스프링 프레임워크

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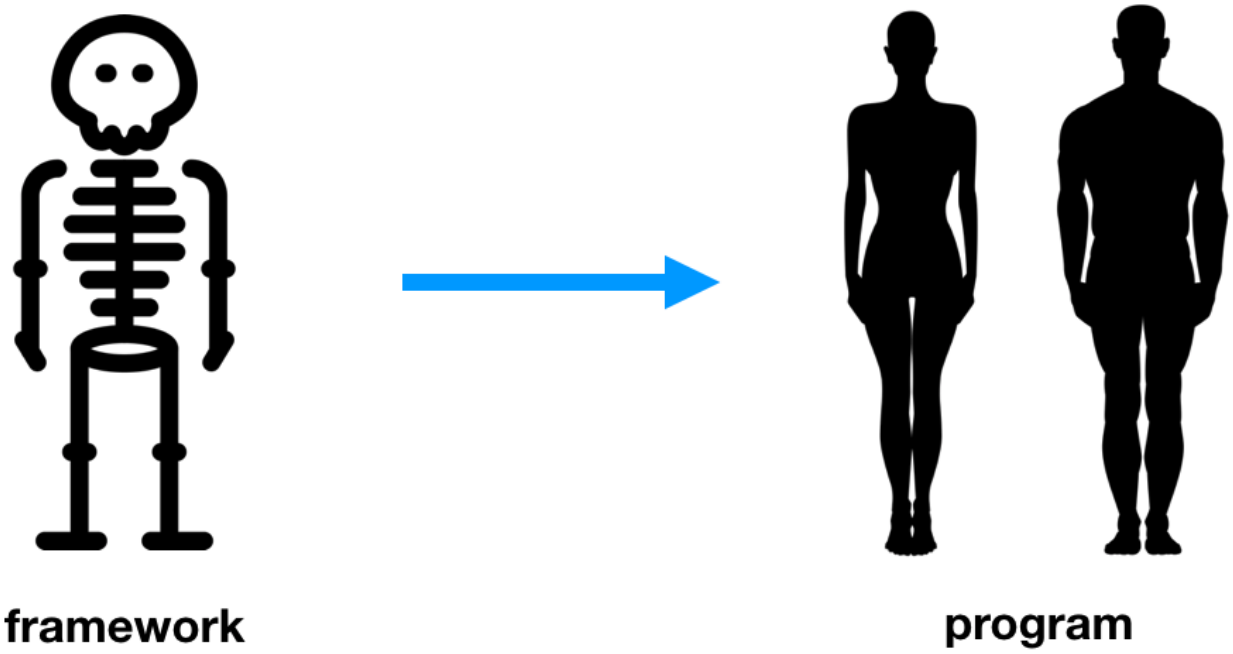
프레임워크(Framework)란

“소프트웨어의 구체적인 부분에 해당하는 설계와 구현을 재사용이 가능하게끔 일련의 협업화된 형태로 클래스들을 제공하는 것”



프레임워크(Framework)란

1.Framework는 구조 품질을 보장한다.
·구조 품질: “Great Software is well-designed, well-coded, and easy to maintain, reuse, and extend.”
· Framework = Design Pattern + Class Library
· 구체적이며 확장 가능한 기반 코드를 가지고 있다.
소프트웨어의 구조 및 기반이 되는 클래스를 제공한다.
· 설계자가 의도하는 여러 디자인 패턴의 집합으로 구성되어 있다.

2.Framework는 반제품이다.
·Application의 틀과 구조를 결정한다.
·Application 코드의 상당 부분을 제공한다.
Application 코드는 Framework에 설계되어 있는 제어 흐름에 따라 동작한다.
즉, Framework 코드가 그 위에 개발된 개발자의 User 코드를 호출하고 제어한다.
·개발자는 Application의 핵심 로직에만 집중할 수 있다.

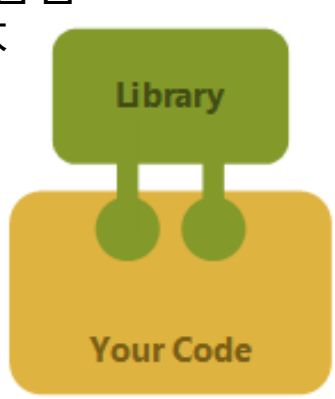
3. Framework의 장점
· 생산성
business logic에만 집중할 수 있어 생산성이 증대
· 코드 품질
코드의 재사용 및 유지 보수 용이
확장성을 가진 코드 설계 가능

프레임워크(Framework)란

프레임워크 vs 라이브러리

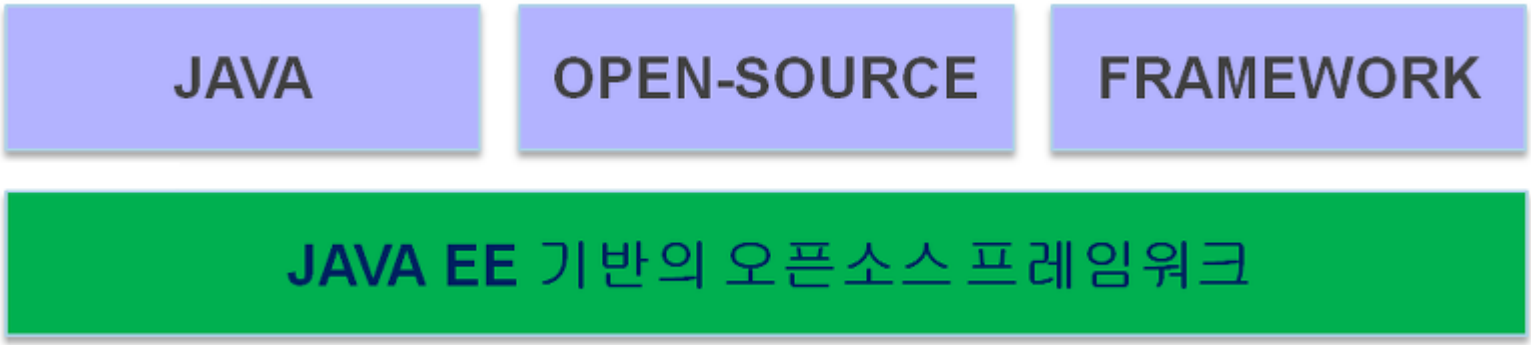
· 프레임워크란
소프트웨어의 구체적인 부분에 해당하는 설계와 구현을 재사용이
가능하게끔 일련의 협업화된 형태로 클래스들을 제공하는 것
Ex) 자동차의 프레임, 즉 기본적으로 구성하고 있는 뼈대

· 라이브러리란
자주 사용되는 로직을 재사용하기 편리하도록 잘 정리한 일련의
코드들의 집합
Ex) 자동ㅊ



스프링 프레임워크(Spring Framework)란

* 자바(JAVA) 플랫폼을 위한 오픈소스(Open Source) 애플리케이션 프레임워크(Framework)
* 자바 엔터프라이즈 개발을 편하게 해주는 오픈 소스 경량급 애플리케이션 프레임워크
* 자바 개발을 위한 프레임워크로 종속 객체를 생성해주고, 조립해주는 도구
* 자바로 된 프레임워크로 자바SE로 된 자바 객체(POJO)를 자바EE에 의존적이지 않게 연결해주는



- POJO 란 Plain Old Java Object 의 약자로 특별한 뜻을 담고 있는 용어는 아니며,
  단순히 평범한 자바빈즈(Javabeans) 객체를 의미함.

스프링 프레임워크 특징

① **"경량 컨테이너"**(크기와 부하의 측면)로서 자바 객체를 직접 관리
 - 각각의 객체 생성, 소멸과 같은 라이프 사이클을 관리하며 스프링으로부터 필요한 객체를 얻어올 수 있다.

② **제어 역행**(**IoC** : Inversion of Control)
 - 애플리케이션의 느슨한 결합을 도모.
 - 컨트롤의 제어권이 사용자가 아니라 프레임워크에 있어 필요에 따라 스프링에서 사용자의 코드를 호출한다.

③ **의존성 주입**(**DI** : Dependency Injection)
 - 각각의 계층이나 서비스들 간에 의존성이 존재할 경우 프레임워크가 서로 연결시켜준다.

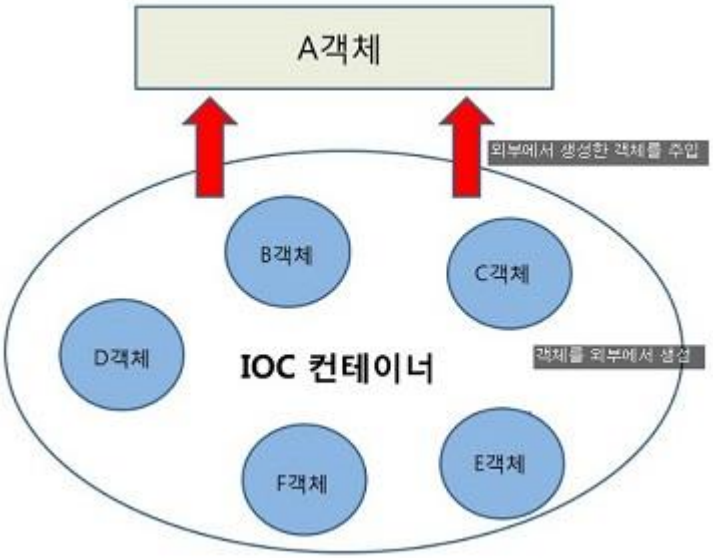
③ **관점지향 프로그래밍**(**AOP** : Aspect-Oriented Programming)
 - 트랜잭션이나 로깅, 보안과 같이 여러 모듈에서 **공통적으로 사용하는 기능의 경우 해당 기능을 분리**하여 관리할 수 있다.

스프링 프레임워크 특징

Spring Framework는 IOC기반이다. IOC(Inversion of Control)란?

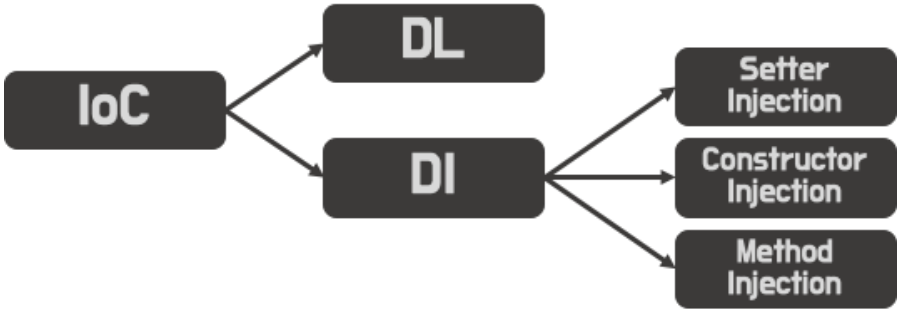
일반적으로 지금까지 프로그램은
객체 결정 및 생성 -> 의존성 객체 생성 -> 객채 내의 메소드 호출 하는 작업을 반복

기존 사용자가 모든 작업을 제어하던 것을 특별한 객체에
모든 것을 위임하여 객체의 생성부터 생명주기 등 모든
객체에 대한 제어권이 넘어 간 것을 IOC, 제어의 역전



스프링 프레임워크 특징

DL (Dependency Lookup : 의존성 검색 / DI (Dependency Injection : 의존성 주입)



DL : 컨테이너에서는 객체들을 관리하기 위해 별도의 저장소에 빈을 저장하는데 저장소에 저장되어 있는 개발자들이 컨테이너에서 제공하는 API 를 이용하여 사용하고자 하는 빈 을 검색하는 방법

DI : 각 클래스 사이에 필요로 하는 의존관계를 빈 설정 정보를 바탕으로 컨테이너가 자동으로 연결해 주는 방법

DL (Dependency Lookup : 의존성 검색) **DI (Dependency Injection : 의존성 주입)**

Xml파일

```
<beans>
    <bean id="myObject" class="com.example.MyObject"/>
</beans>
```

Class 파일

```
String myConfigLocation = "classpath:myApplicationCTX.xml";
AbstractApplicationContext ctx = new GenericXmlApplicationContext(myConfigLocation);
MyObject myObject = ctx.getBean("myObject", MyObject.class);
```

Setter Injection : Setter를 이용한 의존성 주입

Constructor Injection : Constructor(생성자)를 의존성 주입

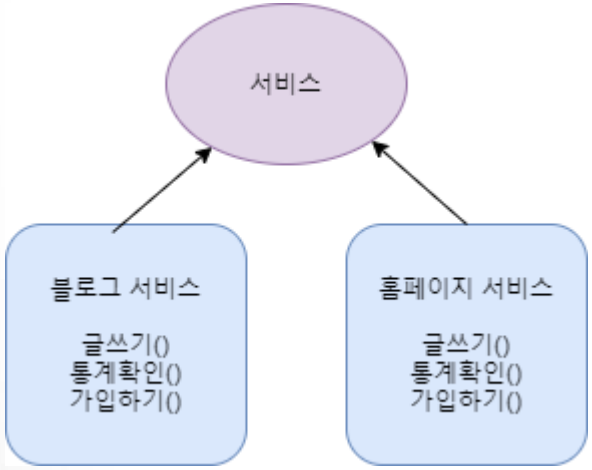
Method Injection : 일반 메소드를 통한 의존성 주입

스프링 프레임워크 특징

AOP (Aspected Oriented Programming) : 관점지향 프로그래밍

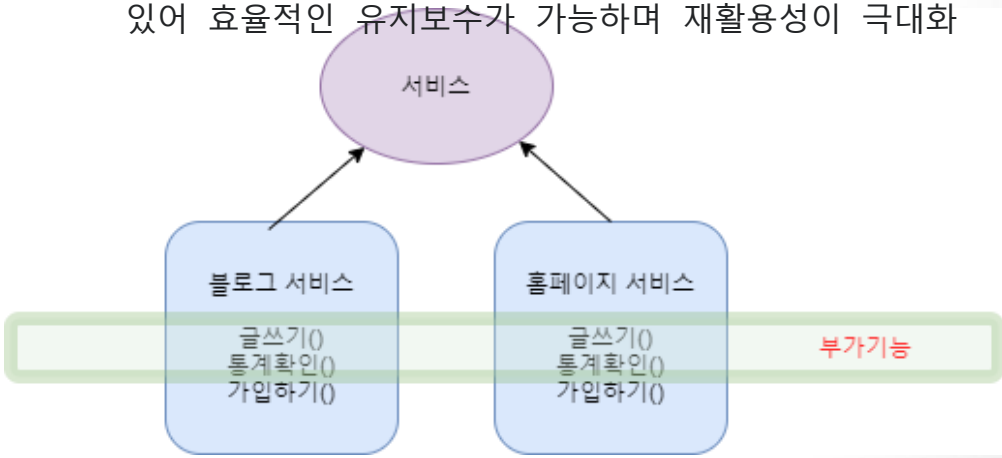
OOP(Object Oriented Programming)

객체지향 원칙에 따라 관심사가 같은 데이터를 한곳에 모아 분리하고 낮은 결합도를 갖게하여 독립적이고 유연한 모듈로 캡슐화 하는것
이러한 과정 중 중복된 코드들이 많아지고 가독성, 확장성, 유지보수성이 낮아짐.



