Step 1: Create a Maven Project in IntelliJ

Open IntelliJ → Click New Project.

Choose Maven from the left menu.

Select Java as the language.

Make sure Build system = Maven, JDK = 1.8.

Enter project name: LibraryManagement

Click Create.

Step 2: Add Spring Dependencies in pom.xml

Replace your pom.xml with this:

<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>

<properties>

<maven.compiler.source>1.8</maven.compiler.source>

<maven.compiler.target>1.8</maven.compiler.target>

</properties>

<dependencies>

<dependency>

<groupId>org.springframework</groupId>

<artifactId>spring-context</artifactId>

<version>5.3.33</version>

</dependency>

<dependency>

<groupId>commons-logging</groupId>

<artifactId>commons-logging</artifactId>

<version>1.2</version>

</dependency>

</dependencies>

</project>

➡ Then click "Load Maven Changes" in IntelliJ.

Step 3: Create Folder Structure and Classes

✅ Create packages:

com.library.repository

com.library.service

✅ BookRepository.java

package com.library.repository;

public class BookRepository {

public void save() {

System.out.println("Book saved to repository.");

}

}

Make sure the file is saved as BookRepository.java.

✅ BookService.java

package com.library.service;

import com.library.repository.BookRepository;

public class BookService {

private BookRepository bookRepository;

public void setBookRepository(BookRepository bookRepository) {

this.bookRepository = bookRepository;

}

public void addBook() {

System.out.println("BookService: Adding a book...");

bookRepository.save();

}

}

Step 4: Create Spring XML Configuration

Create applicationContext.xml inside ( src/main/resources/).

<?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">

<!-- Define BookRepository bean -->

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

<!-- Define BookService bean and inject BookRepository -->

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

<property name="bookRepository" ref="bookRepository"/>

</bean>

</beans>

Step 5: Create Main Class to Run the App

Create App.java in com.library package:

package com.library;

import com.library.service.BookService;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

public class App {

public static void main(String[] args) {

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

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

service.addBook();

}

}

✅ Step 6: Run the Application

Right-click App.java → Run'App.main()'

