Exercise 3:

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"

xmlns:aop="http://www.springframework.org/schema/aop"

xsi:schemaLocation="

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

https://www.springframework.org/schema/beans/spring-beans.xsd

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

https://www.springframework.org/schema/aop/spring-aop.xsd">

<!-- Enable AspectJ auto proxying -->

<aop:aspectj-autoproxy />

<!-- Register the logging aspect -->

<bean id="loggingAspect" class="com.library.LoggingAspect"/>

<!-- Repositories and Services -->

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

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

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

</bean>

</beans>

Loggingaspect:

package com.library;

import org.aspectj.lang.ProceedingJoinPoint;

import org.aspectj.lang.annotation.Around;

import org.aspectj.lang.annotation.Aspect;

@Aspect

public class LoggingAspect {

@Around("execution(\* com.library.service.\*.\*(..))")

public Object logExecutionTime(ProceedingJoinPoint joinPoint) throws Throwable {

long startTime = System.currentTimeMillis();

Object proceed = joinPoint.proceed();

long endTime = System.currentTimeMillis();

String methodName = joinPoint.getSignature().toShortString();

System.out.println("Method " + methodName + " executed in " + (endTime - startTime) + " ms");

return proceed;

}

}

package com.library;

import com.library.service.BookService;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

public class LibraryApp {

public static void main(String[] args) {

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

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

bookService.addBook("Testing the configuration");

}

}

A screenshot of a computer

AI-generated content may be incorrect.