

Spring boot

Spring core

Spring context

Spring mvc

Spring rest

Spring security

Spring orm

Spring dao

Etc

Spring boot is type of spring module which help to develop spring framework with less configuration.

Spring boot = all spring modules – no xml file (beans.xml or dispatcher-servlet.xml file) + few annotation + inbuilt web server ie tomcat or jetty server.

Spring boot itself is standalone project mean core java project. Which help to create any type of projects. It is bootstrap for spring framework.

CSS **Vs** **Bootstrap**

Spring boot components

1. **Spring boot starter** : Spring boot starter provided only one dependencies depending upon type of project. Which help to add all required jar files.

Web starter : which provided all required jar file including inbuild tomcat server.

Jdbc starter : which provided all required jar file which help to connect database.

Jpa starter : which provided all jar file which help to achieve orm features.

2. **Spring boot auto configuration** : depending upon type of starter which we added in spring application it provided DI for those resources.
Example : in spring boot web starter we no need to configure external tomcat server, no need to configure dispatcher-servlet in web.xml file. No xml file. Few configuration using annotation.

Spring boot provided pre defined annotation ie

@SpringBootApplication = **@Configuration** + **@ComponentScan** + **@AutoConfiguration**.

If we need any other configuration like database or security we need to add in properties or yml file.

In spring boot we use **application.properties** or **application.yml** file.

Inside this file we need to provide all configuration details depending upon the starter.

YAML (Yet Another Markup language). Provide information in key=value pairs.

Spring boot with

Maven built tool if we use maven tool. Then **pom.xml** file present. This file is part of maven not a part of spring boot.

Gradle built tool : no xml file we use **build file**.

Creating Simple Spring boot project with web starter

1. Create maven project
2. Add properties tag to change the version of java and add one starter ie web starter.
3. Now we need to create normal java class with main method.
4. On main class we need to use `@SpringBootApplication` annotation.
5. Spring boot provided pre defined class ie `SpringApplication` which contains `run` static method to start the spring boot application.
6. By default spring boot internal tomcat server run on default port number 8080.

Open the browser

<http://localhost:8080>

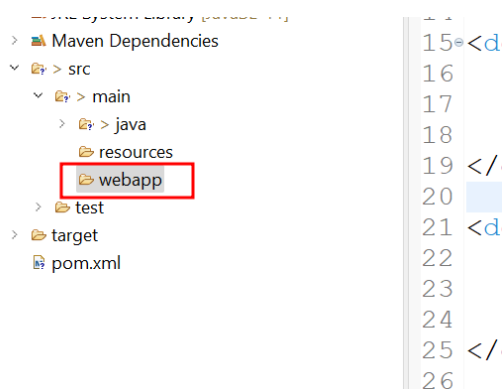
Spring boot with View

1. View can be JSP

We need to starter JSP dependencies if we need view as JSP

Inside `src/main` folder create the folder with name as `webapp`

Inside this folder we can create more than one jsp pages.



Now we need to create the `application.properties` file and provide the view resolver details inside this file. `Application.properties` file must be inside resource folder.

2. View can be Thymeleaf

We need View as Thymeleaf then we need to add Thymeleaf starter.