**SPRINGREST2-HANDSON**

**Project Structure**

Springrest2/

├── src/

│ ├── main/java/com/cognizant/springrest2/

│ │ ├── SpringLearnApplication.java

│ │ ├── controller/

│ │ │ ├── HelloController.java

│ │ │ └── CountryController.java

│ │ ├── service/

│ │ │ └── CountryService.java

│ │ ├── service/exception/

│ │ │ └── CountryNotFoundException.java

│ │ └── model/

│ │ └── Country.java

│ ├── main/resources/

│ │ ├── country.xml

│ │ └── application.properties

│ └── test/java/com/cognizant/springrest2/

│ └── SpringLearnApplicationTests.java

├── pom.xml

**CountryController.java**

package com.cognizant.springrest2.controller;

import com.cognizant.springrest2.model.Country;

import com.cognizant.springrest2.service.CountryService;

import com.cognizant.springrest2.service.exception.CountryNotFoundException;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

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

import java.util.List;

@RestController

public class CountryController {

    @RequestMapping("/country")

    public Country getCountryIndia() {

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

        return context.getBean("country", Country.class);

    }

    @GetMapping("/countries")

    public List<Country> getAllCountries() {

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

        return context.getBean("countryList", List.class);

    }

    @GetMapping("/countries/{code}")

    public Country getCountry(@PathVariable String code) throws CountryNotFoundException {

        return new CountryService().getCountry(code);

    }

}

**HelloController.java**

package com.cognizant.springrest2.controller;

import org.slf4j.Logger;

import org.slf4j.LoggerFactory;

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

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

@RestController

public class HelloController {

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

    @GetMapping("/hello")

    public String sayHello() {

        LOGGER.info("START - sayHello()");

        LOGGER.info("END - sayHello()");

        return "Hello World!!";

    }

}

**Country.java**

package com.cognizant.springrest2.model;

public class Country {

    private String code;

    private String name;

    public Country() {}

    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 + "]";

    }

}

**CountryService.java**

package com.cognizant.springrest2.service;

import com.cognizant.springrest2.model.Country;

import com.cognizant.springrest2.service.exception.CountryNotFoundException;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

import java.util.List;

public class CountryService {

public Country getCountry(String code) throws CountryNotFoundException {

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

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

return countries.stream()

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

.findFirst()

.orElseThrow(() -> new CountryNotFoundException());

}

}

**SpringLearnApplication.java**

package com.cognizant.springrest2;

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);

    }

}

**Application.properties**

server.port=8083

logging.level.com.cognizant.springrest2=debug

**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

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

    <bean id="in" class="com.cognizant.springrest2.model.Country">

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

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

    </bean>

    <bean id="us" class="com.cognizant.springrest2.model.Country">

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

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

    </bean>

    <bean id="de" class="com.cognizant.springrest2.model.Country">

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

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

    </bean>

    <bean id="jp" class="com.cognizant.springrest2.model.Country">

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

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

    </bean>

    <bean id="country" class="com.cognizant.springrest2.model.Country">

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

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

    </bean>

    <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>

**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>springrest2</artifactId>

    <version>0.0.1-SNAPSHOT</version>

    <packaging>jar</packaging>

    <name>springrest2</name>

    <description>Demo Spring Boot project with REST</description>

    <parent>

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

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

        <version>2.7.3</version>

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

    </parent>

    <properties>

        <java.version>11</java.version>

    </properties>

    <dependencies>

        <!-- Spring Boot Starter Web for REST APIs -->

        <dependency>

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

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

        </dependency>

        <!-- DevTools for live reload -->

        <dependency>

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

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

            <scope>runtime</scope>

        </dependency>

        <!-- Starter for testing (JUnit + MockMVC) -->

        <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>

                <version>2.7.3</version>

                <configuration>

                    <mainClass>com.cognizant.springrest2.SpringLearnApplication</mainClass>

                </configuration>

            </plugin>

        </plugins>

    </build>

</project>

**Output:**