AOP(Aspected Oriented Programming)

핵심기능과 공통기능을 분리시켜 핵심 로직에 영향을 끼치지 않게 공통기능을 끼워 넣는 개발 형태 이며
이렇게 개발함에 따라 무분별하게 중복되는 코드를 한곳에 모아 중복 되는 코드를 제거 할 수 있어지고
공통기능을 한 곳에 보관함으로써 공통 기능 하나의 수정으로 모든 핵심기능들의 공통기능을 수정 할 수 있어 효율적인 유지보수가 가능하며 재활용성이 극대화



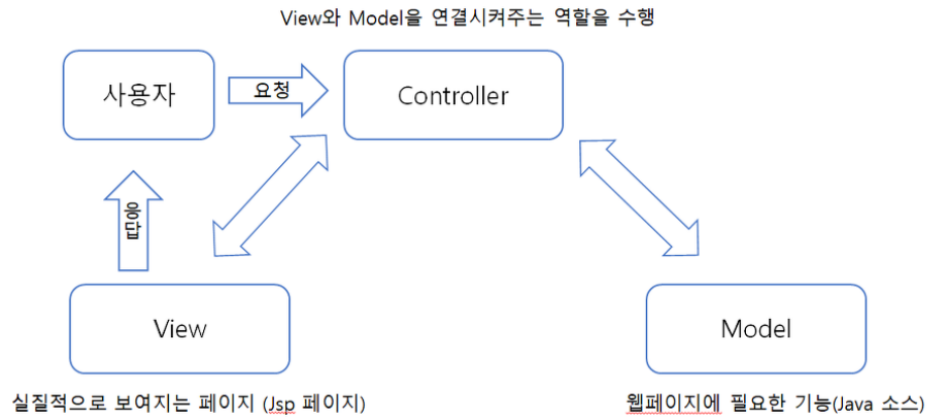
스프링 프레임워크 특징

MVC(Model , View , Controller) : Model2

Model1방식

실질적으로 보여지는 페이지 (Jsp 페이지)

Model2방식



장점
- 개발속도가 빠르다.
- 개발자의 스킬이 낮아도 배우기가 쉬워서 빠르게 적용할 수 있다는 것

단점
- JSP페이지에서 프리젠테이션 로직, 비지니스로직(흐름제어)을 모두 포함하기 때문에 JSP페이지가 너무 복잡해진다. (개발자와 디자이너의 분리된 작업이 힘들어진다.)
- JSP페이지의 코드가 복잡해지므로 유지보수가 어려워진다.

장점
- 자바코드 분리로 코드가 복잡하지 않다.
- 뷰/로직처리에 대한 분업이 용이하다.
- 기능이 분리되어 유지보수가 용이하다.

단점
- 구조가 복잡하여 습득이 어렵고 작업량이 많다.
- JAVA에 대한 깊은 이해가 필요하다.

스프링 프레임워크 모듈

패키지 명	기능
Core	스프링의 핵심으로 기능과 그 설정을 분리하기 위한 IoC 기능이 구현된 BeanFactory를 제공한다.
Context	Core 패키지와 마찬가지로 스프링의 기본 기능이다. 이것은 JNDI가 EJB를 비롯한 리소스에 대한 접근 경로를 제공하는 것처럼 스프링 기반에서 구현된 기능 객체(Bean)들에 대한 접근 방법을 제공한다.
DAO	DAO 패키지는 JDBC에 대한 추상화 계층으로 지루한 JDBC 코딩이나 예외 처리를 없애준다. 또한 트랜잭션 관리 기능도 제공된다.
ORM	객체/관계 맵핑을 위한 JDO, 하이버네이트, iBatis 등과의 통합을 위한 패키지이다. ORM 제품들을 스프링의 기능과 조합해서 사용할 수 있게 한다.
AOP	AOP 얼라이언스와 호환되는 AOP 구현 패키지이다.
Web	일반적인 웹 애플리케이션 개발에 필요한 기본 기능을 제공하고, 웹워크나 스트럿츠와의 통합을 위해 사용되는 패키지이다.
WebMVC	스트럿츠와 같은 일반적인 WAF의 기능을 스프링 버전으로 구현하고 있는 패키지이다. 기존에 사용하고 있던 WAF가 없다면 사용을 고려해 볼만 하다.

