

# Creating your First Spring Application

## What is spring?

Spring is the most popular application development framework for enterprise Java. Spring framework is an open-source Java platform. Spring is lightweight when it comes to size and transparency.

## What is IOC?

Inversion of control- It means giving the control of creating and instantiating the spring beans to the Spring IOC container and the only work the developer does is configuring the beans in the spring XML file.

## What is Dependency Injection?

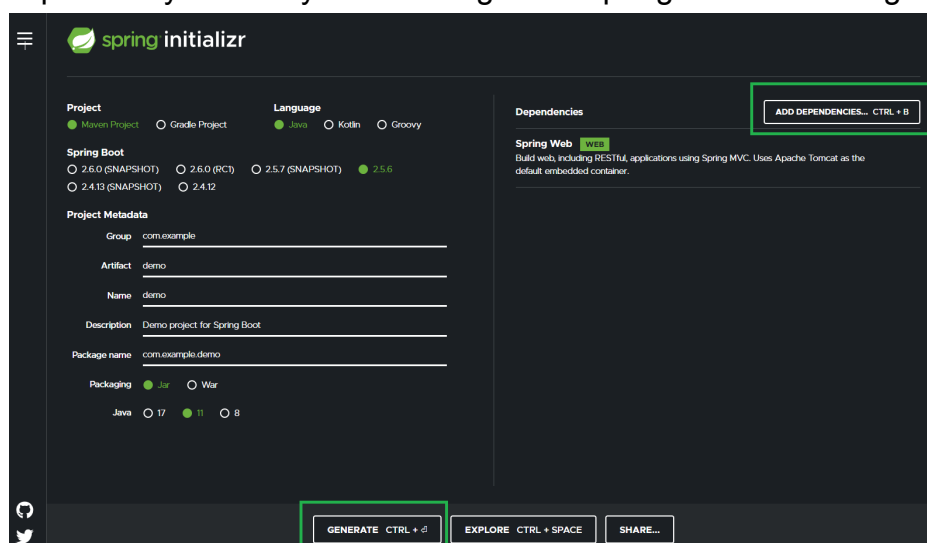
Dependency Injection is a fundamental aspect of the Spring framework, through which the Spring container “injects” objects into other objects or dependencies this allows for loose coupling of components and moves the responsibility of managing components onto the container.

How to create your first spring application?

You can either use Eclipse or Spring tool. I am using eclipse ide and the steps to create are as follows

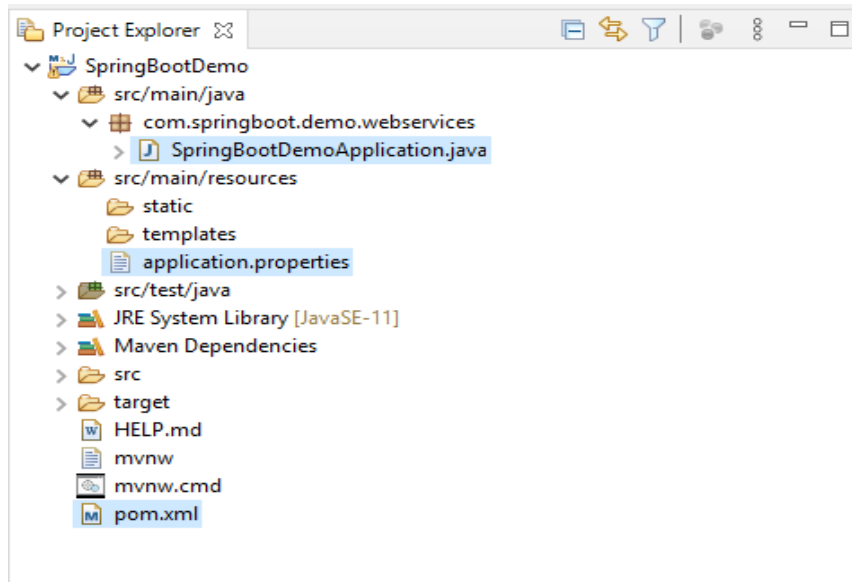
Step1:

At first, you need to go to <https://start.spring.io/> website and generate a file, in the dependency column you need to give as spring web and then generate the file.



