Spring Core and Maven

SuperSet ID:6412063

Exercise 2: Implementing Dependency Injection

Add Spring JAR Files

spring-core-\*.jar

spring-context-\*.jar

spring-beans-\*.jar

commons-logging-\*.jar

Book.java

package com.library.model;

public class Book {

private String title;

private String author;

public Book() {}

public Book(String title, String author) {

this.title = title;

this.author = author;

}

public void display() {

System.out.println("Book: " + title + " by " + author);

}

}

BookRepository.java

package com.library.repository;

import com.library.model.Book;

public class BookRepository {

public Book getBook() {

return new Book("The Alchemist", "Paulo Coelho");

}

}

BookService.java

package com.library.service;

import com.library.model.Book;

import com.library.repository.BookRepository;

public class BookService {

private BookRepository bookRepository;

public void setBookRepository(BookRepository bookRepository) {

this.bookRepository = bookRepository;

}

public void displayBook() {

Book book = bookRepository.getBook();

book.display();

}

}

LibraryManagementApplication.java

package com.library;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

import com.library.service.BookService;

public class LibraryManagementApplication {

public static void main(String[] args) {

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

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

bookService.displayBook();

}

}

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

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

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

</bean>

</beans>

Output:

A computer screen shot of a black rectangular object

Description automatically generated