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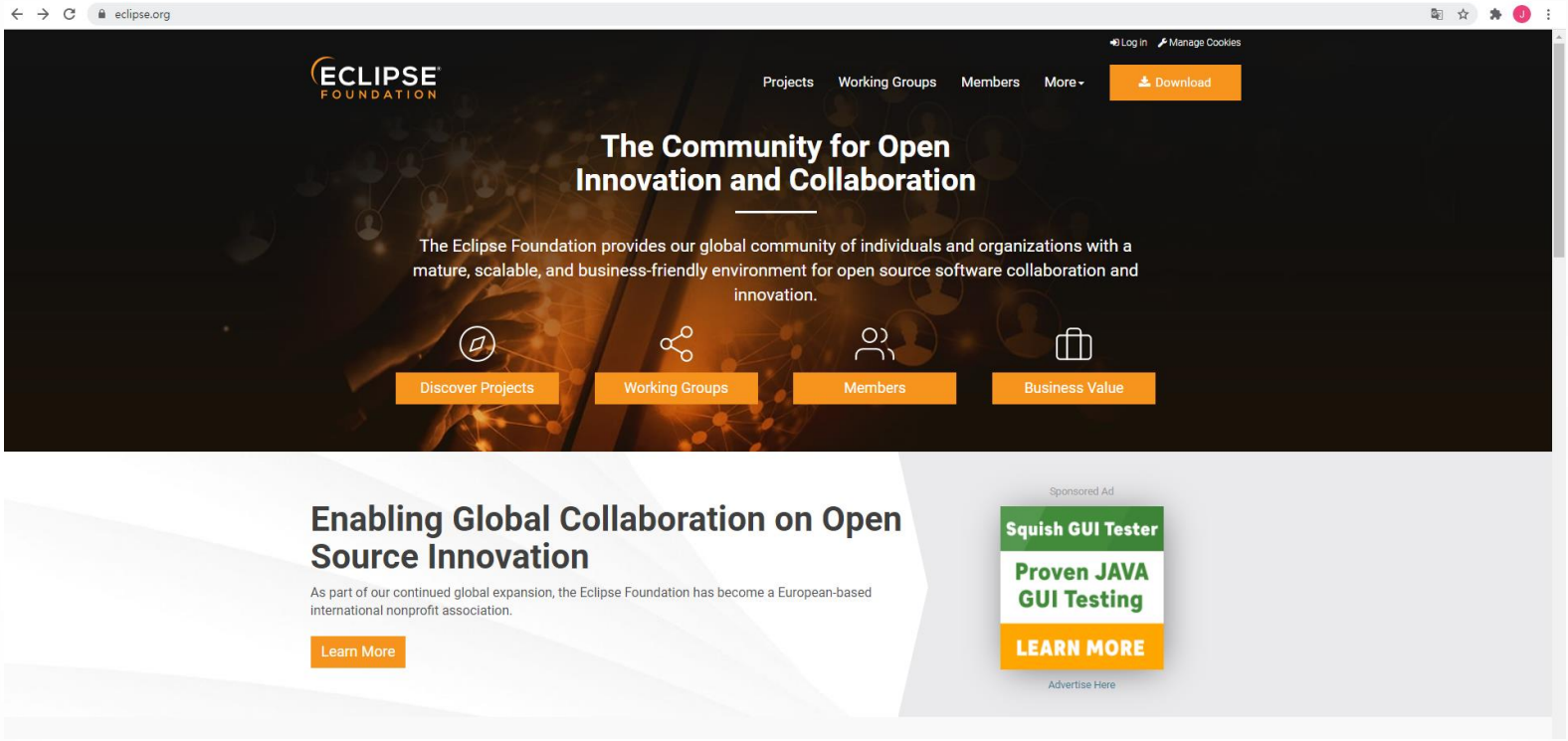
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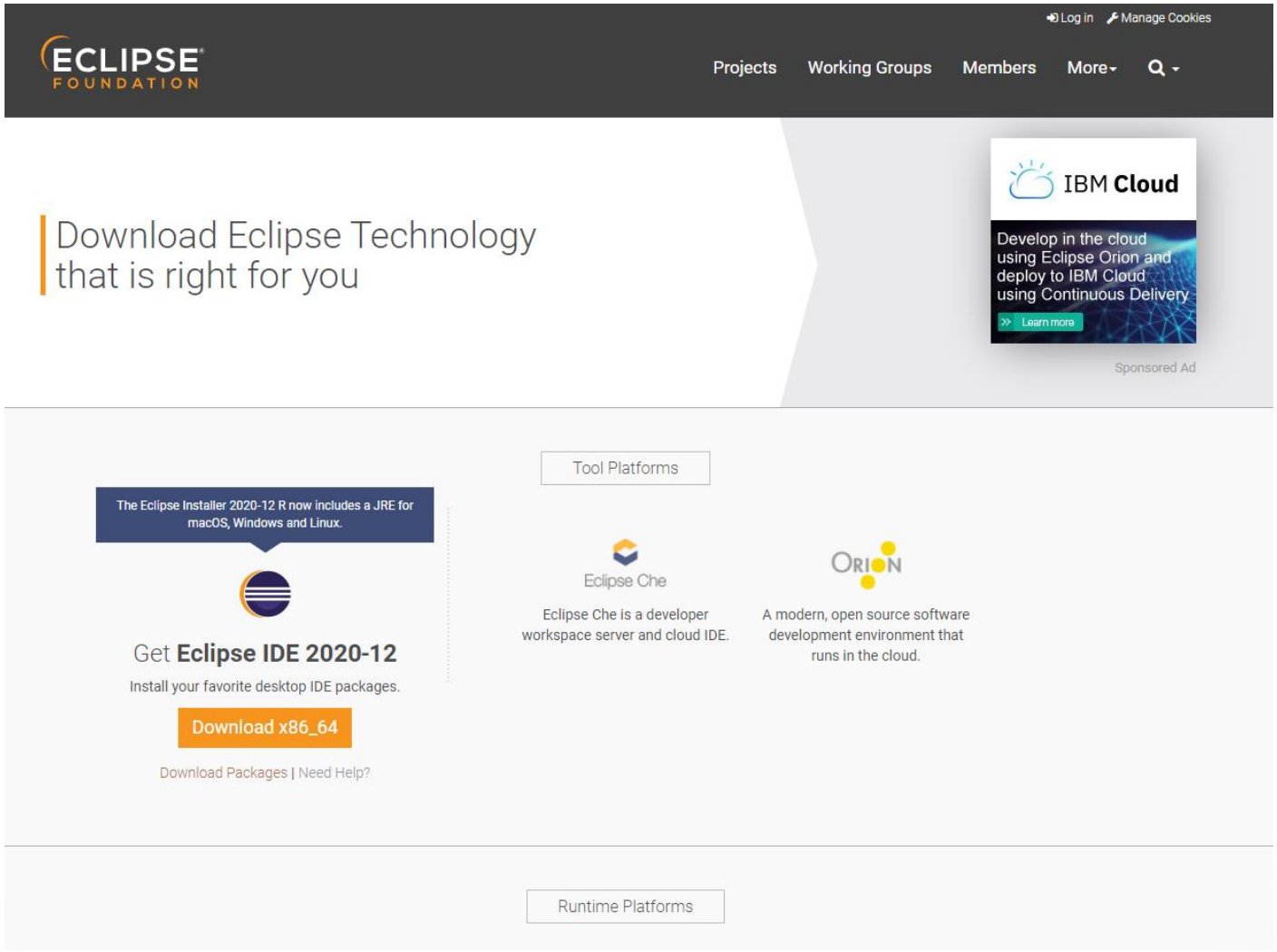
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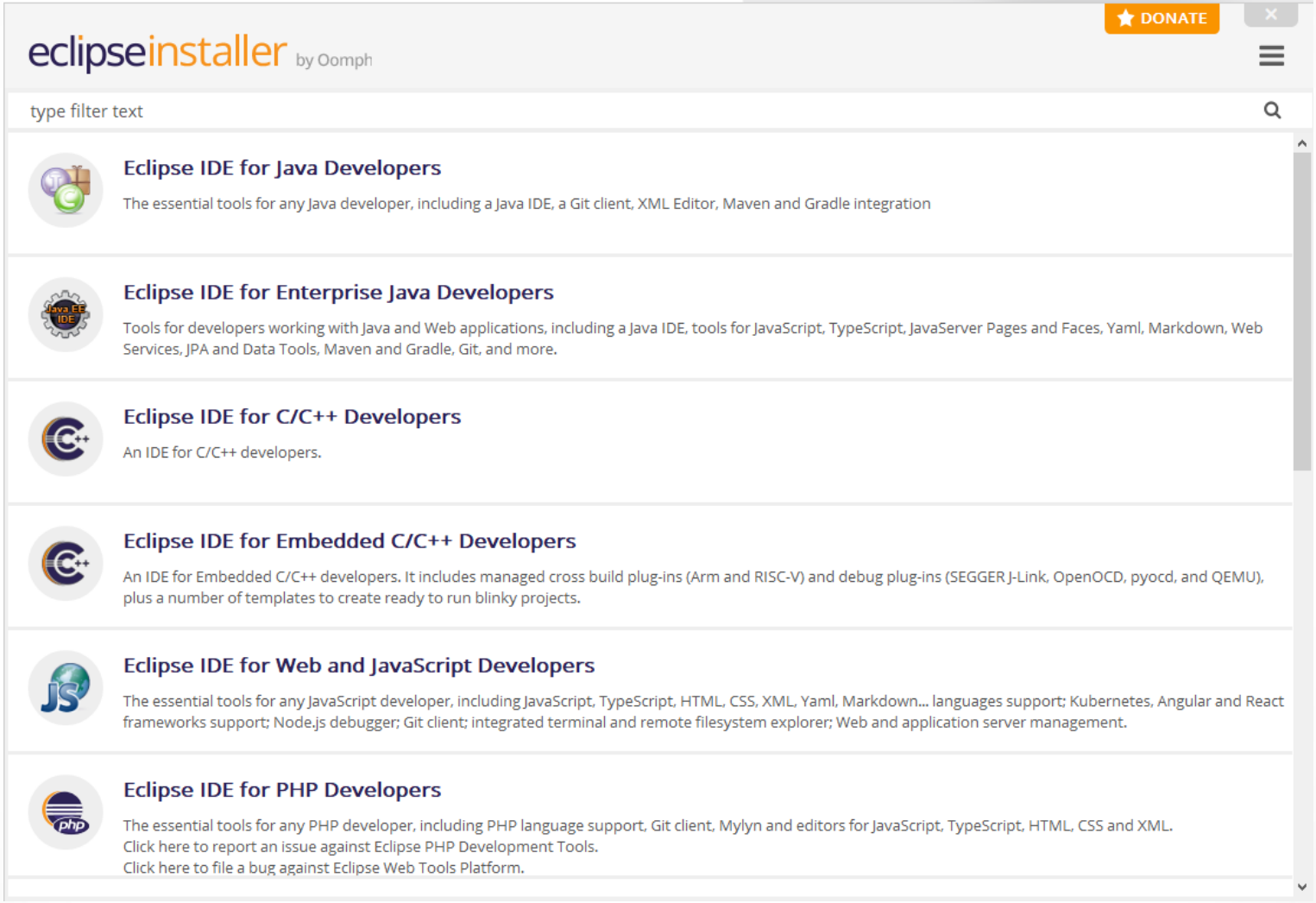
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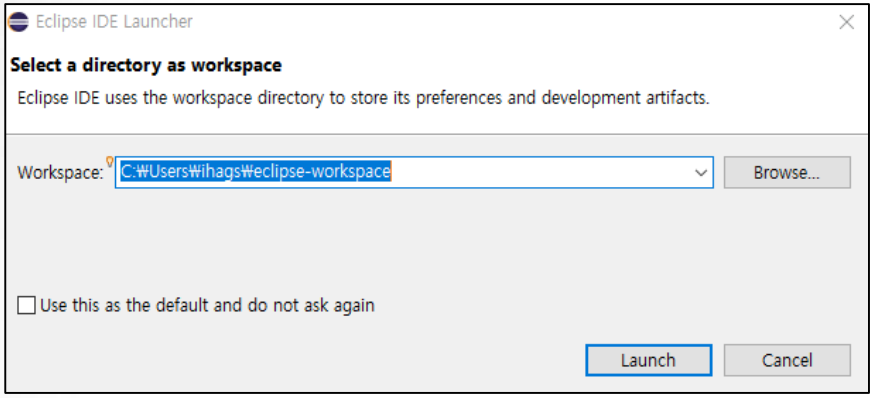
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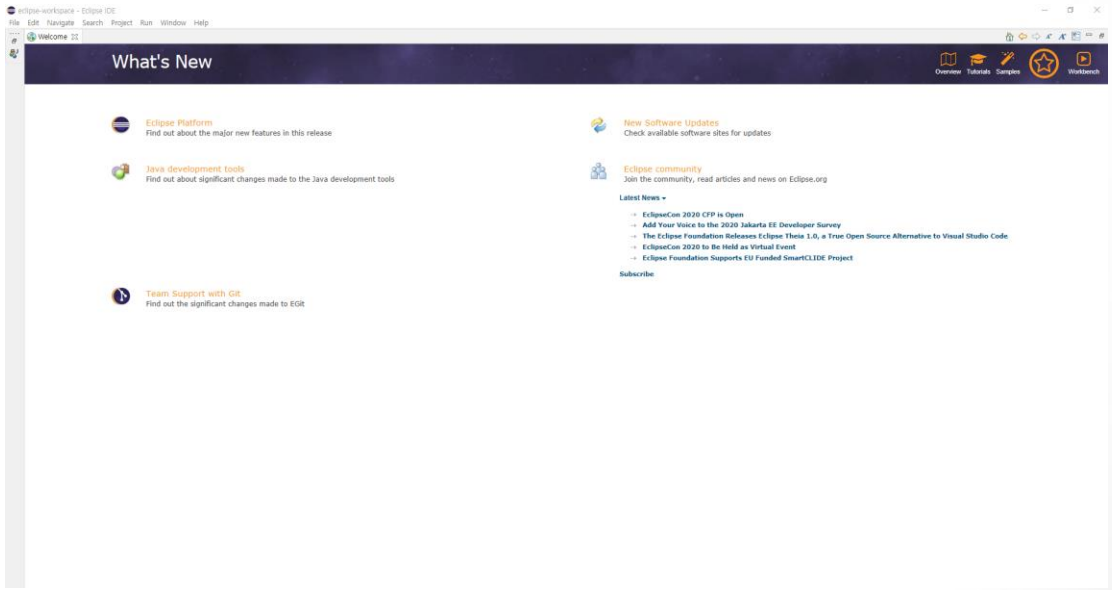
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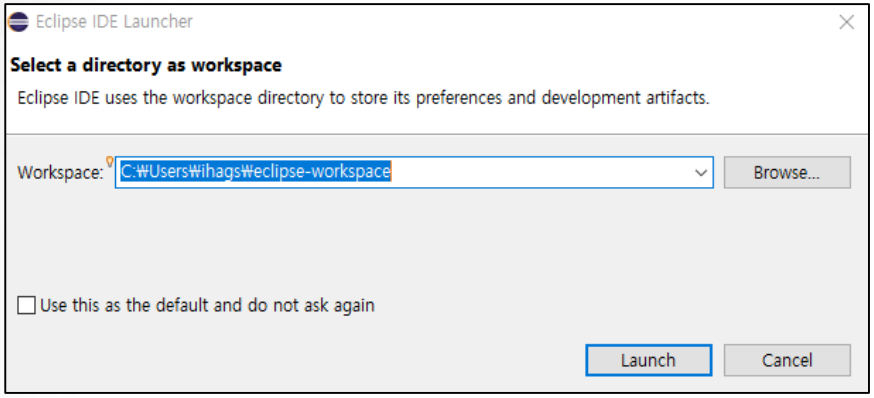
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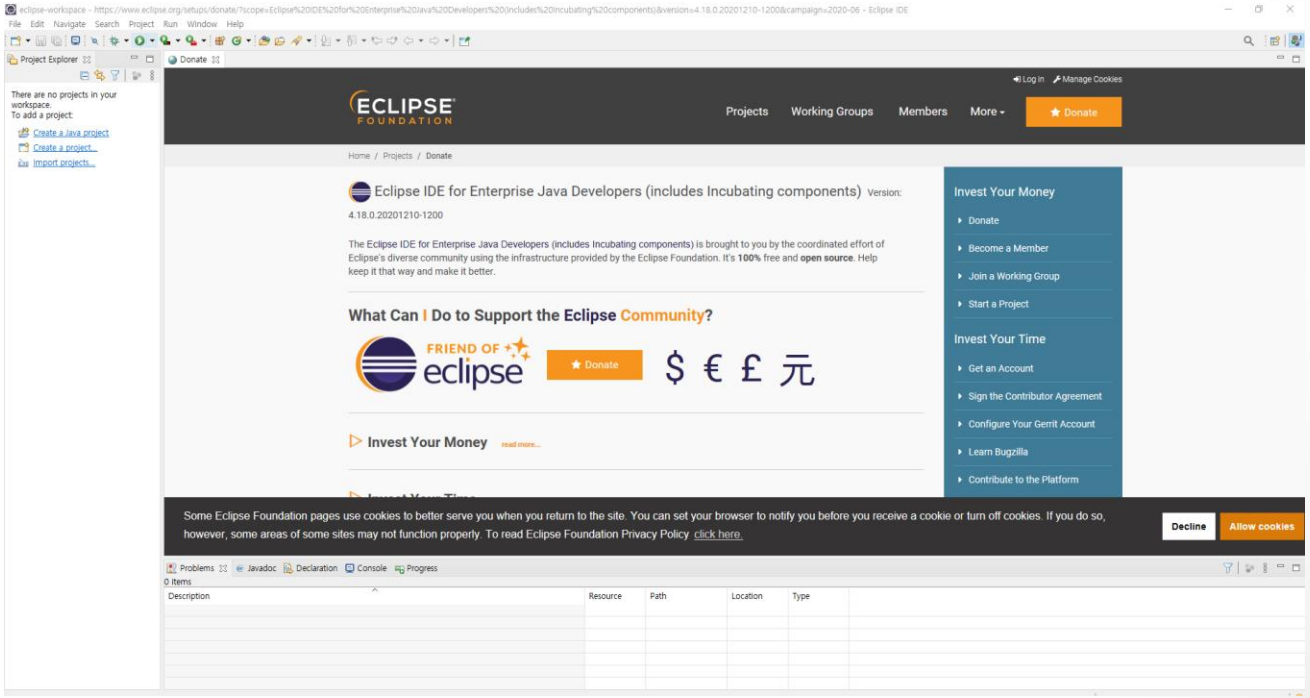
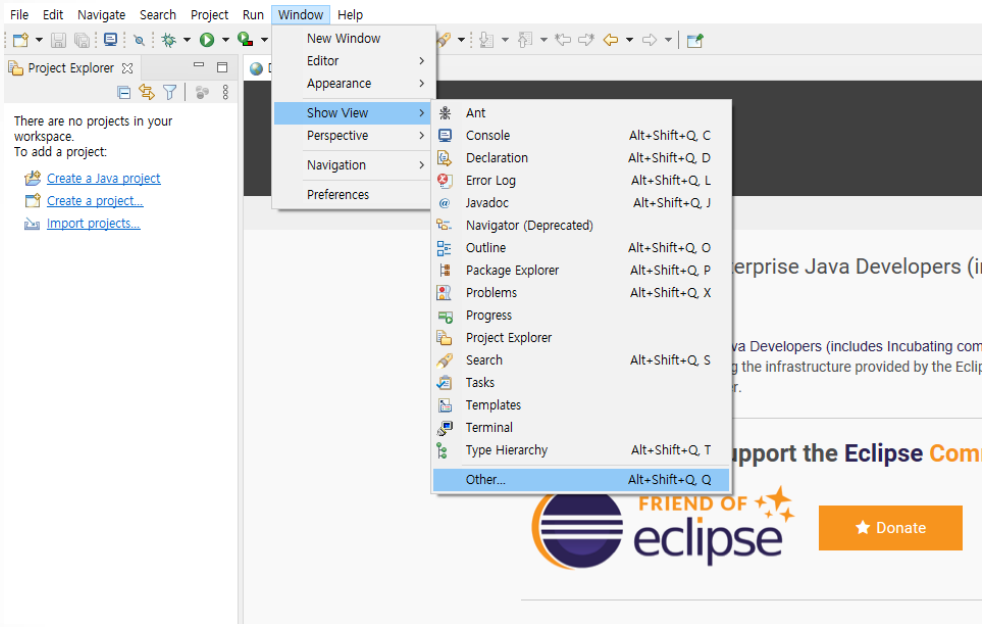
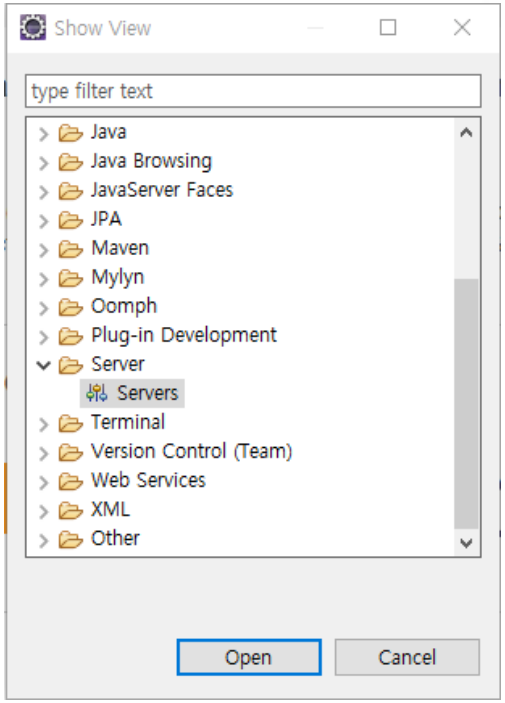
Launch
Cancel

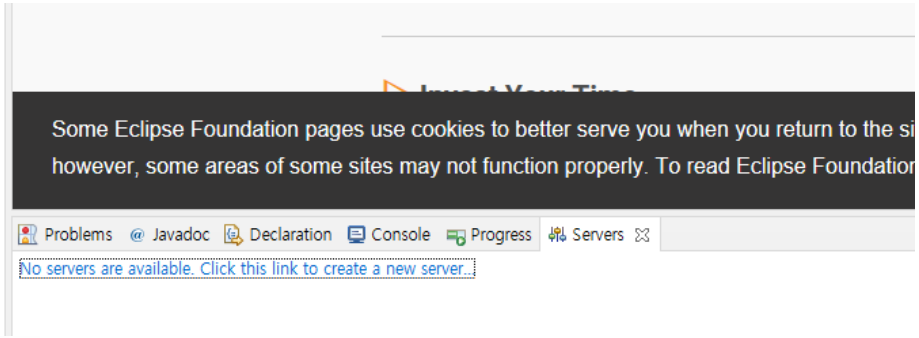

ECLIPSE FOUNDATION
Projects
Working Groups
Members
More
Donate
Eclipse IDE for Enterprise Java Developers (includes Incubating components)
What Can I Do to Support the Eclipse Community?
Invest Your Money
Invest Your Time
Some Eclipse Foundation pages use cookies to better serve you when you return to the site.
Decline
Allow cookies

1. 개발환경 구축

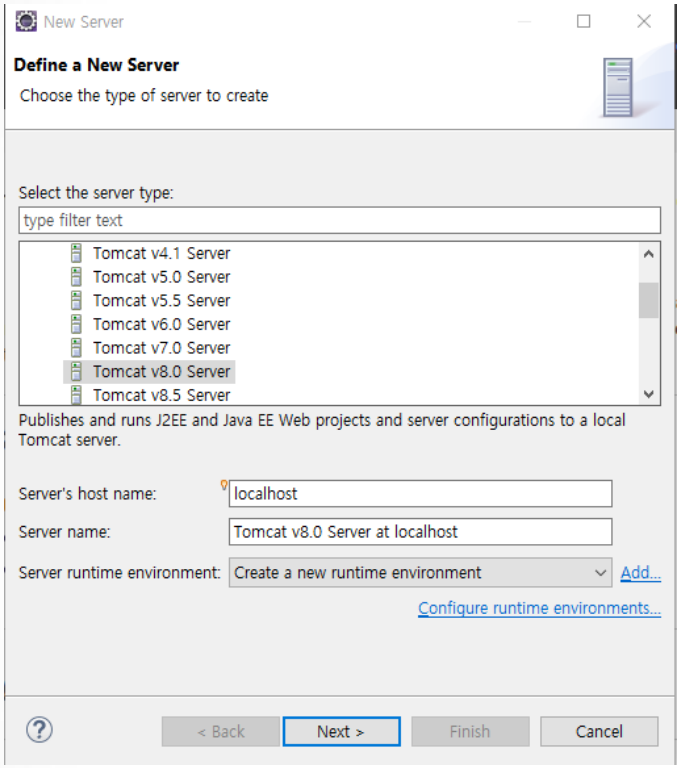
메뉴 > Window > Show View > Other > Server > Servers

