Spring Core\_Maven

**Exercise 3: Implementing Logging with Spring AOP**

**Scenario:**

The library management application requires logging capabilities to track method execution times.

**Code:**

**LoggingAspect.java**

package com.library.aspect;

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.BookService2.\*(..))")

public Object logExecutionTime(ProceedingJoinPoint joinPoint) throws Throwable {

long start = System.nanoTime();

Object result = joinPoint.proceed(); // method execution

long end = System.nanoTime();

System.out.println("[LOG] Execution time of " + joinPoint.getSignature() + ": " + (end - start)/1\_000\_000 + " ms");

return result;

}

}

**App3Main.java**

package com.library;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

import com.library.service.BookService2;

public class App3Main {

public static void main(String[] args) {

ApplicationContext context = new ClassPathXmlApplicationContext("applicationContext3.xml");

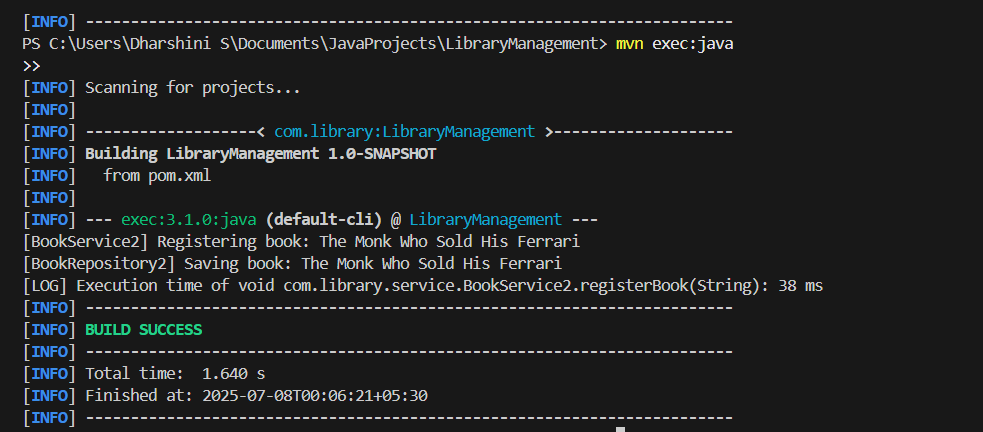
BookService2 service = (BookService2) context.getBean("bookService2");

service.registerBook("The Monk Who Sold His Ferrari");

}

}

**Output:**

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