**SPRINGREST1-HANDSON**

**Project Structure:**

springrest1/

├── src/

│ ├── main/

│ │ ├── java/

│ │ │ └── com/cognizant/springrest1/

│ │ │ ├── SpringLearnApplication.java

│ │ │ ├── Country.java

│ │ │ └── ... other classes if needed

│ │ └── resources/

│ │ ├── application.properties

│ │ ├── country.xml

│ │ └── date-format.xml

│ └── test/

│ └── java/...

├── pom.xml

**Country.java**

package com.cognizant.springrest1;

import org.slf4j.Logger;

import org.slf4j.LoggerFactory;

public class Country {

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

    private String code;

    private String name;

    public Country() {

        LOGGER.debug("Inside Country Constructor.");

    }

    public String getCode() {

        LOGGER.debug("Getting code.");

        return code;

    }

    public void setCode(String code) {

        LOGGER.debug("Setting code.");

        this.code = code;

    }

    public String getName() {

        LOGGER.debug("Getting name.");

        return name;

    }

    public void setName(String name) {

        LOGGER.debug("Setting name.");

        this.name = name;

    }

    @Override

    public String toString() {

        return "Country [code=" + code + ", name=" + name + "]";

    }

}

**SpringLearnApplication.java**

package com.cognizant.springrest1;

import java.text.ParseException;

import java.text.SimpleDateFormat;

import java.util.Date;

import java.util.List;

import org.slf4j.Logger;

import org.slf4j.LoggerFactory;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

@SpringBootApplication

public class SpringLearnApplication {

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

    public static void main(String[] args) {

        SpringApplication.run(SpringLearnApplication.class, args);

        displayDate();

        displayCountry();

        displayCountries();

    }

    public static void displayDate() {

        LOGGER.info("START");

        ApplicationContext context = new ClassPathXmlApplicationContext("date-format.xml");

        SimpleDateFormat format = context.getBean("dateFormat", SimpleDateFormat.class);

        try {

            Date date = format.parse("31/12/2018");

            LOGGER.debug("Parsed Date: {}", date);

        } catch (ParseException e) {

            LOGGER.error("Error parsing date", e);

        }

        LOGGER.info("END");

    }

    public static void displayCountry() {

        LOGGER.info("START");

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

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

        LOGGER.debug("Country : {}", country.toString());

        LOGGER.info("END");

    }

    public static void displayCountries() {

        LOGGER.info("START");

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

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

        LOGGER.debug("Country List : {}", countryList);

        LOGGER.info("END");

    }

}

**Application.properties**

logging.level.org.springframework=info

logging.level.com.cognizant.springrest1=debug

logging.pattern.console=%d{yyMMdd}|%d{HH:mm:ss.SSS}|%-20.20thread|%5p|%-25.25logger{25}|%25M|%m%n

**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">

    <!-- Individual country beans -->

    <bean id="in" class="com.cognizant.springrest1.Country">

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

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

    </bean>

    <bean id="us" class="com.cognizant.springrest1.Country">

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

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

    </bean>

    <bean id="de" class="com.cognizant.springrest1.Country">

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

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

    </bean>

    <bean id="jp" class="com.cognizant.springrest1.Country">

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

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

    </bean>

    <!-- Bean to demonstrate singleton/prototype scope -->

    <bean id="country" class="com.cognizant.springrest1.Country" scope="prototype">

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

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

    </bean>

    <!-- List of countries -->

    <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>

**date-format.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="dateFormat" class="java.text.SimpleDateFormat">

        <constructor-arg value="dd/MM/yyyy" />

    </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>springrest1</artifactId>

    <version>0.0.1-SNAPSHOT</version>

    <packaging>jar</packaging>

    <name>springrest1</name>

    <description>Spring Core and Boot Hands-On</description>

    <parent>

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

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

        <version>3.2.4</version>

        <relativePath/>

    </parent>

    <dependencies>

        <dependency>

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

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

        </dependency>

        <dependency>

            <groupId>org.springframework</groupId>

            <artifactId>spring-context</artifactId>

        </dependency>

        <dependency>

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

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

            <scope>runtime</scope>

        </dependency>

    </dependencies>

    <build>

        <plugins>

            <plugin>

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

                <artifactId>spring-boot-maven-plugin</artifactId>

            </plugin>

        </plugins>

    </build>

</project>

**Output:**

