# Superset ID:  6125132 Name: Podugu Vinay Kumar

**Week :3**

**Exercise 2: Implementing Dependency Injection**

**1. Modified 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:context="http://www.springframework.org/schema/context"  
 xmlns:aop="http://www.springframework.org/schema/aop"  
 xsi:schemaLocation="http://www.springframework.org/schema/beans  
 http://www.springframework.org/schema/beans/spring-beans.xsd  
 http://www.springframework.org/schema/context  
 http://www.springframework.org/schema/context/spring-context.xsd  
 http://www.springframework.org/schema/aop  
 http://www.springframework.org/schema/aop/spring-aop.xsd">  
  
 <context:component-scan base-package="com.library"/>  
 <aop:aspectj-autoproxy/>  
  
 <bean id="bookRepository" class="com.library.repository.BookRepository"/>  
 <bean id="bookService" class="com.library.service.BookService">  
 <property name="bookRepository" ref="bookRepository"/>  
 </bean>  
 <bean class="com.library.aspect.LoggingAspect"/>  
</beans>

# 2. BookService.java with Setter Injection

package com.library.service;  
  
import com.library.repository.BookRepository;  
import org.springframework.beans.factory.annotation.Autowired;  
import org.springframework.stereotype.Service;  
  
@Service  
public class BookService {  
 private BookRepository bookRepository;  
  
 @Autowired  
 public BookService(BookRepository bookRepository) {  
 this.bookRepository = bookRepository;  
 }  
  
 public void addBook(String book) {  
 System.out.println("Adding book: " + book);  
 bookRepository.save(book);  
 }  
  
 public void setBookRepository(BookRepository bookRepository) {  
 this.bookRepository = bookRepository;  
 }  
}

# 3. 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 bookService = context.getBean(BookService.class);  
 bookService.addBook("Spring in Action");  
 }  
}