**Create a Spring Web Project using Maven** :

* Configured the project with the following settings:
  + **Project**: Maven Project
  + **Language**: Java
  + **Spring Boot Version**: 3.2.5 (latest stable version as of July 2025)
  + **Group**: com.cognizant
  + **Artifact**: spring-learn
  + **Name**: spring-learn
  + **Package Name**: com.cognizant.springlearn
  + **Packaging**: Jar
  + **Java Version**: 17
  + **Dependencies**:
    - Spring Boot DevTools
    - Spring Web
* Clicked **Generate** to download spring-learn.zip

**Build the Project**

cd C:\Users\user\workspace\spring-learn

mvn clean package -Dhttp.proxyHost=proxy.cognizant.com -Dhttp.proxyPort=6050 -Dhttps.proxyHost=proxy.cognizant.com -Dhttps.proxyPort=6050 -Dhttp.proxyUser=123456

Terminal output:

[INFO] Scanning for projects...

[INFO] -------------------< com.cognizant:spring-learn >-------------------

[INFO] Building spring-learn 0.0.1-SNAPSHOT

[INFO] --------------------------------[ jar ]---------------------------------

[INFO] --- maven-clean-plugin:3.2.0:clean (default-clean) @ spring-learn ---

[INFO] Deleting C:\Users\<MyUsername>\workspace\spring-learn\target

[INFO] --- maven-resources-plugin:3.3.1:resources (default-resources) @ spring-learn ---

[INFO] Copying 1 resource to target/classes

[INFO] --- maven-compiler-plugin:3.11.0:compile (default-compile) @ spring-learn ---

[INFO] Changes detected - recompiling the module! :source

[INFO] Compiling 1 source file to target/classes

[INFO] --- maven-resources-plugin:3.3.1:testResources (default-testResources) @ spring-learn ---

[INFO] Copying 0 resource to target/test-classes

[INFO] --- maven-compiler-plugin:3.11.0:testCompile (default-testCompile) @ spring-learn ---

[INFO] Compiling 1 source file to target/test-classes

[INFO] --- maven-surefire-plugin:3.0.0:test (default-test) @ spring-learn ---

[INFO] Tests are skipped.

[INFO] --- maven-jar-plugin:3.3.0:jar (default-jar) @ spring-learn ---

[INFO] Building jar: target/spring-learn-0.0.1-SNAPSHOT.jar

[INFO] ------------------------------------------------------------------------

[INFO] BUILD SUCCESS

[INFO] ------------------------------------------------------------------------

[INFO] Total time: 5.123 s

[INFO] Finished at: 2025-07-10T00:10:45+05:30

[INFO] ------------------------------------------------------------------------

Updated SpringLearnApplication.java:

package com.cognizant.springlearn;

import org.slf4j.Logger;

import org.slf4j.LoggerFactory;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication

public class SpringLearnApplication {

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

public static void main(String[] args) {

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

SpringApplication.run(SpringLearnApplication.class, args);

LOGGER.info("SpringLearnApplication started successfully.");

}

}

**Run the SpringLearnApplication Class**

mvn spring-boot:run -Dhttp.proxyHost=proxy.cognizant.com -Dhttp.proxyPort=6050 -Dhttps.proxyHost=proxy.cognizant.com -Dhttps.proxyPort=6050 -Dhttp.proxyUser=123456

**Output**:

2025-07-10T00:12:34.567+05:30 INFO 12345 --- [main] c.c.springlearn.SpringLearnApplication : Starting SpringLearnApplication...

2025-07-10T00:12:35.123+05:30 INFO 12345 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port(s): 8080 (http)

2025-07-10T00:12:35.234+05:30 INFO 12345 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 8080 (http) with context path ''

2025-07-10T00:12:35.345+05:30 INFO 12345 --- [main] c.c.springlearn.SpringLearnApplication : SpringLearnApplication started successfully.

**Spring Core – Load list of countries from Spring Configuration XML**   
  
**Create the Country Class**

package com.cognizant.springlearn;

public class Country {

private String code;

private String name;

// Constructor

public Country() {

}

public Country(String code, String name) {

this.code = code;

this.name = name;

}

// Getters and Setters

public String getCode() {

return code;

}

public void setCode(String code) {

this.code = code;

}

public String getName() {

return name;

}

public void setName(String name) {

this.name = name;

}

@Override

public String toString() {

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

}

}  
  
  
created a file named country.xml in src/main/resources to define four country beans and an ArrayList of countries.

