< JAVA Framework >

개발자에게 봄은 오는가?

Spring framework

made by Yu Hyun-Seok

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2. Spring DI
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6. 데이터 베이스 연동 지원
7. Spring의 트랜잭션
8. 엔터프라이즈 서비스
9. 테스트 지원

Spring framework 소개

스프링(Spring)은 간단히 말하면 엔터프라이즈 어플리케이션에서
필요로 하는 기능을 제공하는 프레임워크이다.

1. 경량 컨테이너이다.(light container)
2. DI(Dependency Injection) pattern 지원
3. AOP(Aspect Oriented Programming)을 지원
4. 스프링은 POJO(Plain Old Java Object)를 지원
5. 트랜잭션 처리를 위한 일관된 방법을 제공한다.
6. 영속성과 관련된 다양한 API지원
7. 다양한 API에 대한 연동을 지원

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Spring framework 소개

스프링 download , 설치 ,모듈 구성

1. download : http://www.springframework.org/download 에서
   spring-framework-2.5.6-with-dependencies.zip
   또는 책 CD의 spring-framework-2.0.8-with-dependencies.zip

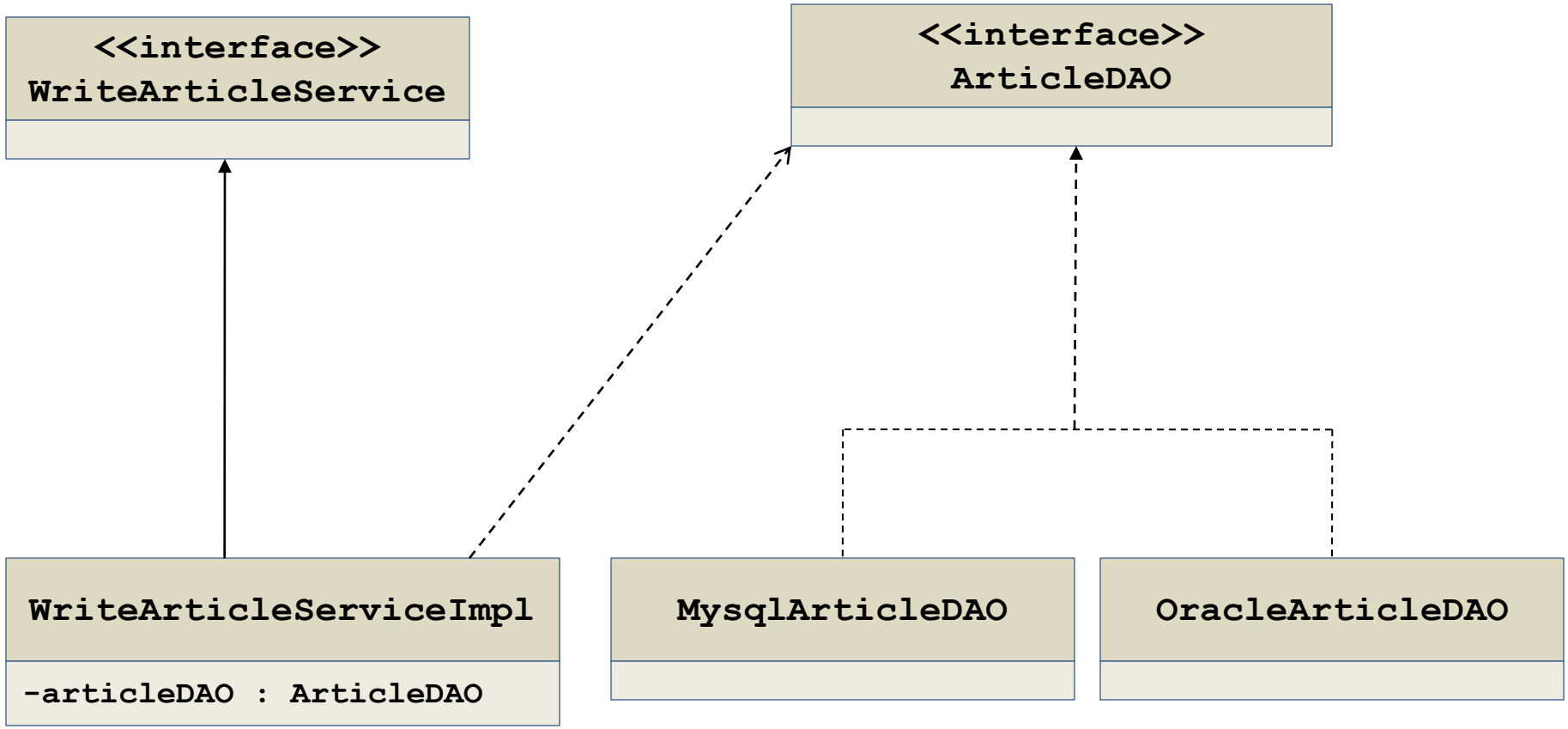
2. 주요폴더
   - dist : 스프링 jar 파일 포함
   - lib : 스프링을 사용하는데 필요한 모든 외부 lib
   - docs : 스프링 reference 및 API javadoc을 포함

   처음에 사용할때는 대부분의 모듈이 포함되어 있는 spring.jar사용
   -spring-framework-2.5.6-with-dependencies/dis/spring.jar
   -구체적인 모듈 구성 [p27~p30 참고]

3. 설치는 압축을 풀고 해당 jar파일을 해당 프로젝트에 추가
   여기서는 웹기반 프로젝트를 중심으로 진행

Spring DI(Dependency Injectioin)

DI패턴 미적용



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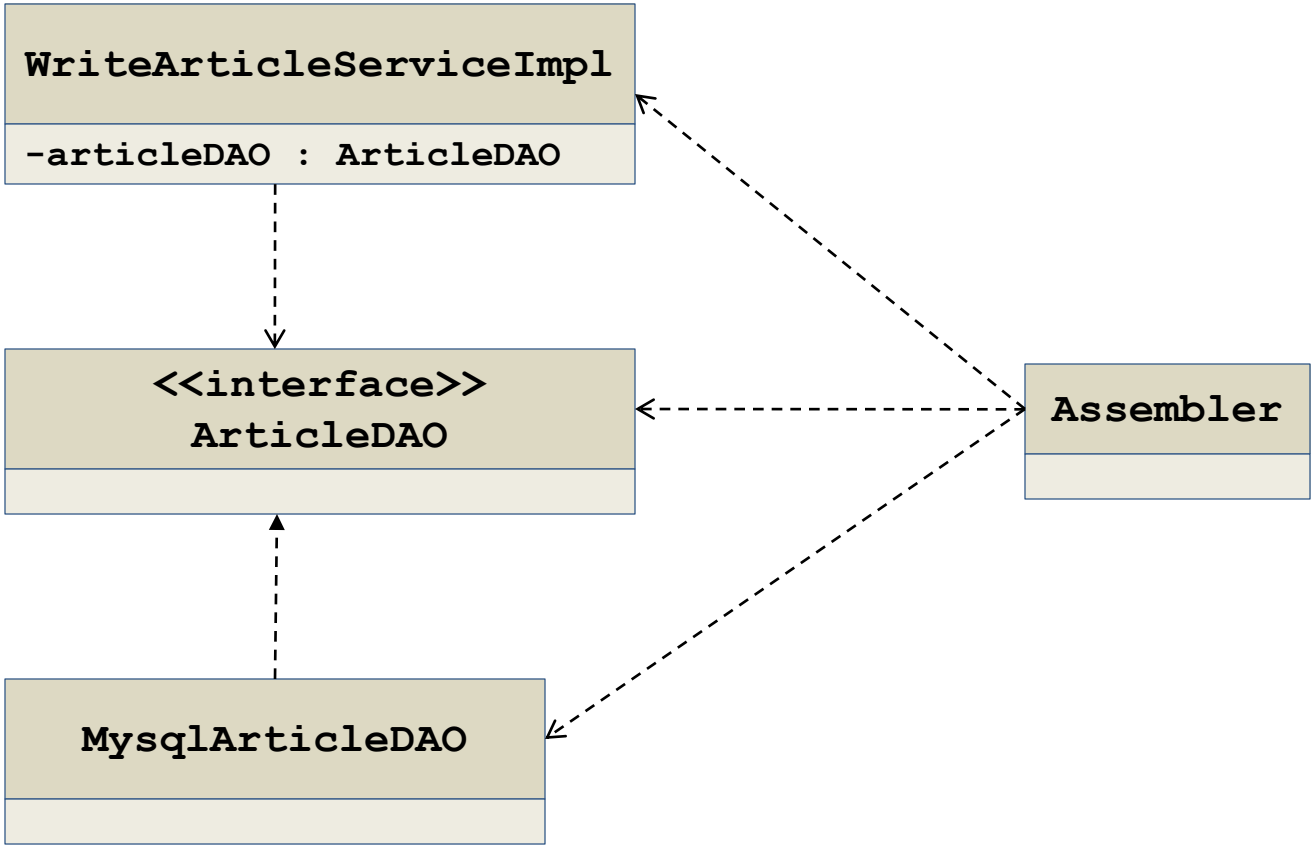
Spring DI(Dependency Injection)

Spring에서 DI패턴 적용



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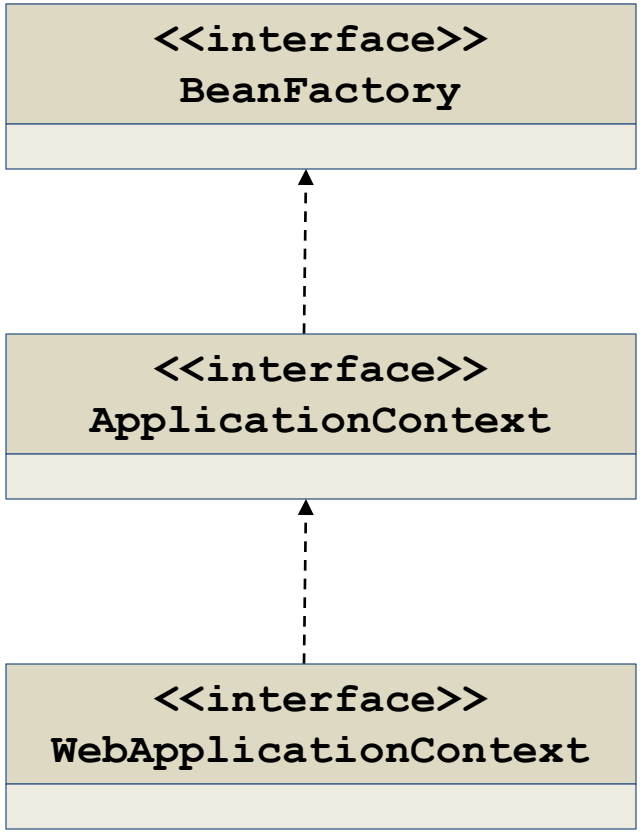
Spring DI(Dependency Injection)

Spring Container의 주요 interface



빈 객체를 관리, Bean객체간의 의존관계를 설정

```
Resource resource = new FileSystemResource();
XmlBeanFactory factory = new XmlBeanFactory(resource);
ParseFactory factory = factory.getBean("parserFactory");
```

자원처리 추상화, 메시지 지원 및 국제화 지원,
이벤트 지원

웹 어플리 케이션을 위한 ApplicationContext
- ServletContext 하나당 ApplicationContext

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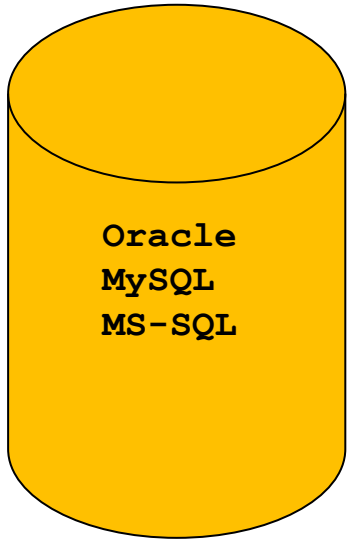
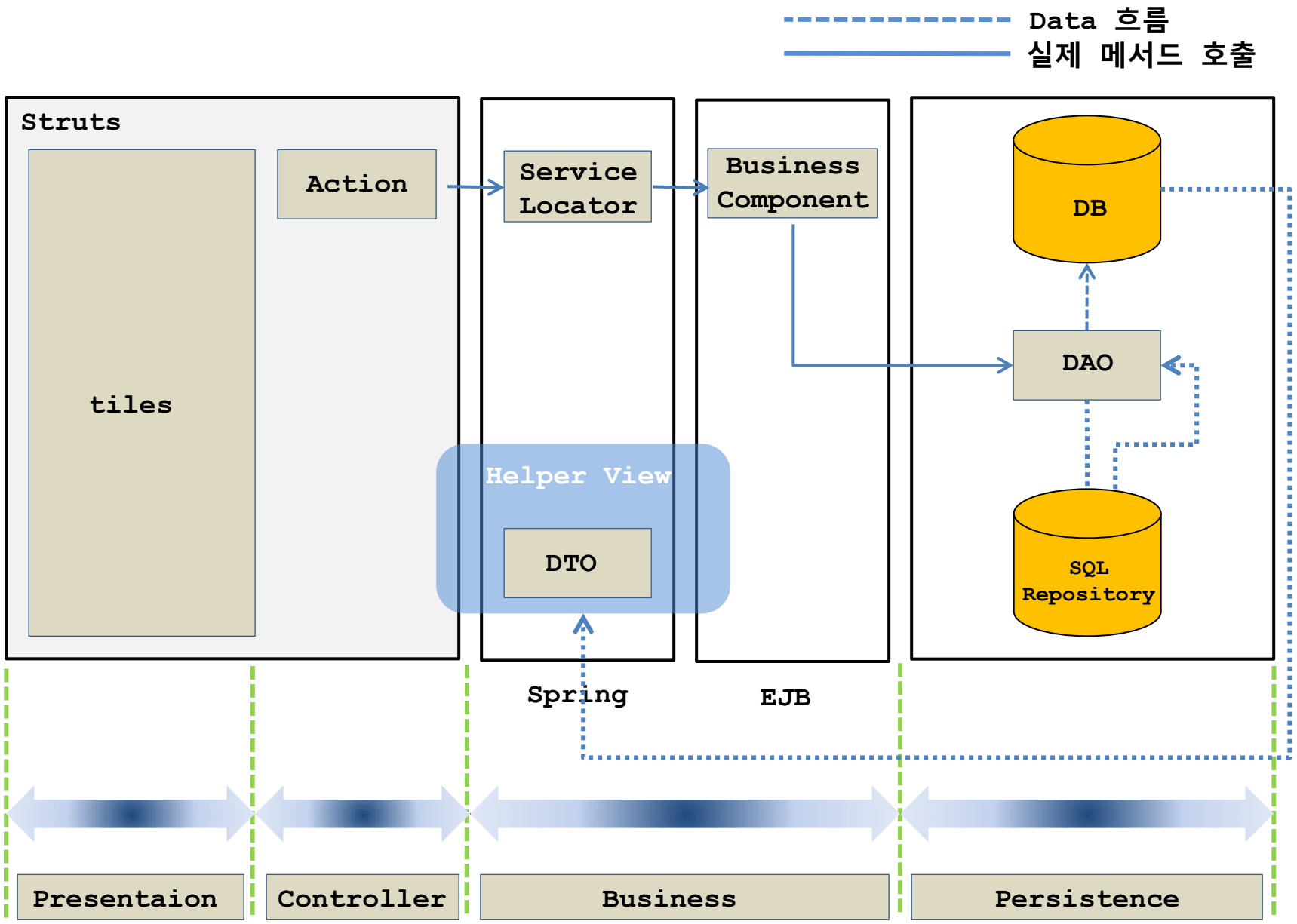
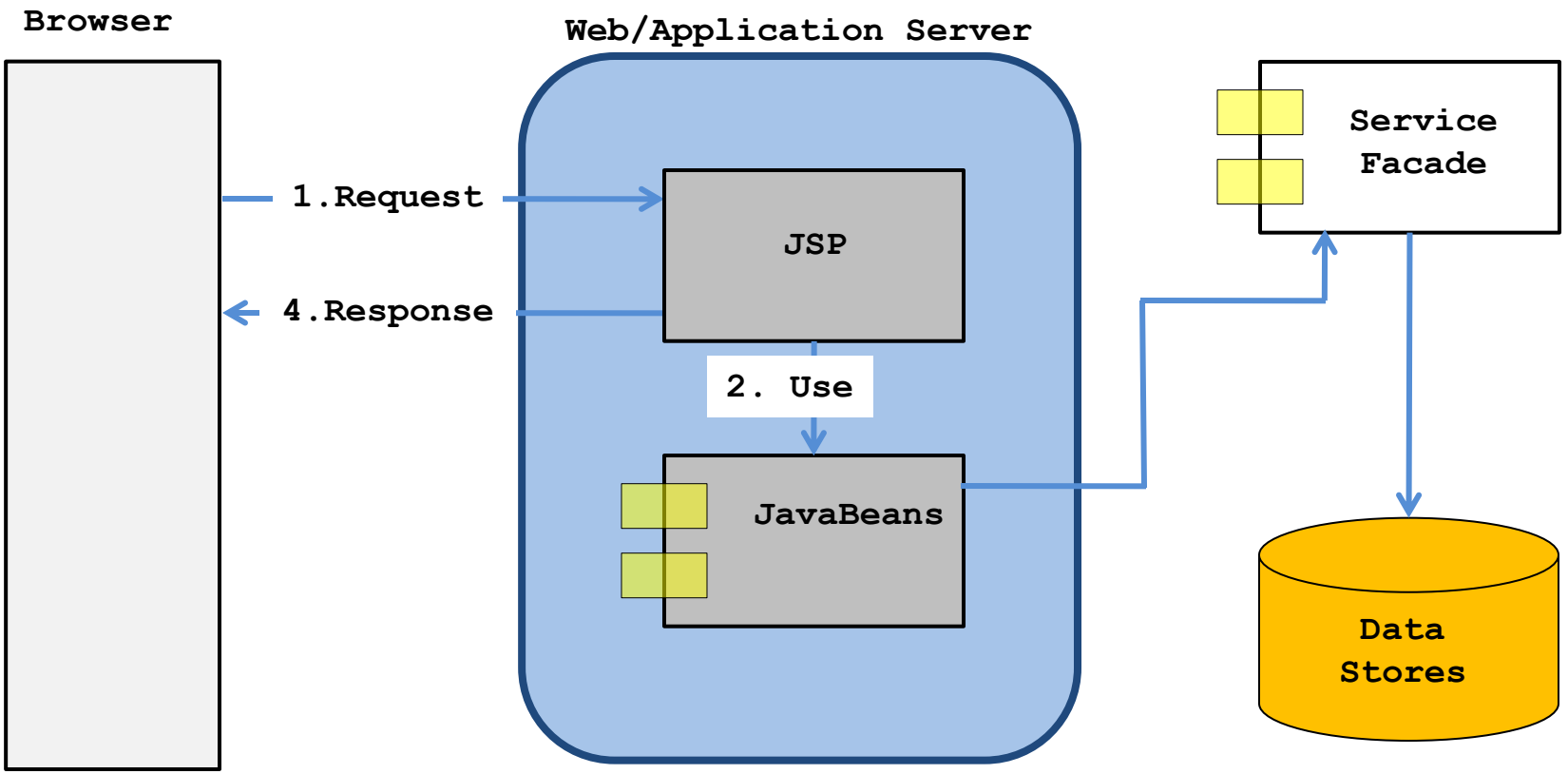
Tier/Layer

