

REST - Get country based on country code

CountryController.java:

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

import com.cognizant.spring_learn.Country;
import com.cognizant.spring_learn.service.CountryService;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.web.bind.annotation.*;

@RestController

public class CountryController {

    @Autowired

    private CountryService countryService;

    @GetMapping("/countries/{code}")

    public Country getCountry(@PathVariable String code) {

        return countryService.getCountry(code);

    }

}
```

CountryService.java:

```
package com.cognizant.spring_learn.service;

import com.cognizant.spring_learn.Country;
import org.springframework.context.ApplicationContext;
import org.springframework.context.support.ClassPathXmlApplicationContext;
import org.springframework.stereotype.Service;
import java.util.List;

@Service

public class CountryService {

    public Country getCountry(String code) {
```

```

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

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

return countryList.stream()

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

    .findFirst()

    .orElse(null);

}

}

```

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="country" class="com.cognizant.springlearn.Country">
        <property name="code" value="IN"/>
        <property name="name" value="India"/>
    </bean>
    <bean id="countryList" class="java.util.ArrayList">
        <constructor-arg>
            <list>
                <bean class="com.cognizant.springlearn.Country">
                    <property name="code" value="IN"/>
                    <property name="name" value="India"/>
                </bean>
                <bean class="com.cognizant.springlearn.Country">

```

```

        <property name="code" value="US"/>
        <property name="name" value="United States"/>
    </bean>

    <bean class="com.cognizant.springlearn.Country">
        <property name="code" value="CN"/>
        <property name="name" value="China"/>
    </bean>

</list>

</constructor-arg>

</bean>

</beans>

```

OUTPUT:

The screenshot shows an IDE with the following components:

- Project Explorer:** Shows a project named 'SpringLearnApplication' with a package structure including 'com.cognizant.springlearn', 'controller', 'service', and 'Country'.
- Editor:** Displays the 'country.xml' file with the following content:

```

<beans xmlns="http://www.springframework.org/schema/beans"
    xmlns:xsi="http://www.springframework.org/schema/xsi"
    xsi:schemaLocation="http://www.springframework.org/schema/beans http://www.springframework.org/schema/beans.xsd">

    <bean id="countryList" class="java.util.ArrayList">
        <constructor-arg>
            <list>
                <bean class="com.cognizant.springlearn.Country">
                    <property name="code" value="IN"/>
                    <property name="name" value="India"/>
                </bean>
                <bean class="com.cognizant.springlearn.Country">
                    <property name="code" value="US"/>
                    <property name="name" value="United States"/>
                </bean>
                <bean class="com.cognizant.springlearn.Country">
                    <property name="code" value="DE"/>
                    <property name="name" value="Germany"/>
                </bean>
                <bean class="com.cognizant.springlearn.Country">
                    <property name="code" value="JP"/>
                    <property name="name" value="Japan"/>
                </bean>
            </list>
        </constructor-arg>
    </bean>


```
- Output Console:** Shows the application running successfully with the following log messages:

```

at org.apache.coyote.AbstractProtocol$ConnectionHandler.process(AbstractProtocol.java:903) ~[tomcat-embed-core-10.1.42.jar:10.1.42]
at org.apache.tomcat.util.net.NioEndpoint$SocketProcessor.doRun(NioEndpoint.java:1769) ~[tomcat-embed-core-10.1.42.jar:10.1.42]
at org.apache.tomcat.util.net.SocketProcessorBase.run(SocketProcessorBase.java:52) ~[tomcat-embed-core-10.1.42.jar:10.1.42]
at org.apache.tomcat.util.threads.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1189) ~[tomcat-embed-core-10.1.42.jar:10.1.42]
at org.apache.tomcat.util.threads.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:658) ~[tomcat-embed-core-10.1.42.jar:10.1.42]
at org.apache.tomcat.util.threads.TaskThread$WrappingRunnable.run(TaskThread.java:63) ~[tomcat-embed-core-10.1.42.jar:10.1.42] <1 internal line>

```
- Bottom Bar:** Shows the file path 'src > main > resources > country.xml', the time '17:58', the encoding 'CRLF', the character set 'UTF-8', and the number of spaces '4 spaces'.