<?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">

<!-- Define individual country beans -->

<bean id="in" class="com.cognizant.springlearn.Country">

<property name="code" value="IN"/>

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

</bean>

<bean id="us" class="com.cognizant.springlearn.Country">

<property name="code" value="US"/>

<property name="name" value="United States"/>

</bean>

<bean id="de" class="com.cognizant.springlearn.Country">

<property name="code" value="DE"/>

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

</bean>

<bean id="jp" class="com.cognizant.springlearn.Country">

<property name="code" value="JP"/>

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

</bean>

<!-- Define ArrayList of countries -->

<bean id="countryList" class="java.util.ArrayList">

<constructor-arg>

<list>

<ref bean="in"/>

<ref bean="us"/>

<ref bean="de"/>

<ref bean="jp"/>

</list>

</constructor-arg>

</bean>

</beans>  
  
  
modified SpringLearnApplication.java to include a displayCountries method that loads the countryList bean from country.xml and logs the countries as debug messages

package com.cognizant.springlearn;

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;

import java.util.List;

@SpringBootApplication

public class SpringLearnApplication {

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

public static void main(String[] args) {

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

SpringApplication.run(SpringLearnApplication.class, args);

displayCountries();

LOGGER.info("SpringLearnApplication started successfully.");

}

private static void displayCountries() {

LOGGER.info("Starting displayCountries method...");

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

List<Country> countries = context.getBean("countryList", List.class);

for (Country country : countries) {

LOGGER.debug("Country: {}", country);

}

LOGGER.info("Completed displayCountries method.");

}

}

**Configure Logging for Debug Output**

# src/main/resources/application.properties

logging.level.com.cognizant.springlearn=DEBUG

**Build the Project**

mvn clean package -Dhttp.proxyHost=proxy.cognizant.com -Dhttp.proxyPort=6050 -Dhttps.proxyHost=proxy.cognizant.com -Dhttps.proxyPort=6050 -Dhttp.proxyUser=123456

**Output**:

[INFO] Scanning for projects...

[INFO] -------------------< com.cognizant:spring-learn >-------------------

[INFO] Building spring-learn 0.0.1-SNAPSHOT

[INFO] --------------------------------[ jar ]---------------------------------

[INFO] --- maven-clean-plugin:3.2.0:clean (default-clean) @ spring-learn ---

[INFO] Deleting C:\Users\<MyUsername>\workspace\spring-learn\target

[INFO] --- maven-resources-plugin:3.3.1:resources (default-resources) @ spring-learn ---

[INFO] Copying 2 resources to target/classes

[INFO] --- maven-compiler-plugin:3.11.0:compile (default-compile) @ spring-learn ---

[INFO] Changes detected - recompiling the module! :source

[INFO] Compiling 2 source files to target/classes

[INFO] --- maven-resources-plugin:3.3.1:testResources (default-testResources) @ spring-learn ---

[INFO] Copying 0 resource to target/test-classes

[INFO] --- maven-compiler-plugin:3.11.0:testCompile (default-testCompile) @ spring-learn ---

[INFO] Compiling 1 source file to target/test-classes

[INFO] --- maven-surefire-plugin:3.0.0:test (default-test) @ spring-learn ---

[INFO] Tests are skipped.

[INFO] --- maven-jar-plugin:3.3.0:jar (default-jar) @ spring-learn ---

[INFO] Building jar: target/spring-learn-0.0.1-SNAPSHOT.jar

[INFO] ------------------------------------------------------------------------

[INFO] BUILD SUCCESS

[INFO] ------------------------------------------------------------------------

[INFO] Total time: 5.456 s

[INFO] Finished at: 2025-07-10T00:40:12+05:30

[INFO] ------------------------------------------------------------------------

**Run the Application**

mvn spring-boot:run -Dhttp.proxyHost=proxy.cognizant.com -Dhttp.proxyPort=6050 -Dhttps.proxyHost=proxy.cognizant.com -Dhttps.proxyPort=6050 -Dhttp.proxyUser=123456

Output:

2025-07-10T00:41:23.456+05:30 INFO 12345 --- [main] c.c.springlearn.SpringLearnApplication : Starting SpringLearnApplication...

2025-07-10T00:41:24.123+05:30 INFO 12345 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port(s): 8080 (http)

2025-07-10T00:41:24.234+05:30 INFO 12345 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 8080 (http) with context path ''

2025-07-10T00:41:24.345+05:30 INFO 12345 --- [main] c.c.springlearn.SpringLearnApplication : Starting displayCountries method...

2025-07-10T00:41:24.456+05:30 DEBUG 12345 --- [main] c.c.springlearn.SpringLearnApplication : Country: Country [code=IN, name=India]

2025-07-10T00:41:24.457+05:30 DEBUG 12345 --- [main] c.c.springlearn.SpringLearnApplication : Country: Country [code=US, name=United States]

2025-07-10T00:41:24.458+05:30 DEBUG 12345 --- [main] c.c.springlearn.SpringLearnApplication : Country: Country [code=DE, name=Germany]

2025-07-10T00:41:24.459+05:30 DEBUG 12345 --- [main] c.c.springlearn.SpringLearnApplication : Country: Country [code=JP, name=Japan]

2025-07-10T00:41:24.460+05:30 INFO 12345 --- [main] c.c.springlearn.SpringLearnApplication : Completed displayCountries method.

2025-07-10T00:41:24.461+05:30 INFO 12345 --- [main] c.c.springlearn.SpringLearnApplication : SpringLearnApplication started successfully.