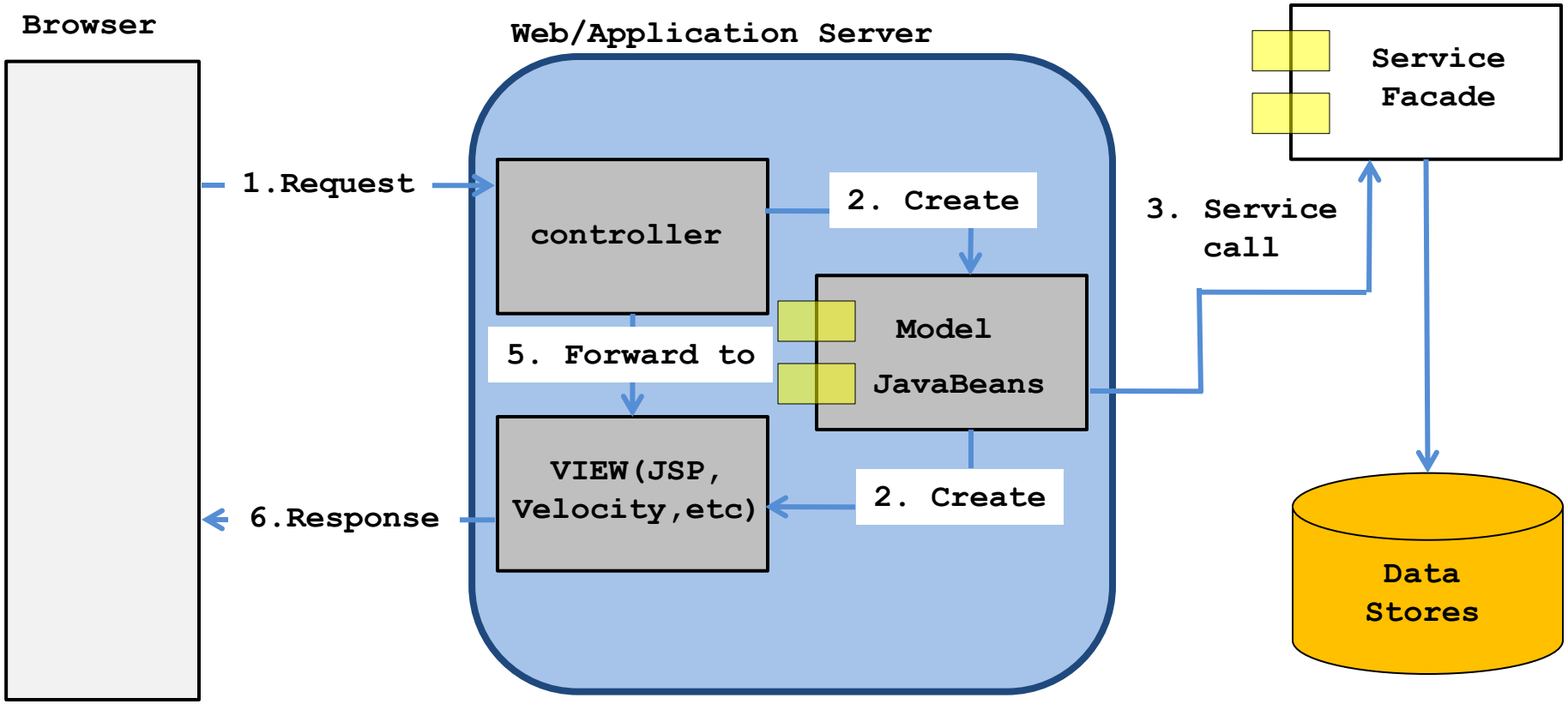
Tier	Client	Server			EIS
구성	HTML JS CSS	JSP Serlvet XML설정	EJB Service	SQL 관련작업	
기본 프레임 워크	Ajax Flex	Struts Spring MVC webwork velocity JSF	EJB Spring	Hibernate DAO MyBATIS	
Layer	Presentation		Business	Persistence	
MVC	View	controller	Model		Data저장
기능	표시	HTML생성 리소드 계층	비즈니스 로직처리	Data처리 관련	


Data 흐름
실제 메서드 호출
Struts
tiles
Action
Service Locator
Business Component
DB
DAO
SQL Repository
Helper View
DTO
Spring
EJB
Presentaion
Controller
Business
Persistence

MVC Model one architecture



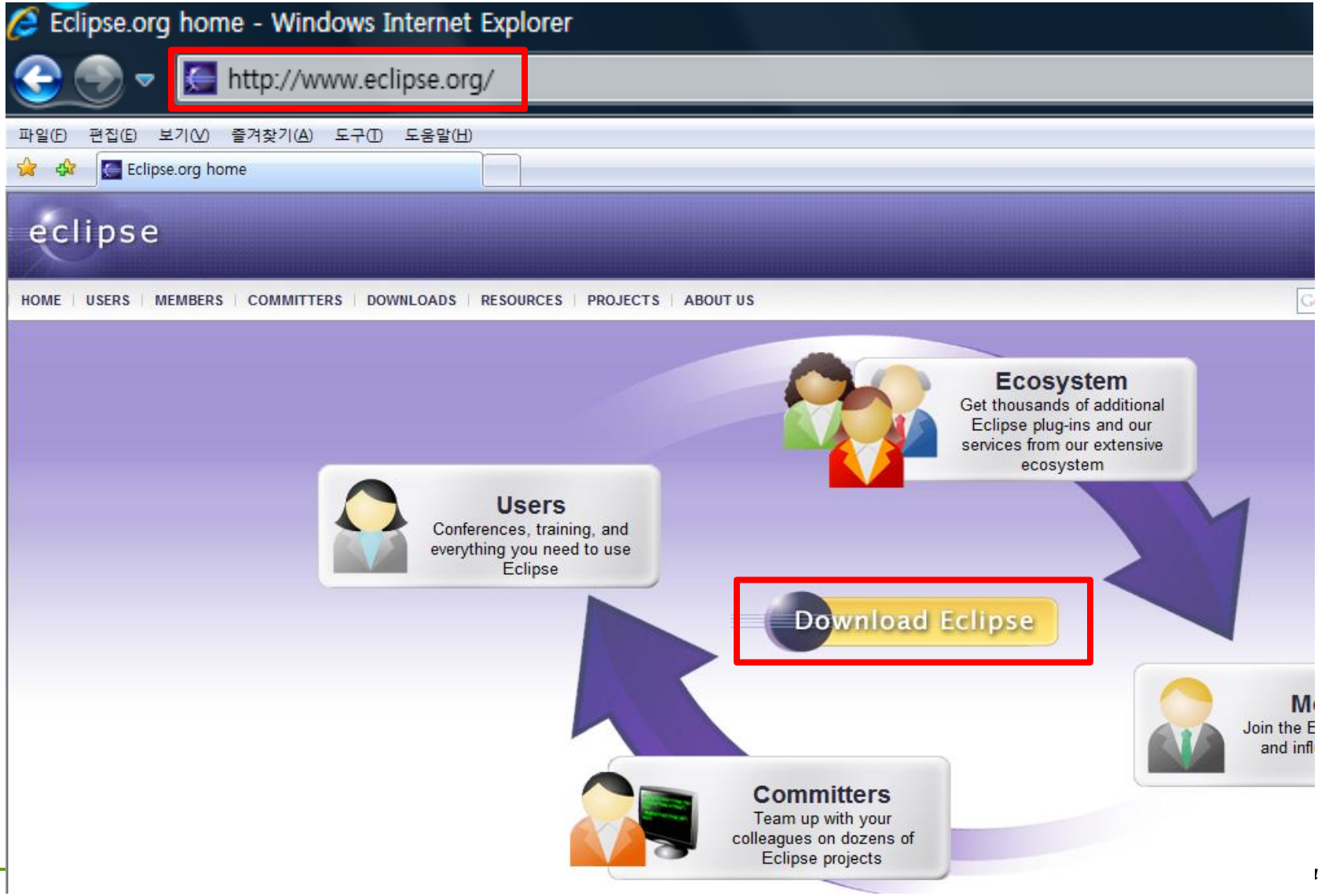
MVC Model two architecture



elipse3.4 download

download하기 위해 eclipse site로 이동

http://www.eclipse.org



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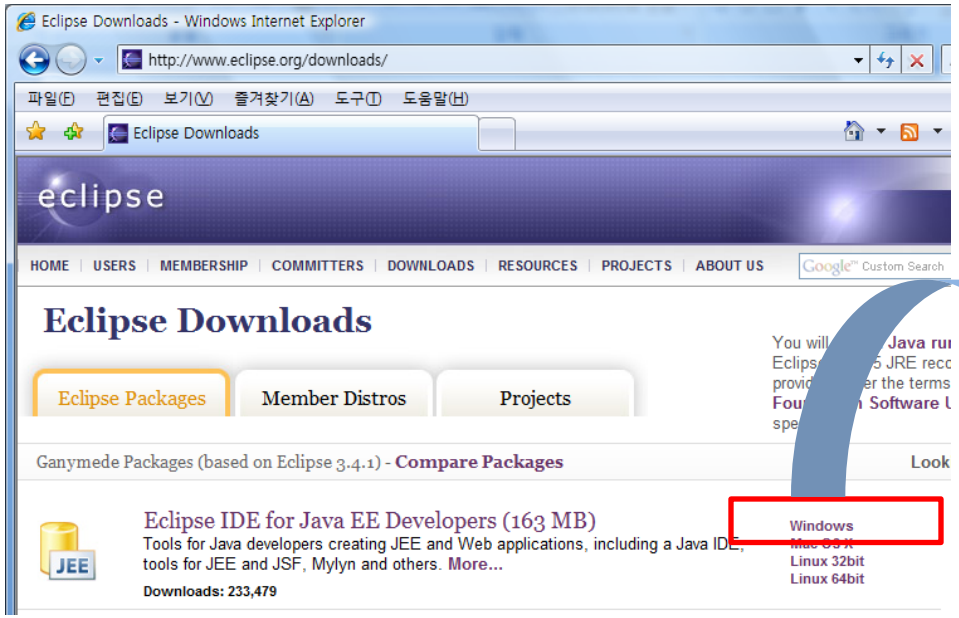
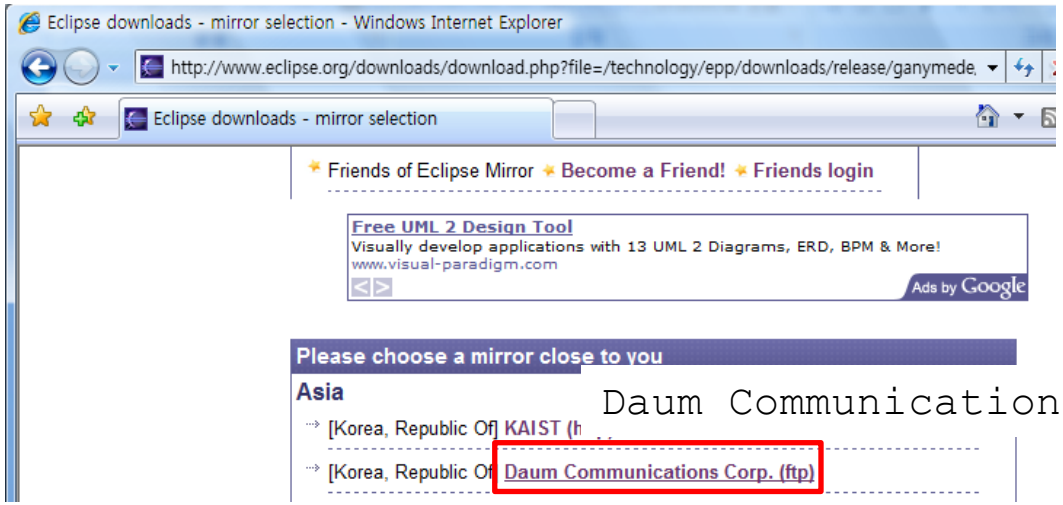
download

http://www.eclipse.org/downloads/



Windows



Daum Communications Corp. (ftp)

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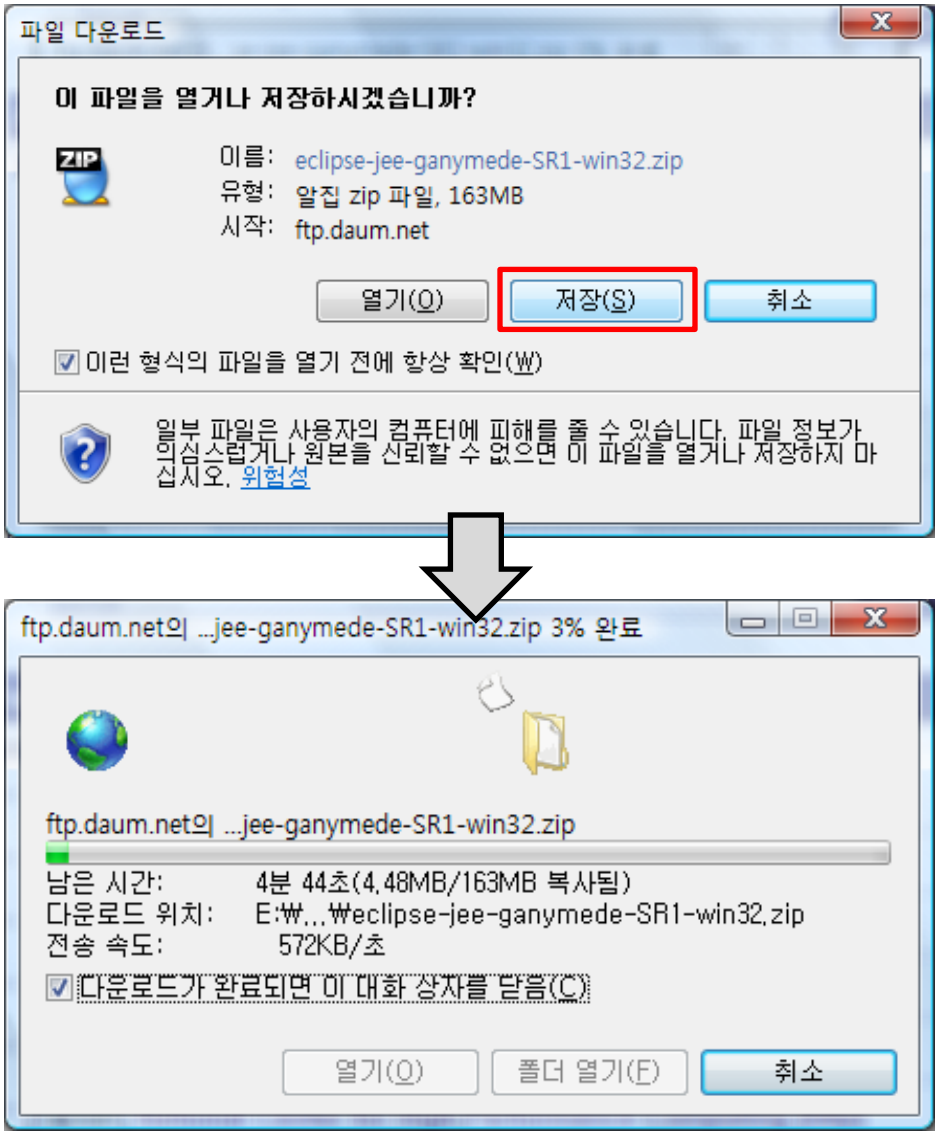
elipse3.4 download

eclipse[3.4 GANYMEDE] save



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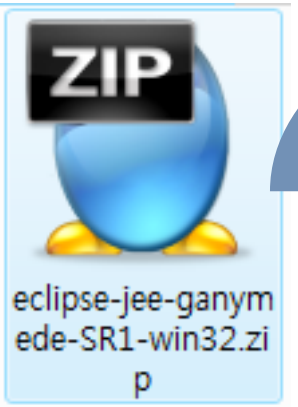
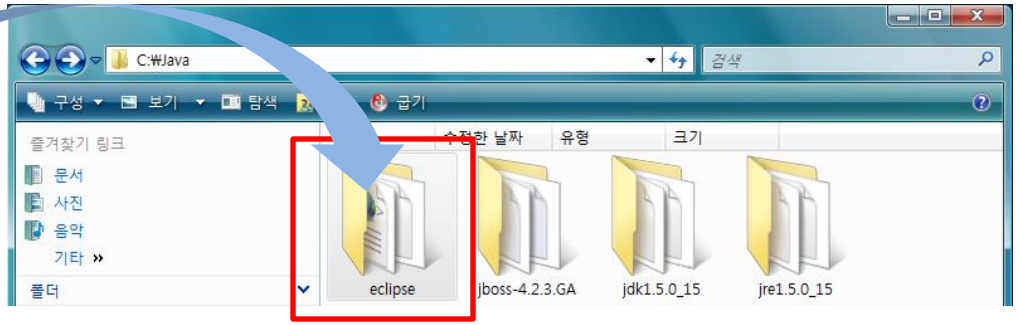
elipse3.4[ganymede] install

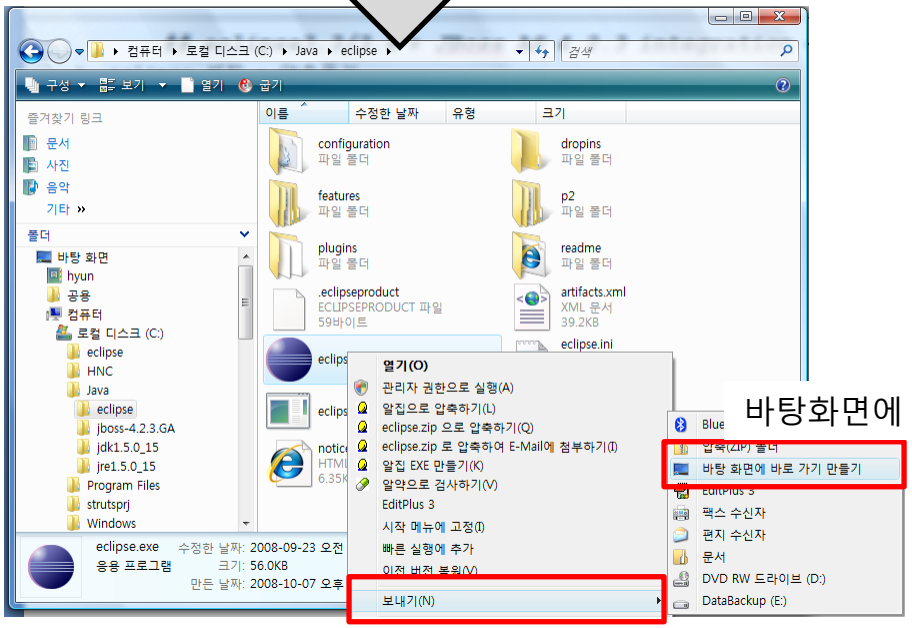
1. 압축해제



C:\Java



2. C:\Java\eclipse 이동



바탕화면에 바로가기 만들기

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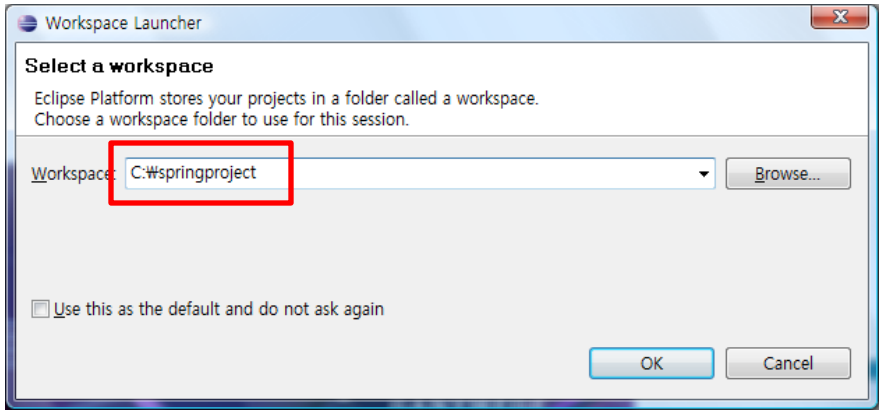
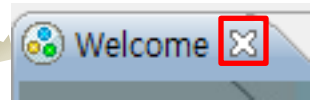
elipse3.4[ganymede] 실행(run)

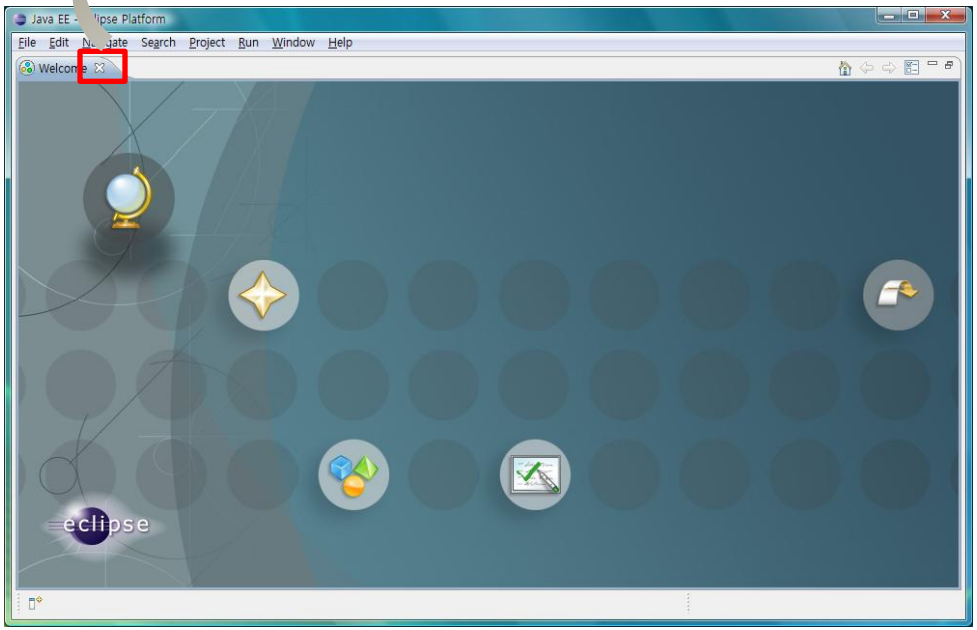
3. 바탕화면에서 eclipse 아이콘 더블클릭!!

