Digital-Nurture-4.0-JavaFSE-main

REST - Get country based on country code

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Week Task : Week - 4

**REST - Get country based on country code**   
  
Write a REST service that returns a specific country based on country code. The country code should be case insensitive.  
  
**Controller**: com.cognizant.spring-learn.controller.CountryController  
**Method Annotation:** @GetMapping("/countries/{code}")  
**Method Name**: getCountry(String code)  
**Method Implemetation**: Invoke countryService.getCountry(code)   
**Service Method:**com.cognizant.spring-learn.service.CountryService.getCountry(String code)  
  
**Service Method Implementation**:

* Get the country code using @PathVariable
* Get country list from country.xml
* Iterate through the country list
* Make a case insensitive matching of country code and return the country.
* Lambda expression can also be used instead of iterating the country list

**Sample Request**: http://localhost:8083/country/in  
  
**Sample Response**:

{

  "code": "IN",

  "name": "India"

}

SpringLearnApplication.java

package com.cognizant.springlearn;import org.springframework.boot.SpringApplication;import org.springframework.boot.autoconfigure.SpringBootApplication;@SpringBootApplicationpublic class SpringLearnApplication { public static void main(String[] args) { SpringApplication.run(SpringLearnApplication.class, args); }}Application.properties

server.port=8086

SpringLearn Pom.xml

<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 http://maven.apache.org/xsd/maven-4.0.0.xsd"> <modelVersion>4.0.0</modelVersion> <groupId>com.cognizant</groupId> <artifactId>spring-learn</artifactId> <version>0.0.1-SNAPSHOT</version> <packaging>jar</packaging> <name>spring-learn</name> <description>Hello World Spring Boot App</description> <parent> <groupId>org.springframework.boot</groupId> <artifactId>spring-boot-starter-parent</artifactId> <version>3.2.0</version> </parent> <dependencies> <dependency> <groupId>org.springframework.boot</groupId> <artifactId>spring-boot-starter-web</artifactId> </dependency> </dependencies> <build> <plugins> <plugin> <groupId>org.springframework.boot</groupId> <artifactId>spring-boot-maven-plugin</artifactId> </plugin> </plugins> </build></project>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"> <bean id="in" class="com.cognizant.springlearn.model.Country"> <property name="code" value="IN"/> <property name="name" value="India"/> </bean> <bean id="us" class="com.cognizant.springlearn.model.Country"> <property name="code" value="US"/> <property name="name" value="United States"/> </bean> <bean id="countryList" class="java.util.ArrayList"> <constructor-arg> <list> <ref bean="in"/> <ref bean="us"/> </list> </constructor-arg> </bean></beans>Country.java:

package com.cognizant.springlearn.model;public class Country { private String code; private String name; public Country() {} public Country(String code, String name) { this.code = code; this.name = name; } 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; }}

CountryController.java:

package com.cognizant.springlearn.controller;import com.cognizant.springlearn.model.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.\*;@RestControllerpublic class CountryController { private static final Logger LOGGER = LoggerFactory.getLogger(CountryController.class); @Autowired private CountryService countryService; @RequestMapping("/country") public Country getCountryIndia() { LOGGER.info("START: getCountryIndia()"); ApplicationContext context = new ClassPathXmlApplicationContext("country.xml"); Country india = (Country) context.getBean("in"); LOGGER.info("END: getCountryIndia()"); return india; } @GetMapping("/country/{code}") public Country getCountry(@PathVariable String code) { LOGGER.info("START: getCountry()"); Country result = countryService.getCountry(code); LOGGER.info("END: getCountry()"); return result; }}HelloController.java:

package com.cognizant.springlearn.controller;import org.slf4j.Logger;import org.slf4j.LoggerFactory;import org.springframework.web.bind.annotation.GetMapping;import org.springframework.web.bind.annotation.RestController;@RestControllerpublic class HelloController { private static final Logger LOGGER = LoggerFactory.getLogger(HelloController.class); @GetMapping("/hello") public String sayHello() { LOGGER.info("START: sayHello()"); String response = "Hello World!!"; LOGGER.info("END: sayHello()"); return response; }}

Output:





