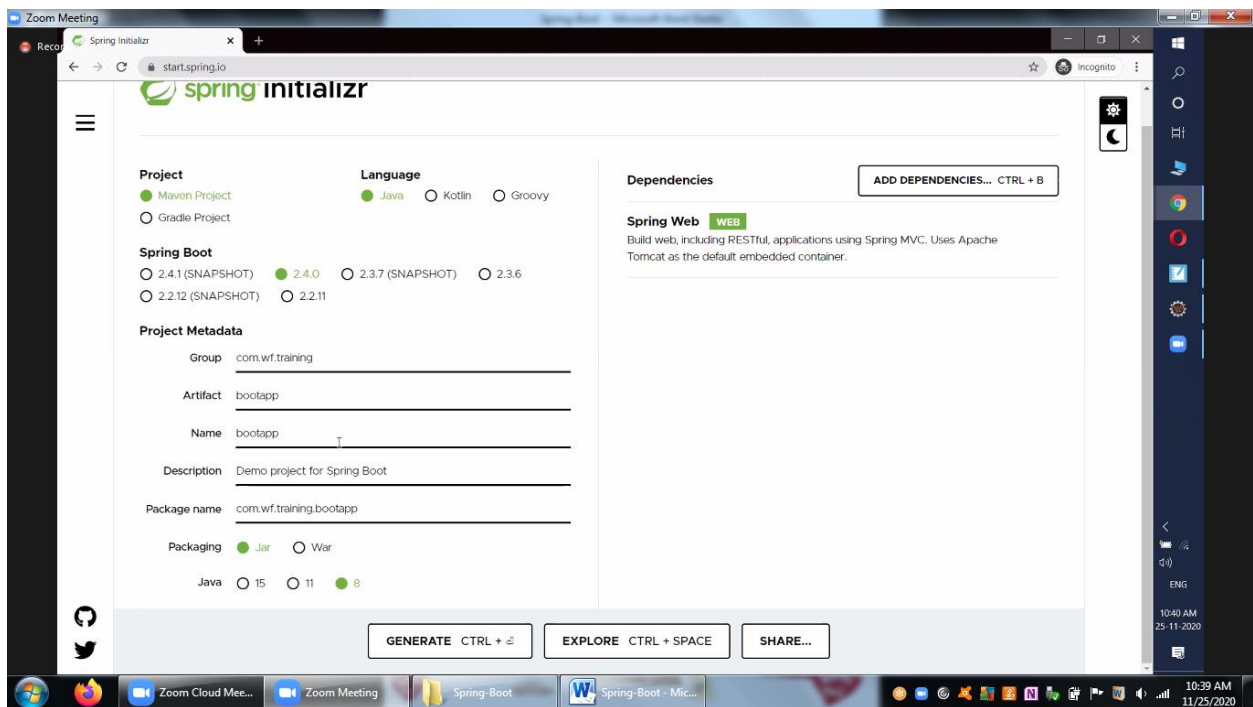
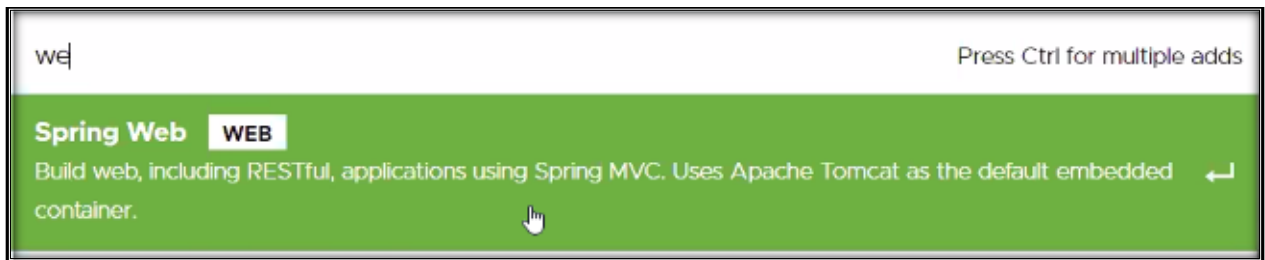
Online Spring platform