4. Workspace창에 '*C:\springproject*' 입력 후 [OK]버튼 클릭



5. Welcome 화면 닫기





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SPRING framework - download

spring 2.5.6 download

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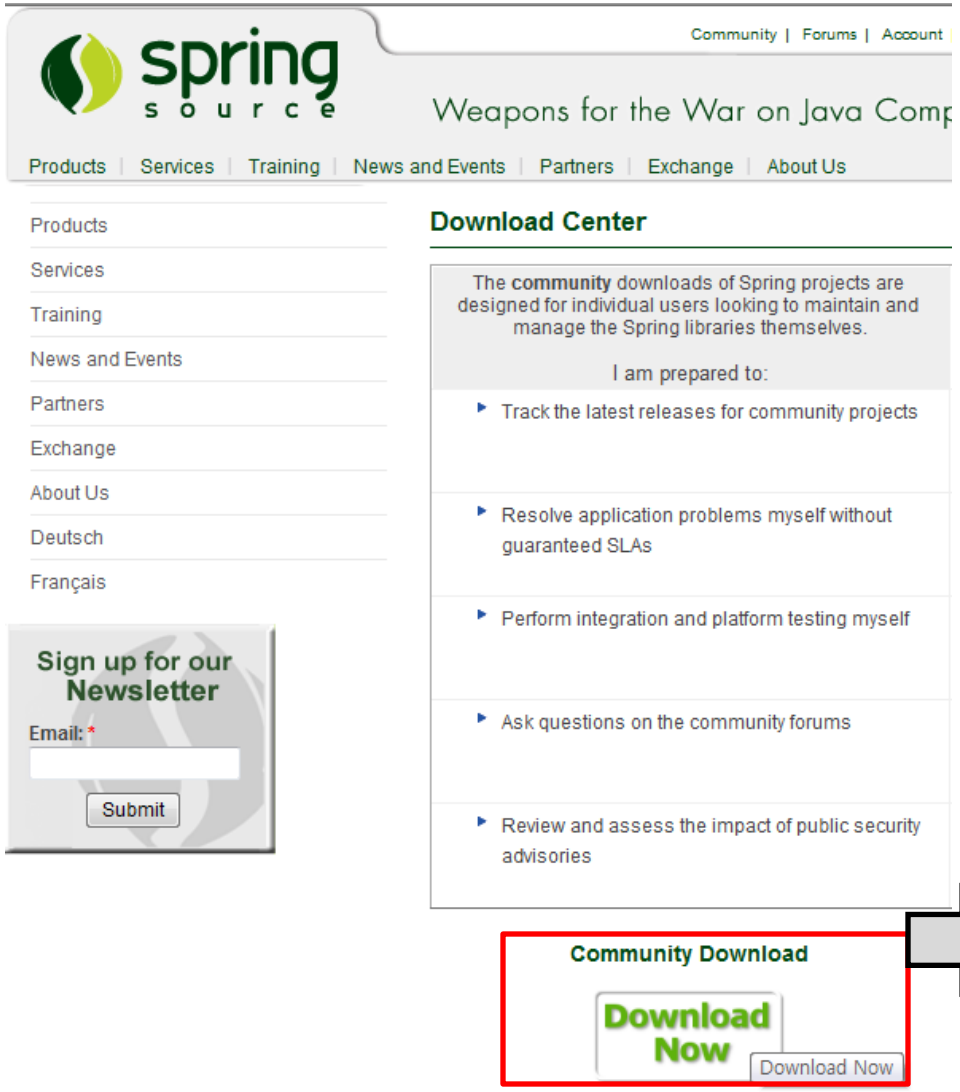
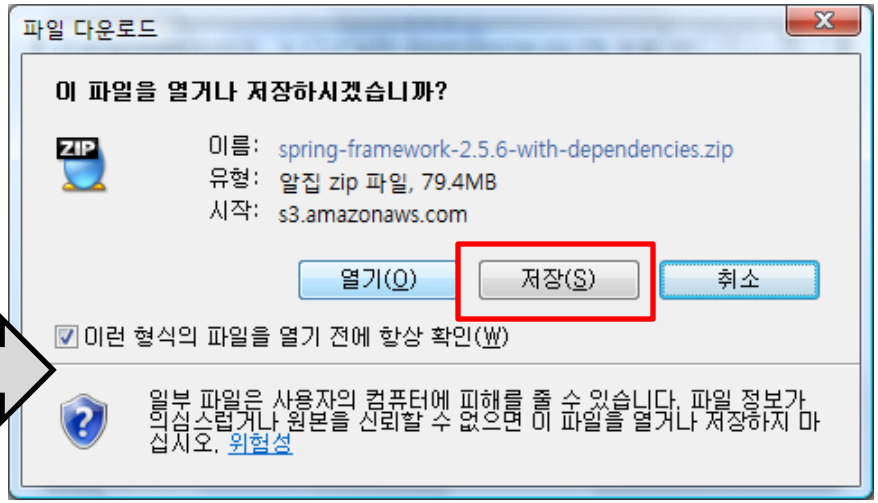
SPRING framework





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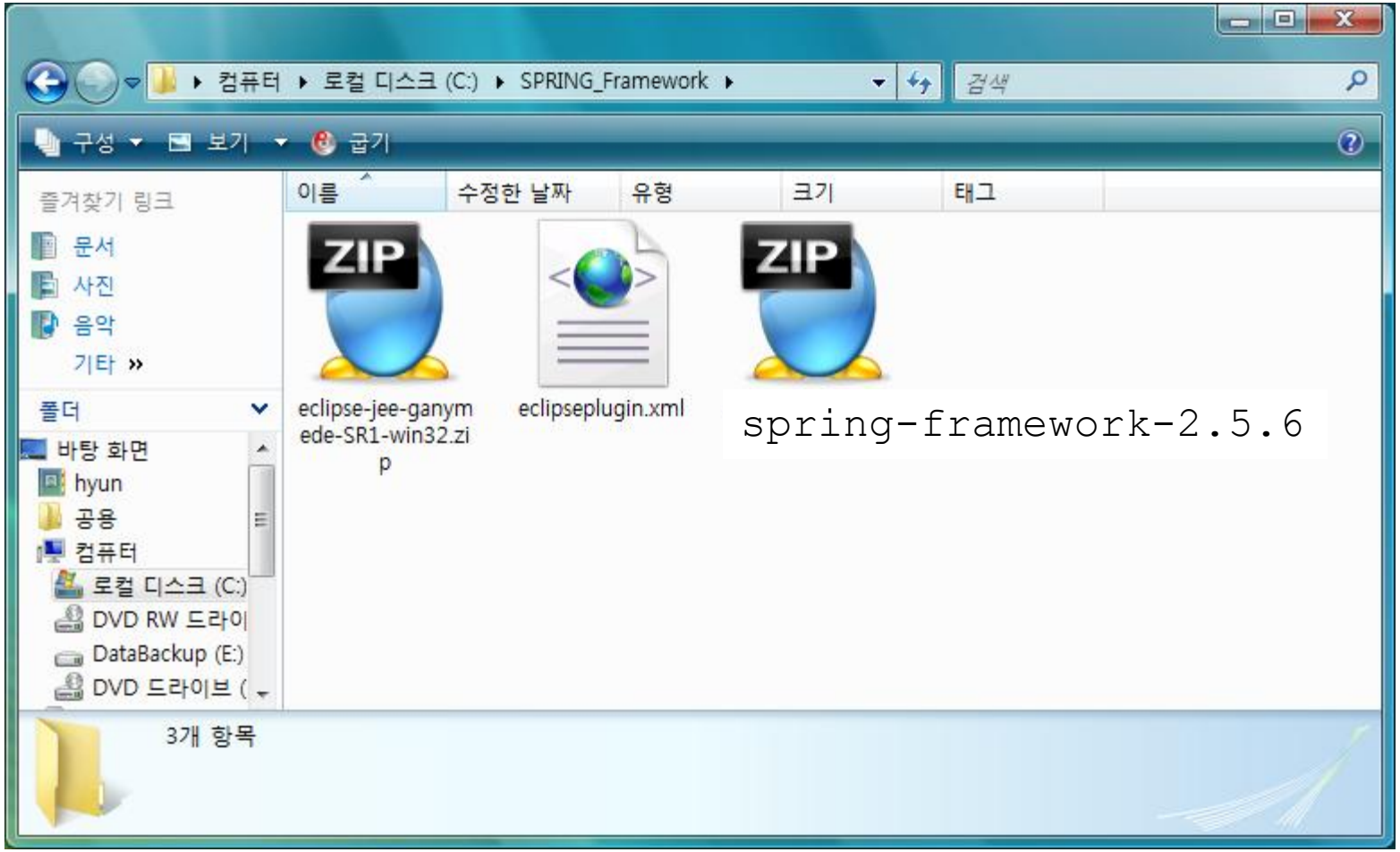
spring framework 실습하기 위한 파일구성



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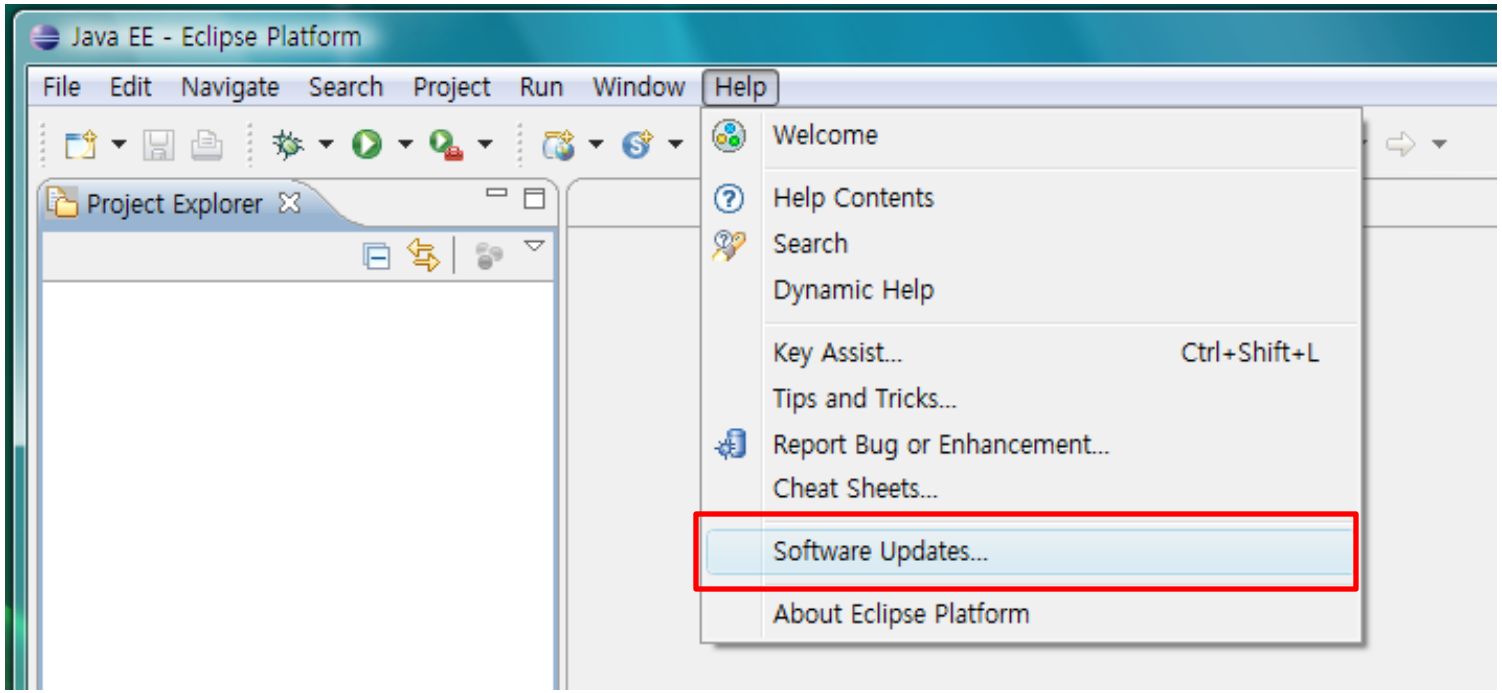
SPRING framework - spring IDE



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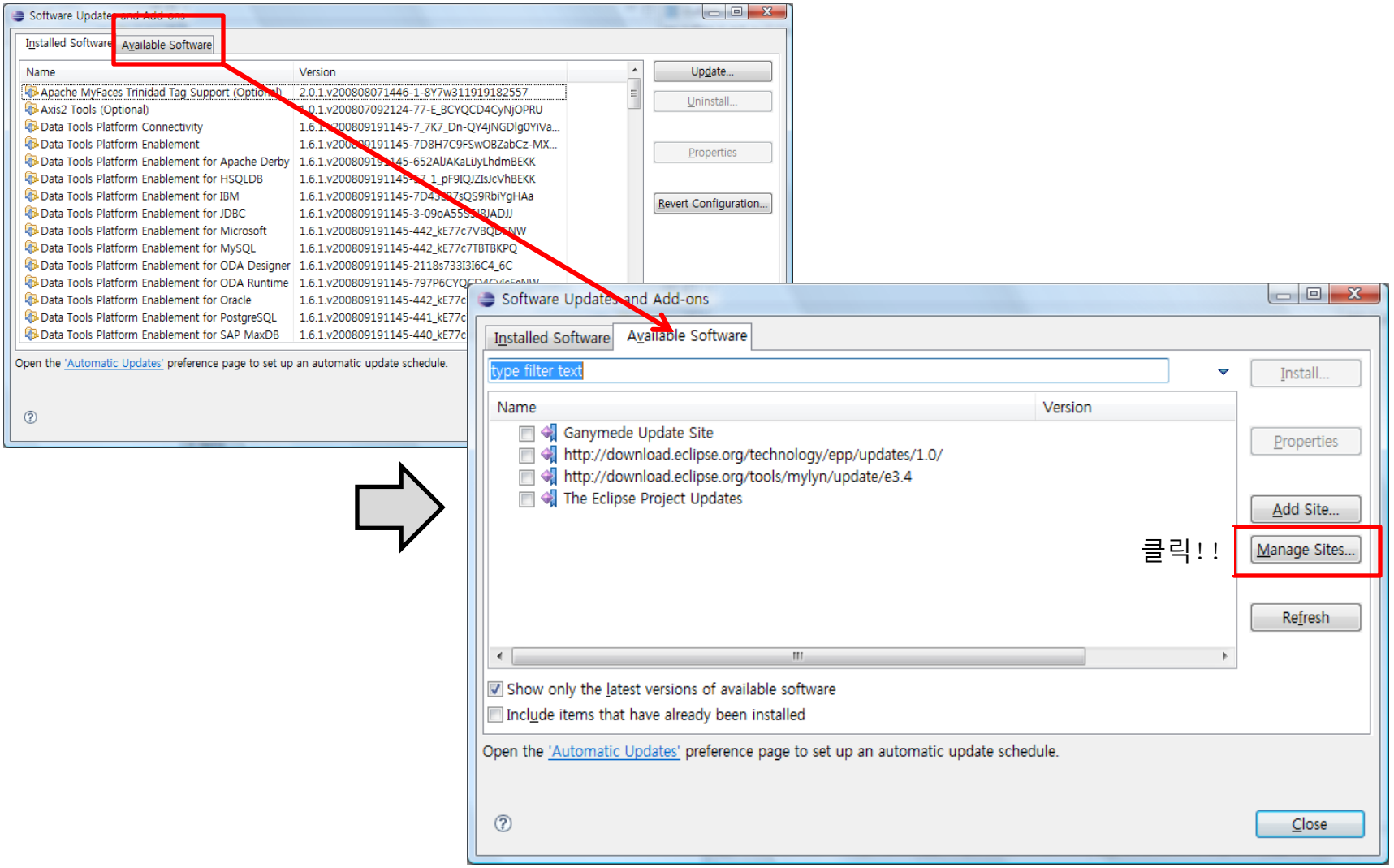
SPRING framework - spring IDE



