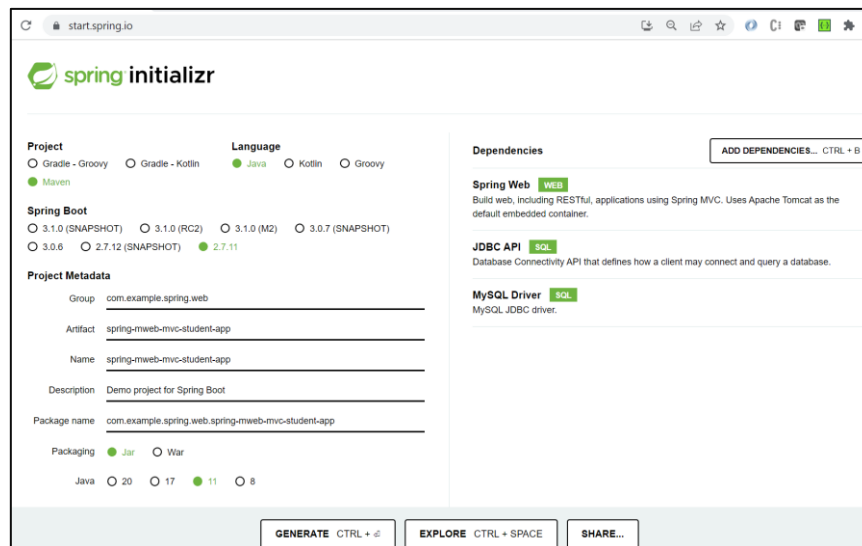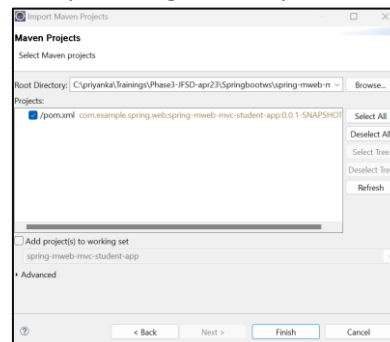This application will display two web pages – to **view students** and to **add new student** in the database.

We will be using spring boot to generate spring web mvc application. To do so, go to https://start.spring.io/
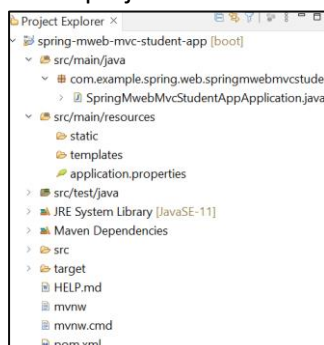
1. Open the URL and select the given options on the web page.

2. Click GENERATE button and download the zip file.
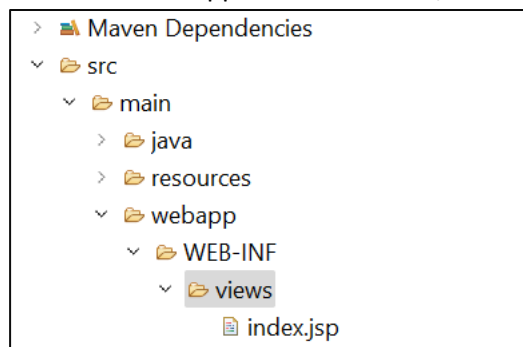3. Unzip the zip file and import in eclipse using file > import.

4. Select project folder and click Finish.

5. Now the project, will have embedded Tomcat container, DispatcherServlet bean in the application at runtime.
6. However, we need to configure some more things, before we add controllers, models, and views to the product.
    a. To add support for jsp pages, we need to add jasper and JSTL dependencies in pom.xml.

```
7.  <dependency>
8.              <groupId>org.apache.tomcat.embed</groupId>
9.              <artifactId>tomcat-embed-jasper</artifactId>
10.             <!--<version>9.0.44</version> -->
11.             <scope>provided</scope>
12.         </dependency>
13.
14.         <dependency>
15.             <groupId>javax.servlet</groupId>
16.             <artifactId>jstl</artifactId>
17.             <!--<version>1.2</version>-->
18.             <scope>provided</scope>
19.         </dependency>
```

b. Create a webapp folder within src/main folder

```
>  ▲ Maven Dependencies
∨  📂 src
   ∨  📂 main
      >  📂 java
      >  📂 resources
      ∨  📂 webapp
         ∨  📂 WEB-INF
            ∨  📂 views
               📄 index.jsp
```

c. InternalViewResolver bean will be created by Spring Boot, however, needs to add configurations for application.properties file.

```
spring.mvc.view.prefix=/WEB-INF/views/
spring.mvc.view.suffix=.jsp
```

d. We need two beans for JDBCTemplate and DataSource .

Remember, in spring boot we don't have xml, then how to create these beans in the project. Create a class named in AppConfiguration within the main package and add this code.

```
📂 spring-mweb-mvc-student-app [boot]
∨  📂 src/main/java
   ∨  ⊞ com.example.spring.web.springmwebmvcstudentapp
      >  📄 AppConfiguration.java
      >  📄 SpringMwebMvcStudentAppApplication.java
```

```java
package com.example.spring.web.springmwebmvcstudentapp;

import javax.sql.DataSource;

import org.springframework.context.annotation.Bean;
import org.springframework.context.annotation.Configuration;
import org.springframework.jdbc.core.JdbcTemplate;
import org.springframework.jdbc.datasource.DriverManagerDataSource;

@Configuration
public class AppConfiguration {

        @Bean
        public JdbcTemplate jdbcTemplate() {
                JdbcTemplate jdbcTemplate = new JdbcTemplate(dataSource());
                return jdbcTemplate;

        }

        @Bean
        public DataSource dataSource() {

                DriverManagerDataSource dataSource = new DriverManagerDataSource();
                dataSource.setUsername("root");
                dataSource.setPassword("root");

dataSource.setUrl("jdbc:mysql://localhost:3306/studentmgmt?allowPublicKeyRetrieval=true&use
SSL=false");
                dataSource.setDriverClassName("com.mysql.cj.jdbc.Driver");
                return dataSource;
        }

}
```

e. Now, right click on **SpringMwebMvcStudentAppApplication.java** file, Run as > Java Application.

Next, we need to create the database and table in MYSQL database.

1. Open MySQL Workbench.

```
1. You need a database (Mysql)

2. Command to run :  create database studentmgmt


3. open database, command to run: use studentmgmt


 4. Created table in the database
```

```
create table students(

    id int NOT NULL,
    name varchar(45) NULL,
    mobile BIGINT NULL,
    country varchar(45) NULL,
    PRIMARY KEY(id)
 );

5. Added one record in the table
  insert into students values(1, 'jack rojer', 1234567, 'UK');



6. select * from students;

You can add more records to the table using insert command.
```

=============== End ======================