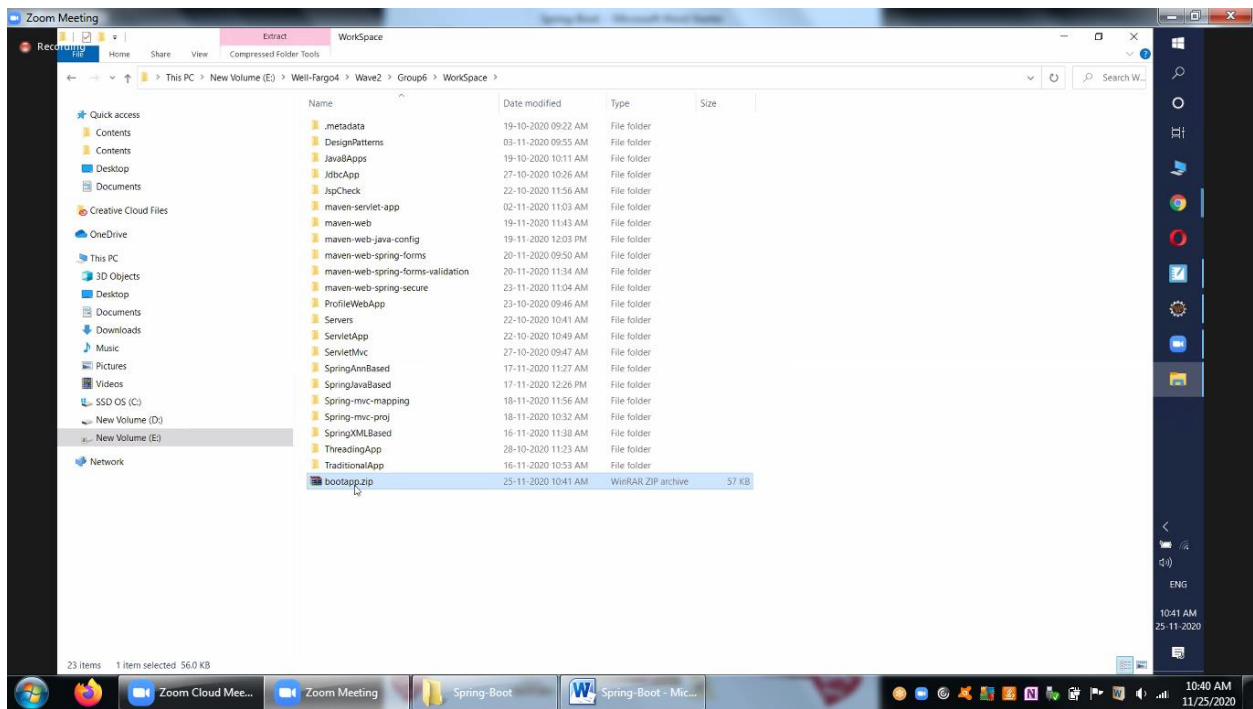
Click on the Add Dependencies



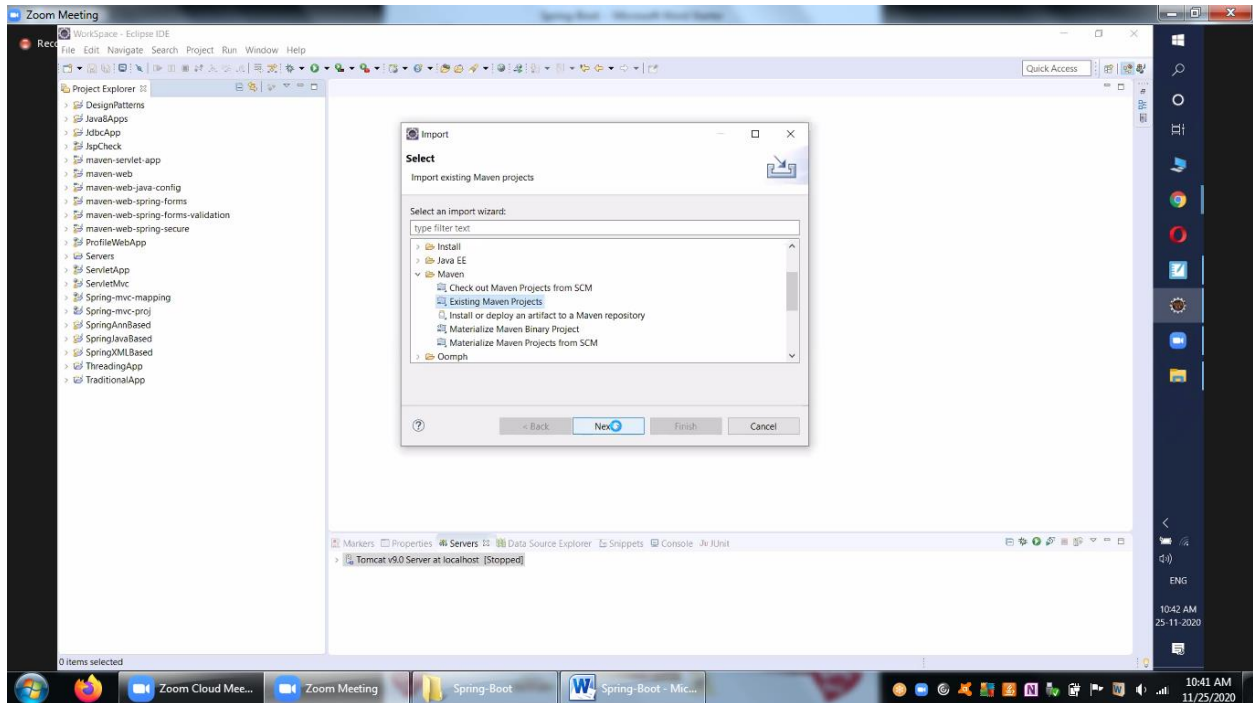
Select Web project and add as dependency