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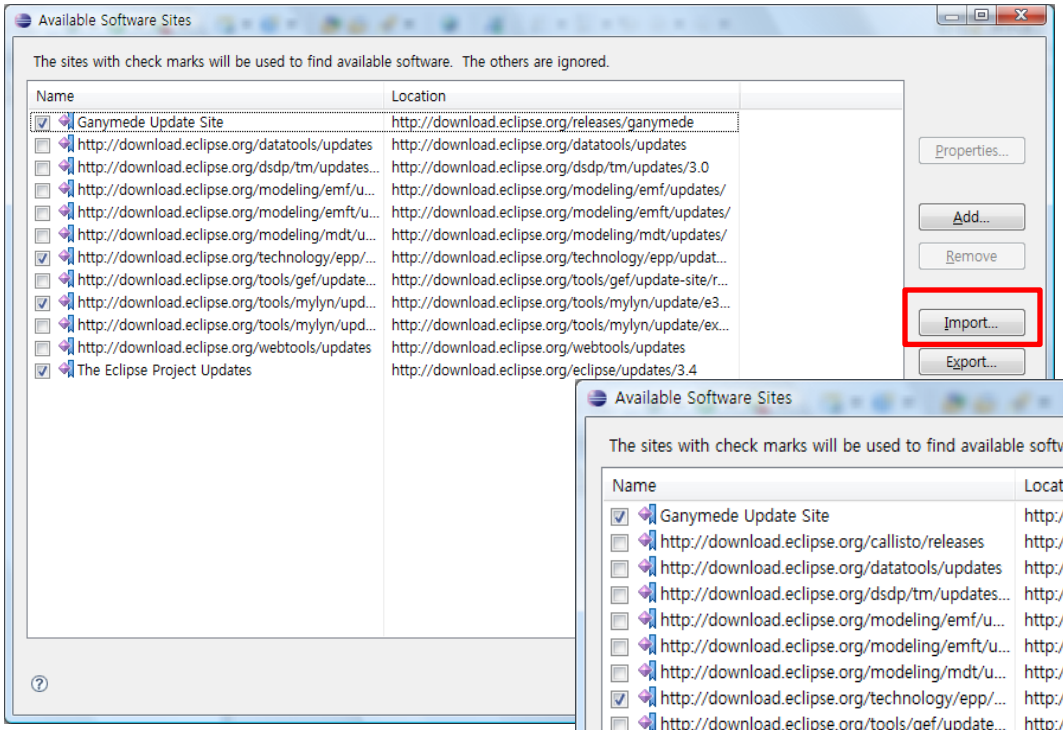
SPRING framework - spring IDE



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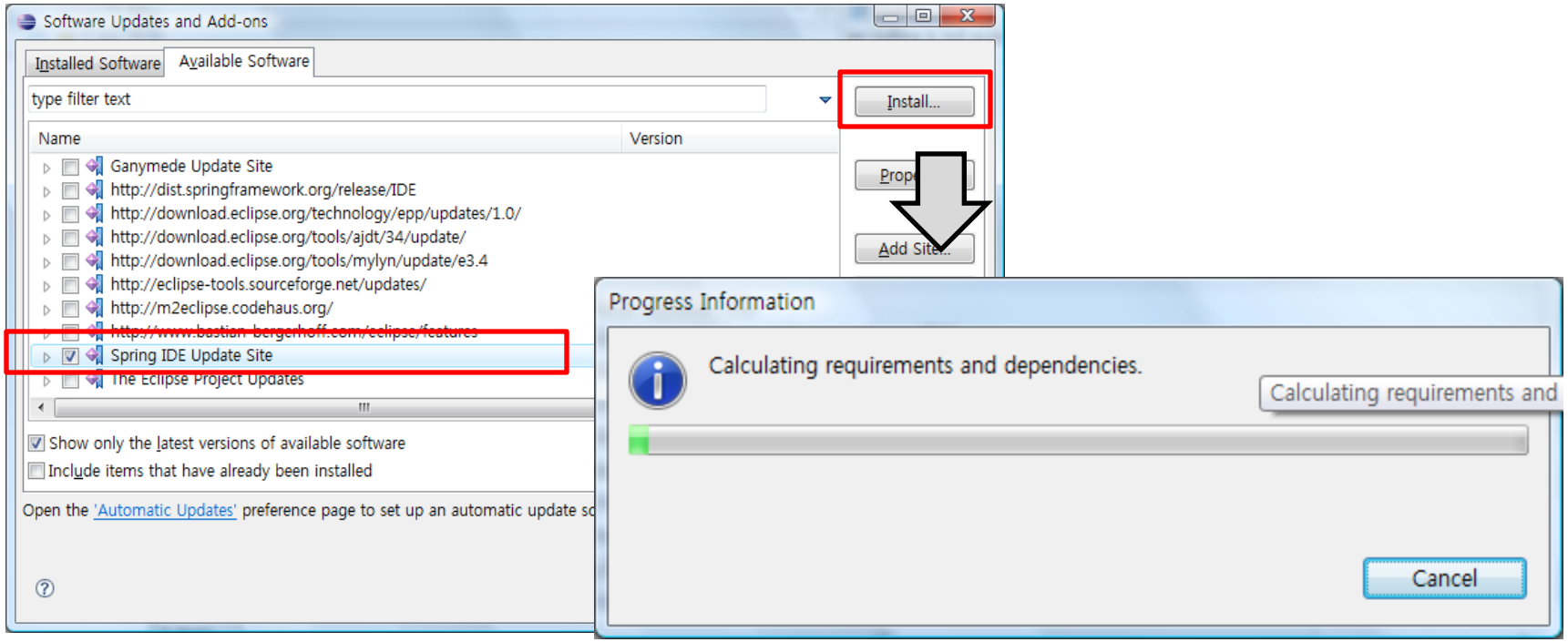
SPRING framework - spring IDE



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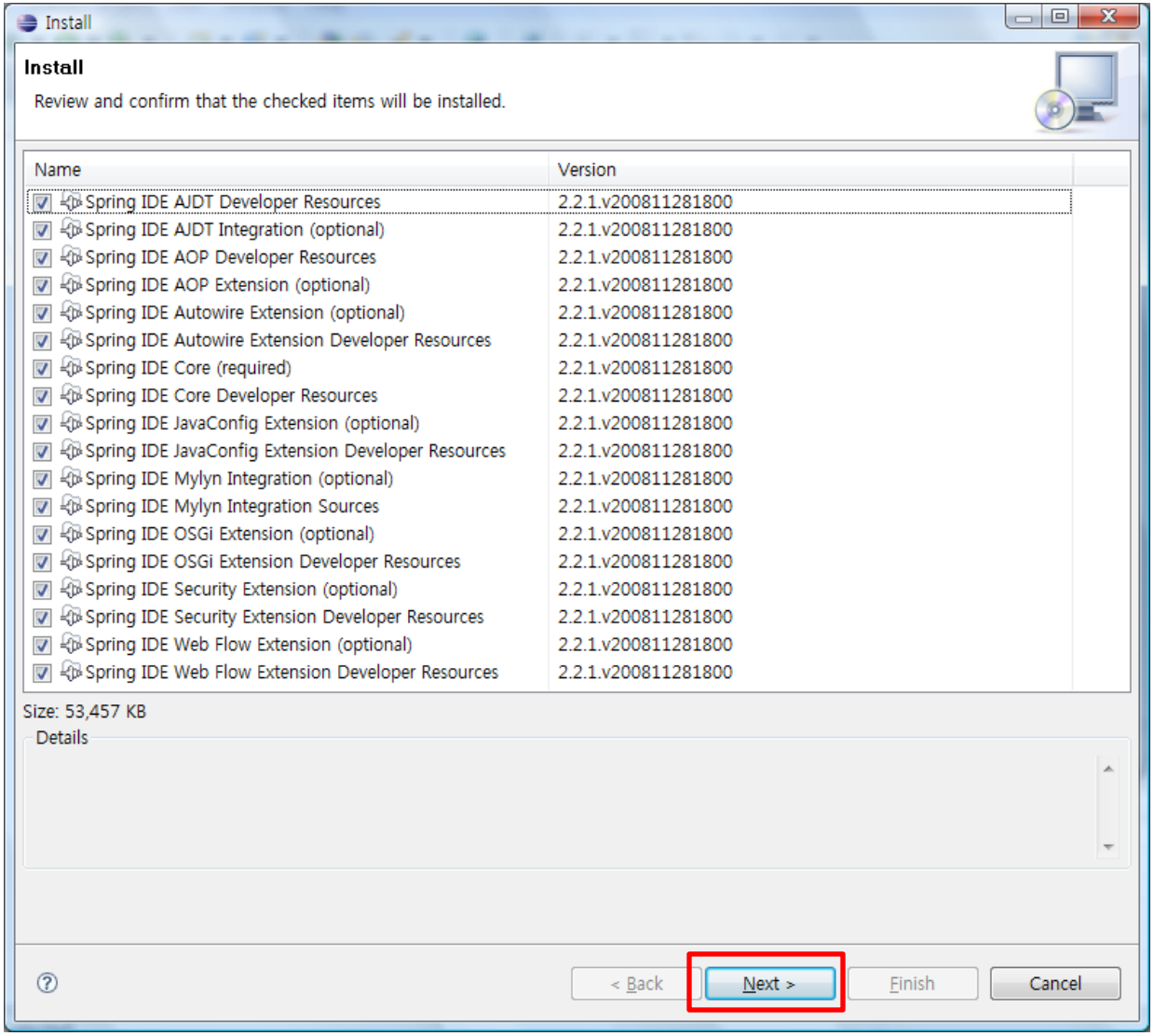
SPRING framework - spring IDE



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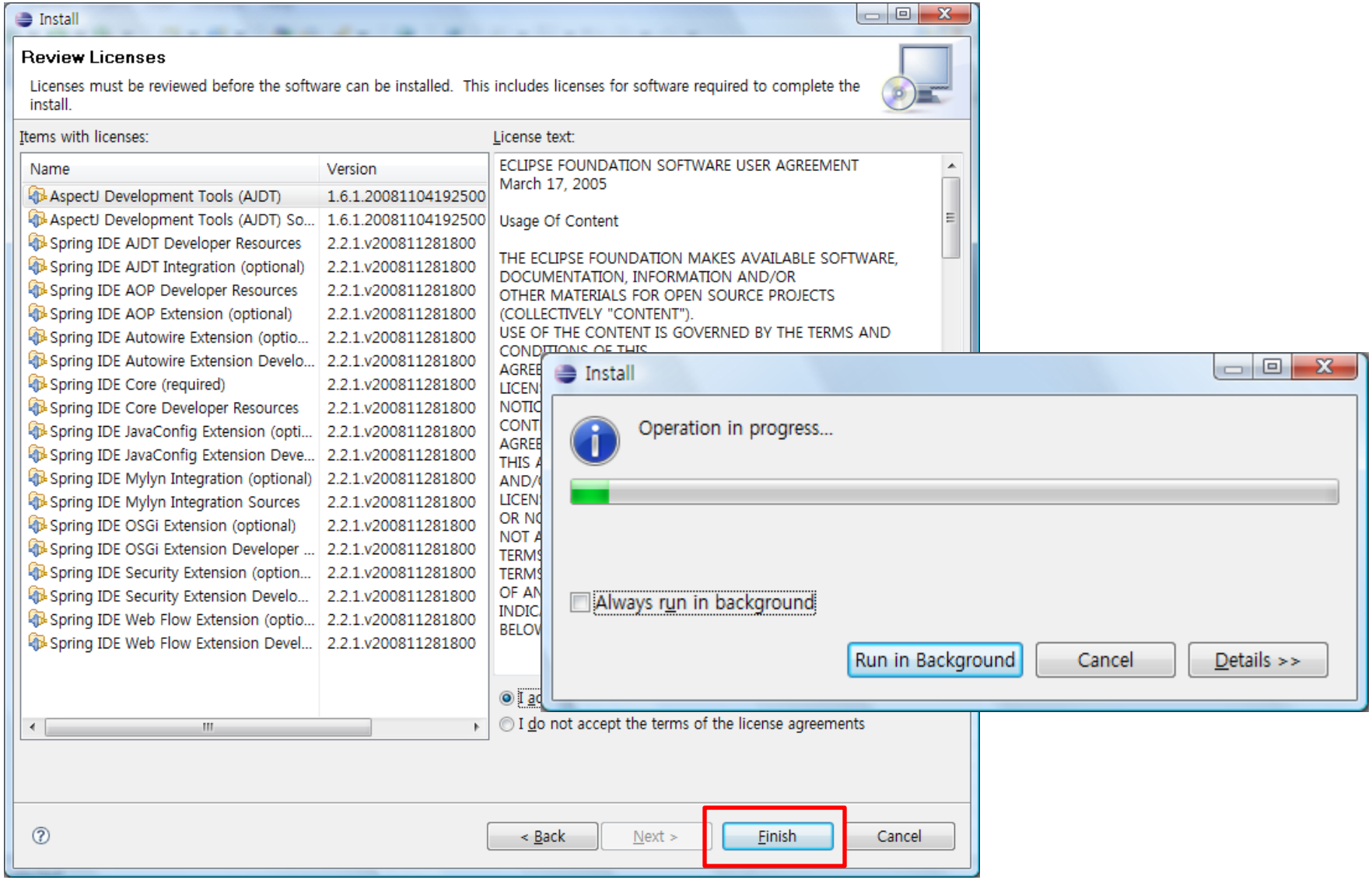
SPRING framework - spring IDE



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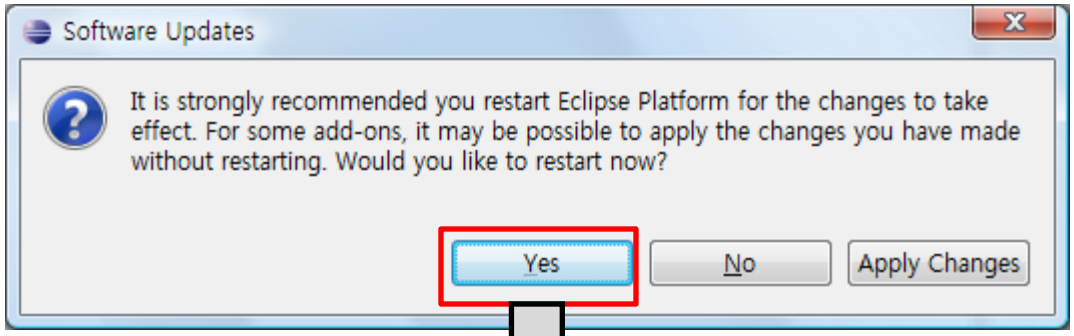
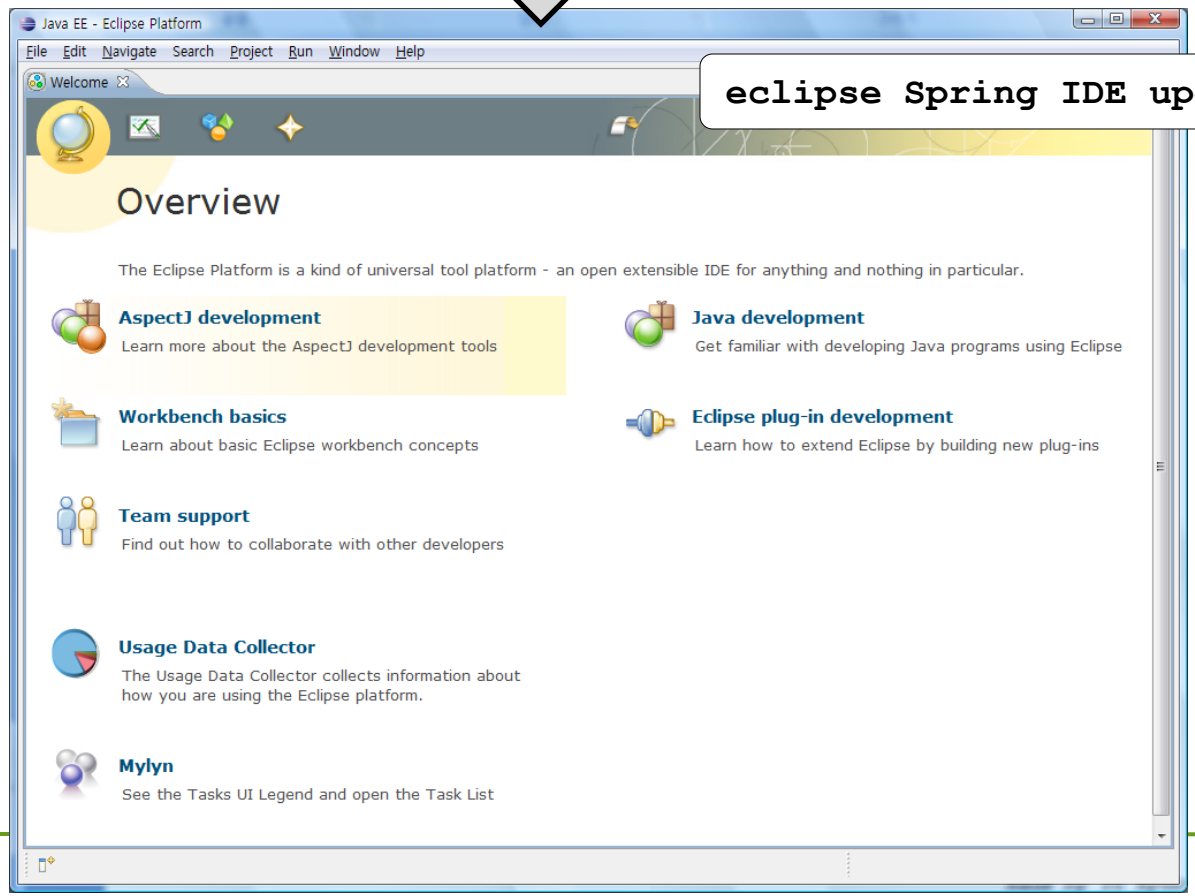
SPRING framework - spring IDE





