**WEEK-8**

**1.**

**SpringLearnApplication.java:**

package com.cognizant.springlearn;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

import org.slf4j.Logger;

import org.slf4j.LoggerFactory;

@SpringBootApplication

public class SpringLearnApplication {

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

public static void main(String[] args) {

LOGGER.info("Application starting...");

SpringApplication.run(SpringLearnApplication.class, args);

LOGGER.info("Application started successfully!");

}

}

**pom.xml:**

<dependencies>

<dependency>

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

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

</dependency>

<dependency>

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

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

<scope>runtime</scope>

<optional>true</optional>

</dependency>

<dependency>

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

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

<scope>test</scope>

</dependency>

</dependencies>

**OUTPUT:**

2025-08-09 19:55:21 INFO 15284 --- [main] c.c.s.SpringLearnApplication : Application starting...

2025-08-09 19:55:23 INFO 15284 --- [main] c.c.s.SpringLearnApplication : Application started successfully!

2025-08-09 19:55:23 INFO 15284 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 8080 (http)

2025-08-09 19:55:23 INFO 15284 --- [main] c.c.s.SpringLearnApplication : Started SpringLearnApplication in 2.456 seconds (JVM running for 3.12)

2.

**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">

<!-- SimpleDateFormat bean with 'dd/MM/yyyy' pattern -->

<bean id="dateFormat" class="java.text.SimpleDateFormat">

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

</bean>

</beans>

**SpringLearnApplication:**

package com.cognizant.spring\_learn;

import java.text.ParseException;

import java.text.SimpleDateFormat;

import java.util.Date;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

public class SpringLearnApplication {

public static void main(String[] args) throws ParseException {

displayDate();

}

public static void displayDate() throws ParseException {

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

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

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

System.out.println("Parsed Date: " + date);

}

}

**OUTPUT:**

Parsed Date: Mon Dec 31 00:00:00 IST 2018

**3.**

**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">

<!-- Country Bean -->

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

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

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

</bean>

</beans>

**Country.java:**

package com.cognizant.springlearn;

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("Inside getCode()");

return code;

}

public void setCode(String code) {

LOGGER.debug("Inside setCode()");

this.code = code;

}

public String getName() {

LOGGER.debug("Inside getName()");

return name;

}

public void setName(String name) {

LOGGER.debug("Inside setName()");

this.name = name;

}

@Override

public String toString() {

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

}

}

**SpringLearnApplication.java:**

package com.cognizant.springlearn;

import org.slf4j.Logger;

import org.slf4j.LoggerFactory;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

public class SpringLearnApplication {

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

public static void main(String[] args) {

displayCountry();

}

public static void displayCountry() {

// Load Spring context

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

// Retrieve bean

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

// Log bean details

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

}

}

**OUTPUT:**

DEBUG com.cognizant.springlearn.Country - Inside Country Constructor.

DEBUG com.cognizant.springlearn.Country - Inside setCode()

DEBUG com.cognizant.springlearn.Country - Inside setName()

DEBUG com.cognizant.springlearn.Country - Inside toString()

DEBUG com.cognizant.springlearn.SpringLearnApplication - Country : Country [code=IN, name=India]