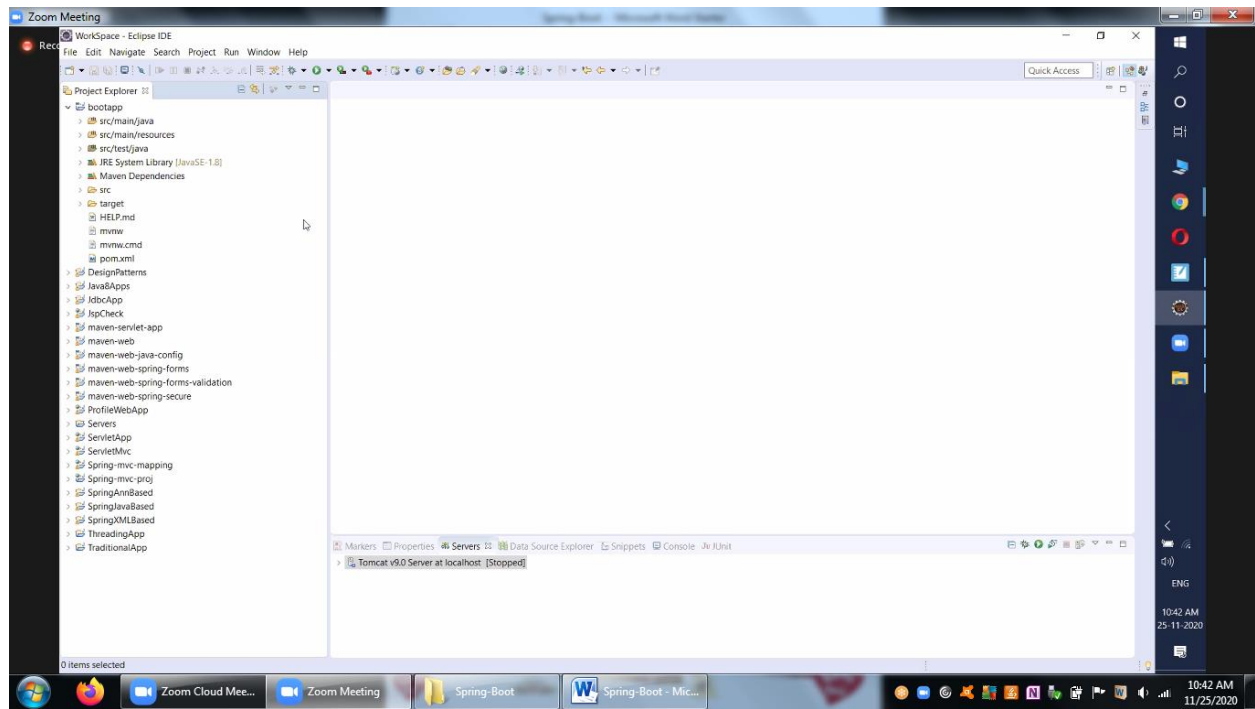
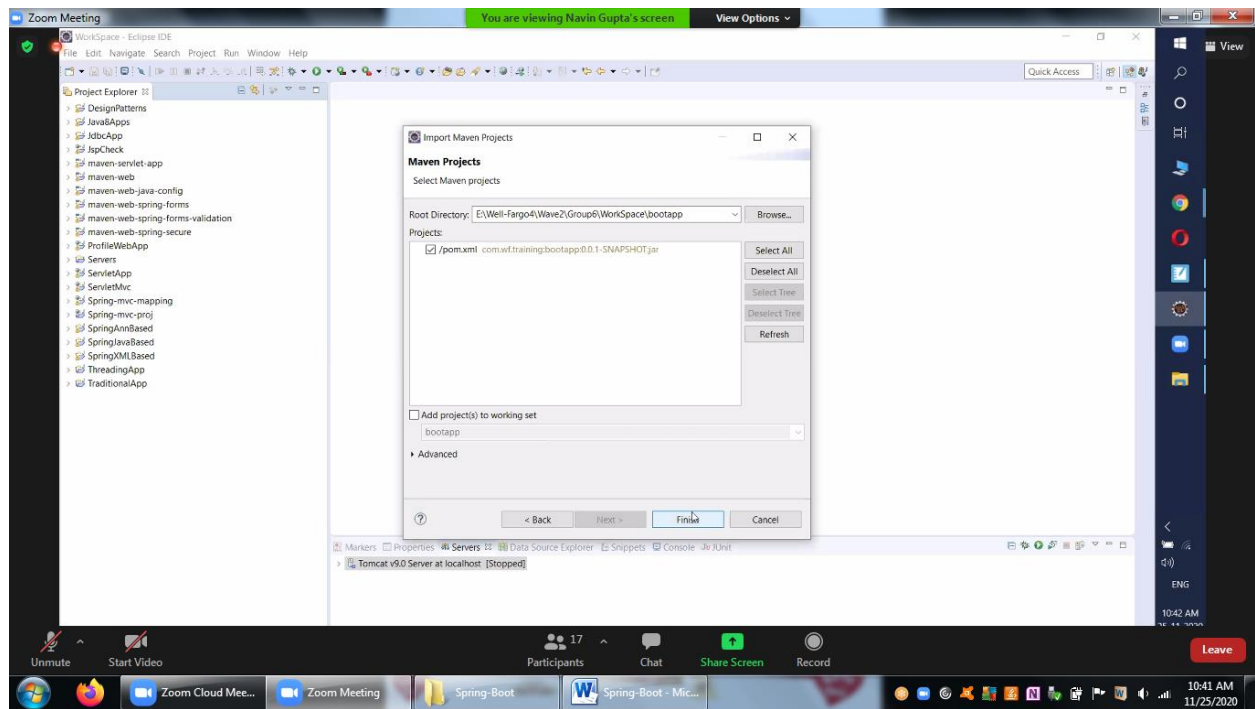