eclipse Spring IDE update 완료

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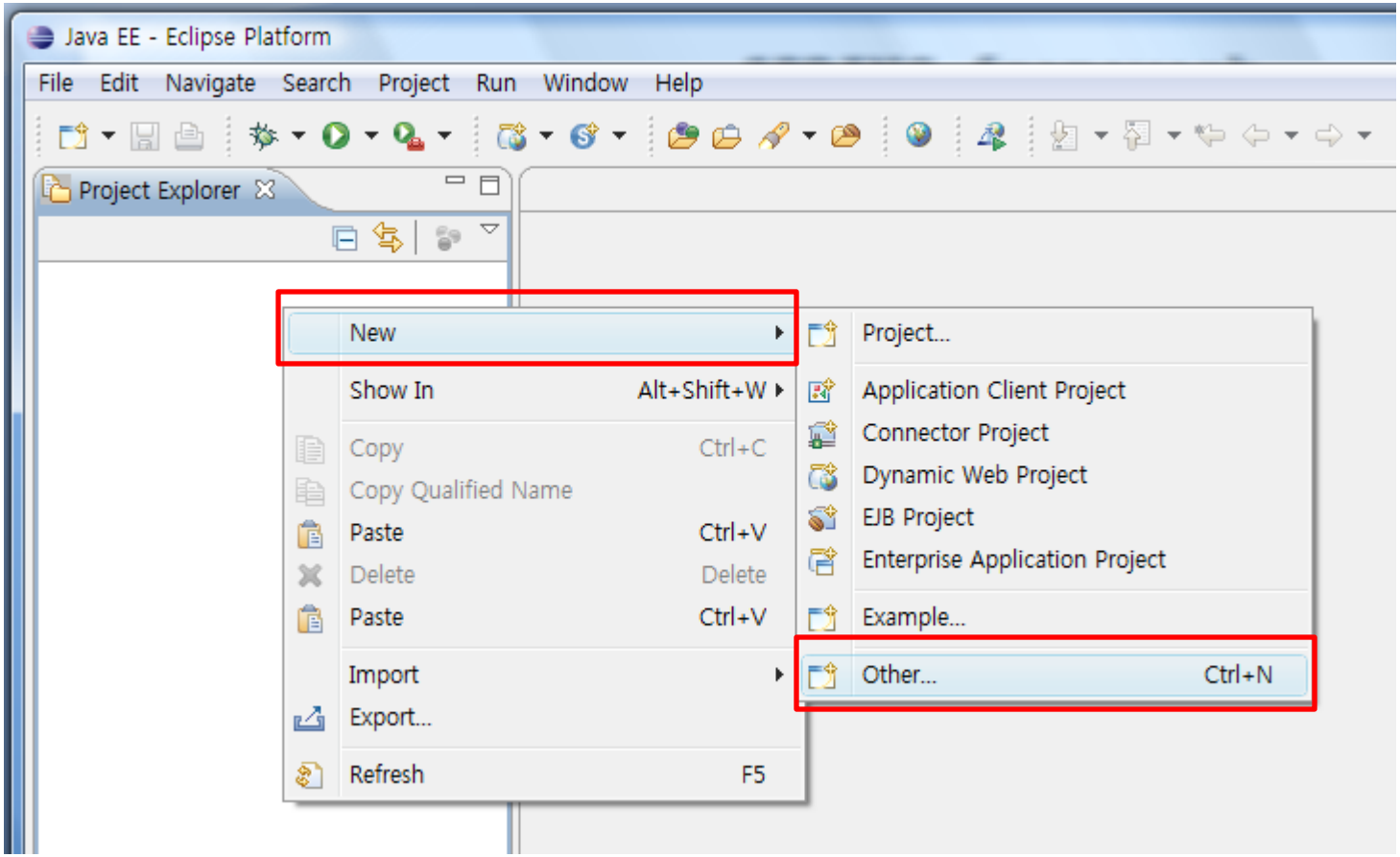
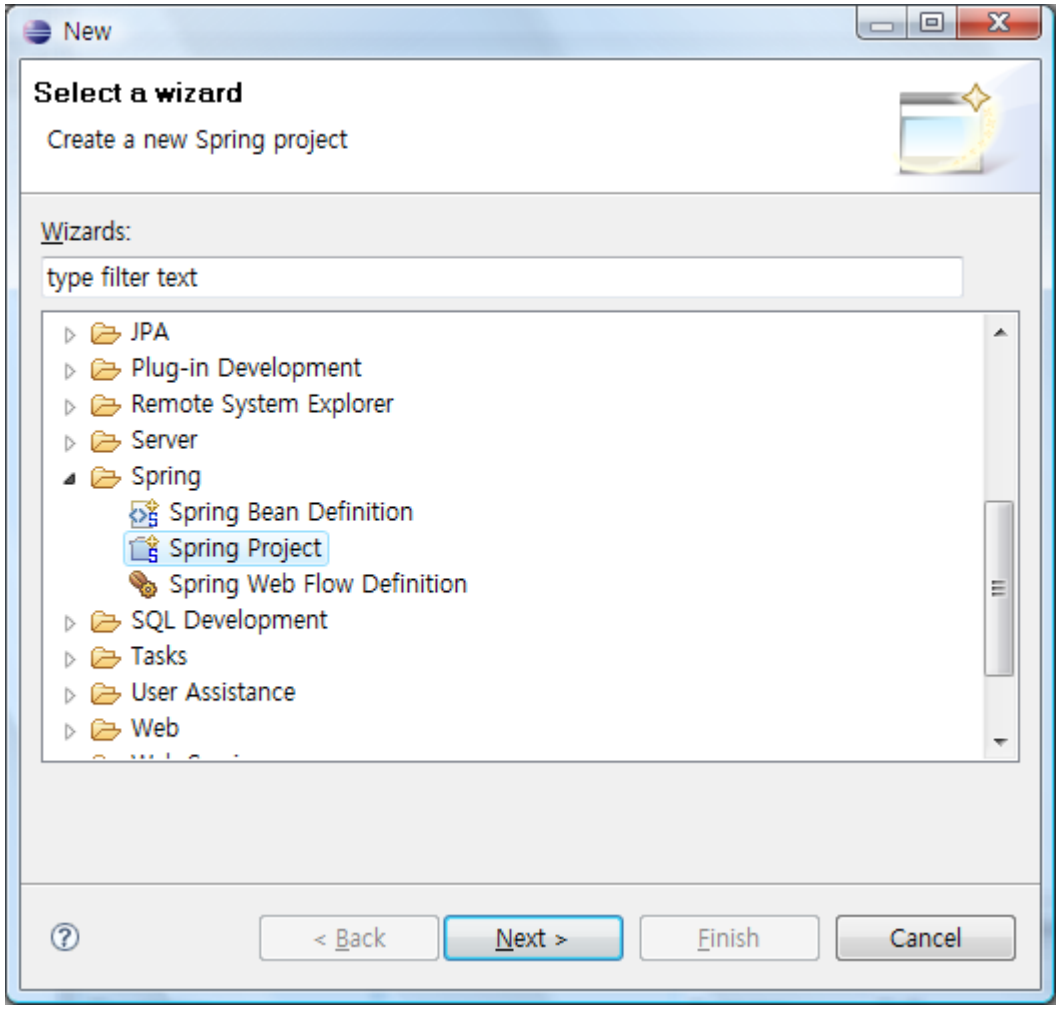
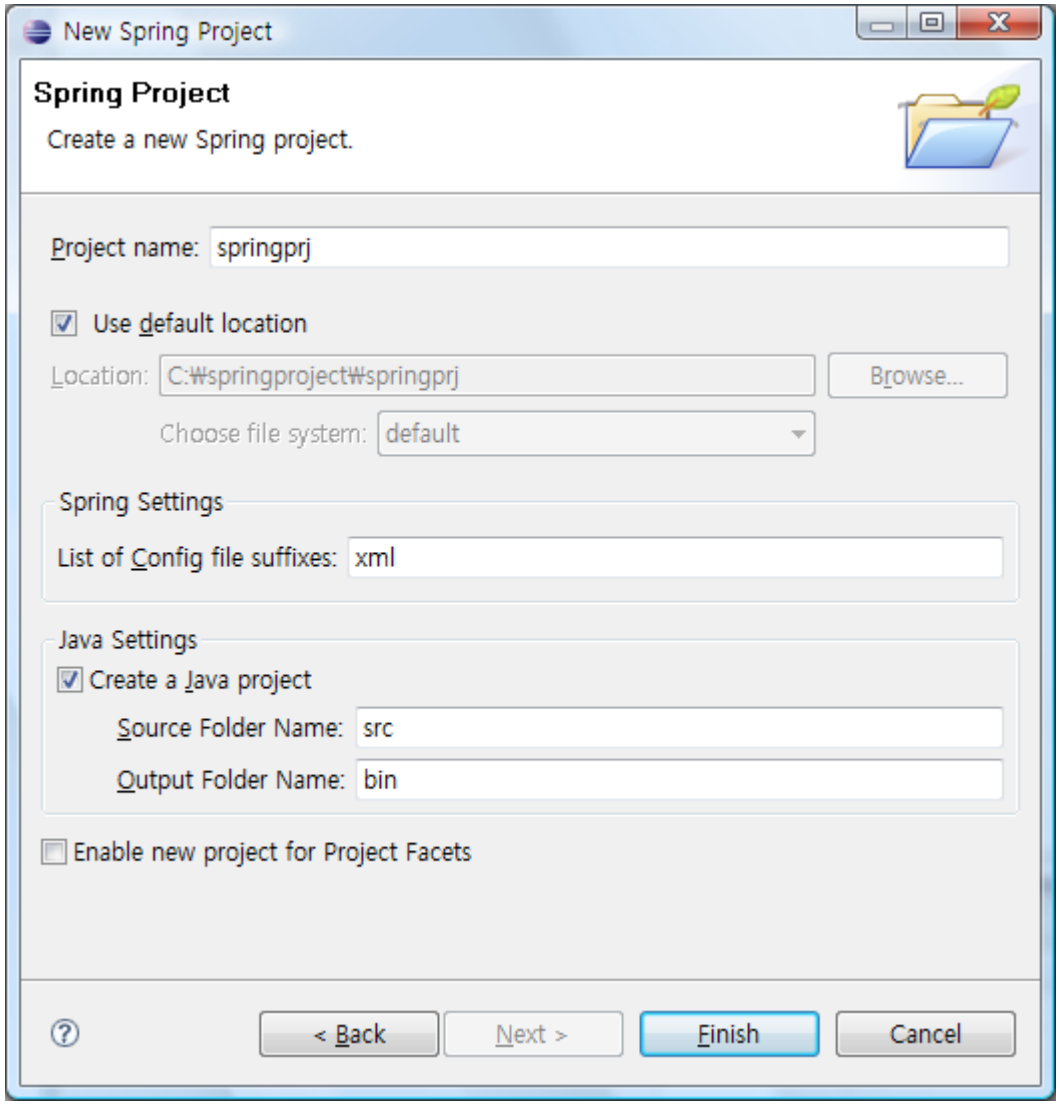
앞에 화면에서 [yes]를 눌렀다면 재시작을 한다.

Project Explorer에서 마우스 우클릭 > New > Other



Spring > Spring Project > Next 클릭





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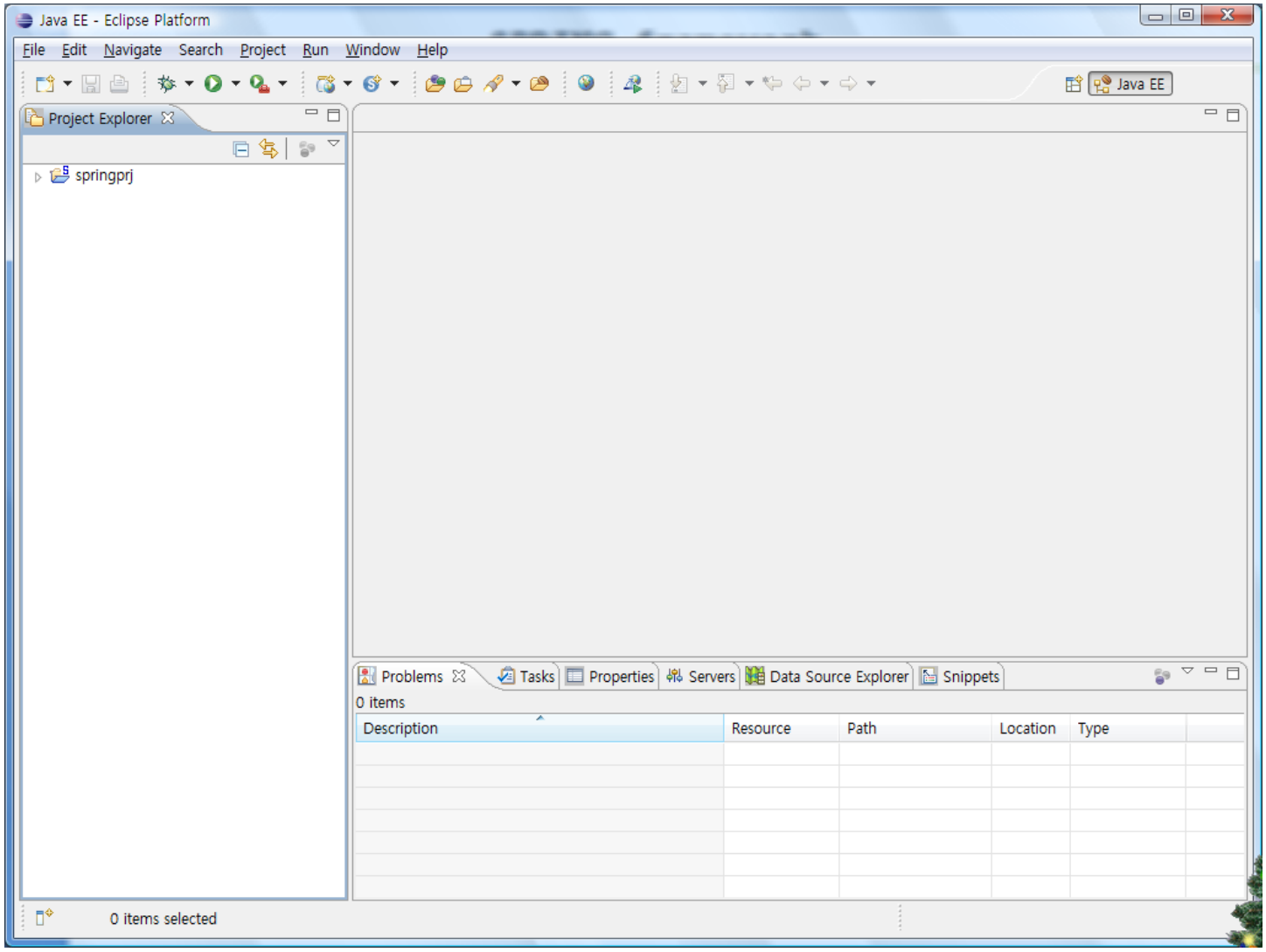

