Hands on 1 : Create a Spring Web Project using Maven

Solution:

**STEP 1: Create Spring Boot Project using Spring Initializr**

1. Go to <https://start.spring.io>
2. Fill in the following:
   * **Group:** com.cognizant
   * **Artifact:** spring-lear
   * Click **"Add Dependencies"** and include:
     1. Spring Web
     2. Spring Boot DevTools
3. Click **Generate** → A ZIP file will be downloaded.

Go to src/main/java/com/cognizant

Add the following files:

Country.java

package com.cognizant.spring\_learn;

public class Country {

private int id;

private String name;

private String code;

public Country() {}

public Country(int id, String name, String code) {

this.id = id;

this.name = name;

this.code = code;

}

public int getId() {

return id;

}

public void setId(int id) {

this.id = id;

}

public String getName() {

return name;

}

public void setName(String name) {

this.name = name;

}

public String getCode() {

return code;

}

public void setCode(String code) {

this.code = code;

}

*@Override*

public String toString() {

return "Country{" +

"id=" + id +

", name='" + name + '\'' +

", code='" + code + '\'' +

'}';

}

}

SpringLearnApplication.java

package com.cognizant.spring\_learn;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

import org.slf4j.Logger;

import org.slf4j.LoggerFactory;

@SpringBootApplication

public class SpringLearnApplication {

private static final Logger LOGGER = LoggerFactory.getLogger(SpringLearnApplication.class);

public static void main(String[] args) {

LOGGER.info("Starting SpringLearnApplication main() method");

SpringApplication.run(SpringLearnApplication.class, args);

}

}

SpringXMLDemo.java

package com.cognizant.spring\_learn;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

public class SpringXmlDemo {

public static void main(String[] args) {

ApplicationContext context = new ClassPathXmlApplicationContext("beans.xml");

Country countrySingleton1 = (Country) context.getBean("countrySingleton");

Country countrySingleton2 = (Country) context.getBean("countrySingleton");

System.out.println("Singleton bean 1: " + countrySingleton1);

System.out.println("Singleton bean 2: " + countrySingleton2);

System.out.println("Are singleton beans same? " + (countrySingleton1 == countrySingleton2));

Country countryPrototype1 = (Country) context.getBean("countryPrototype");

Country countryPrototype2 = (Country) context.getBean("countryPrototype");

System.out.println("Prototype bean 1: " + countryPrototype1);

System.out.println("Prototype bean 2: " + countryPrototype2);

System.out.println("Are prototype beans same? " + (countryPrototype1 == countryPrototype2));

}

}

HelloController.java

package com.cognizant.spring\_learn;

import org.springframework.web.bind.annotation.GetMapping;

import org.springframework.web.bind.annotation.RestController;

@RestController

public class HelloController {

@GetMapping("/hello")

public String hello() {

return "Hello, Spring Boot! The web part is working.";

}

}

Run the SpringLearnApplication.java as a java application

In the console, type ./mvnw spring-boot:run

Go to browser and type: <http://localhost:8081/hello>

Output:

A screenshot of a chat

AI-generated content may be incorrect.