Click on the Generate CTRL and Place it in the workspace as below



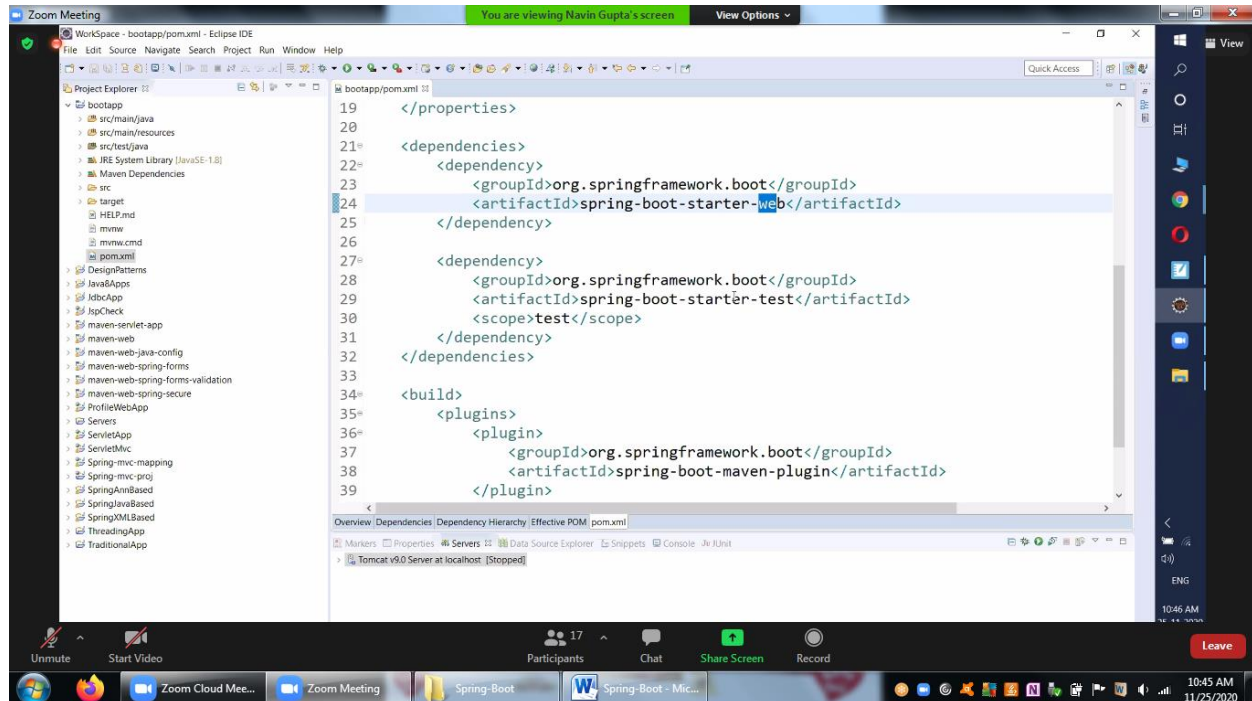
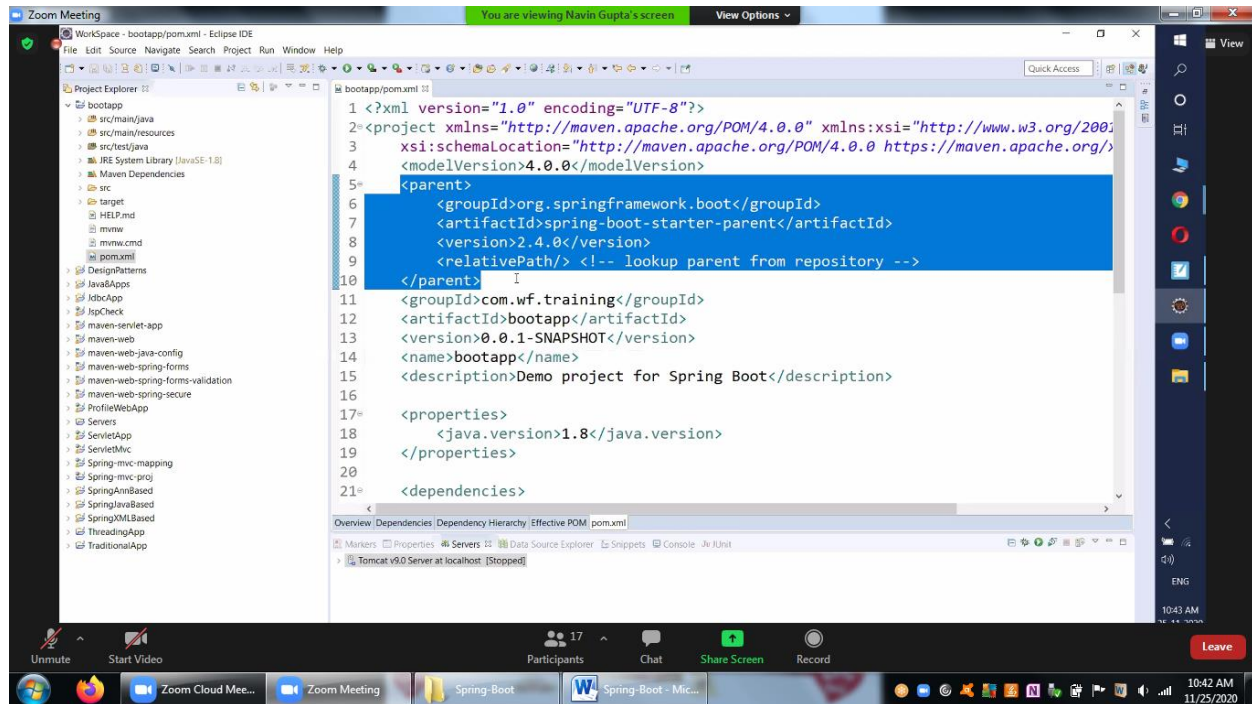
Import as Maven Project