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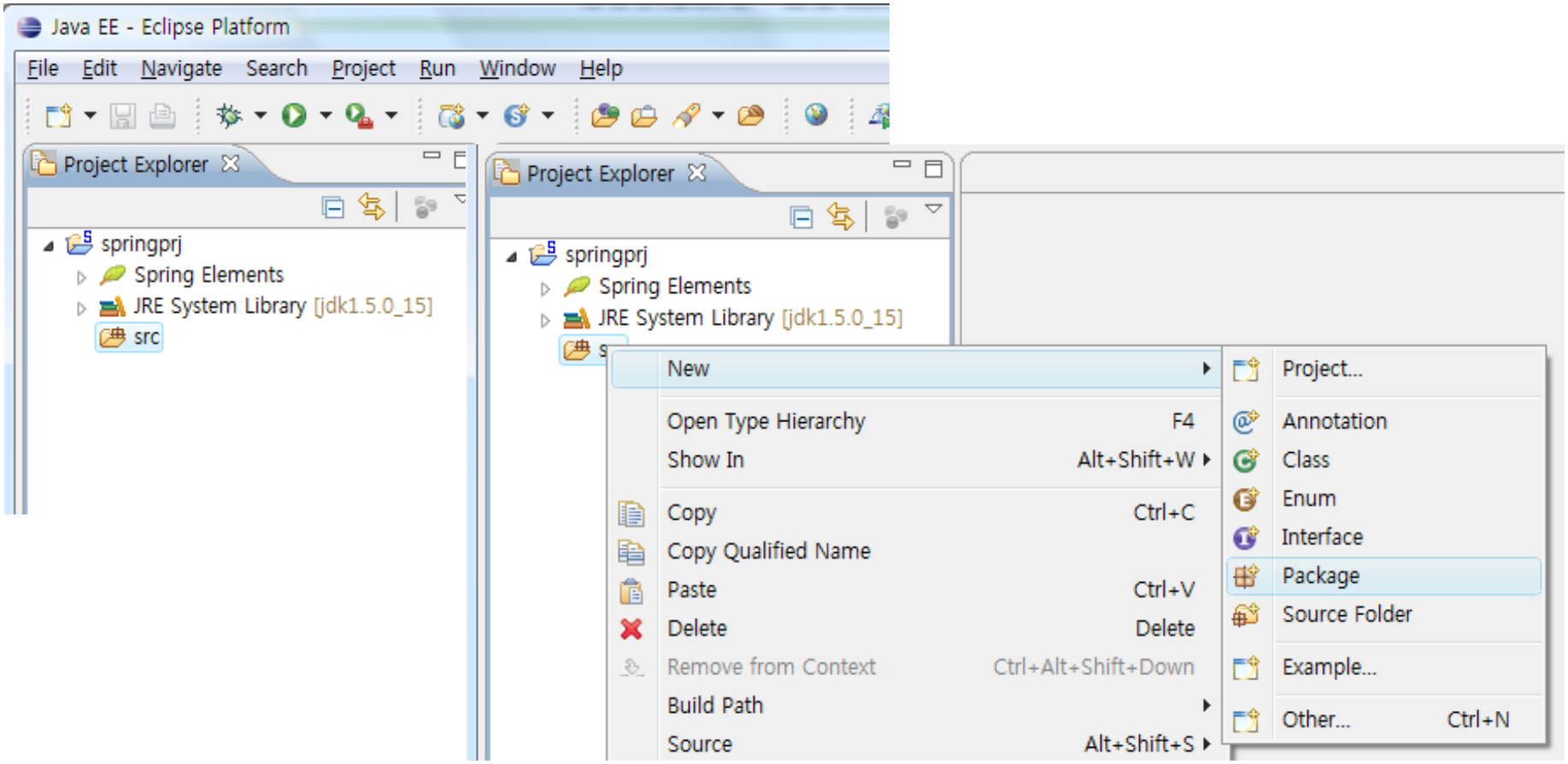
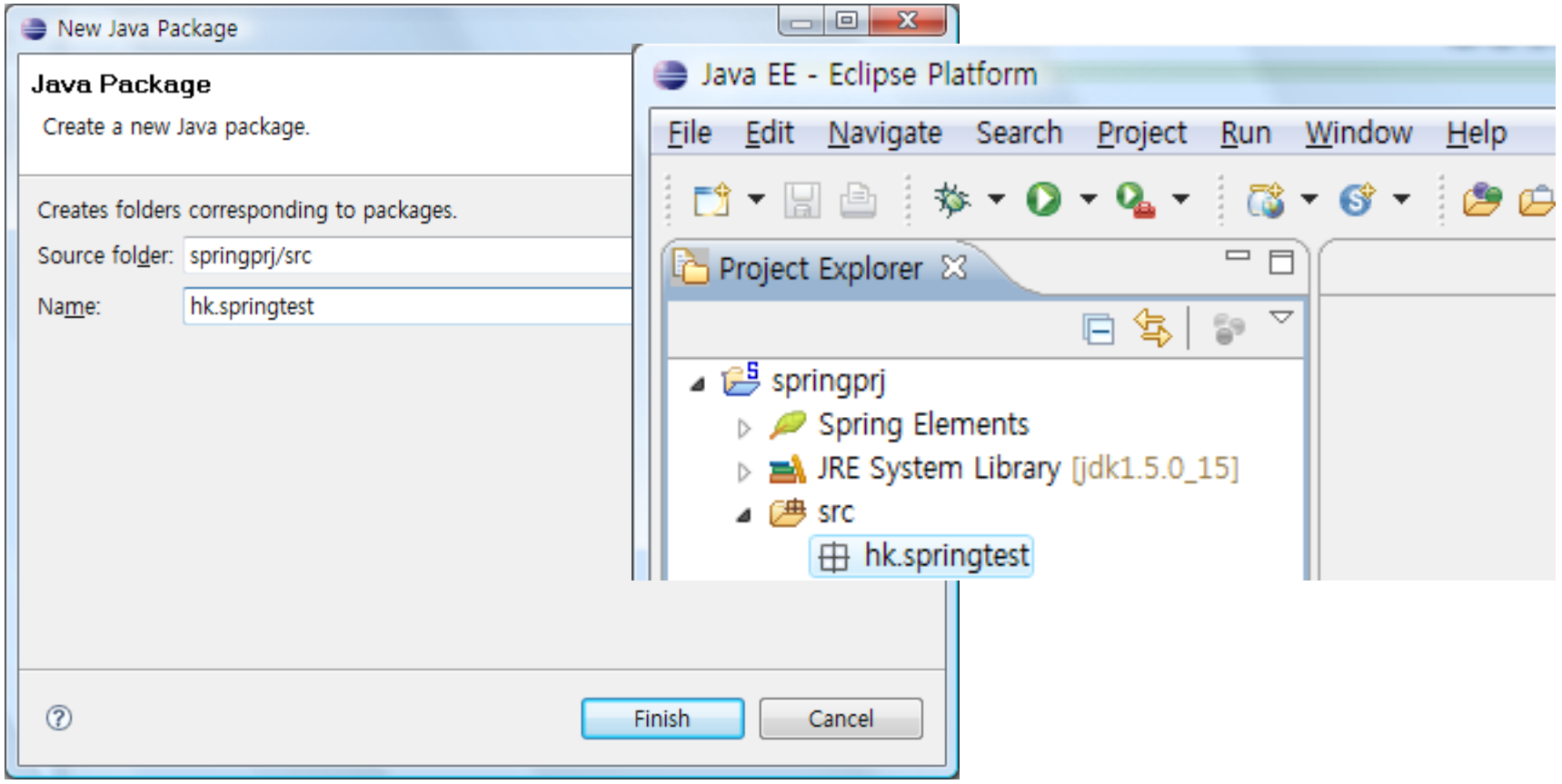
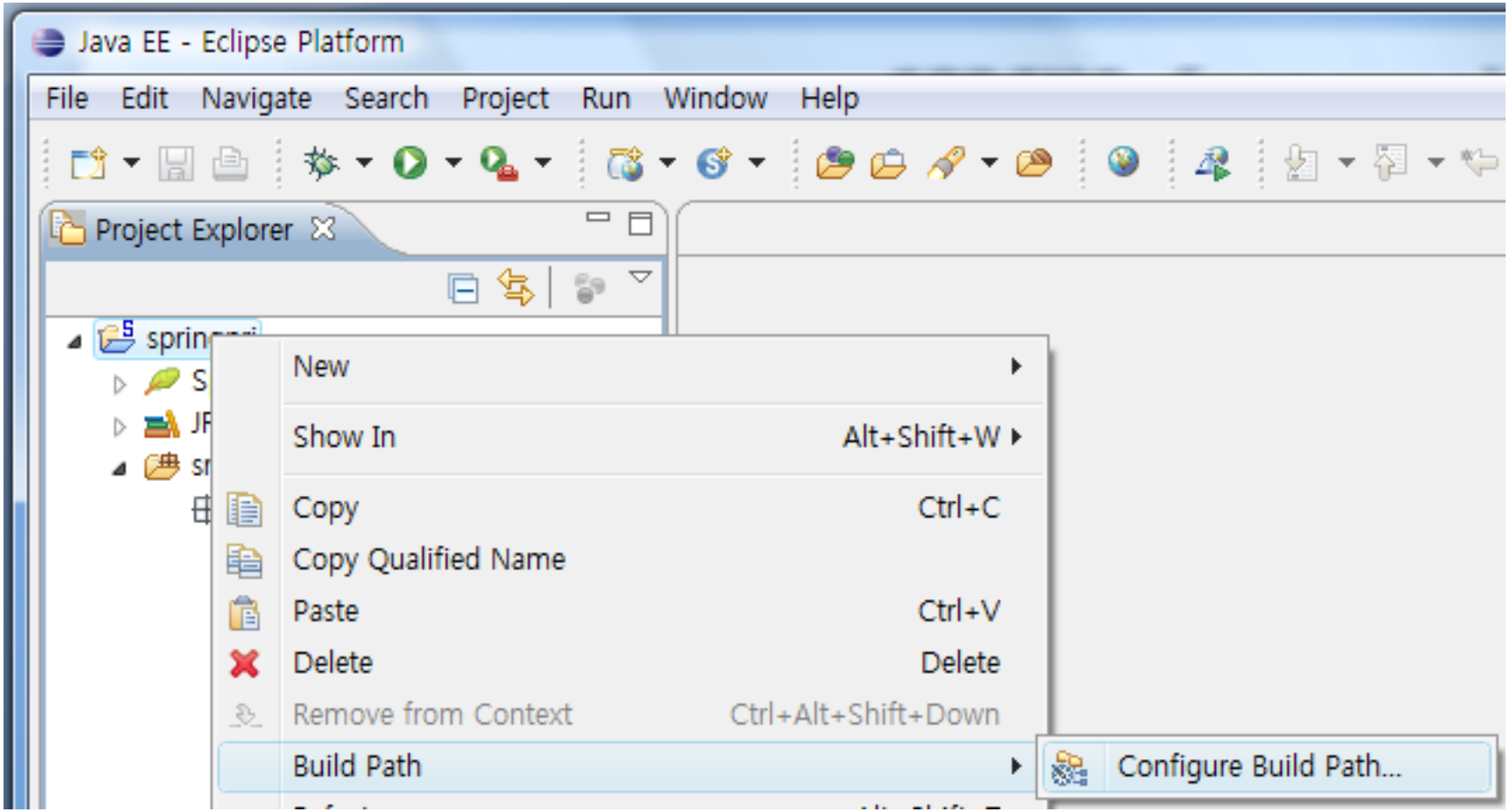
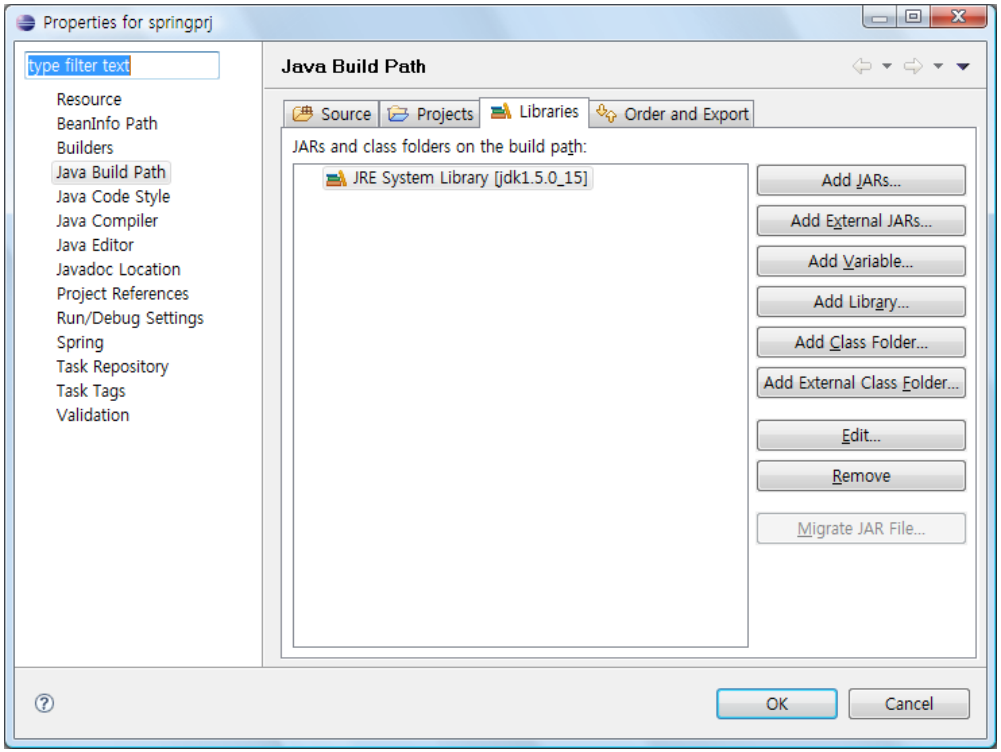

Java EE - Eclipse Platform
File Edit Navigate Search Project Run Window Help
Project Explorer
springprj
Spring Elements
JRE System Library [jdk1.5.0_15]
src
Project Explorer
springprj
Spring Elements
JRE System Library [jdk1.5.0_15]
New
Open Type Hierarchy F4
Show In Alt+Shift+W
Copy Ctrl+C
Copy Qualified Name
Paste Ctrl+V
Delete Delete
Remove from Context Ctrl+Alt+Shift+Down
Build Path
Source Alt+Shift+S
Project...
Annotation
Class
Enum
Interface
Package
Source Folder
Example...
Other... Ctrl+N


New Java Package
Java Package
Create a new Java package.
Creates folders corresponding to packages.
Source folder: springprj/src
Name: hk.springtest
Finish
Cancel
Java EE - Eclipse Platform
File Edit Navigate Search Project Run Window Help
Project Explorer
springprj
Spring Elements
JRE System Library [jdk1.5.0_15]
src
hk.springtest

build path 설정





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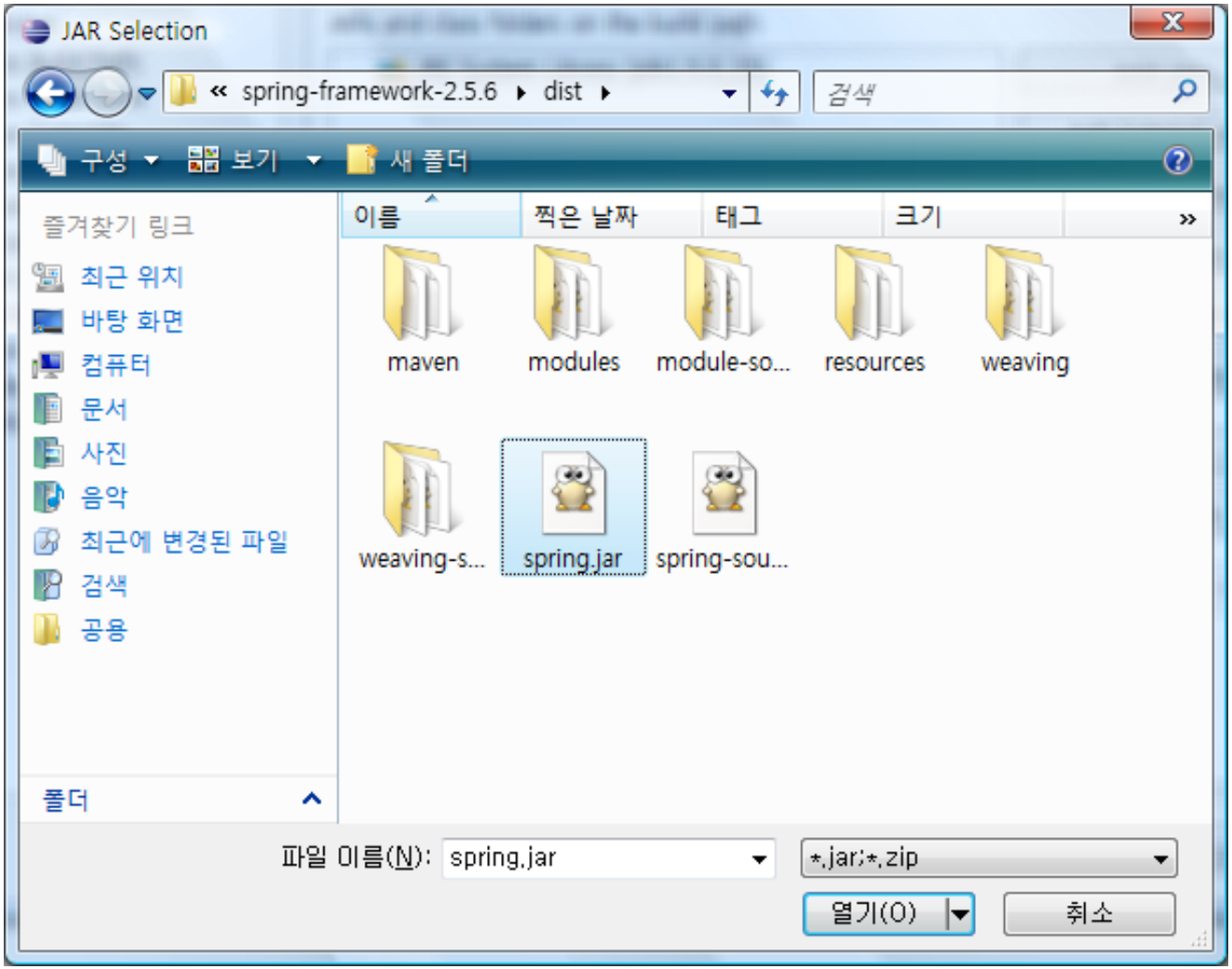
C:\spring-framework-2.5.6\dist\spring.jar



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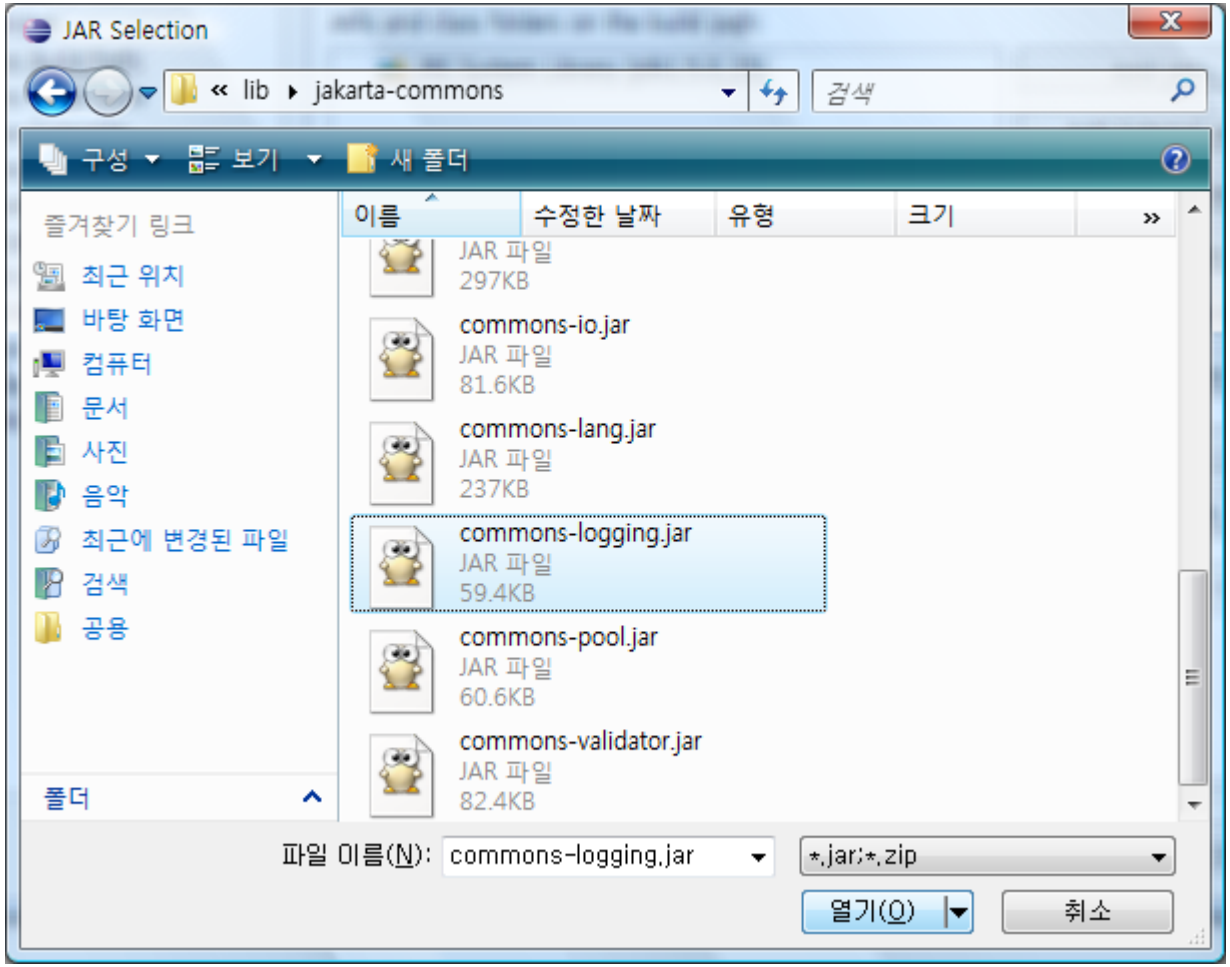
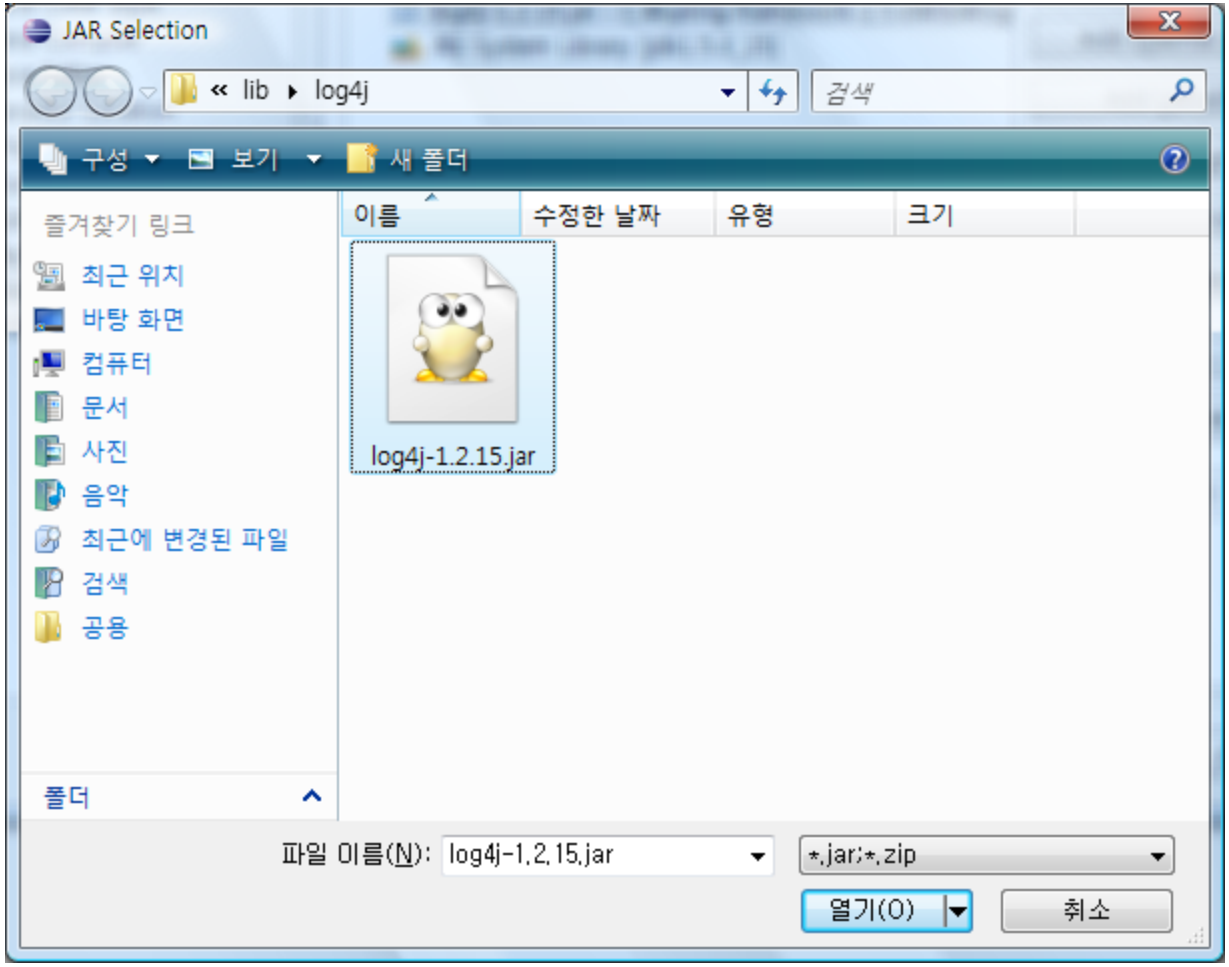
C:\spring-framework-2.5.6\lib\jakarta-commons\commons-logging.jar