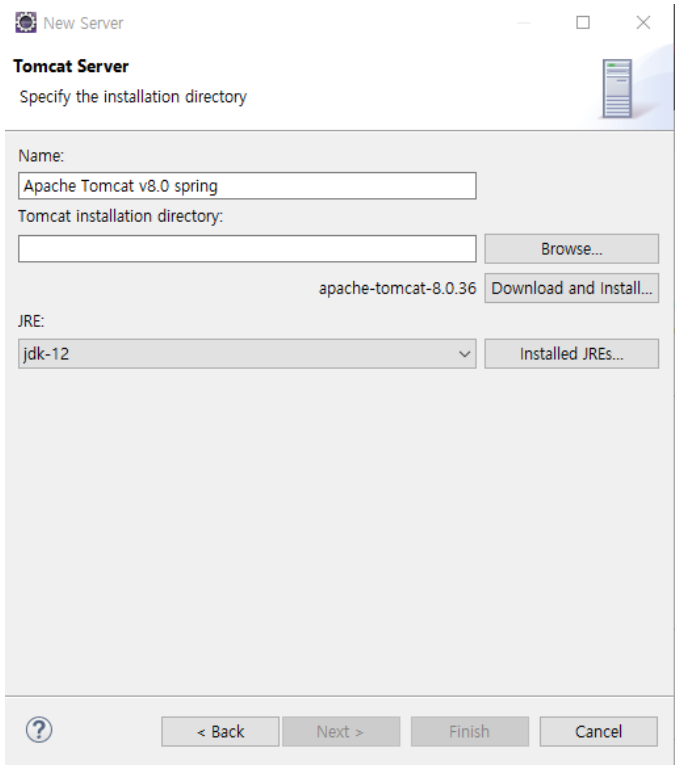




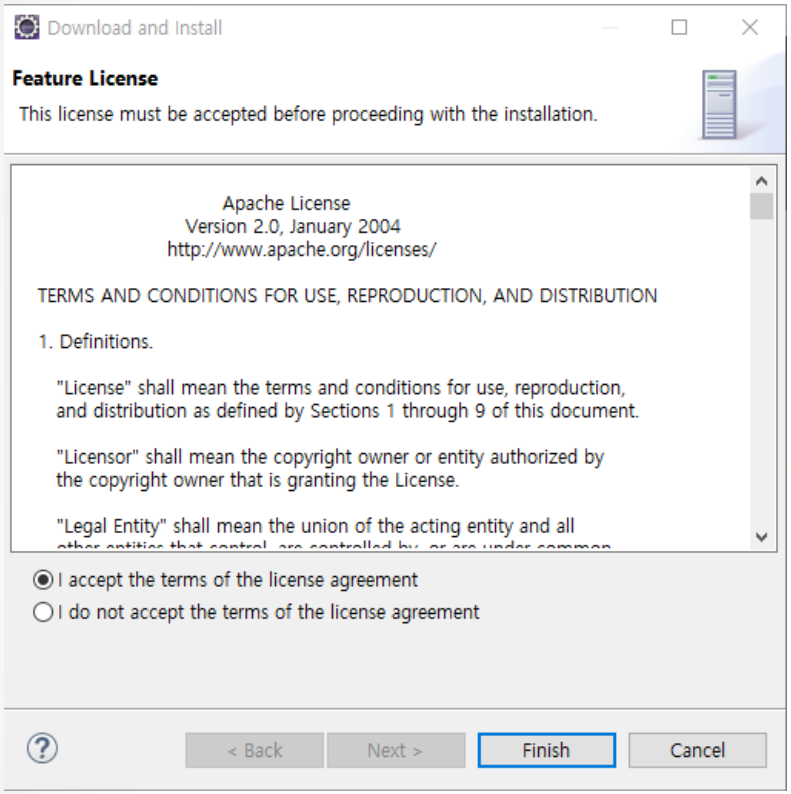


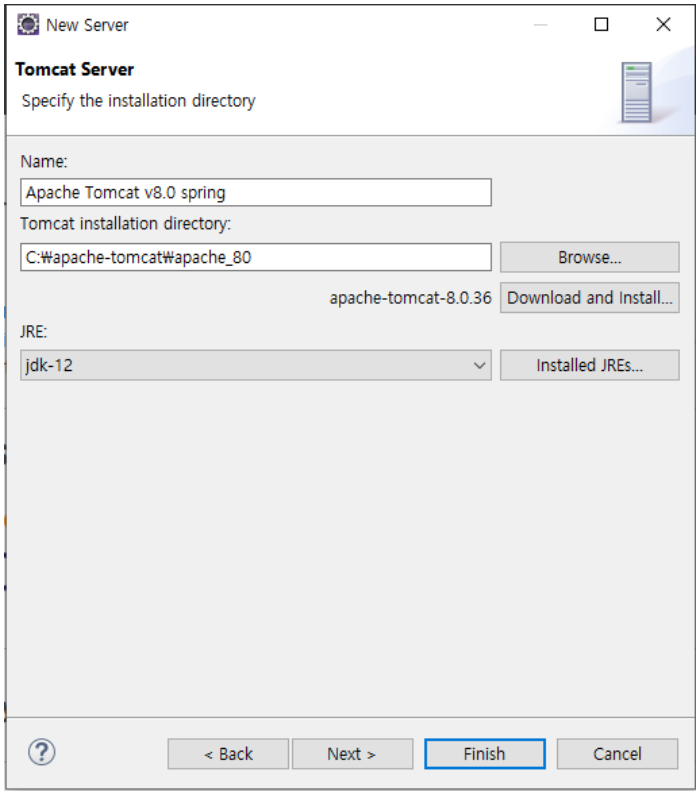
1. 개발환경 구축


New Server
Define a New Server
Choose the type of server to create
Select the server type:
type filter text
Tomcat v4.1 Server
Tomcat v5.0 Server
Tomcat v5.5 Server
Tomcat v6.0 Server
Tomcat v7.0 Server
Tomcat v8.0 Server
Tomcat v8.5 Server
Publishes and runs J2EE and Java EE Web projects and server configurations to a local Tomcat server.
Server's host name:
localhost
Server name:
Tomcat v8.0 Server at localhost
Server runtime environment:
Create a new runtime environment
Add...
Configure runtime environments...
< Back
Next >
Finish
Cancel

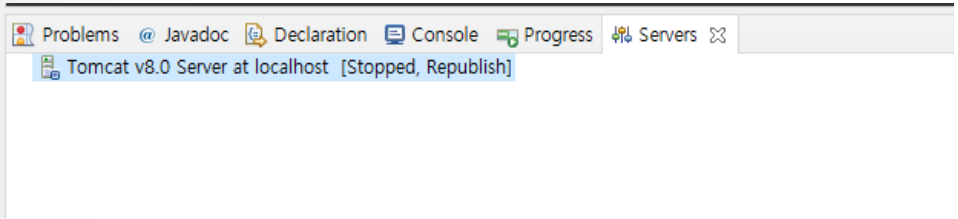

New Server
Tomcat Server
Specify the installation directory
Name:
Apache Tomcat v8.0 spring
Tomcat installation directory:
Browse...
apache-tomcat-8.0.36
Download and Install...
JRE:
jdk-12
Installed JREs...
< Back
Next >
Finish
Cancel

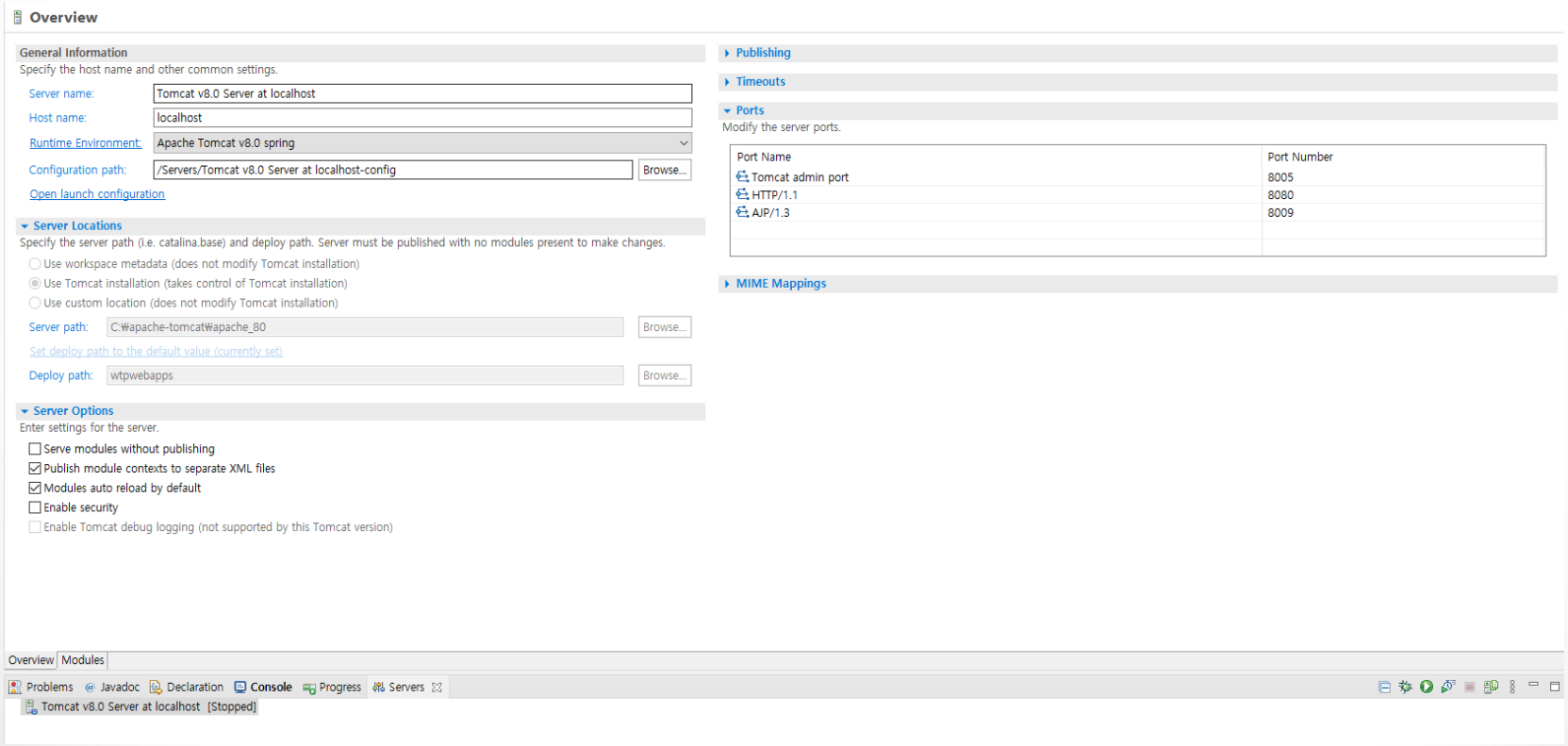
1. 개발환경 구축


Download and Install
Feature License
This license must be accepted before proceeding with the installation.
Apache License
Version 2.0, January 2004
http://www.apache.org/licenses/
TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION
1. Definitions.
"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.
"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.
"Legal Entity" shall mean the union of the acting entity and all
I accept the terms of the license agreement
I do not accept the terms of the license agreement
< Back
Next >
Finish
Cancel

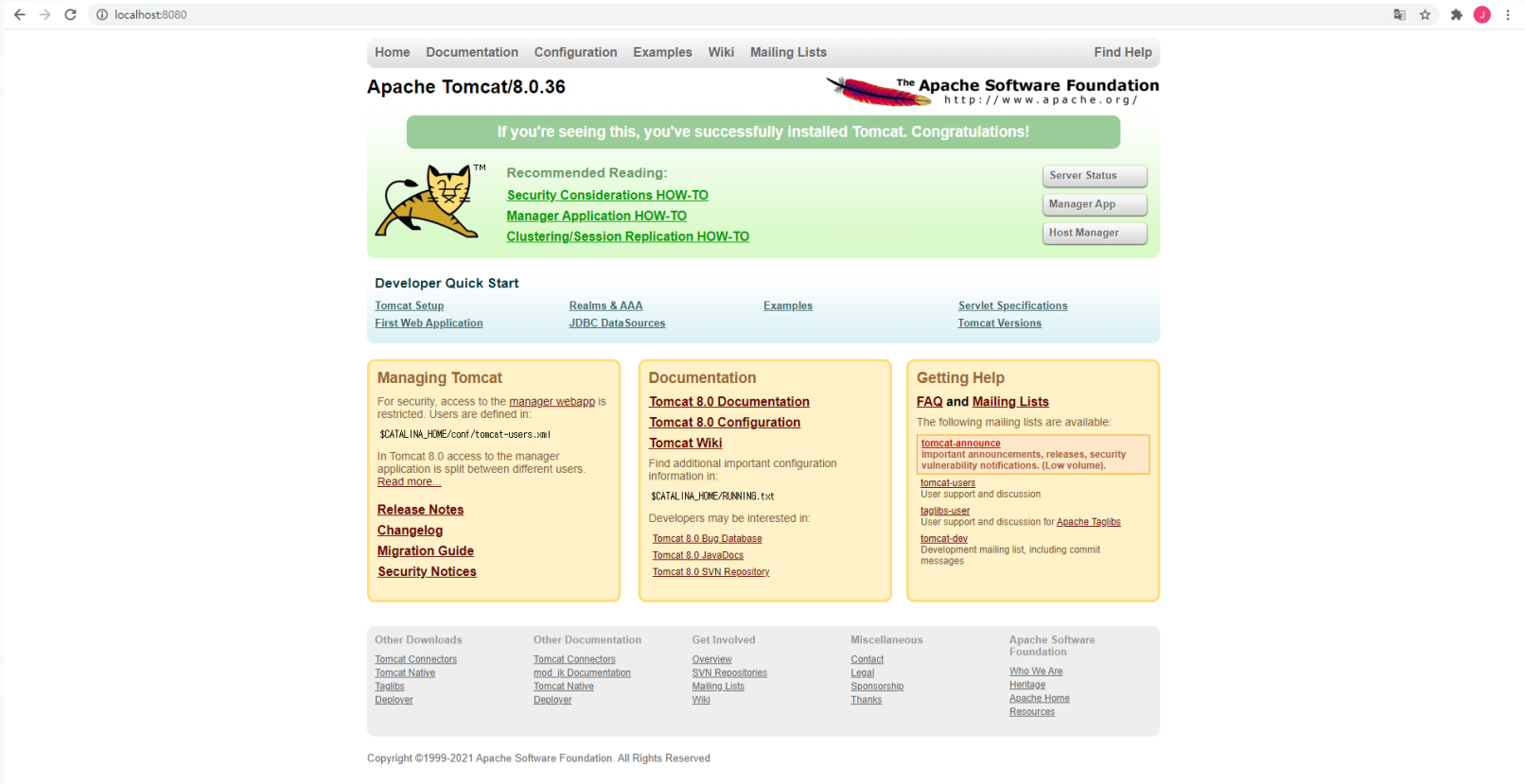

New Server
Tomcat Server
Specify the installation directory
Name:
Apache Tomcat v8.0 spring
Tomcat installation directory:
C:₩apache-tomcat₩apache_80
Browse...
apache-tomcat-8.0.36
Download and Install...
JRE:
jdk-12
Installed JREs...
< Back
Next >
Finish
Cancel

