

1.Set Up a Spring Project

Pom.xml

```
<project xmlns="http://maven.apache.org/POM/4.0.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
    http://maven.apache.org/xsd/maven-4.0.0.xsd">
  <modelVersion>4.0.0</modelVersion>

  <groupId>com.library</groupId>
  <artifactId>LibraryManagement</artifactId>
  <version>1.0</version>

  <dependencies>
    <!-- Spring Core -->
    <dependency>
      <groupId>org.springframework</groupId>
      <artifactId>spring-context</artifactId>
      <version>5.3.34</version>
    </dependency>
  </dependencies>
</project>
```

2. Configure the Application Context

```
<?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="bookRepository" class="com.library.repository.BookRepository" />
```

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

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

```
</bean>
```

```
</beans>
```

3. Define Service and Repository Classes

com/library/repository/BookRepository.java

```
package com.library.repository;
```

```
public class BookRepository {
```

```
    public void saveBook(String title) {
```

```
        System.out.println("BookRepository: Saving book titled \"" + title + "\" to the database.");
```

```
    }
```

```
}
```

com/library/service/BookService.java

```
package com.library.service;
```

```
import com.library.repository.BookRepository;
```

```
public class BookService {
```

```
    private BookRepository bookRepository;
```

```
    // Setter for Dependency Injection
```

```
    public void setBookRepository(BookRepository bookRepository) {
```

```
        this.bookRepository = bookRepository;
```

```
    }
```

```
public void addBook(String title) {  
    System.out.println("BookService: Adding book titled \"\" + title + "\"...");  
    bookRepository.saveBook(title);  
}  
}
```

4. Run the Application

com/library/LibraryApp.java

```
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) {  
        Load Spring context from XML  
        ApplicationContext context = new ClassPathXmlApplicationContext("applicationContext.xml");  
  
        BookService bookService = context.getBean("bookService", BookService.class);  
  
        bookService.addBook("Effective Java");  
    }  
}
```

Output

