

## Spring boot Testing

The screenshot displays the Spring Initializr web application interface. The 'Project' section has 'Maven' selected. The 'Language' section has 'Java' selected. The 'Spring Boot' section has '3.1.8' selected. The 'Project Metadata' section includes fields for Group (com.example), Artifact (SpringBootTest), Name (SpringBootTest), Description (Demo project for Spring Boot), and Package name (com). The 'Packaging' section has 'Jar' selected, and the 'Java' section has '17' selected. The 'Dependencies' section on the right lists 'Spring Web', 'Spring Data JPA', 'MySQL Driver', and 'Spring Boot DevTools'.

**Project**

☐ Gradle - Groovy ☐ Gradle - Kotlin ☒ **Java** ☐ Kotlin ☐ Groovy

☒ **Maven**

**Spring Boot**

☐ 3.3.0 (SNAPSHOT) ☐ 3.3.0 (M1) ☐ 3.2.3 (SNAPSHOT) ☐ 3.2.2

☐ 3.1.9 (SNAPSHOT) ☒ **3.1.8**

**Project Metadata**

Group

Artifact

Name

Description

Package name

Packaging ☒ **Jar** ☐ War

Java ☐ 21 ☒ **17**

**Dependencies** [ADD DEPENDENCIES... CTRL + B](#)

**Spring Web** **WEB**  
Build web, including RESTful, applications using Spring MVC. Uses Apache Tomcat as the default embedded container.

**Spring Data JPA** **SQL**  
Persist data in SQL stores with Java Persistence API using Spring Data and Hibernate.

**MySQL Driver** **SQL**  
MySQL JDBC driver.

**Spring Boot DevTools** **DEVELOPER TOOLS**  
Provides fast application restarts, LiveReload, and configurations for enhanced development experience.

If we want to do the testing for controller

Controller depends upon service

Service depends upon dao or repository

Dao or repository depends upon database. With table and records.

Controller want to do mock for service layer.

A	B	1500 Rs
A	C	
A	D	
B	C	
B	D	

## Project 1

Eureka Server → 8761

Starter : Eureka and Web Starter

Book cab micro service → 8181

Web Starter                      @controller                      view can be thymeleaf or jsp

Thymeleaf

Eureka Client

JPA Starter

Mysql starter

Dev tools

Booking table

Bid	Name	DateAndTime	Fare	etc
-----	------	-------------	------	-----

Book cab micro service going to communicate fare micro service to get the fare base upon A to B distance.

View

As JSP or Thymeleaf then @Controller

View as

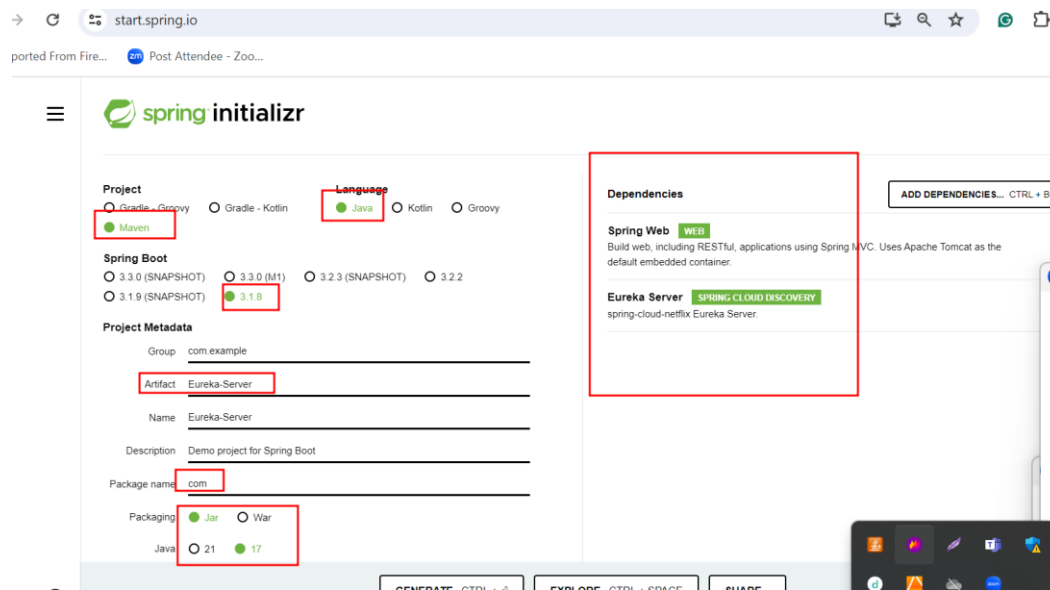
Angular then @RestController

<https://start.spring.io/>

Project 1

Eureka Server → 8761

Starter : Eureka and Web Starter



In application.properties file

```
server.port=8761
eureka.client.register-with-eureka=false
eureka.client.fetch-registry=false
```

