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

http://www.springframework.org/schema/context

http://www.springframework.org/schema/context/spring-context.xsd">

<!-- Enable component scanning -->

<context:component-scan base-package="com.library"/>

<!-- BookRepository bean -->

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

<!-- BookService bean with constructor injection -->

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

<constructor-arg ref="bookRepository"/>

</bean>

</beans>

BookService

package com.library.service;

import com.library.repository.BookRepository;

import org.springframework.beans.factory.annotation.Autowired;

import org.springframework.stereotype.Service;

@Service

public class BookService {

private BookRepository bookRepository;

// Constructor injection

@Autowired

public BookService(BookRepository bookRepository) {

this.bookRepository = bookRepository;

}

// Setter for bookRepository (setter injection)

@Autowired

public void setBookRepository(BookRepository bookRepository) {

this.bookRepository = bookRepository;

}

// Service method to add a book

public void addBook(String bookName) {

bookRepository.save(bookName);

System.out.println("Book added: " + bookName);

}

}

applicationContext.xml

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

<constructor-arg ref="bookRepository"/>

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

</bean>

Main.java

package com.library;

import com.library.service.BookService;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

public class Main {

public static void main(String[] args) {

// Load the Spring context

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

// Get the BookService bean

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

// Test the BookService

bookService.addBook("Spring in Action");

}

}

Saving book: Spring in Action

Book added: Spring in Action