C:\spring-framework-2.5.6\log4j\log4j-1.2.15.jar



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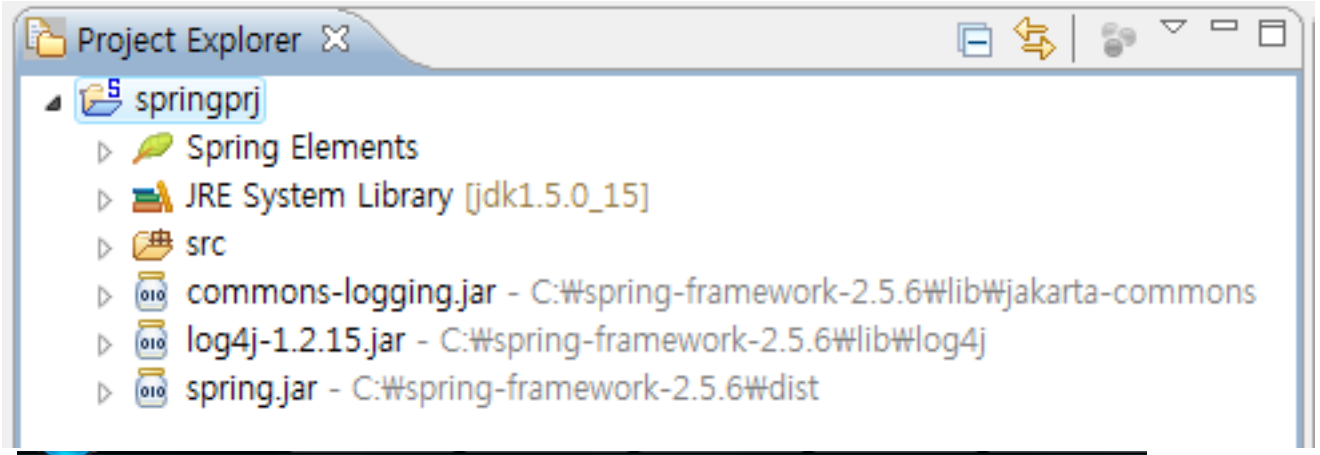
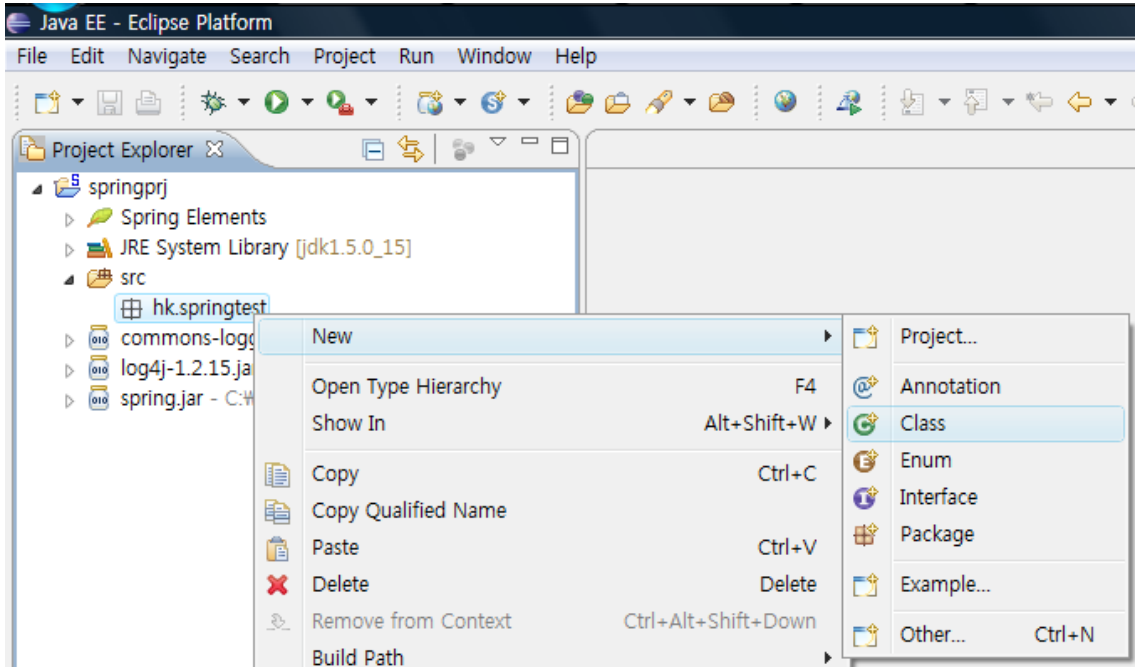
mechi00@daum.net





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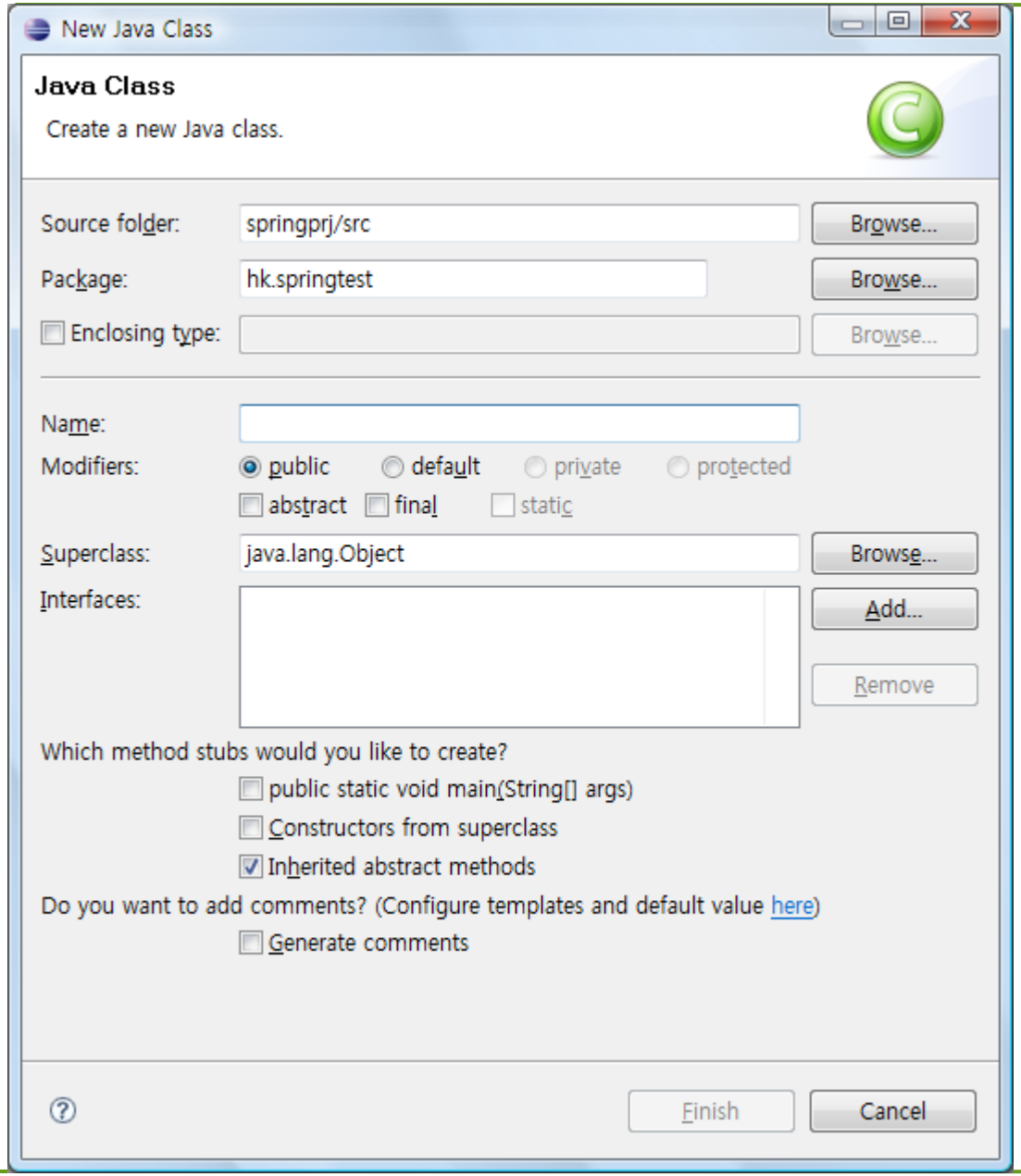

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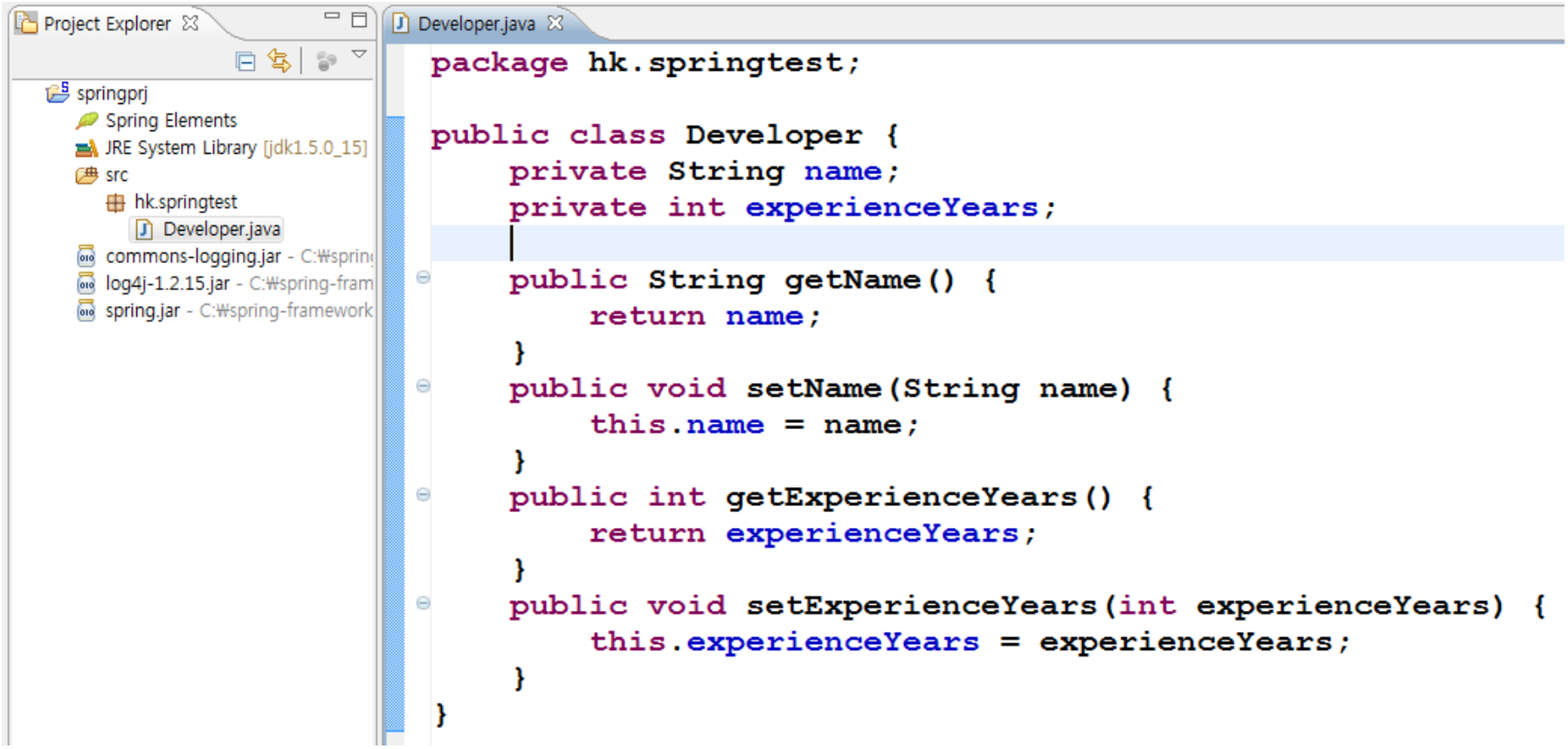
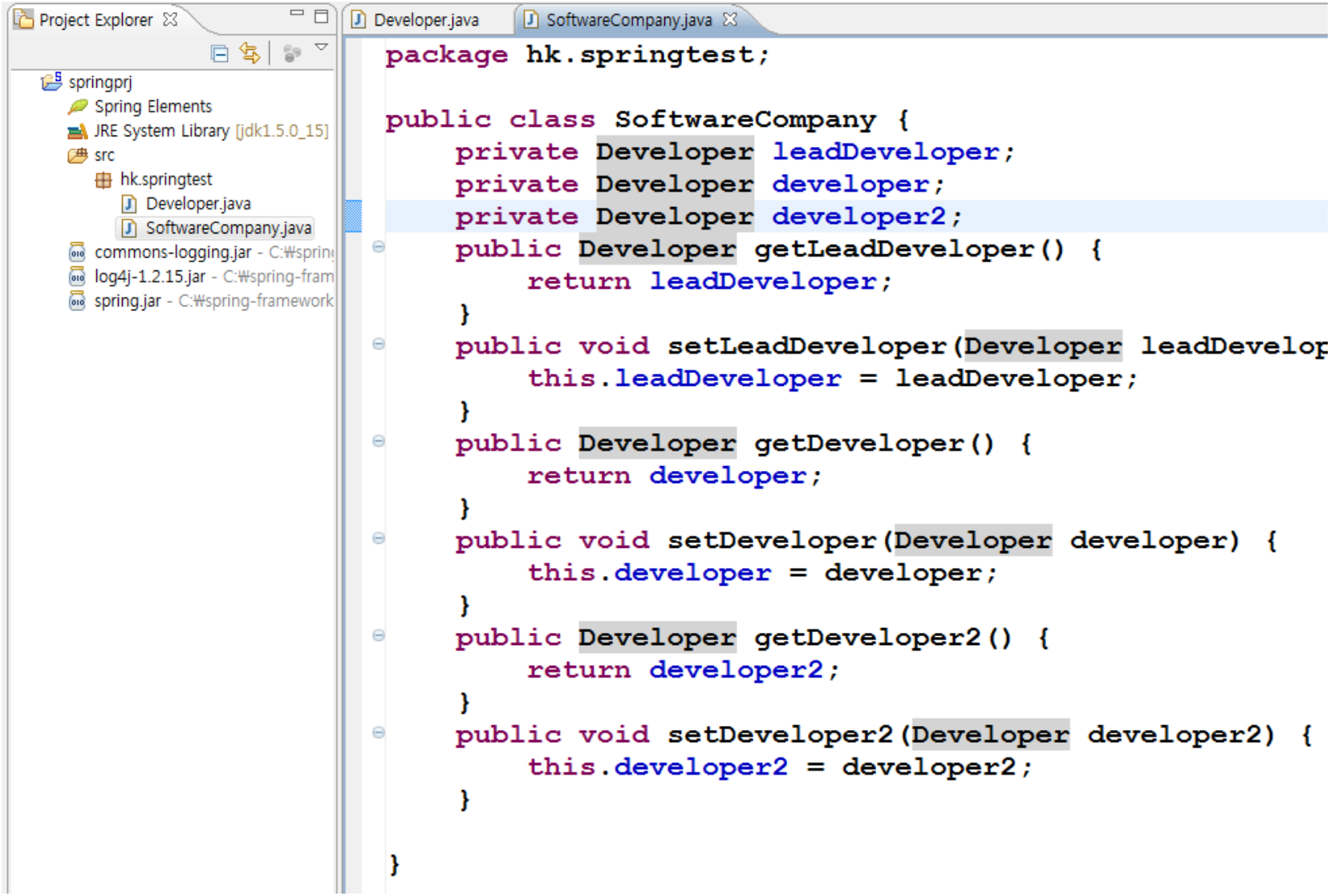
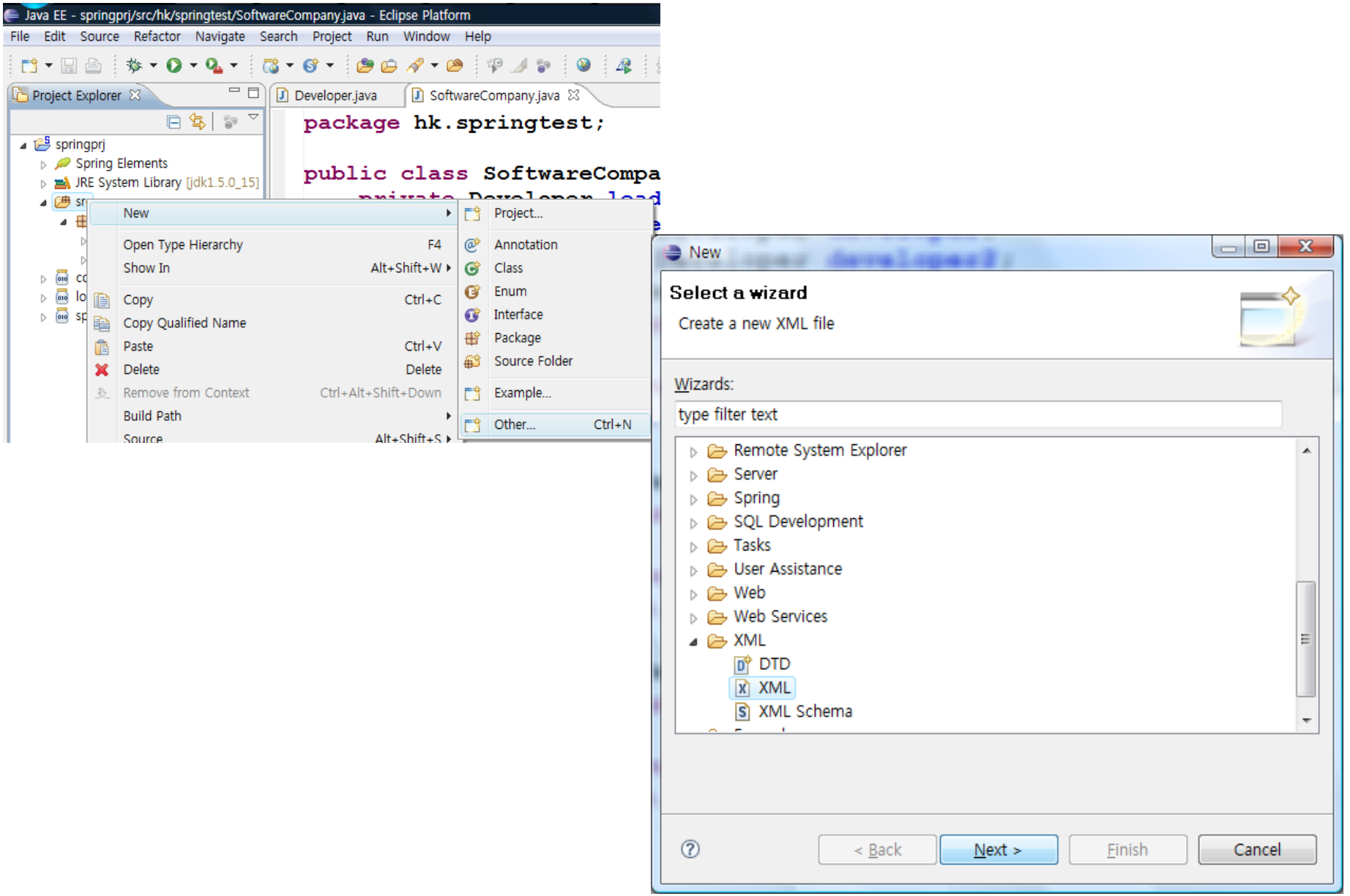
Developer.java