1. 개발환경 구축

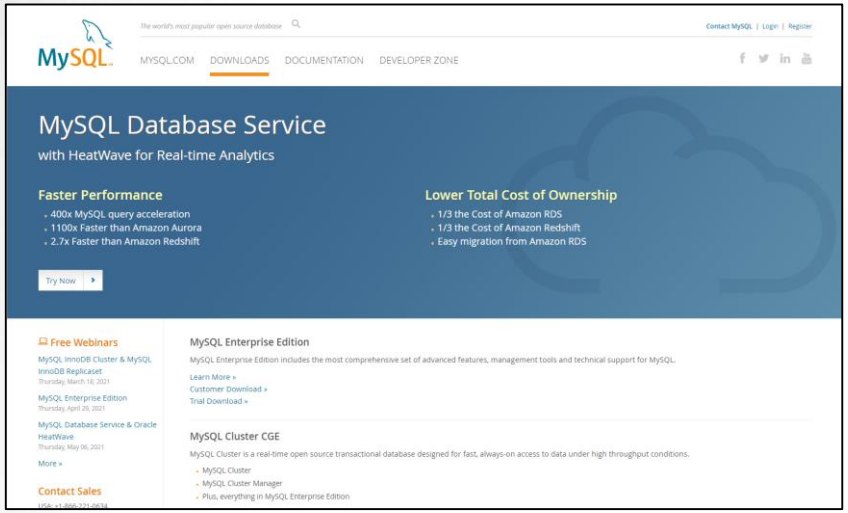

Problems
Javadoc
Declaration
Console
Progress
Servers
Tomcat v8.0 Server at localhost [Stopped, Republish]

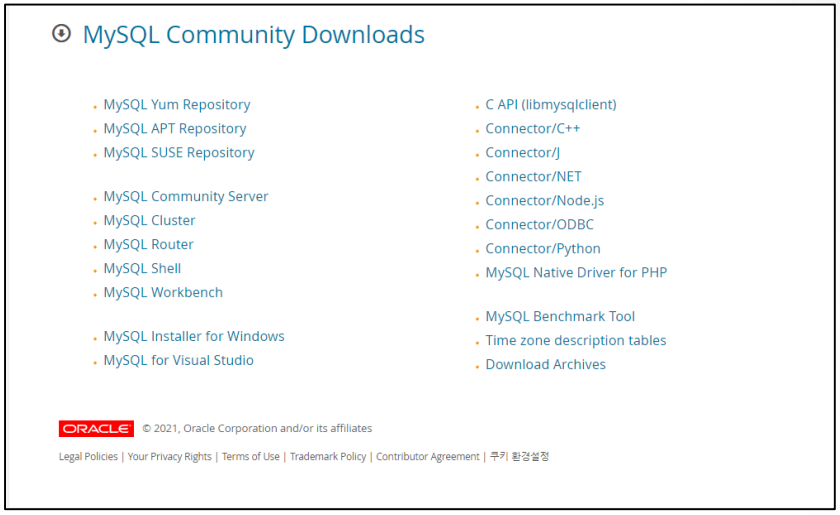

Overview
General Information
Specify the host name and other common settings.
Server name: Tomcat v8.0 Server at localhost
Host name: localhost
Runtime Environment: Apache Tomcat v8.0 spring
Configuration path: /Servers/Tomcat v8.0 Server at localhost-config
Browse...
Open launch configuration
Server Locations
Specify the server path (i.e. catalina.base) and deploy path. Server must be published with no modules present to make changes.
Use workspace metadata (does not modify Tomcat installation)
Use Tomcat installation (takes control of Tomcat installation)
Use custom location (does not modify Tomcat installation)
Server path: C:₩apache-tomcat₩apache_80
Set deploy path to the default value (currently set)
Deploy path: wtpwebapps
Server Options
Enter settings for the server.
Serve modules without publishing
Publish module contexts to separate XML files
Modules auto reload by default
Enable security
Enable Tomcat debug logging (not supported by this Tomcat version)
Publishing
Timeouts
Ports
Modify the server ports.
Port Name
Port Number
Tomcat admin port 8005
HTTP/1.1 8080
AJP/1.3 8009
MIME Mappings
Overview
Modules
Problems
Javadoc
Declaration
Console
Progress
Servers
Tomcat v8.0 Server at localhost [Stopped]

1. 개발환경 구축


localhost:8080
Home Documentation Configuration Examples Wiki Mailing Lists Find Help
Apache Tomcat/8.0.36
The Apache Software Foundation
http://www.apache.org/
If you're seeing this, you've successfully installed Tomcat. Congratulations!
Recommended Reading:
Security Considerations HOW-TO
Manager Application HOW-TO
Clustering/Session Replication HOW-TO
Server Status
Manager App
Host Manager
Developer Quick Start
Tomcat Setup
First Web Application
Realms & AAA
JDBC DataSources
Examples
Servlet Specifications
Tomcat Versions
Managing Tomcat
For security, access to the manager webapp is restricted. Users are defined in:
$CATALINA_HOME/conf/tomcat-users.xml
In Tomcat 8.0 access to the manager application is split between different users.
Read more...
Release Notes
Changelog
Migration Guide
Security Notices
Documentation
Tomcat 8.0 Documentation
Tomcat 8.0 Configuration
Tomcat Wiki
Find additional important configuration information in:
$CATALINA_HOME/RUNNING.txt
Developers may be interested in:
Tomcat 8.0 Bug Database
Tomcat 8.0 JavaDocs
Tomcat 8.0 SVN Repository
Getting Help
FAQ and Mailing Lists
The following mailing lists are available:
tomcat-announce
Important announcements, releases, security vulnerability notifications. (Low volume).
tomcat-users
User support and discussion
taglibs-user
User support and discussion for Apache Taglibs
tomcat-dev
Development mailing list, including commit messages
Other Downloads
Tomcat Connectors
Tomcat Native
Taglibs
Deployer
Other Documentation
Tomcat Connectors
mod_jk Documentation
Tomcat Native
Deployer
Get Involved
Overview
SVN Repositories
Mailing Lists
Wiki
Miscellaneous
Contact
Legal
Sponsorship
Thanks
Apache Software Foundation
Who We Are
Heritage
Apache Home
Resources
Copyright ©1999-2021 Apache Software Foundation. All Rights Reserved

1. 개발환경 구축


MySQL
MYSQL.COM
DOWNLOADS
DOCUMENTATION
DEVELOPER ZONE
MySQL Database Service
with HeatWave for Real-time Analytics
Faster Performance
400x MySQL query acceleration
1100x Faster than Amazon Aurora
2.7x Faster than Amazon Redshift
Lower Total Cost of Ownership
1/3 the Cost of Amazon RDS
1/3 the Cost of Amazon Redshift
Easy migration from Amazon RDS
Try Now
Free Webinars
Contact Sales
MySQL Enterprise Edition
MySQL Cluster CGE


MySQL Community Downloads
MySQL Yum Repository
MySQL APT Repository
MySQL SUSE Repository
MySQL Community Server
MySQL Cluster
MySQL Router
MySQL Shell
MySQL Workbench
MySQL Installer for Windows
MySQL for Visual Studio
C API (libmysqlclient)
Connector/C++
Connector/J
Connector/NET
Connector/Node.js
Connector/ODBC
Connector/Python
MySQL Native Driver for PHP
MySQL Benchmark Tool
Time zone description tables
Download Archives
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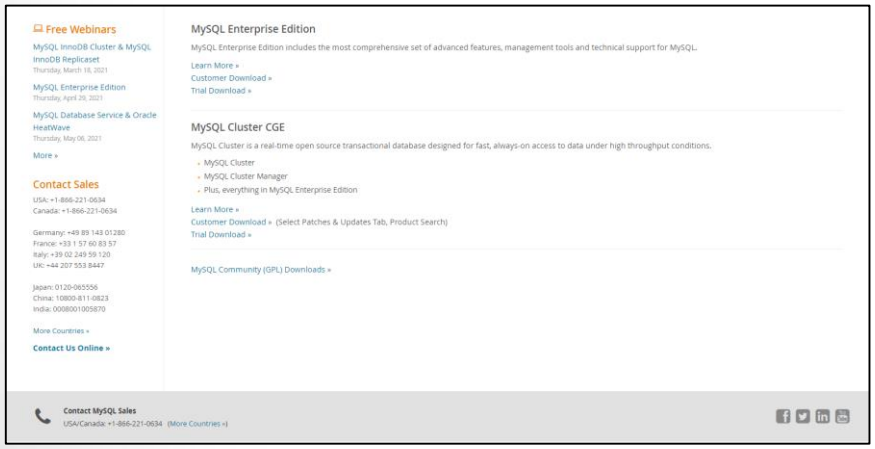
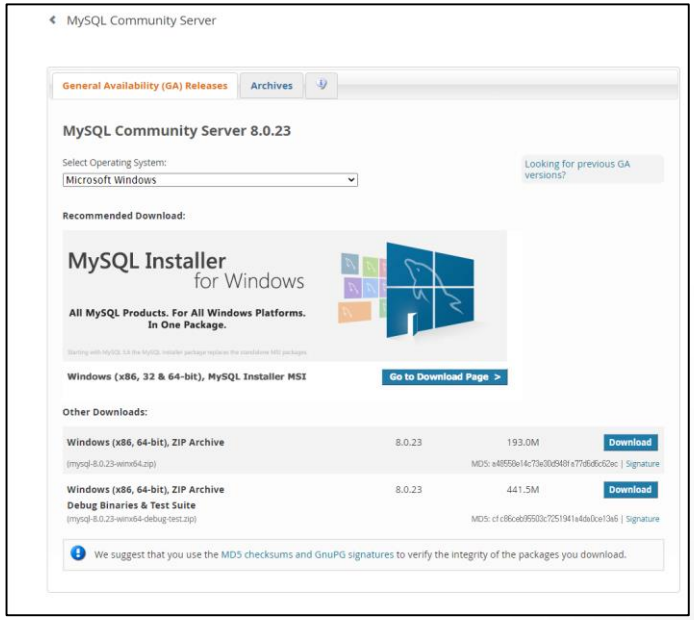
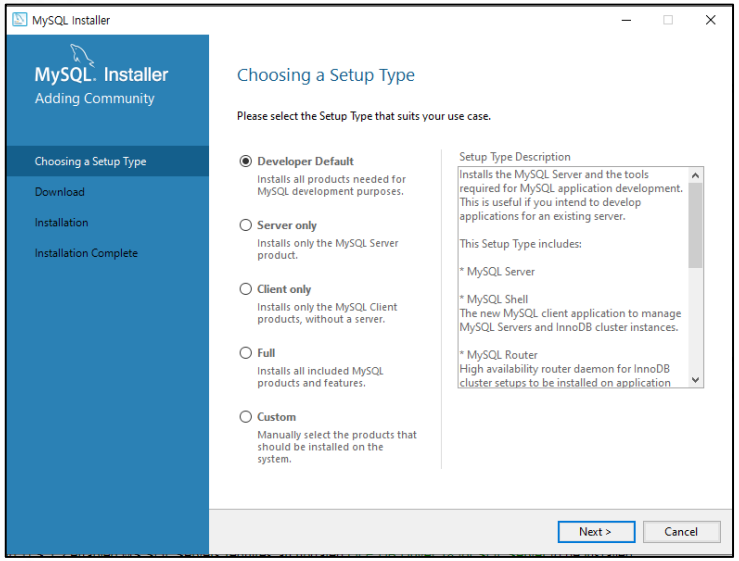
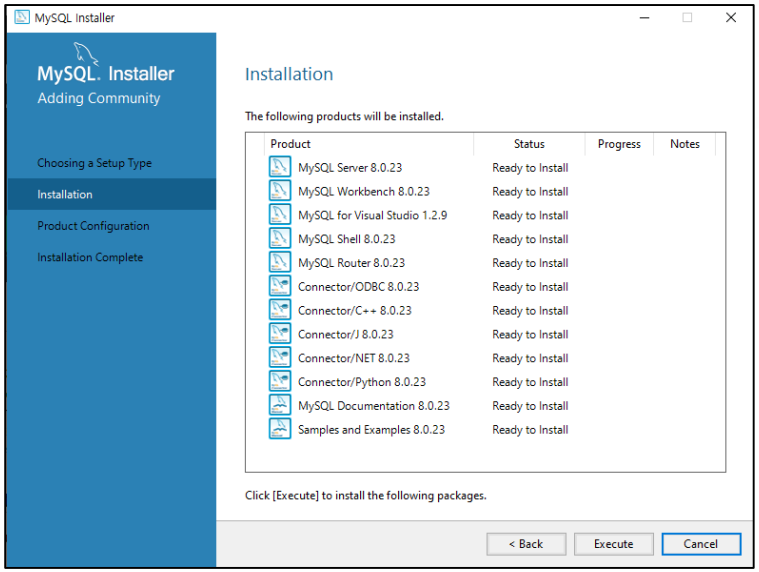
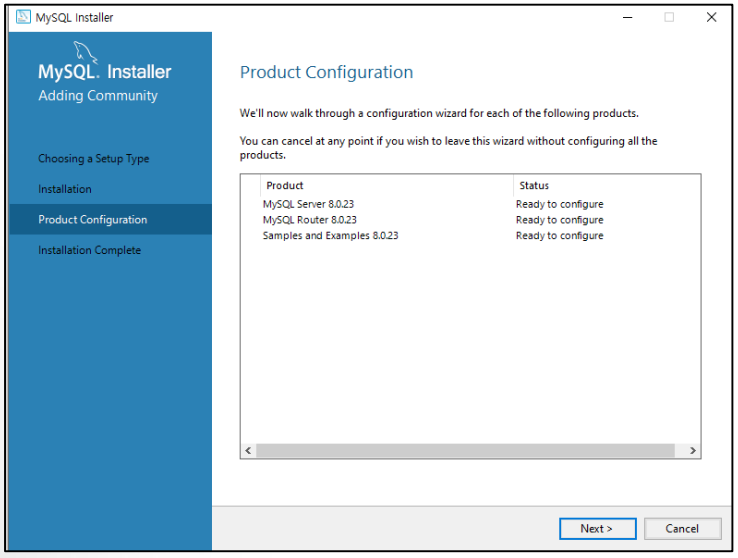

Free Webinars
MySQL Enterprise Edition
MySQL Cluster CGE
Contact Sales
Contact MySQL Sales

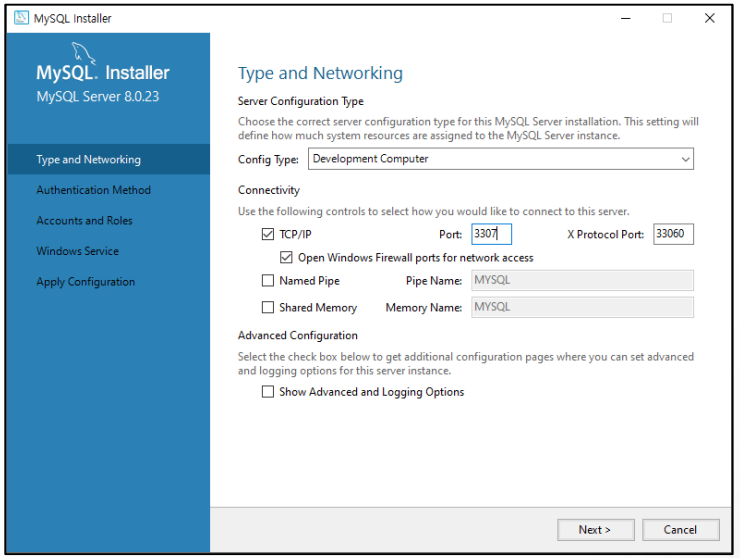

MySQL Community Server
General Availability (GA) Releases
Archives
MySQL Community Server 8.0.23
Select Operating System:
Microsoft Windows
Looking for previous GA versions?
Recommended Download:
MySQL Installer for Windows
All MySQL Products. For All Windows Platforms. In One Package.
Windows (x86, 32 & 64-bit), MySQL Installer MSI
Go to Download Page >
Other Downloads:
Windows (x86, 64-bit), ZIP Archive
8.0.23
193.0M
Download
Windows (x86, 64-bit), ZIP Archive
Debug Binaries & Test Suite
8.0.23
441.5M
Download
We suggest that you use the MD5 checksums and GnuPG signatures to verify the integrity of the packages you download.