Main class

```
package com;
```

```
import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
import org.springframework.cloud.netflix.eureka.server.EnableEurekaServer;
```

```
@SpringBootApplication
```

```
@EnableEurekaServer
```

```
public class EurekaServerApplication {
```

```

public static void main(String[] args) {

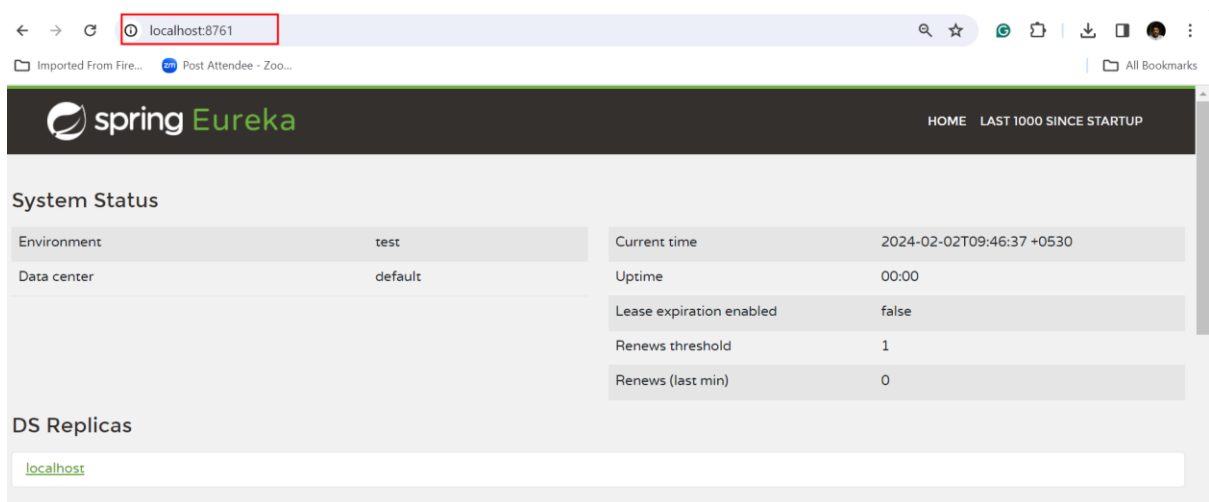
    SpringApplication.run(EurekaServerApplication.class, args);

    System.err.println("Eureka Server up on port number 8761");

}

}

```



Book cab micro service-→ 8181

Web Starter                      @controller                      view can be thymeleaf or jsp

Thymeleaf

Eureka Client

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Mysql starter

Dev tools

Booking table

Bid	Name	DateAndTime	Fare	etc
-----	------	-------------	------	-----

Book cab micro service going to communicate fare micro service to get the fare base upon A to B distance.

Calculate fake micro service -> 8282

Web Starter @rest controller

Eureka Client

JPA Starter

Mysql starter

Dev tools

The screenshot shows the Spring Initializr web application. The 'Project' section has 'Maven' selected. The 'Language' section has 'Java' selected. The 'Spring Boot' section has '3.1.8' selected. The 'Project Metadata' section has 'Group' as 'com.example', 'Artifact' as 'cab-fare-micro-service', 'Name' as 'cab-fare-micro-service', 'Description' as 'Demo project for Spring Boot', 'Package name' as 'com', 'Packaging' as 'Jar', and 'Java' as '17'. The 'Dependencies' section has a red box around it, containing 'Spring Web', 'Eureka Discovery Client', 'Spring Data JPA', 'MySQL Driver', and 'Spring Boot DevTools'. The 'ADD DEPENDENCIES...' button is visible in the top right of the dependencies section.

application.properties

server.port=8282

spring.application.name=cab-fare-micro-service

spring.datasource.driver-class-

name=com.mysql.cj.jdbc.Driver

```
spring.datasource.url=jdbc:mysql://localhost:3306/cab\_fare  
spring.datasource.username=root  
spring.datasource.password=root@123  
spring.jpa.hibernate.ddl-auto=update
```

## Cab Fare

### Table

From	To	type of Cab	fare
A	B	Innova	8000
A	B	swift	6500