SoftwareCompany.java



SPRING framework



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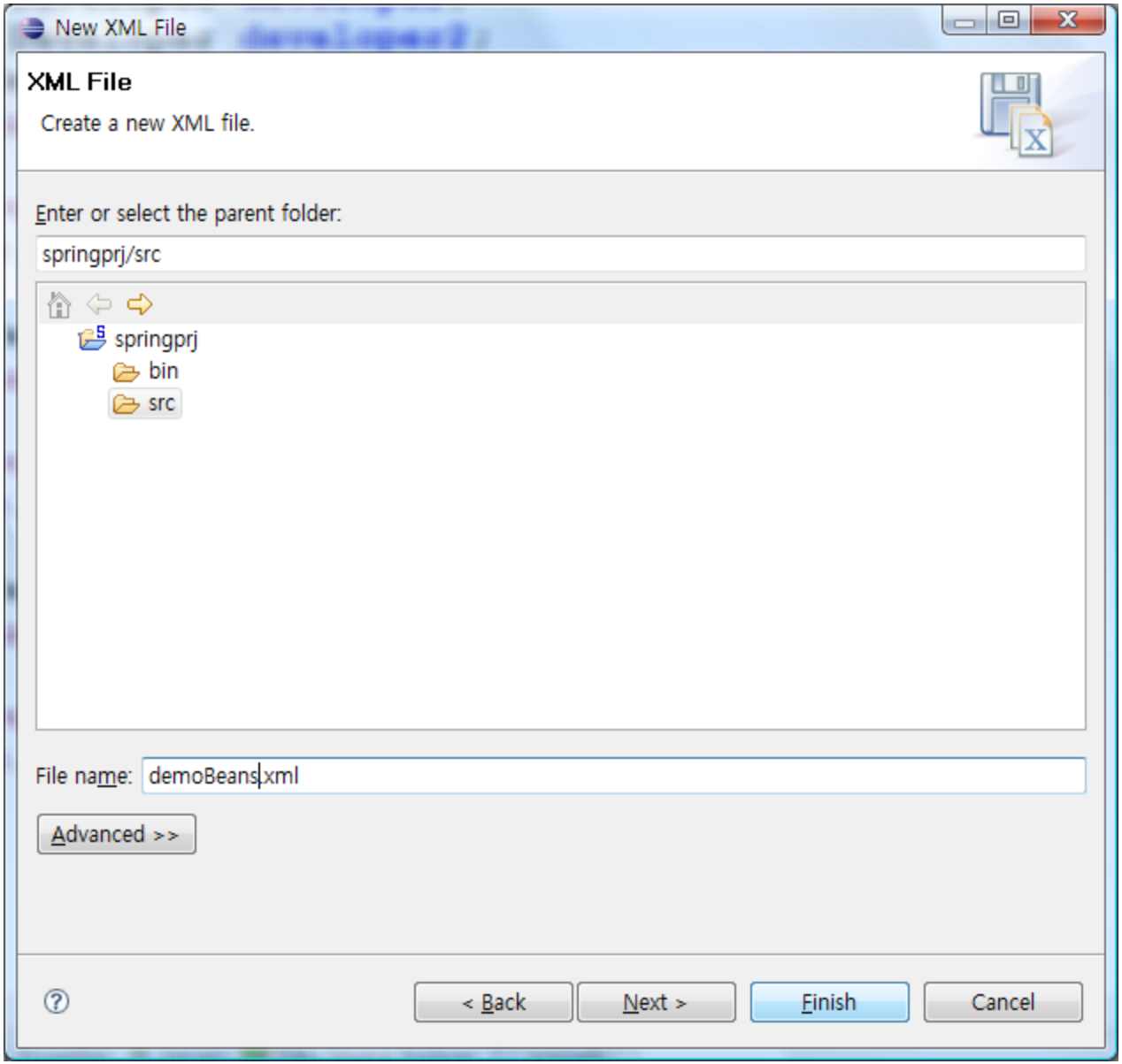
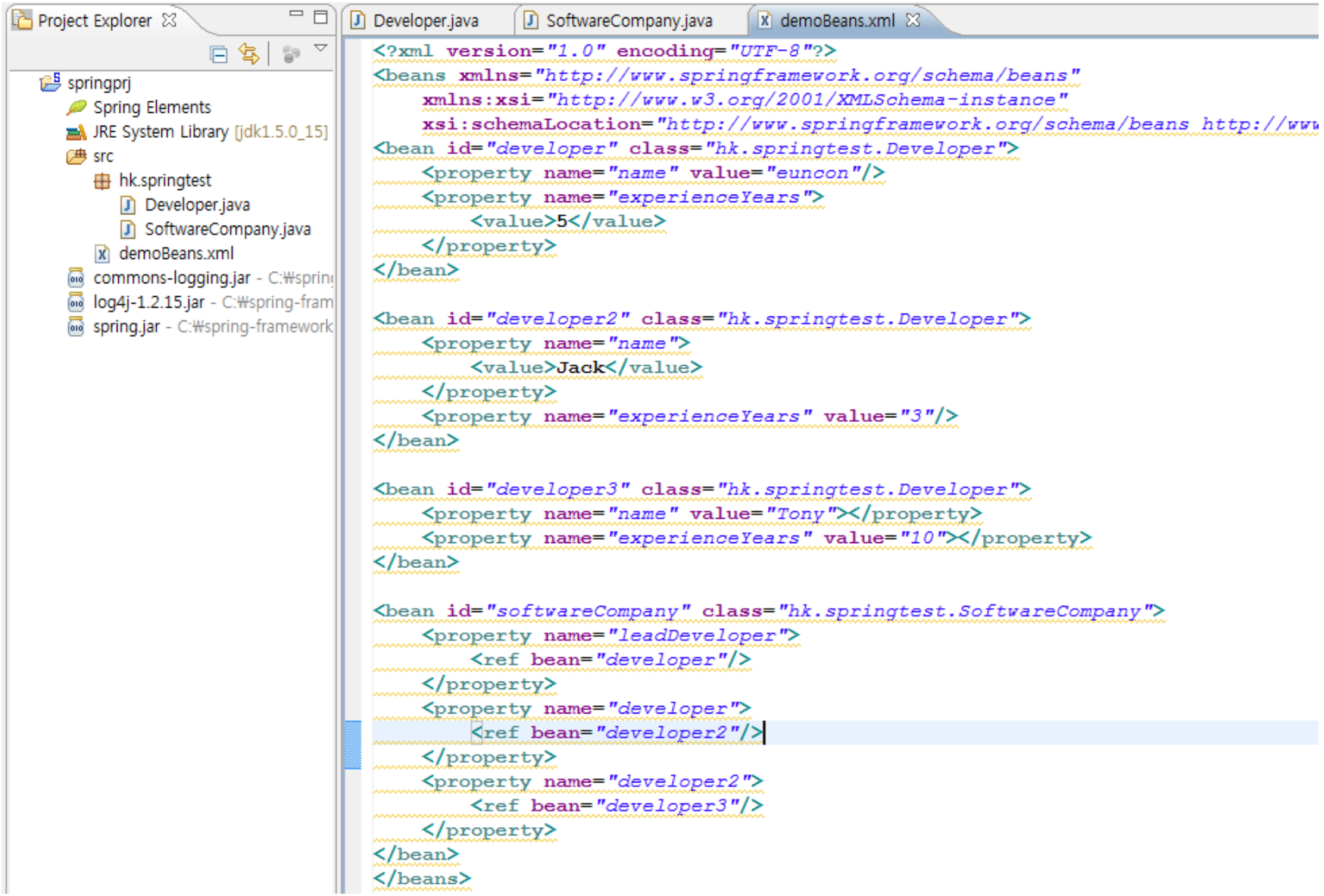

New XML File
XML File
Create a new XML file.
Enter or select the parent folder:
springprj/src
springprj
bin
src
File name: demoBeans.xml
Advanced >>
< Back
Next >
Finish
Cancel

demoBeans.xml



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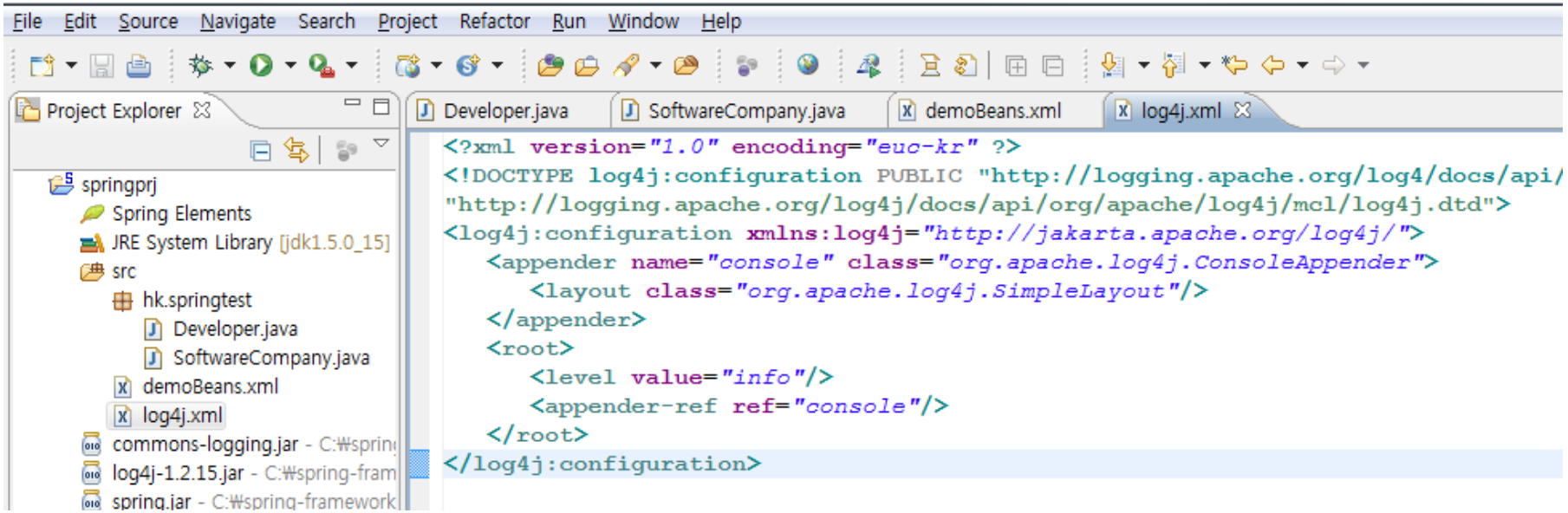
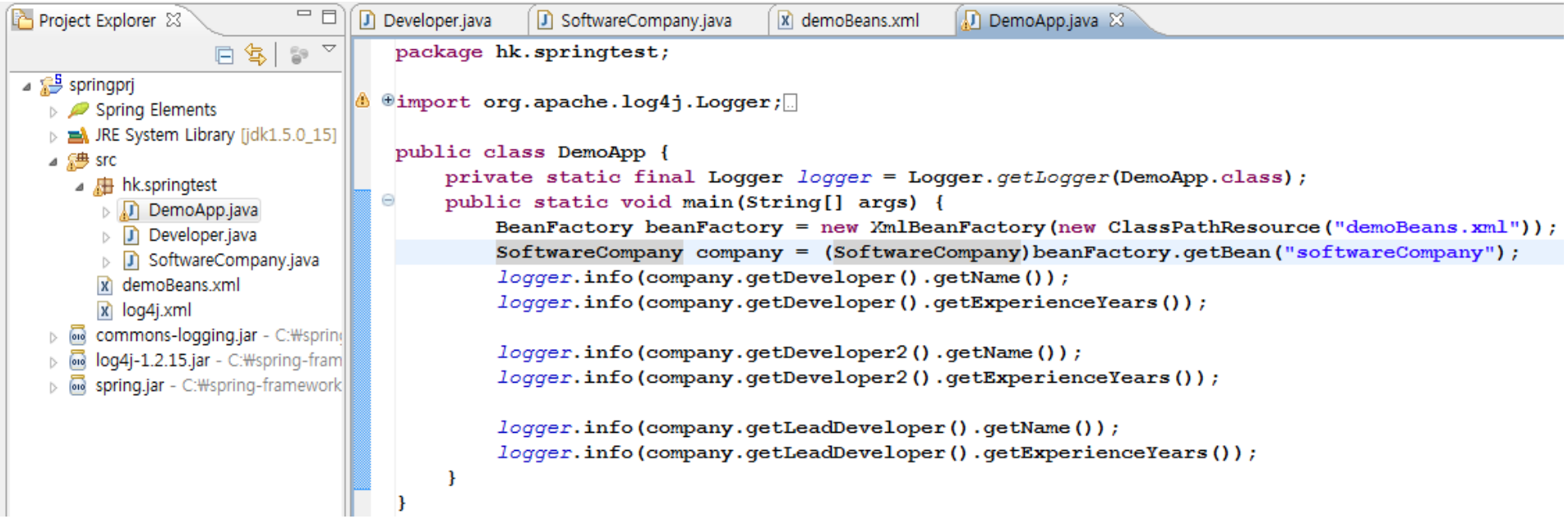
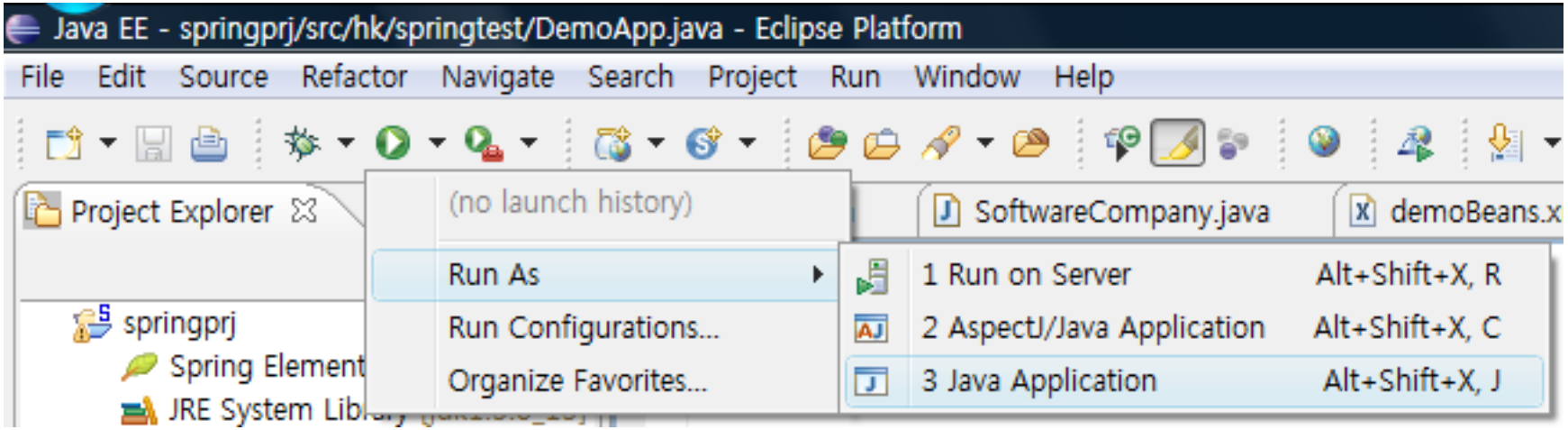
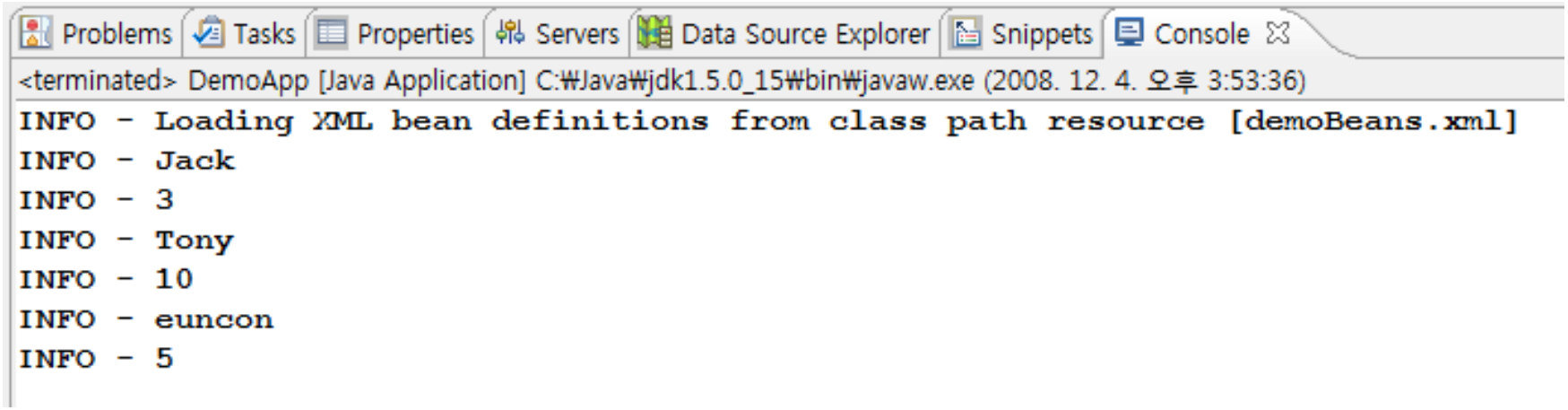
log4j.xml


File Edit Source Navigate Search Project Refactor Run Window Help
Project Explorer
springprj
Spring Elements
JRE System Library [jdk1.5.0_15]
src
hk.springtest
Developer.java
SoftwareCompany.java
demoBeans.xml
log4j.xml
commons-logging.jar - C:₩sprin
log4j-1.2.15.jar - C:₩spring-fram
spring.jar - C:₩spring-framework
Developer.java
SoftwareCompany.java
demoBeans.xml
log4j.xml
<?xml version="1.0" encoding="euc-kr" ?>
<!DOCTYPE log4j:configuration PUBLIC "http://logging.apache.org/log4/docs/api/
"http://logging.apache.org/log4j/docs/api/org/apache/log4j/mcl/log4j.dtd">
<log4j:configuration xmlns:log4j="http://jakarta.apache.org/log4j/">
<appender name="console" class="org.apache.log4j.ConsoleAppender">
<layout class="org.apache.log4j.SimpleLayout"/>
</appender>
<root>
<level value="info"/>
<appender-ref ref="console"/>
</root>
</log4j:configuration>

DemoApp.java




Java EE - springprj/src/hk/springtest/DemoApp.java - Eclipse Platform
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
springprj
Spring Element
JRE System Lib
(no launch history)
Run As
Run Configurations...
Organize Favorites...
SoftwareCompany.java
demoBeans.x
1 Run on Server Alt+Shift+X, R
2 AspectJ/Java Application Alt+Shift+X, C
3 Java Application Alt+Shift+X, J


Problems Tasks Properties Servers Data Source Explorer Snippets Console
<terminated> DemoApp [Java Application] C:₩Java₩jdk1.5.0_15₩bin₩javaw.exe (2008. 12. 4. 오후 3:53:36)
INFO - Loading XML bean definitions from class path resource [demoBeans.xml]
INFO - Jack
INFO - 3
INFO - Tony
INFO - 10
INFO - euncon
INFO - 5