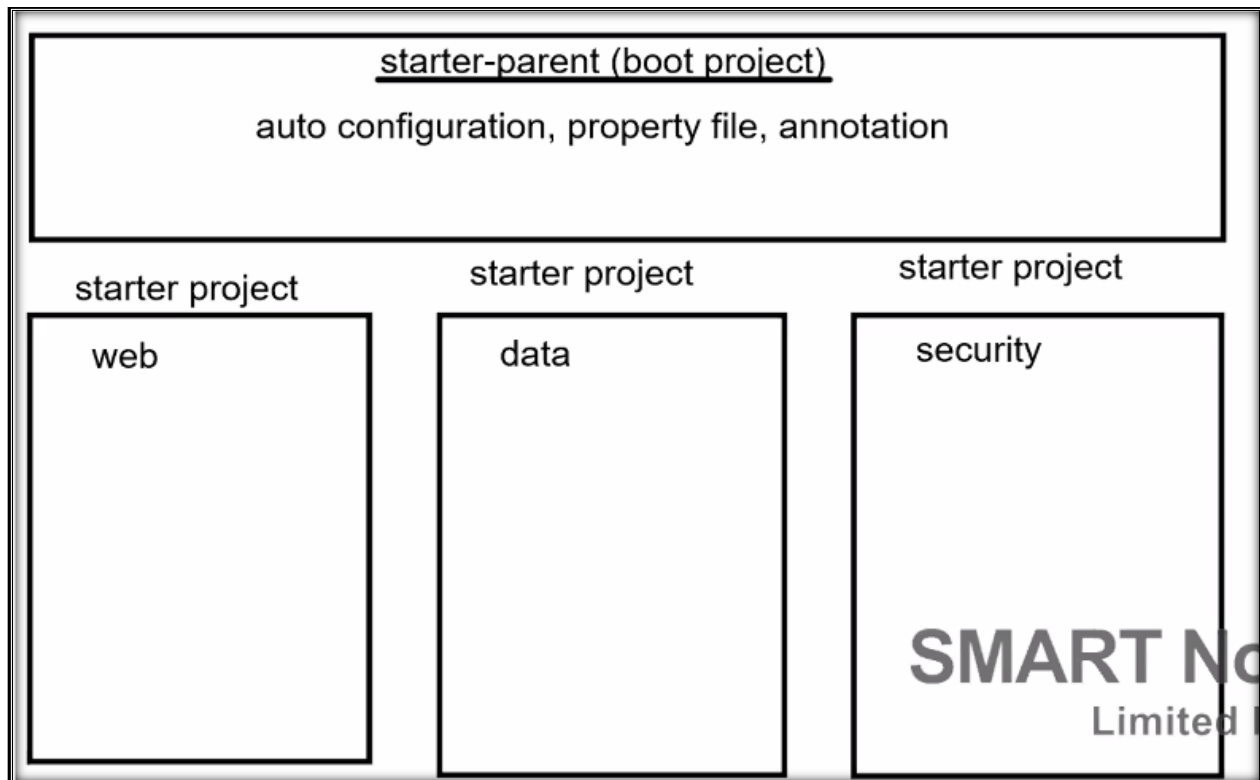




Dependencies Management

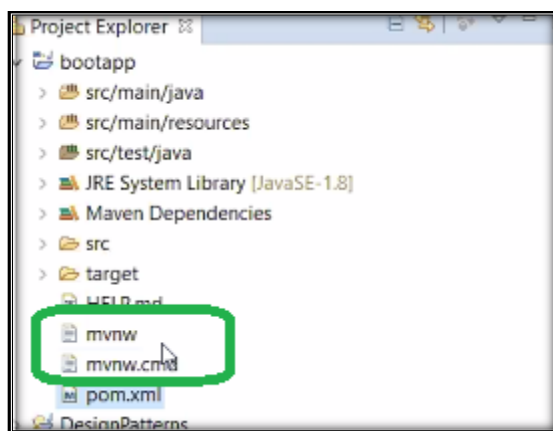
Existing Maven dependencies





Let's talk about Self-Sufficiency

Maven in-built support is below



In built Java class along with configuration is already given

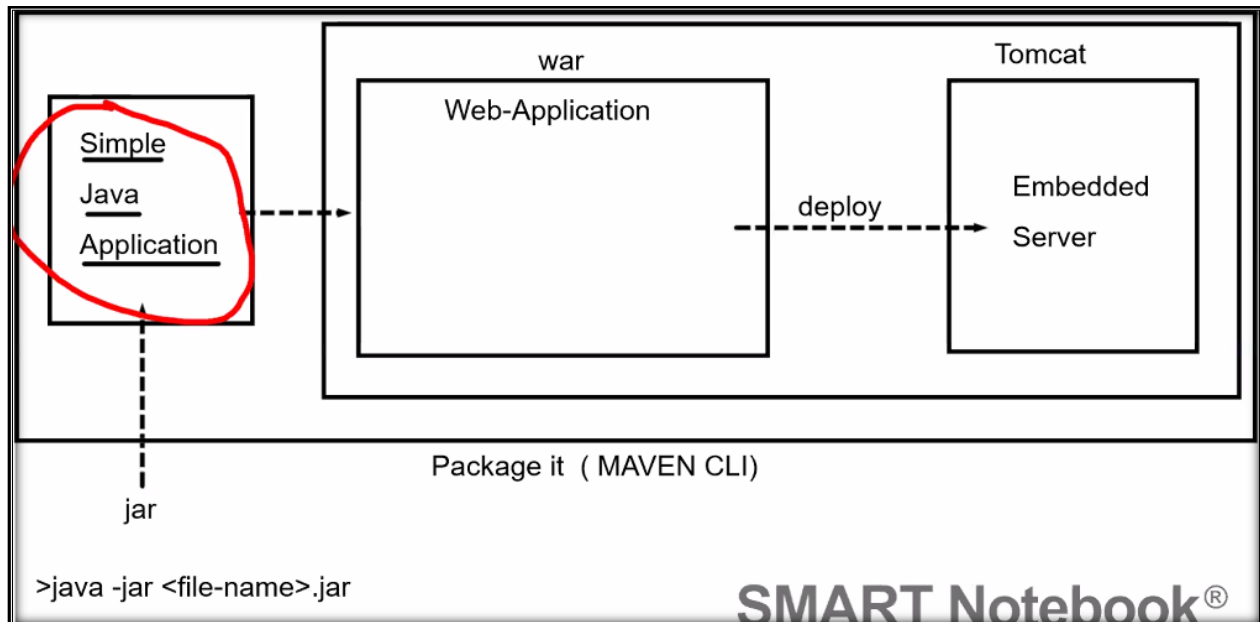
```
1 package com.wf.training.bootapp;
2
3 import org.springframework.boot.SpringApplication;
4
5
6 @SpringBootApplication
7 public class BootappApplication {
8
9     public static void main(String[] args) {
10         SpringApplication.run(BootappApplication.class, args);
11     }
12
13 }
14
```

Explanation

Auto Configuration

=> Dependency : looking at dependencies in pom.xml , default & std config auto done

=> Specialized annotation : auto config

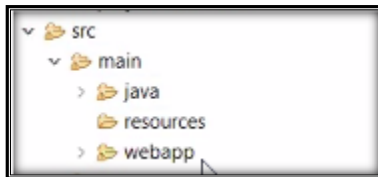


Just we have to focus on the Views, Model and Controllers (Business resources)

Create the Spring Resources which are specific for our project

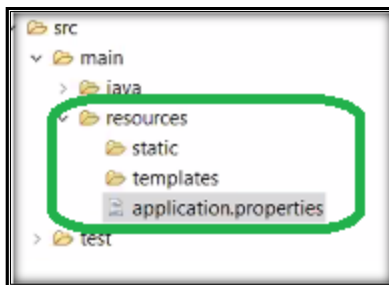
Webapp folder

webapp folder is missing and it is expected, we don't see the webapp folder for spring boot



