Exercise: 1

**Create a Spring Web Project using Maven**

* Goto spring initializer website.
* Set the group as “com.cognizant”
* Set the Artifact id as “spring-learn”
* Add the spring boot dev tools and spring web as dependencies
* Download the zip file
* If the port 8080 is already in use server.port=9090

**Pom.xml**

<?xml version="1.0" encoding="UTF-8"?>

<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

    xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 https://maven.apache.org/xsd/maven-4.0.0.xsd">

    <modelVersion>4.0.0</modelVersion>

    <parent>

        <groupId>org.springframework.boot</groupId>

        <artifactId>spring-boot-starter-parent</artifactId>

        <version>3.5.3</version>

        <relativePath/> <!-- lookup parent from repository -->

    </parent>

    <groupId>com.cognizant</groupId>

    <artifactId>spring-learn</artifactId>

    <version>0.0.1-SNAPSHOT</version>

    <name>spring-learn</name>

    <description>Demo project for Spring Boot</description>

    <url/>

    <licenses>

        <license/>

    </licenses>

    <developers>

        <developer/>

    </developers>

    <scm>

        <connection/>

        <developerConnection/>

        <tag/>

        <url/>

    </scm>

    <properties>

        <java.version>21</java.version>

    </properties>

    <dependencies>

        <dependency>

            <groupId>org.springframework.boot</groupId>

            <artifactId>spring-boot-starter-web</artifactId>

        </dependency>

        <dependency>

            <groupId>org.springframework.boot</groupId>

            <artifactId>spring-boot-devtools</artifactId>

            <scope>runtime</scope>

            <optional>true</optional>

        </dependency>

        <dependency>

            <groupId>org.springframework.boot</groupId>

            <artifactId>spring-boot-starter-test</artifactId>

            <scope>test</scope>

        </dependency>

    </dependencies>

    <build>

        <plugins>

            <plugin>

                <groupId>org.springframework.boot</groupId>

                <artifactId>spring-boot-maven-plugin</artifactId>

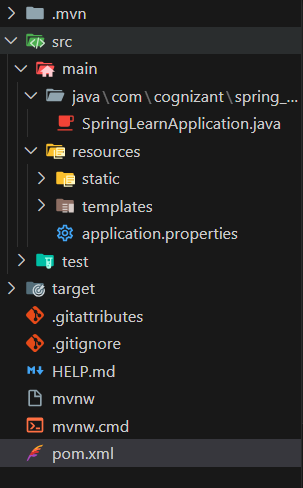
            </plugin>

        </plugins>

    </build>

</project>

**Output:**

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**Exercise 4**

**Spring Core – Load Country from Spring Configuration XML**

**beanConfig.xml**

<?xml version="1.0" encoding="UTF-8"?>

<beans xmlns="http://www.springframework.org/schema/beans"

    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

    xsi:schemaLocation="http://www.springframework.org/schema/beans

    http://www.springframework.org/schema/beans/spring-beans.xsd">

    <bean id="country1" class="com.cognizant.spring\_learn.Country">

        <property name="code" value="+91"/>

        <property name="name" value="India"/>

    </bean>

    <bean id="country2" class="com.cognizant.spring\_learn.Country">

        <property name="code" value="+41"/>

        <property name="name" value="Germany"/>

    </bean>

    <bean id="country3" class="com.cognizant.spring\_learn.Country">

        <property name="code" value="+7"/>

        <property name="name" value="Russia"/>

    </bean>

</beans>

**springLearnApplication.java**

package com.cognizant.spring\_learn;

import org.slf4j.Logger;

import org.slf4j.LoggerFactory;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

@SpringBootApplication

public class SpringLearnApplication {

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

    public static void displayCountry() {

        ApplicationContext con = new ClassPathXmlApplicationContext("beanConfig.xml");

        Country country1 = con.getBean("country1", Country.class);

        Country country2 = con.getBean("country2", Country.class);

        Country country3 = con.getBean("country3", Country.class);

        log.info("Country : {}", country1.toString());

        log.info("Country : {}", country2.toString());

        log.info("Country : {}", country3.toString());

    }

    public static void main(String[] args) {

        SpringApplication.run(SpringLearnApplication.class, args);

        log.info("List of countries :");

        displayCountry();

    }

}

**Country.java**

package com.cognizant.spring\_learn;

public class Country {

    private String code,name;

    public String getCode(){

        return code;

    }

    public void setCode(String c){

        code=c;

    }

    public String getName(){

        return name;

    }

    public void setName(String n){

        name=n;

    }

    @Override

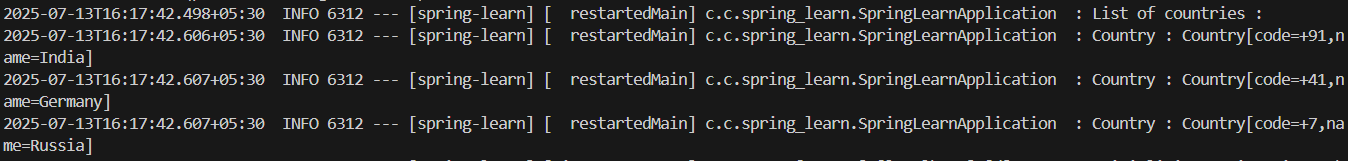
    public String toString(){

        return "Country[code="+code+",name="+name+"]";

    }

}

**Output:**

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