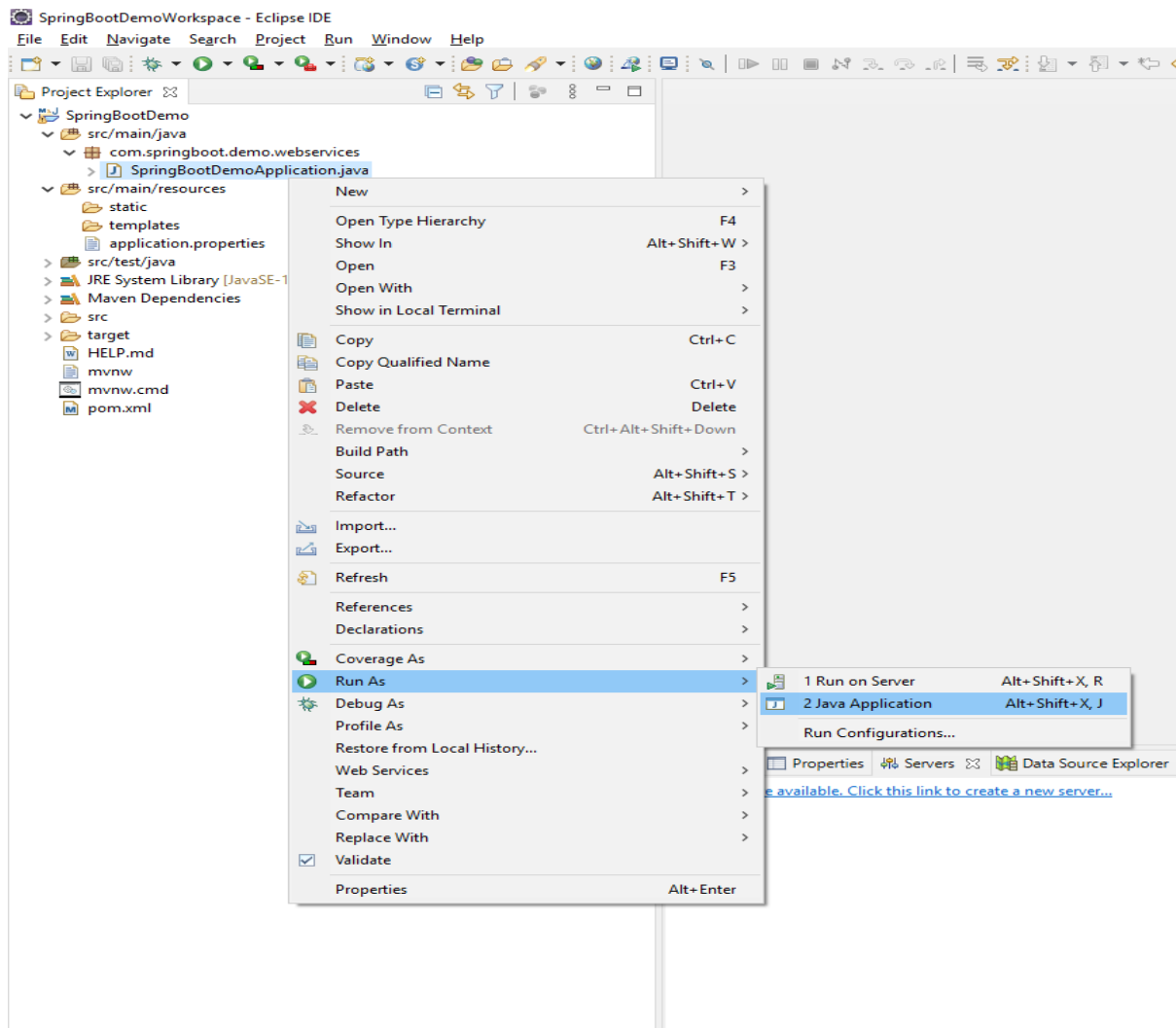
The screenshot shows the Spring Initializr web interface. The 'Project' section has 'Maven Project' selected. The 'Language' section has 'Java' selected. The 'Spring Boot' section has '2.5.6' selected. The 'Project Metadata' section has 'Group' as 'com.example', 'Artifact' as 'demo', 'Name' as 'demo', 'Description' as 'Demo project for Spring Boot', 'Package name' as 'com.example.demo', 'Packaging' as 'jar', and 'Java' as '17'. The 'Dependencies' section has 'Spring Web' selected. The 'ADD DEPENDENCIES... CTRL + B' button is highlighted with a green box. The 'GENERATE CTRL + G' button is also highlighted with a green box. The 'EXPLORE CTRL + SPACE' and 'SHARE...' buttons are visible at the bottom.

Step 2: Unzip and import Spring Boot Project in Eclipse IDE, Go to the Eclipse IDE for Enterprise Java and Web Developer > **File > Import** as maven Existing project and click on next button. Give it couple of minutes to import all the required maven dependencies. Once its imported, you will be the project structure as shown below in your project explorer



- The **src/main/java** path will contain java class files. There will already be a default **Application.java** file which is your springboot starting file
- **application.properties** inside the **src/main/resources** path where you will be able to configure the application properties like application name, ports db urls etc
- **pom.xml** file which will be the file where you will configure all maven dependencies that are needed for your project.

Step 3: Running your first Spring Application.



And you will see the spring boot application starting in console of your eclipse. As shown below.

