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

**Scenario:**

Your company is developing a web application for managing a library. You need to use the Spring Framework to handle the backend operations.



**Directory:** src/main/resources

**File:** applicationContext.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.library</groupId>

<artifactId>LibraryManagement</artifactId>

<version>1.0-SNAPSHOT</version>

<dependencies>

<!-- Spring Core -->

<dependency>

<groupId>org.springframework</groupId>

<artifactId>spring-context</artifactId>

<version>5.3.36</version>

</dependency>

</dependencies>

</project>

**src/main/java/com/library/repository/BookRepository.java**

package com.library.repository;

public class BookRepository {

public void fetchBooks() {

System.out.println("Fetching books from the repository...");

}

}

#### src/main/java/com/library/service/BookService.java

package com.library.service;

import com.library.repository.BookRepository;

public class BookService {

private BookRepository bookRepository;

// Setter for Dependency Injection

public void setBookRepository(BookRepository bookRepository) {

this.bookRepository = bookRepository;

}

public void displayBooks() {

bookRepository.fetchBooks();

}

}

**src/main/java/com/library/MainApp.java**

package com.library;

import com.library.service.BookService;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

public class MainApp {

public static void main(String[] args) {

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

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

bookService.displayBooks();

}

}

