**Exercise 1: Configuring a Basic Spring Application**

**1.Create a Maven Project**

* Project Name: LibraryManagement
* Project Structure:

LibraryManagement/

src/main/java

src/main/resources

pom.xml

**2.Add Spring Core Dependencies in pom.xml**

<dependencies>

<!-- Spring Core -->

<dependency>

<groupId>org.springframework</groupId>

<artifactId>spring-context</artifactId>

<version>5.3.30</version>

</dependency>

</dependencies>

**3.Configure the Application Context**

* Create src/main/resources/applicationContext.xml

<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="bookRepository" class="com.library.repository.BookRepository"/>

<bean id="bookService" class="com.library.service.BookService"/>

</beans>

**4.Create the Service and Repository Classes**

**BookRepository**

package com.library.repository;

public class BookRepository {

public void saveBook(String bookName) {

System.out.println("Saving book: " + bookName);

}

}

**BookService**

package com.library.service;

public class BookService {

public void addBook(String bookName) {

System.out.println("Adding book: " + bookName);

}

}

**5.Run the Application**

**LibraryManagementApplication.java**

package com.library;

import com.library.service.BookService;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

public class LibraryManagementApplication {

public static void main(String[] args) {

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

BookService bookService = (BookService) context.getBean("bookService");

bookService.addBook("Spring Core And Maven");

}

}