1. 개발환경 구축

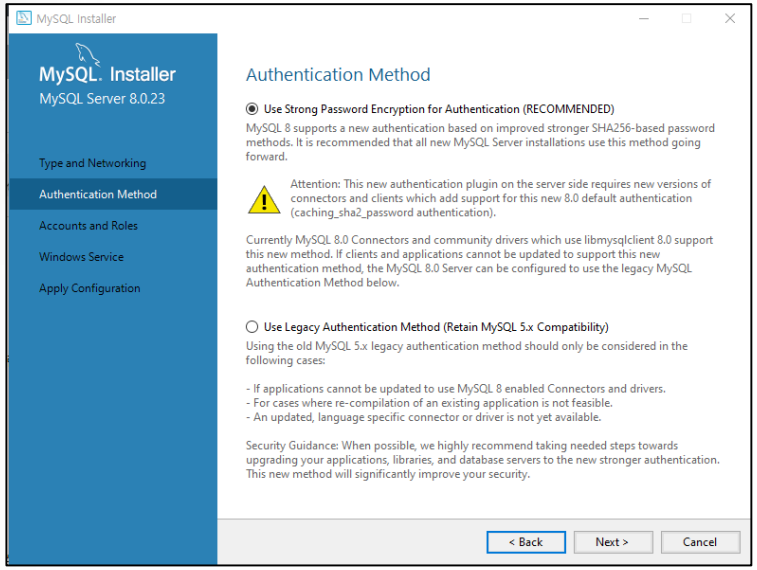

MySQL Installer
MySQL. Installer
Adding Community
Choosing a Setup Type
Download
Installation
Installation Complete
Choosing a Setup Type
Please select the Setup Type that suits your use case.
Developer Default
Installs all products needed for MySQL development purposes.
Server only
Installs only the MySQL Server product.
Client only
Installs only the MySQL Client products, without a server.
Full
Installs all included MySQL products and features.
Custom
Manually select the products that should be installed on the system.
Setup Type Description
Installs the MySQL Server and the tools required for MySQL application development. This is useful if you intend to develop applications for an existing server.
This Setup Type includes:
* MySQL Server
* MySQL Shell
The new MySQL client application to manage MySQL Servers and InnoDB cluster instances.
* MySQL Router
High availability router daemon for InnoDB cluster setups to be installed on application
Next >
Cancel

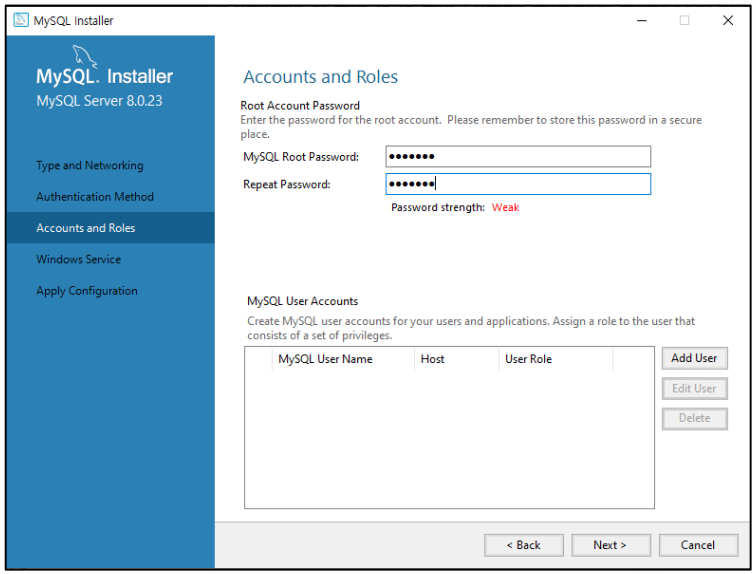

MySQL Installer
MySQL. Installer
Adding Community
Choosing a Setup Type
Installation
Product Configuration
Installation Complete
Installation
The following products will be installed.
Product
Status
Progress
Notes
MySQL Server 8.0.23
MySQL Workbench 8.0.23
MySQL for Visual Studio 1.2.9
MySQL Shell 8.0.23
MySQL Router 8.0.23
Connector/ODBC 8.0.23
Connector/C++ 8.0.23
Connector/J 8.0.23
Connector/NET 8.0.23
Connector/Python 8.0.23
MySQL Documentation 8.0.23
Samples and Examples 8.0.23
Ready to Install
Click [Execute] to install the following packages.
< Back
Execute
Cancel

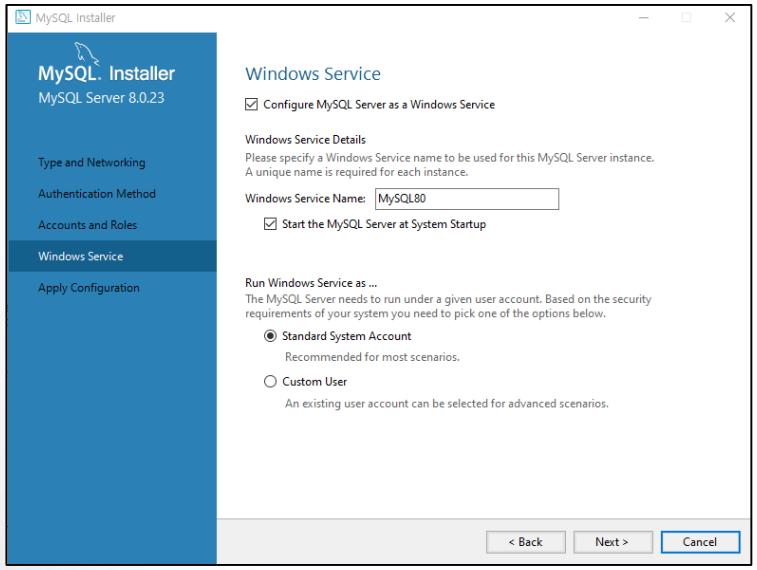

MySQL Installer
MySQL. Installer
Adding Community
Choosing a Setup Type
Installation
Product Configuration
Installation Complete
Product Configuration
We'll now walk through a configuration wizard for each of the following products.
You can cancel at any point if you wish to leave this wizard without configuring all the products.
Product
Status
MySQL Server 8.0.23
MySQL Router 8.0.23
Samples and Examples 8.0.23
Ready to configure
Next >
Cancel


MySQL Installer
MySQL. Installer
MySQL Server 8.0.23
Type and Networking
Authentication Method
Accounts and Roles
Windows Service
Apply Configuration
Type and Networking
Server Configuration Type
Choose the correct server configuration type for this MySQL Server installation. This setting will define how much system resources are assigned to the MySQL Server instance.
Config Type: Development Computer
Connectivity
Use the following controls to select how you would like to connect to this server.
TCP/IP
Port: 3307
X Protocol Port: 33060
Open Windows Firewall ports for network access
Named Pipe
Pipe Name: MYSQL
Shared Memory
Memory Name: MYSQL
Advanced Configuration
Select the check box below to get additional configuration pages where you can set advanced and logging options for this server instance.
Show Advanced and Logging Options
Next >
Cancel

1. 개발환경 구축


MySQL Installer
MySQL. Installer
MySQL Server 8.0.23
Type and Networking
Authentication Method
Accounts and Roles
Windows Service
Apply Configuration
Authentication Method
Use Strong Password Encryption for Authentication (RECOMMENDED)
MySQL 8 supports a new authentication based on improved stronger SHA256-based password methods. It is recommended that all new MySQL Server installations use this method going forward.
Attention: This new authentication plugin on the server side requires new versions of connectors and clients which add support for this new 8.0 default authentication (caching_sha2_password authentication).
Currently MySQL 8.0 Connectors and community drivers which use libmysqlclient 8.0 support this new method. If clients and applications cannot be updated to support this new authentication method, the MySQL 8.0 Server can be configured to use the legacy MySQL Authentication Method below.
Use Legacy Authentication Method (Retain MySQL 5.x Compatibility)
Using the old MySQL 5.x legacy authentication method should only be considered in the following cases:
- If applications cannot be updated to use MySQL 8 enabled Connectors and drivers.
- For cases where re-compilation of an existing application is not feasible.
- An updated, language specific connector or driver is not yet available.
Security Guidance: When possible, we highly recommend taking needed steps towards upgrading your applications, libraries, and database servers to the new stronger authentication. This new method will significantly improve your security.
< Back
Next >
Cancel


MySQL Installer
MySQL. Installer
MySQL Server 8.0.23
Type and Networking
Authentication Method
Accounts and Roles
Windows Service
Apply Configuration
Accounts and Roles
Root Account Password
Enter the password for the root account. Please remember to store this password in a secure place.
MySQL Root Password:
Repeat Password:
Password strength: Weak
MySQL User Accounts
Create MySQL user accounts for your users and applications. Assign a role to the user that consists of a set of privileges.
MySQL User Name
Host
User Role
Add User
Edit User
Delete
< Back
Next >
Cancel


MySQL Installer
MySQL. Installer
MySQL Server 8.0.23
Type and Networking
Authentication Method
Accounts and Roles
Windows Service
Apply Configuration
Windows Service
Configure MySQL Server as a Windows Service
Windows Service Details
Please specify a Windows Service name to be used for this MySQL Server instance. A unique name is required for each instance.
Windows Service Name:
MySQL80
Start the MySQL Server at System Startup
Run Windows Service as ...
The MySQL Server needs to run under a given user account. Based on the security requirements of your system you need to pick one of the options below.
Standard System Account
Recommended for most scenarios.
Custom User
An existing user account can be selected for advanced scenarios.
< Back
Next >
Cancel

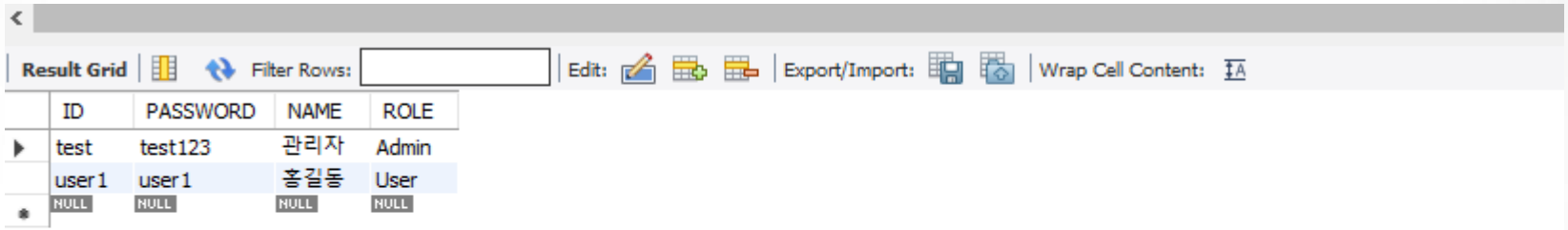
1. 개발환경 구축

Query 1 | board | users

Limit to 1000 rows

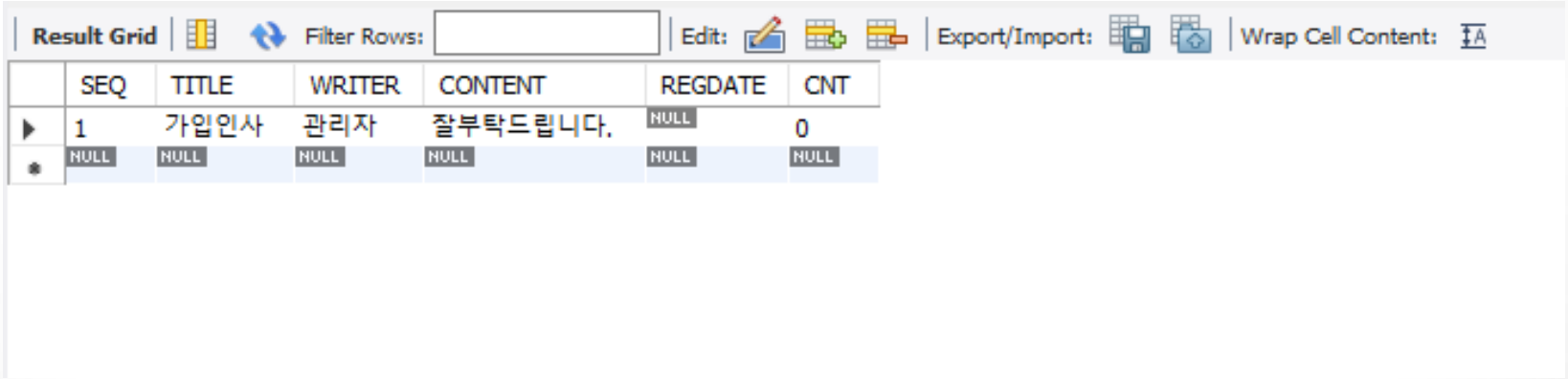
```
1  CREATE TABLE USERS (
2      ID  VARCHAR(8) primary KEY,
3      PASSWORD VARCHAR(8),
4      NAME VARCHAR(20),
5      ROLE VARCHAR(5)
6      );
7
8      INSERT INTO USERS VALUES ('test','test123','관리자','Admin');
9      INSERT INTO USERS VALUE ('user1','user1','홍길동','User');
10
11
12     CREATE TABLE BOARD(
13         SEQ INT(5) PRIMARY KEY,
14         TITLE VARCHAR(200),
15         WRITER VARCHAR(20),
16         CONTENT TEXT,
17         REGDATE DATETIME,
18         CNT int(5) default 0
19         );
20
21 INSERT INTO BOARD(SEQ,TITLE,WRITER,CONTENT) VALUES (1,'가입인사','관리자','잘부탁드립니다.');
```

