**SPRING CORE\_MAVEN**

**Exercise 3: Creating and Configuring a Maven Project**

**Create Maven Project in Eclipse:**

**Description:**

Start a new Maven project in Eclipse, which will manage dependencies and folder structure automatically.

Steps:

1.Go to File → New → Maven Project

2.Check "Create a simple project (skip archetype selection)" → Click Next

3.Fill in:  
 Group Id: com.example

Artifact Id: spring-core-demo

4.Click Finish

Eclipse will create this folder structure:

spring-core-demo/

├── src/main/java/

├── src/main/resources/

├── pom.xml

**Add Spring Dependencies to pom.xml**

**Description:**

Add the Spring Core dependency so Maven will download the required JARs.

**Code:**

<!-- 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.example</groupId>

<artifactId>spring-core-demo</artifactId>

<version>1.0-SNAPSHOT</version>

<dependencies>

<!-- Spring Core / Context dependency -->

<dependency>

<groupId>org.springframework</groupId>

<artifactId>spring-context</artifactId>

<version>5.3.32</version>

</dependency>

</dependencies>

</project>

**Create a Simple Spring Bean**

**Description:**

Define a basic Java class that will be managed by Spring.

**Code:**

// src/main/java/com/example/HelloService.java

package com.example;

public class HelloService {

public void sayHello() {

System.out.println("Hello from Spring Maven Project!");

}

}

**Create Spring Configuration File**

**Description:**

This XML file will define the Spring beans and let Spring know how to wire them.

Path: src/main/resources/applicationContext.xml

**Code:**

<!-- src/main/resources/applicationContext.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="helloService" class="com.example.HelloService"/>

</beans>

**Create the Main App Class**

**Description:**

This class will load Spring’s container and fetch the bean defined in the XML.

**Code:**

// src/main/java/com/example/App.java

package com.example;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

public class App {

public static void main(String[] args) {

// Load the Spring XML configuration

ApplicationContext context =

new ClassPathXmlApplicationContext("applicationContext.xml");

// Retrieve the HelloService bean

HelloService helloService = context.getBean("helloService", HelloService.class);

// Call the method

helloService.sayHello();

}

}

**OUTPUT:**

