REST - Country Web Service

Write a REST service that returns India country details in the earlier created spring learn application.

URL: /country
Controller: com.cognizant.spring-learn.controller.CountryController
Method Annotation: @RequestMapping
Method Name: getCountryIndia()
Method Implementation: Load India bean from spring xml configuration and return
Sample Request: http://localhost:8083/country
Sample Response:

```
{
 "code": "IN",
 "name": "India"
}
```

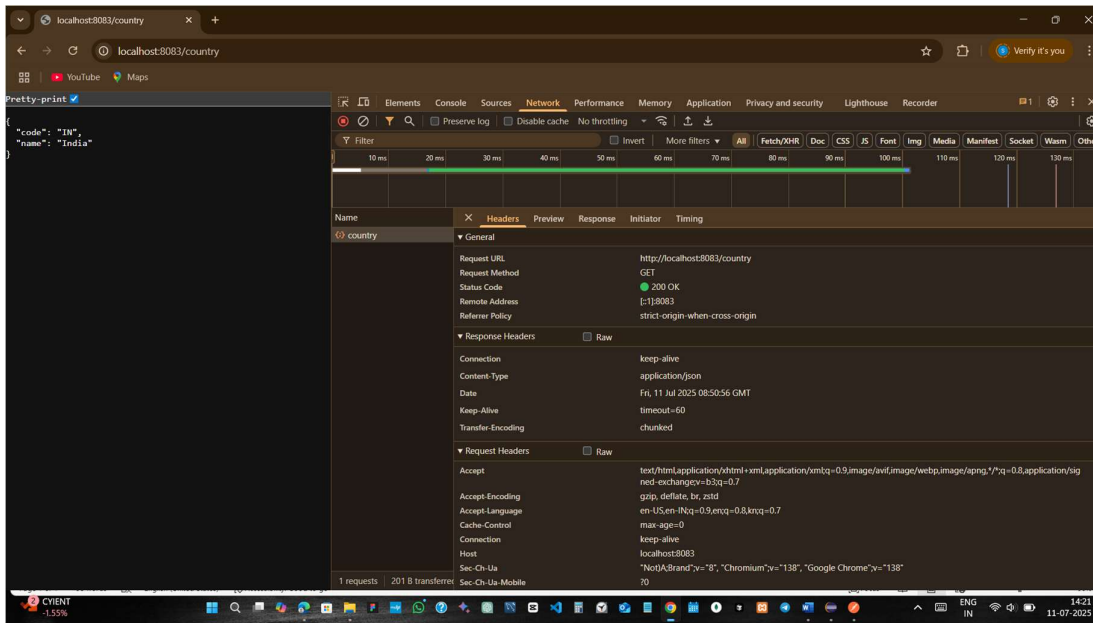**SME to explain the following aspects:**

- **What happens in the controller method?**

  1. Loads Spring context from country.xml
  2. Fetches the bean with ID "in" of type Country
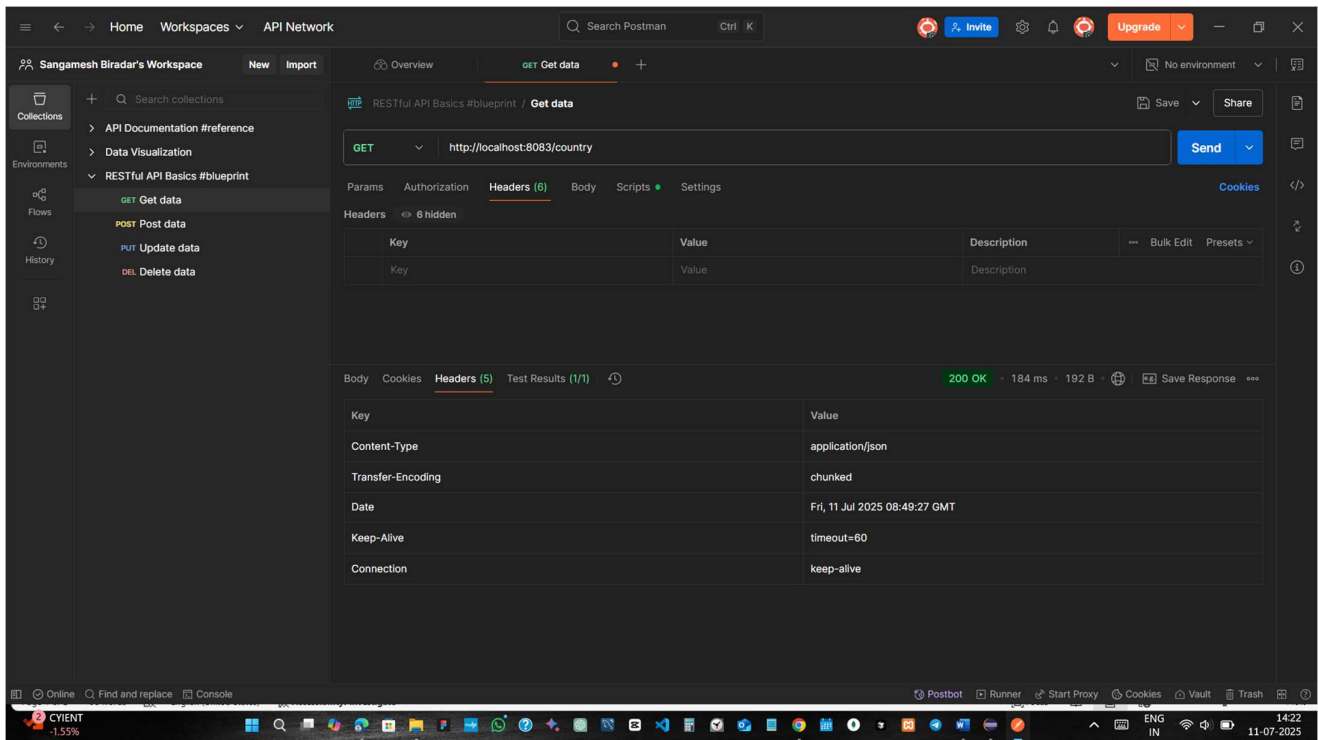 3. Returns the bean (Java object)

- **How the bean is converted into JSON reponse?**

  1. Spring Boot has Jackson (by default) which auto-converts Java objects to JSON
  2. Since you use @RestController, the object returned is automatically serialized to JSON using Jackson

- **In network tab of developer tools show the HTTP header details received**

- In postman click on "Headers" tab to view the HTTP header details received

country.xml file

```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.spring_learn.model.Country">
    <property name="code" value="IN"/>
    <property name="name" value="India"/>
  </bean>


</beans>
```

Country.java

```java
package com.cognizant.spring_learn.model;


public class Country {
    private String code;
    private String name;

    // Constructors
    public Country() {}
    public Country(String code, String name) {
        this.code = code;
        this.name = name;
    }
    // Getters and Setters
    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

```java
package com.cognizant.spring_learn.controller;

import com.cognizant.spring_learn.model.Country;
import org.springframework.context.ApplicationContext;
import org.springframework.context.support.ClassPathXmlApplicationContext;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RestController;

@RestController
public class CountryController {

    @RequestMapping("/country")
    public Country getCountryIndia() {
        ApplicationContext context = new ClassPathXmlApplicationContext("country.xml");
        Country country = context.getBean("in", Country.class);
        return country;
    }
}
```