1. 개발환경 구축



Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

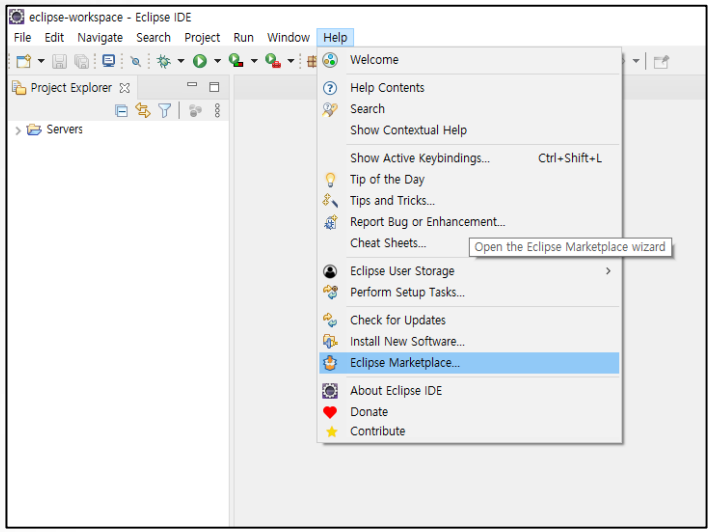
ID	PASSWORD	NAME	ROLE
test	test123	관리자	Admin
user1	user1	홍길동	User
NULL	NULL	NULL	NULL

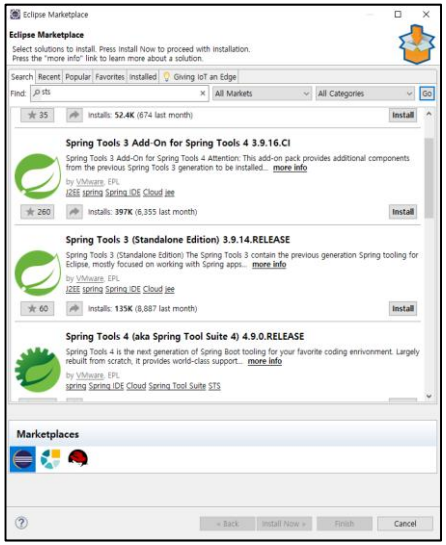


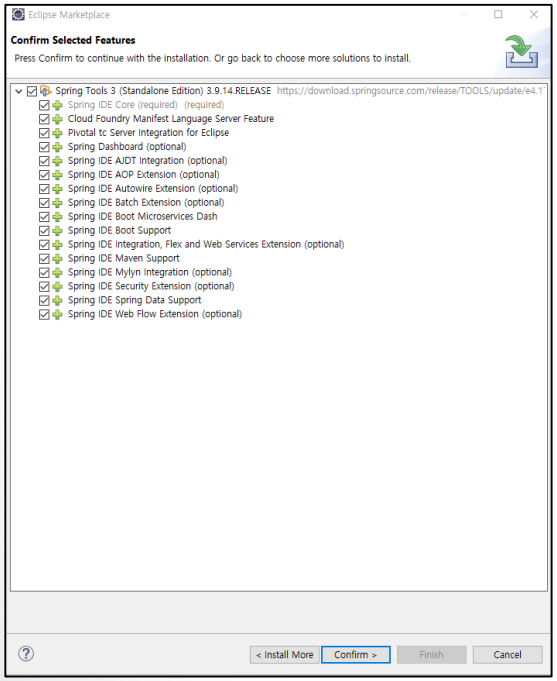
Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

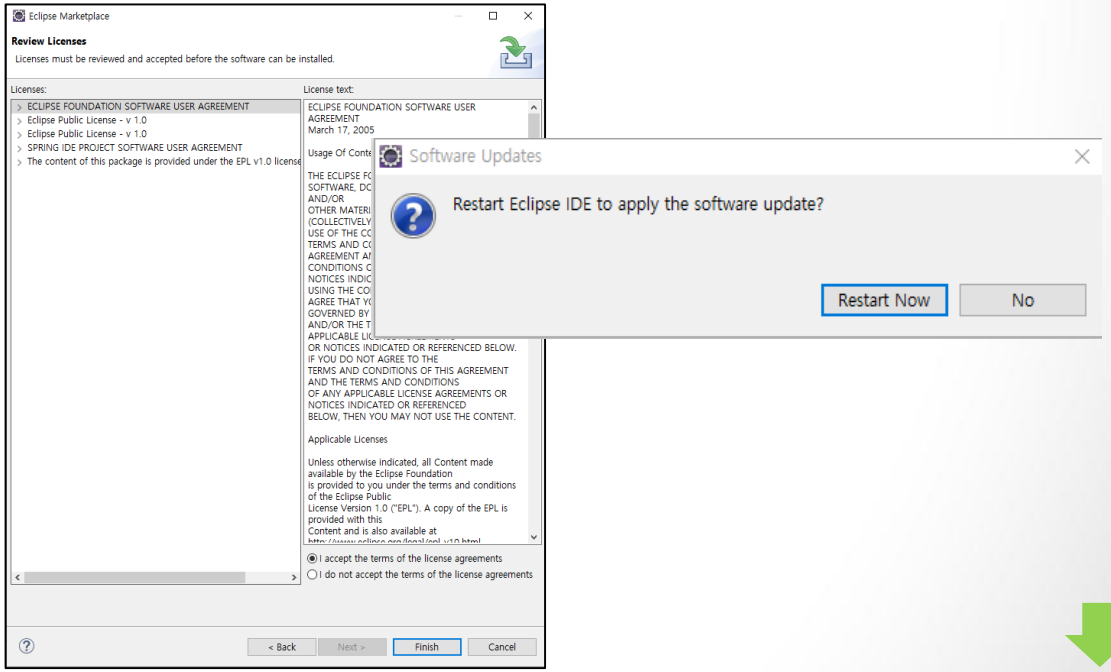
SEQ	TITLE	WRITER	CONTENT	REGDATE	CNT
1	가입인사	관리자	잘부탁드립니다.	NULL	0
NULL	NULL	NULL	NULL	NULL	NULL

1. 개발환경 구축


eclipse-workspace - Eclipse IDE
File Edit Navigate Search Project Run Window Help
Project Explorer
Servers
Welcome
Help Contents
Search
Show Contextual Help
Show Active Keybindings... Ctrl+Shift+L
Tip of the Day
Tips and Tricks...
Report Bug or Enhancement...
Cheat Sheets...
Open the Eclipse Marketplace wizard
Eclipse User Storage
Perform Setup Tasks...
Check for Updates
Install New Software...
Eclipse Marketplace...
About Eclipse IDE
Donate
Contribute

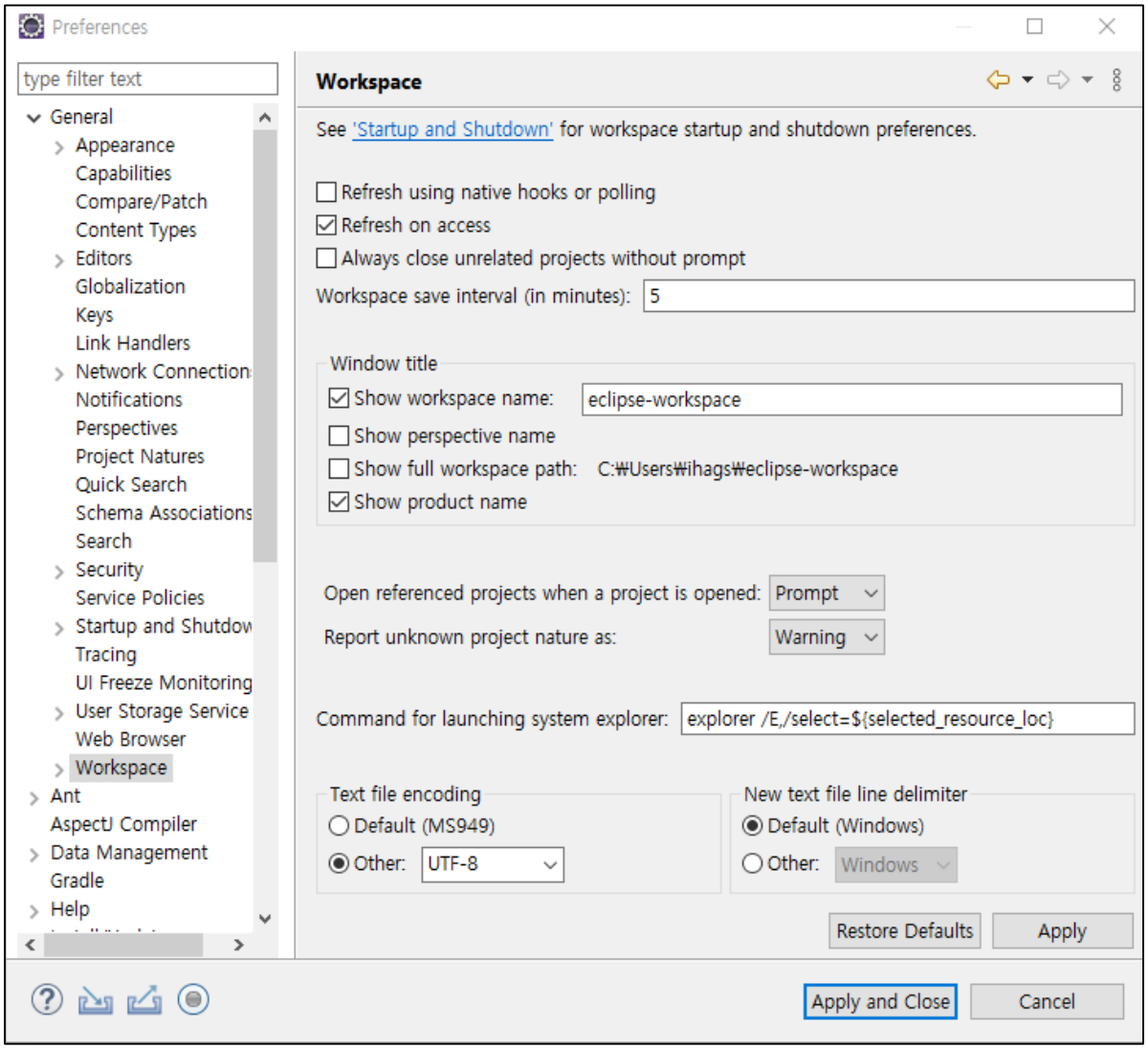

Eclipse Marketplace
Spring Tools 3 Add-On for Spring Tools 4 3.9.16.CI
Spring Tools 3 (Standalone Edition) 3.9.14.RELEASE
Spring Tools 4 (aka Spring Tool Suite 4) 4.9.0.RELEASE
Marketplaces
Cancel


Eclipse Marketplace
Confirm Selected Features
Press Confirm to continue with the installation. Or go back to choose more solutions to install.
Spring Tools 3 (Standalone Edition) 3.9.14.RELEASE
Spring IDE Core (required)
Cloud Foundry Manifest Language Server Feature
Pivotal tc Server Integration for Eclipse
Spring Dashboard (optional)
Spring IDE AJDT Integration (optional)
Spring IDE AOP Extension (optional)
Spring IDE Autowire Extension (optional)
Spring IDE Batch Extension (optional)
Spring IDE Boot Microservices Dash
Spring IDE Boot Support
Spring IDE Integration, Flex and Web Services Extension (optional)
Spring IDE Maven Support
Spring IDE Mylyn Integration (optional)
Spring IDE Security Extension (optional)
Spring IDE Spring Data Support
Spring IDE Web Flow Extension (optional)
< Install More
Confirm >
Finish
Cancel


Eclipse Marketplace
Review Licenses
Licenses must be reviewed and accepted before the software can be installed.
Licenses:
ECLIPSE FOUNDATION SOFTWARE USER AGREEMENT
Eclipse Public License - v 1.0
Eclipse Public License - v 1.0
SPRING IDE PROJECT SOFTWARE USER AGREEMENT
The content of this package is provided under the EPL v1.0 license
License text:
ECLIPSE FOUNDATION SOFTWARE USER AGREEMENT
March 17, 2005
Applicable Licenses
I accept the terms of the license agreements
I do not accept the terms of the license agreements
< Back
Next >
Finish
Cancel
Software Updates
Restart Eclipse IDE to apply the software update?
Restart Now
No

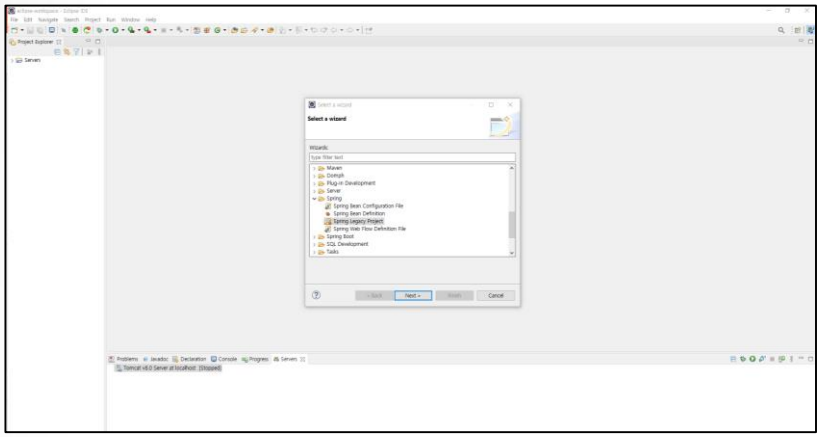
1. 개발환경 구축

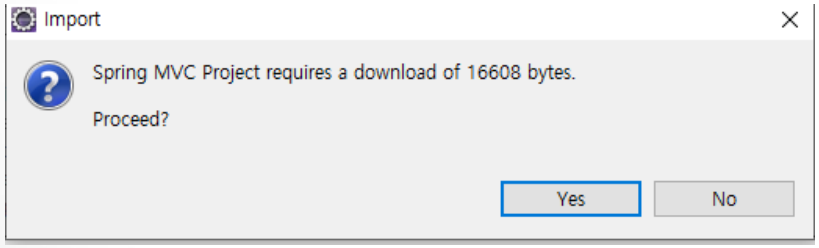
Window > Preferences > General > WorkSpace > Text file encoding

