BookRepository.java

package ex1;

public class BookRepository {

public void getBooks() {

System.out.println(" Fetching list of books from the database...");

}

}

BookService.java

package ex1;

public class BookService {

private BookRepository bookRepository;

public void setBookRepository(BookRepository bookRepository) {

this.bookRepository = bookRepository;

}

public void displayBooks() {

System.out.println("📖 BookService: Calling BookRepository...");

bookRepository.getBooks();

}

}

LibraryManagementApplication.java

package ex1;

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

bookService.displayBooks();

((ClassPathXmlApplicationContext) context).close();

}

}

Loggingaspect.java:

package ex1;

import org.aspectj.lang.ProceedingJoinPoint;

import org.aspectj.lang.annotation.Around;

import org.aspectj.lang.annotation.Aspect;

@Aspect

public class LoggingAspect {

@Around("execution(\* ex1.BookService.\*(..))")

public Object logExecutionTime(ProceedingJoinPoint joinPoint) throws Throwable {

long start = System.currentTimeMillis();

Object result = joinPoint.proceed();

long end = System.currentTimeMillis();

System.out.println("Method " + joinPoint.getSignature().getName() +

" executed in " + (end - start) + " ms");

return result;

}

}

OUTPUT:

