Spring Core and Maven

SuperSet ID:6412063

Exercise 7: Implementing Constructor and Setter Injection

Pom.xml

<dependencies>

<dependency>

<groupId>org.springframework</groupId>

<artifactId>spring-context</artifactId>

<version>5.3.32</version>

</dependency>

</dependencies>

<build>

<plugins>

<plugin>

<groupId>org.apache.maven.plugins</groupId>

<artifactId>maven-compiler-plugin</artifactId>

<version>3.8.1</version>

<configuration>

<source>1.8</source>

<target>1.8</target>

</configuration>

</plugin>

</plugins>

</build>

Author.java

package com.library.service;

public class Author {

private String name;

public Author(String name) {

this.name = name;

System.out.println("Constructor Injection: Author set");

}

public String getAuthorName() {

return name;

}

}

BookRepository.java

package com.library.repository;

public class BookRepository {

public String getBookTitle() {

return "Spring in Action";

}

}

BookService.java

package com.library.service;

import com.library.repository.BookRepository;

public class BookService {

private Author author;

private BookRepository bookRepository;

public BookService(Author author) {

this.author = author;

}

public void setBookRepository(BookRepository bookRepository) {

this.bookRepository = bookRepository;

System.out.println("Setter Injection: BookRepository set");

}

public void showDetails() {

System.out.println("Author: " + author.getAuthorName());

System.out.println("Book Title: " + bookRepository.getBookTitle());

}

}

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="author" class="com.library.service.Author">

<constructor-arg value="Craig Walls"/>

</bean>

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

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

<constructor-arg ref="author"/>

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

</bean>

</beans>

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

service.showDetails();

}

}

Output:

A computer screen shot of a computer screen

Description automatically generated