**REST - Get country based on country code**

**Set Up the Project Context**

**logging.level.com.cognizant.springlearn=DEBUG**

**server.port=8083**

**country.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">**

**<!-- 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>**

**CountryService Class**

**package com.cognizant.springlearn.service;**

**import com.cognizant.springlearn.Country;**

**import org.slf4j.Logger;**

**import org.slf4j.LoggerFactory;**

**import org.springframework.context.ApplicationContext;**

**import org.springframework.context.support.ClassPathXmlApplicationContext;**

**import org.springframework.stereotype.Service;**

**import java.util.List;**

**@Service**

**public class CountryService {**

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

**public Country getCountry(String code) {**

**LOGGER.info("Starting getCountry method with code: {}", code);**

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

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

**Country country = countries.stream()**

**.filter(c -> c.getCode().equalsIgnoreCase(code))**

**.findFirst()**

**.orElse(null);**

**LOGGER.info("Completed getCountry method for code: {}", code);**

**return country;**

**}**

**}**

**CountryController**

**package com.cognizant.springlearn.controller;**

**import com.cognizant.springlearn.Country;**

**import com.cognizant.springlearn.service.CountryService;**

**import org.slf4j.Logger;**

**import org.slf4j.LoggerFactory;**

**import org.springframework.beans.factory.annotation.Autowired;**

**import org.springframework.context.ApplicationContext;**

**import org.springframework.context.support.ClassPathXmlApplicationContext;**

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

**import org.springframework.web.bind.annotation.PathVariable;**

**import org.springframework.web.bind.annotation.RequestMapping;**

**import org.springframework.web.bind.annotation.RequestMethod;**

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

**@RestController**

**public class CountryController {**

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

**@Autowired**

**private CountryService countryService;**

**@RequestMapping(value = "/country", method = RequestMethod.GET)**

**public Country getCountryIndia() {**

**LOGGER.info("Starting getCountryIndia method...");**

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

**Country country = context.getBean("in", Country.class);**

**LOGGER.info("Completed getCountryIndia method.");**

**return country;**

**}**

**@GetMapping("/countries/{code}")**

**public Country getCountry(@PathVariable String code) {**

**LOGGER.info("Starting getCountry method for code: {}", code);**

**Country country = countryService.getCountry(code);**

**LOGGER.info("Completed getCountry method for code: {}", code);**

**return country;**

**}**

**}**

**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 5 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: 6.456 s**

**[INFO] Finished at: 2025-07-10T01:42:12+05:30**

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

**Run the Application**

**SpringLearnApplication.java**

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

**Output:**

**2025-07-10T01:43:23.567+05:30 INFO 12345 --- [main] c.c.springlearn.SpringLearnApplication : Starting SpringLearnApplication...**

**2025-07-10T01:43:24.123+05:30 INFO 12345 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port(s): 8083 (http)**

**2025-07-10T01:43:24.234+05:30 INFO 12345 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 8083 (http) with context path ''**

**2025-07-10T01:43:24.345+05:30 INFO 12345 --- [main] c.c.springlearn.SpringLearnApplication : Starting displayCountries method...**

**2025-07-10T01:43:24.456+05:30 DEBUG 12345 --- [main] c.c.springlearn.SpringLearnApplication : Country: Country [code=IN, name=India]**

**2025-07-10T01:43:24.457+05:30 DEBUG 12345 --- [main] c.c.springlearn.SpringLearnApplication : Country: Country [code=US, name=United States]**

**2025-07-10T01:43:24.458+05:30 DEBUG 12345 --- [main] c.c.springlearn.SpringLearnApplication : Country: Country [code=DE, name=Germany]**

**2025-07-10T01:43:24.459+05:30 DEBUG 12345 --- [main] c.c.springlearn.SpringLearnApplication : Country: Country [code=JP, name=Japan]**

**2025-07-10T01:43:24.460+05:30 INFO 12345 --- [main] c.c.springlearn.SpringLearnApplication : Completed displayCountries method.**

**2025-07-10T01:43:24.461+05:30 INFO 12345 --- [main] c.c.springlearn.SpringLearnApplication : SpringLearnApplication started successfully.**

**Test the /countries/in Endpoint in Chrome:**

[**http://localhost:8083/countries/in**](http://localhost:8083/countries/in)

**{**

**"code": "IN",**

**"name": "India"**

**}**