Explanation:

We see new resources 3 folders and explanation is below



no webapp :

Spring-boot applications by default does not support jsp+jstl view template

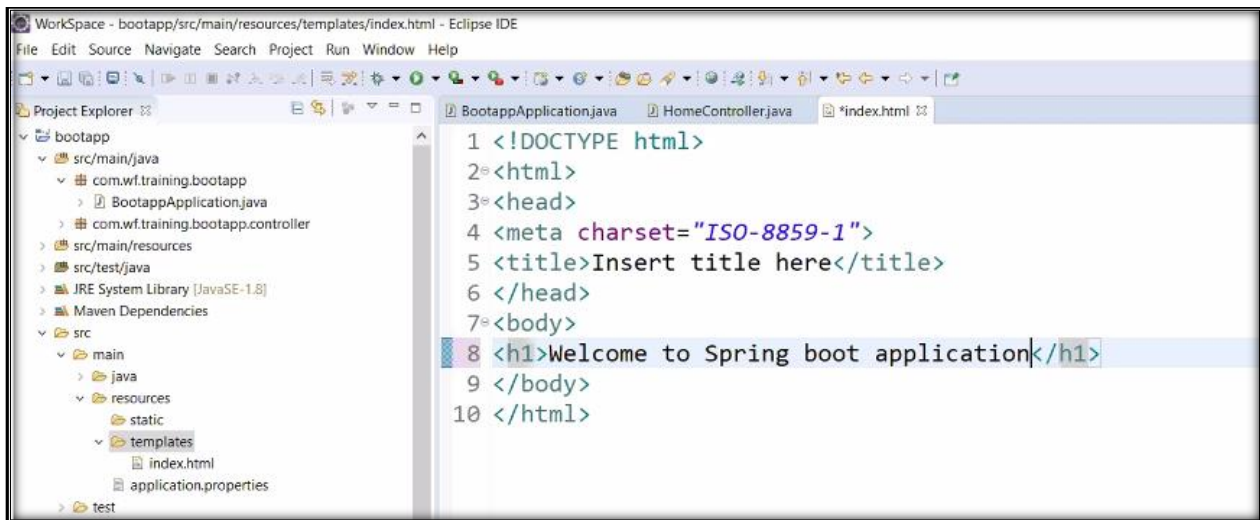
By default support of Thymeleaf

static : images etc

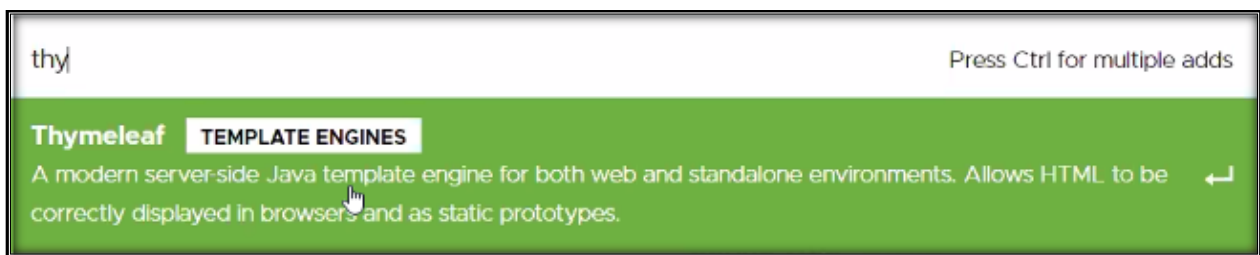
template : home folder for view pages (no view resolver needed to configure)

