**HandsOn : REST - Country Web Service**

The objective here in this project is to build a RESTful web service in the existing Spring Boot application to return country details (India) by reading them from a Spring XML configuration.

**Steps :**

1. ***country.xml* is configured.**

XML config contains a <bean> for India with code and name properties.

<bean id="country" class="com.cognizant.spring\_learn.Country">

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

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

</bean>

1. **A java class ‘*CountryController.java’* is created –**

It’s placed in the package **‘com.cognizant.spring\_learn.controller’.**

package com.cognizant.spring\_learn.controller;

import com.cognizant.spring\_learn.Country;

import org.slf4j.Logger;

import org.slf4j.LoggerFactory;

import org.springframework.context.support.ClassPathXmlApplicationContext;

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

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

*@RestController*

public class CountryController {

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

*@RequestMapping*("/country")

public Country getCountryIndia() {

*LOGGER*.info("START");

Country country;

try (ClassPathXmlApplicationContext context = new ClassPathXmlApplicationContext("country.xml")) {

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

}

*LOGGER*.info("END");

return country;

}

}

1. **Ran the Application –**

After running the **‘SpringLearnApplication.java’** as java application, we get console output as :

A screen shot of a computer

AI-generated content may be incorrect.

1. **Tested the API –**

After opening the browser/postman, we get this JSON output –

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AI-generated content may be incorrect.

**SME Section :**

1. **What happens in the controller method?**

Controller method does the following –

* It loads the Spring context from **country.xml** .
* Fetches the **country** bean using **getBean()** .
* Returns it as Spring Boot automatically converts the **Country** object into JSON.

1. **How is the bean converted to JSON?**

* Spring Boot uses to serialize the **Country** object into JSON.
* Since the method returns an object and the class is annotated with **@RestController**, it knows to convert the object to JSON.

1. **Network Tab (Browser Dev Tools) –**

**A screenshot of a computer

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1. **Postman Headers Tab –**

**A screenshot of a computer

AI-generated content may be incorrect.**