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

**Java Files**

**SpringLearnApplication.java**

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

**Country.java**

package com.cognizant.springlearn.model;  
  
import jakarta.xml.bind.annotation.XmlElement;  
import jakarta.xml.bind.annotation.XmlRootElement;  
  
@XmlRootElement(name = "country")  
public class Country {  
 private String code;  
 private String name;  
  
 @XmlElement  
 public String getCode() {  
 return code;  
 }  
  
 public void setCode(String code) {  
 this.code = code;  
 }  
  
 @XmlElement  
 public String getName() {  
 return name;  
 }  
  
 public void setName(String name) {  
 this.name = name;  
 }  
}

**CountryList.java**

package com.cognizant.springlearn.model;  
  
import jakarta.xml.bind.annotation.XmlElement;  
import jakarta.xml.bind.annotation.XmlRootElement;  
import java.util.List;  
  
@XmlRootElement(name = "countries")  
public class CountryList {  
 private List<Country> countries;  
  
 @XmlElement(name = "country")  
 public List<Country> getCountries() {  
 return countries;  
 }  
  
 public void setCountries(List<Country> countries) {  
 this.countries = countries;  
 }  
}

**CountryService.java**

package com.cognizant.springlearn.service;  
  
import com.cognizant.springlearn.model.Country;  
import com.cognizant.springlearn.model.CountryList;  
import jakarta.xml.bind.JAXBContext;  
import jakarta.xml.bind.Unmarshaller;  
import org.springframework.stereotype.Service;  
  
import java.io.InputStream;  
import java.util.List;  
  
@Service  
public class CountryService {  
  
 public Country getCountry(String code) {  
 List<Country> countries = getAllCountries();  
 return countries.stream()  
 .filter(c -> c.getCode().equalsIgnoreCase(code))  
 .findFirst()  
 .orElse(null);  
 }  
  
 public List<Country> getAllCountries() {  
 try {  
 InputStream inputStream = getClass().getResourceAsStream("/country.xml");  
 JAXBContext context = JAXBContext.newInstance(CountryList.class);  
 Unmarshaller unmarshaller = context.createUnmarshaller();  
 CountryList countryList = (CountryList) unmarshaller.unmarshal(inputStream);  
 return countryList.getCountries();  
 } catch (Exception e) {  
 e.printStackTrace();  
 return null;  
 }  
 }  
}

**CountryController.java**

package com.cognizant.springlearn.controller;  
  
import com.cognizant.springlearn.model.Country;  
import com.cognizant.springlearn.service.CountryService;  
import org.springframework.beans.factory.annotation.Autowired;  
import org.springframework.web.bind.annotation.\*;  
  
@RestController  
public class CountryController {  
  
 @Autowired  
 private CountryService countryService;  
  
 @GetMapping(value = "/countries/{code}", produces = "application/json")  
 public Country getCountry(@PathVariable String code) {  
 return countryService.getCountry(code);  
 }  
}

**Configuration Files**

**pom.xml**

<project xmlns="http://maven.apache.org/POM/4.0.0" ...>  
 <parent>  
 <groupId>org.springframework.boot</groupId>  
 <artifactId>spring-boot-starter-parent</artifactId>  
 <version>3.1.5</version>  
 </parent>  
 <dependencies>  
 <dependency>  
 <groupId>org.springframework.boot</groupId>  
 <artifactId>spring-boot-starter-web</artifactId>  
 </dependency>  
 <dependency>  
 <groupId>jakarta.xml.bind</groupId>  
 <artifactId>jakarta.xml.bind-api</artifactId>  
 </dependency>  
 <dependency>  
 <groupId>org.glassfish.jaxb</groupId>  
 <artifactId>jaxb-runtime</artifactId>  
 </dependency>  
 </dependencies>  
</project>

**country.xml**

<countries>  
 <country>  
 <code>IN</code>  
 <name>India</name>  
 </country>  
 <country>  
 <code>US</code>  
 <name>United States</name>  
 </country>  
</countries>

**Output**