application.properties : file for custom configuration

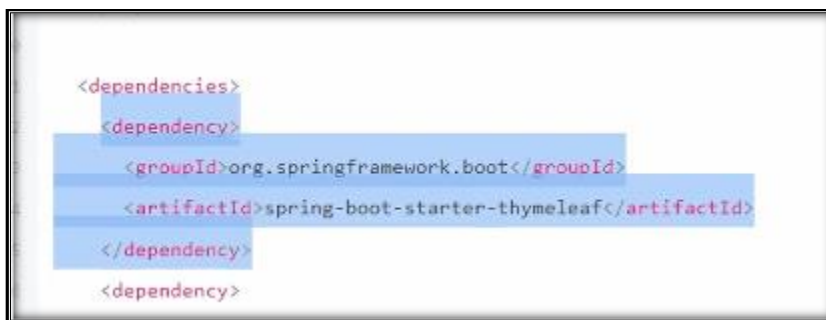
Add index.html for basic test scenario



Add the dependency of Thymeleaf



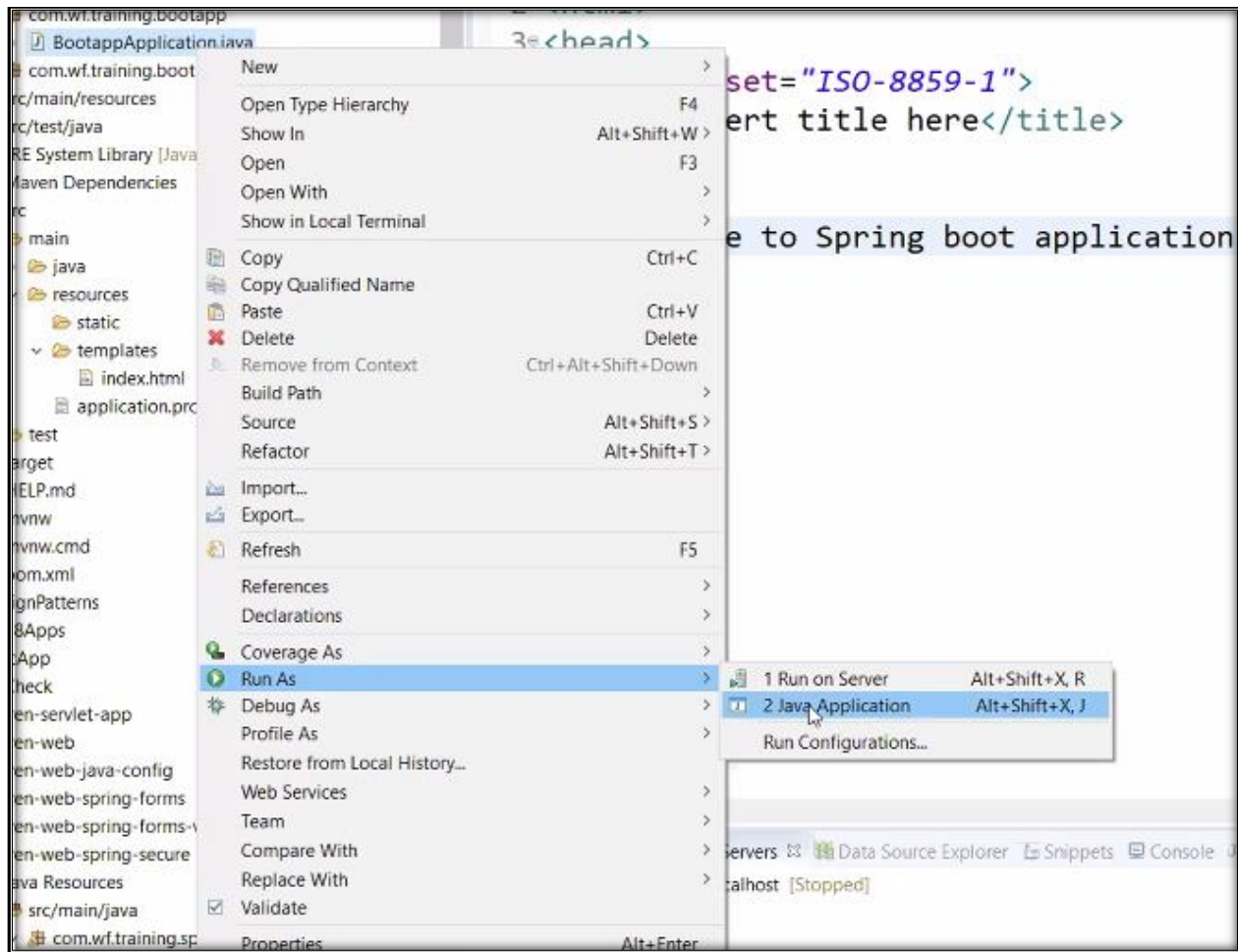
Click on the Explore button, Copy and add the same to our project POM.xml



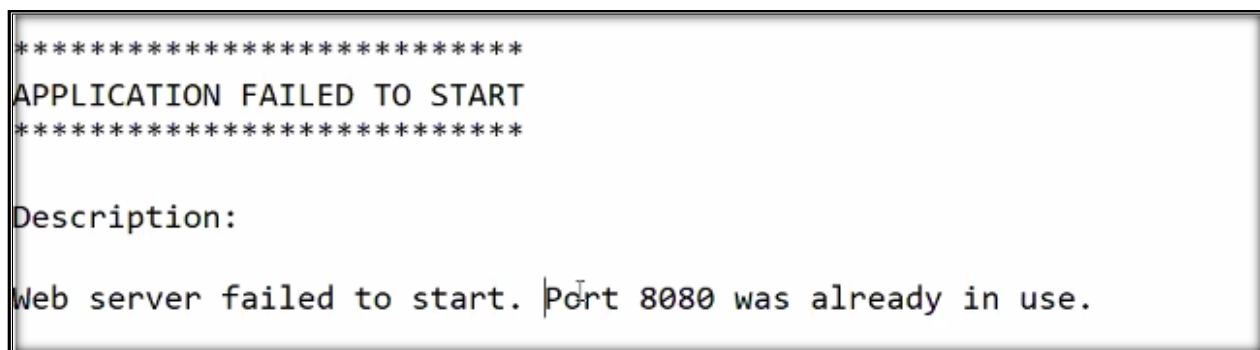

```
<dependencies>
  <dependency>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-web</artifactId>
  </dependency>

  <dependency>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-thymeleaf</artifactId>
  </dependency>
  |
  <dependency>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-test</artifactId>
    <scope>test</scope>
  </dependency>
</dependencies>
```

Run our Application and Run as Java application

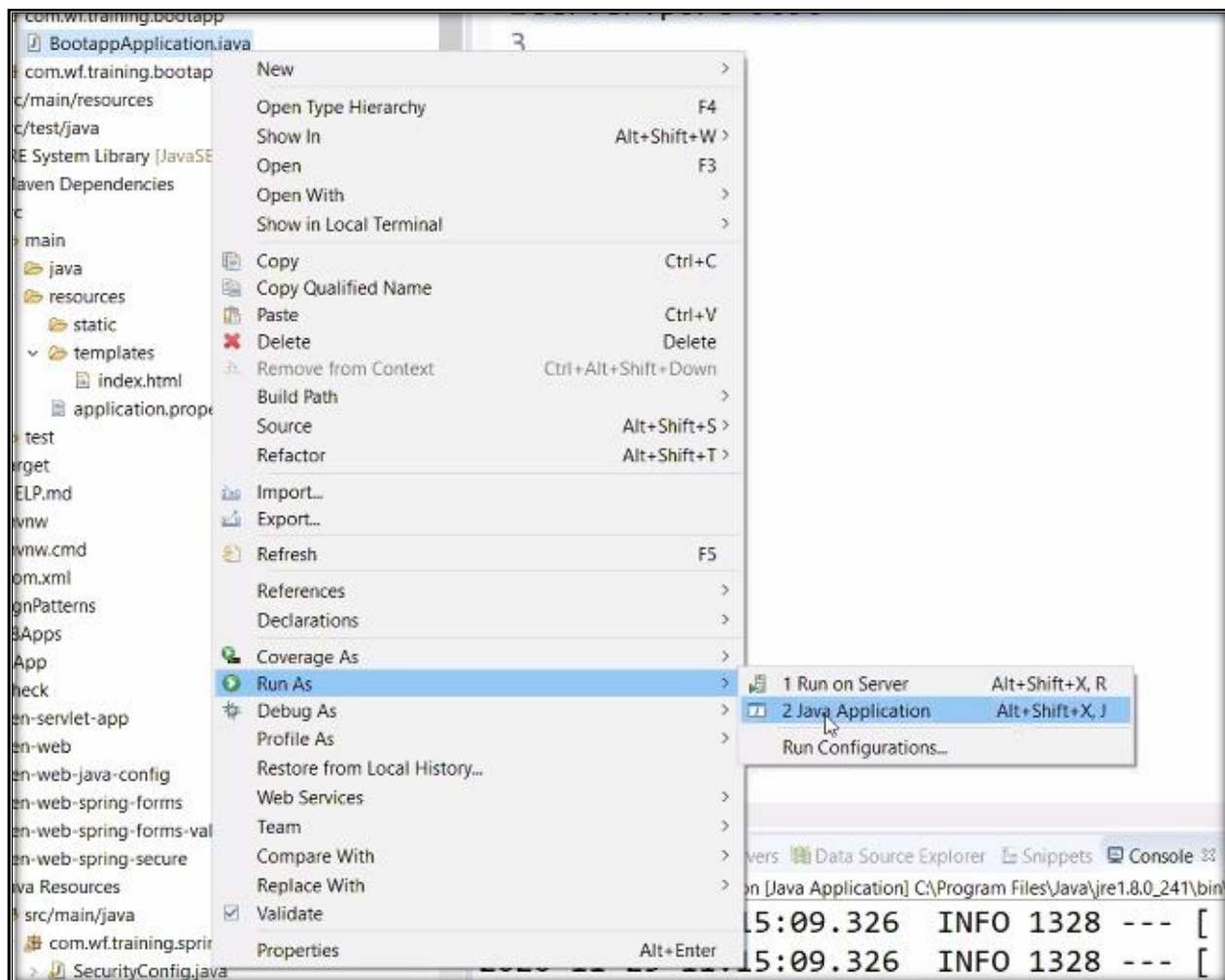
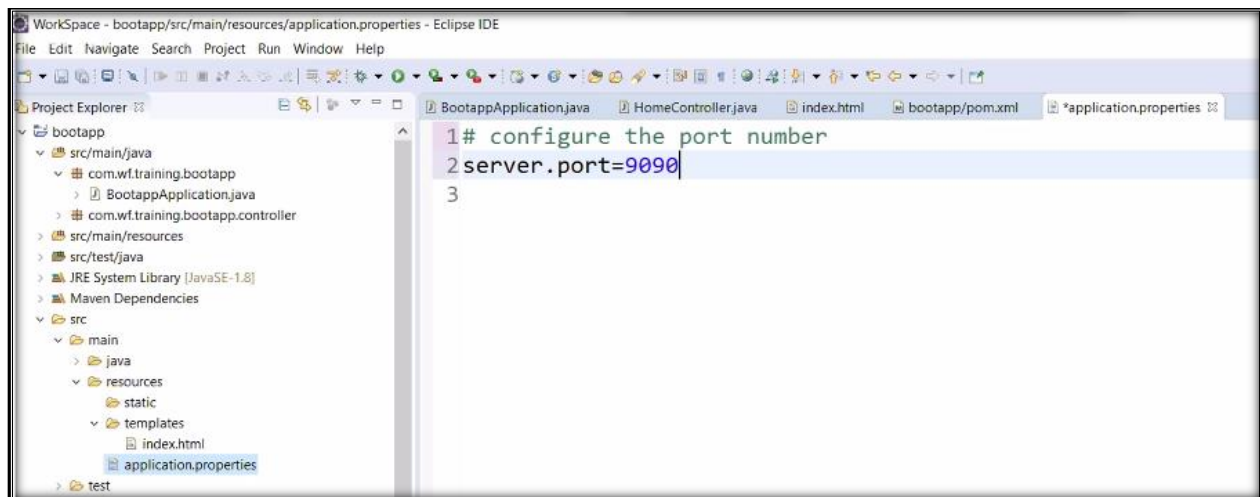


We may get this error

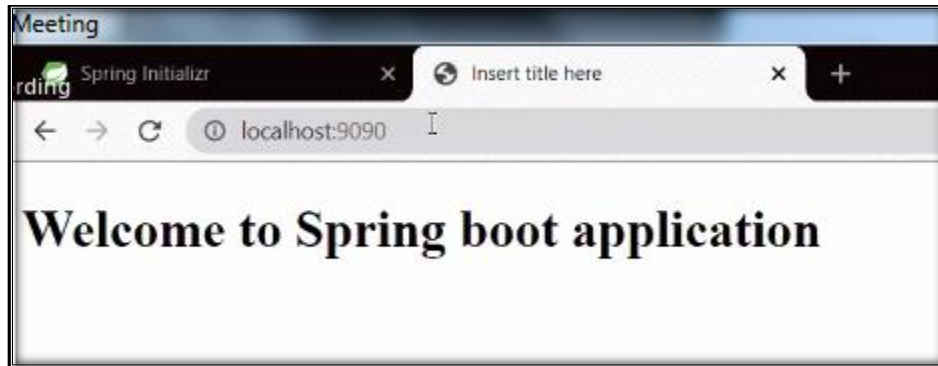


Configure the port number for the embedded Tomcat

Here application.properties plays a vital role, add the below key value pair in properties file



We have to enter the URL and launch the chrome manually. Now its success.



...Basic Configuration is success and completed now....