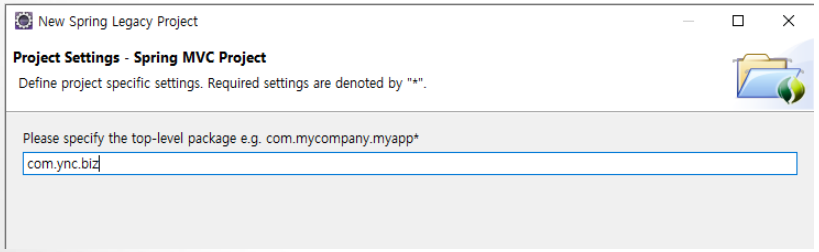


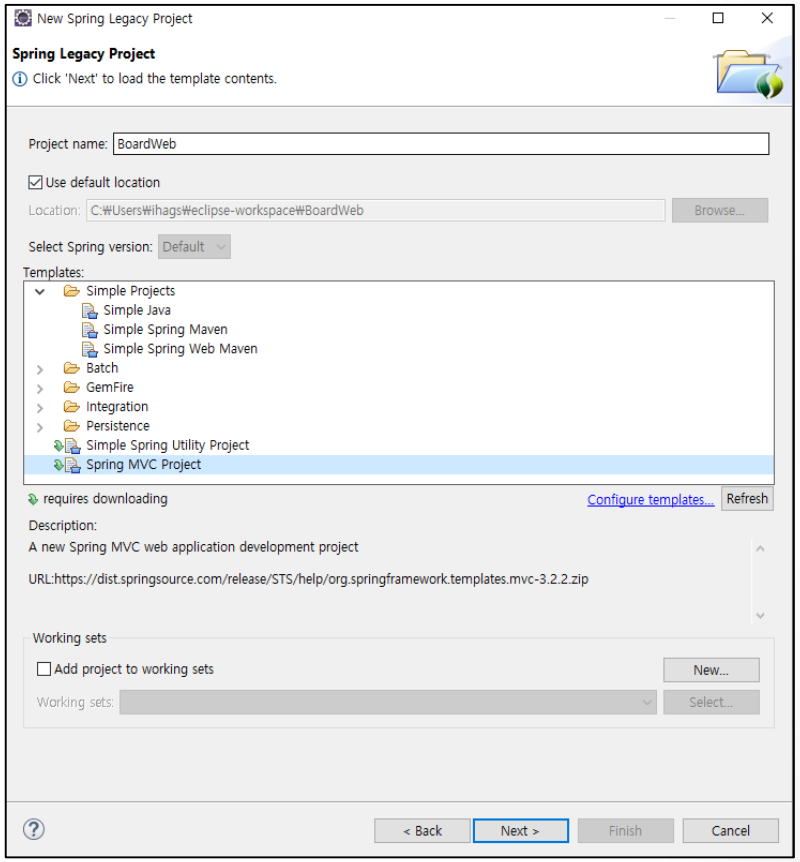
2. 실습프로젝트 생성

File > New > Other > Spring > Spring Legacy Project



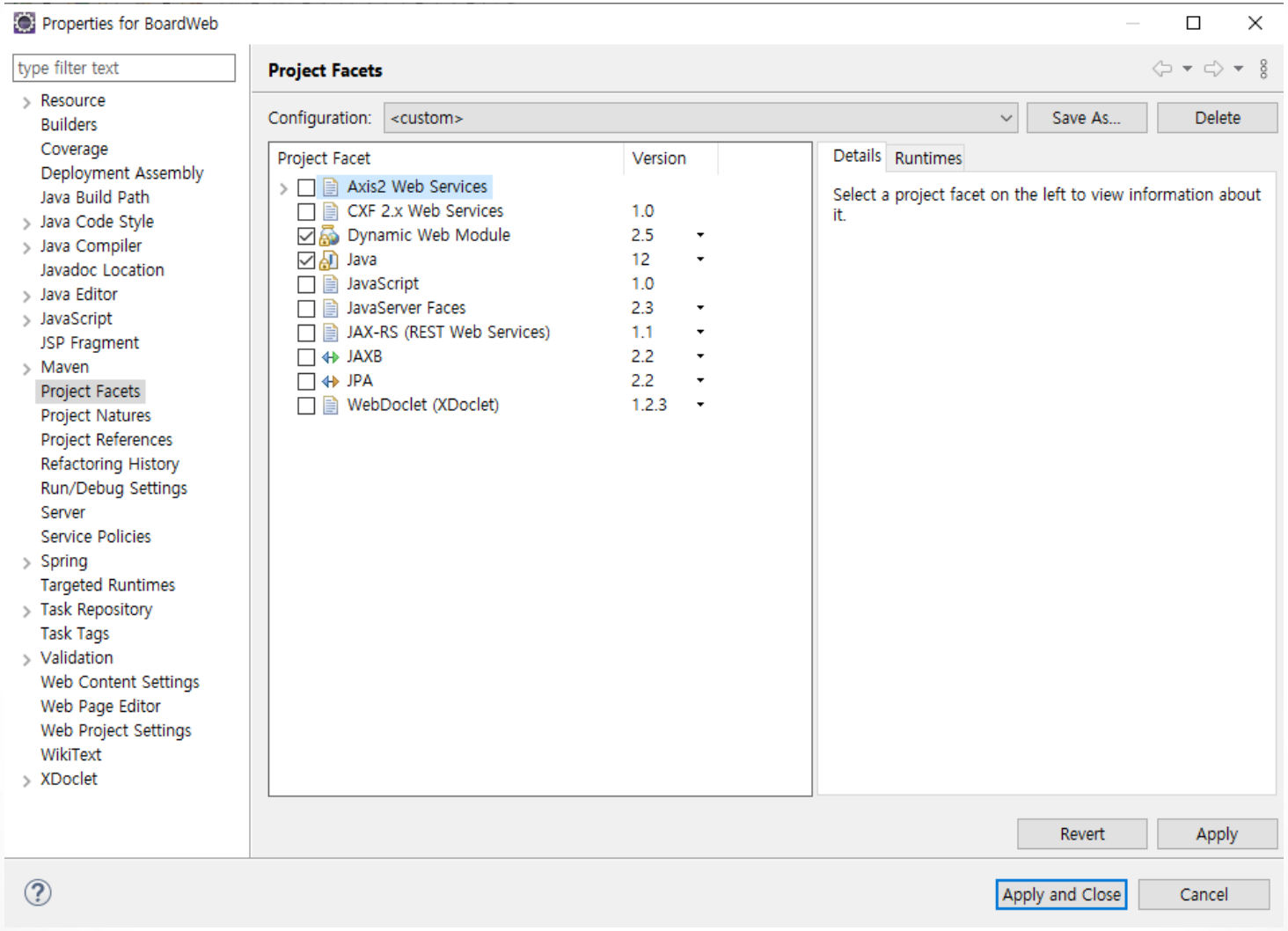






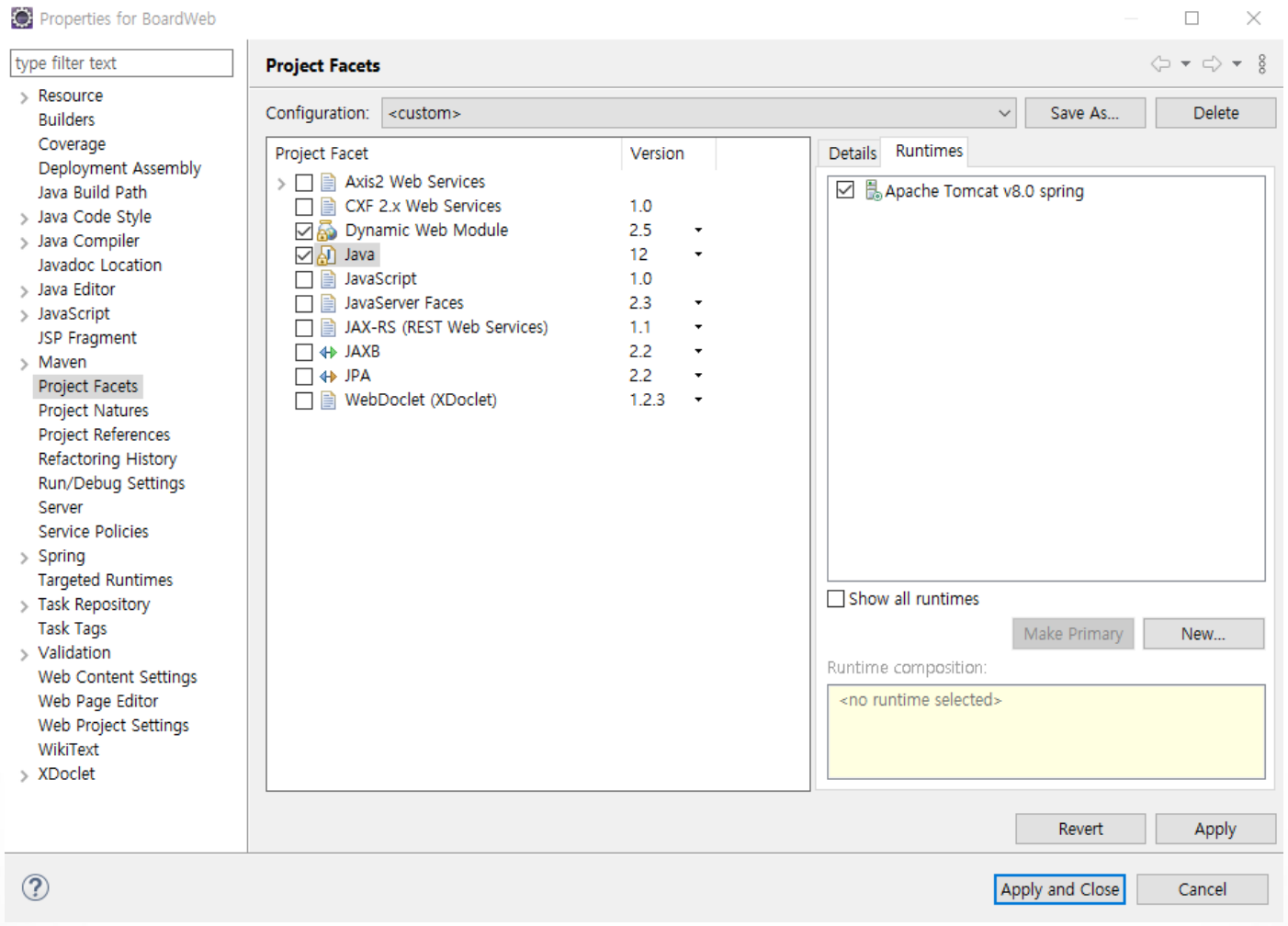
2. 실습프로젝트 생성

프로젝트선택 > Peoperties > Project Facets > Java > 12



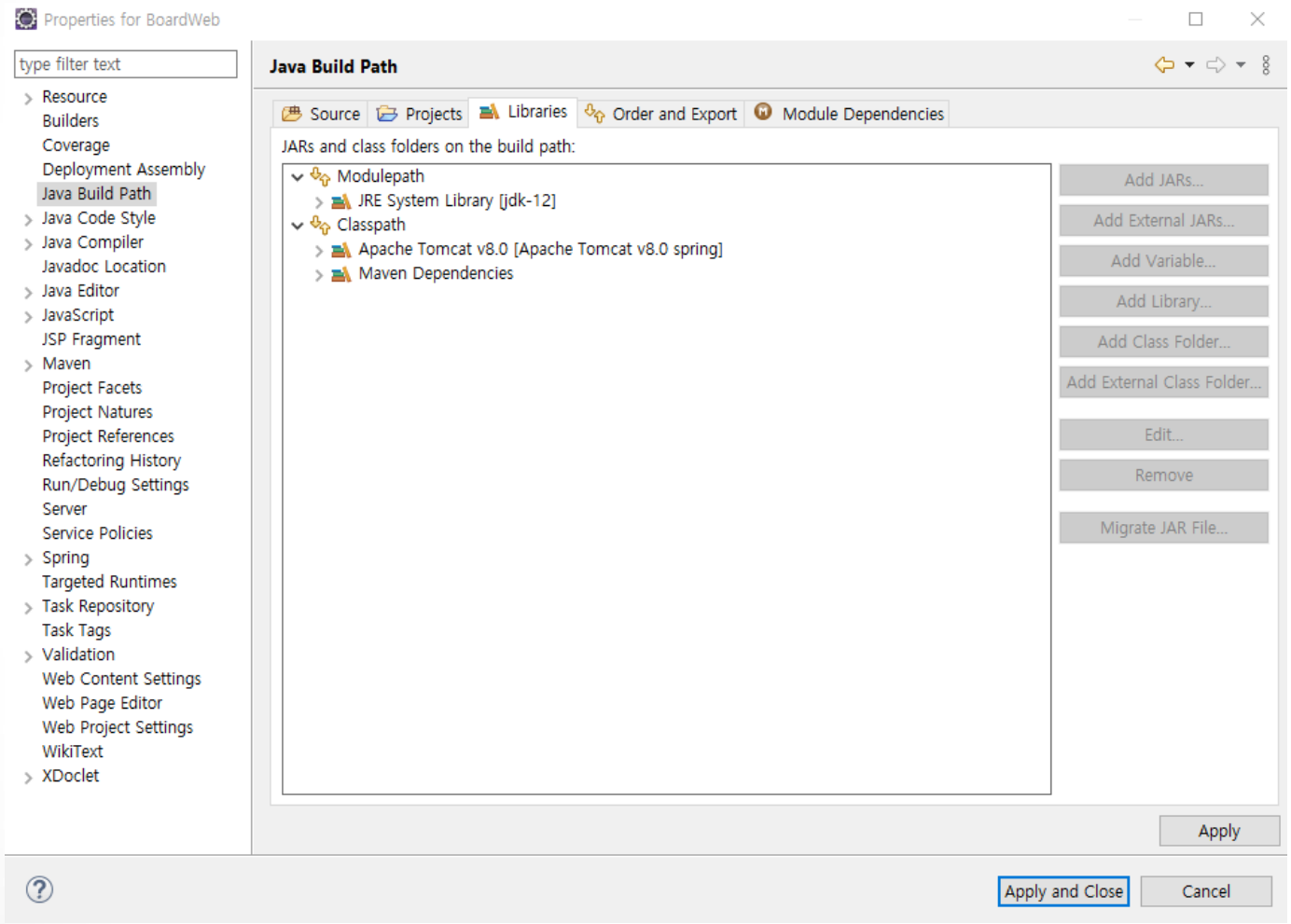
2. 실습프로젝트 생성

프로젝트선택 > Peoperties > Project Facests > Java > Runtimes



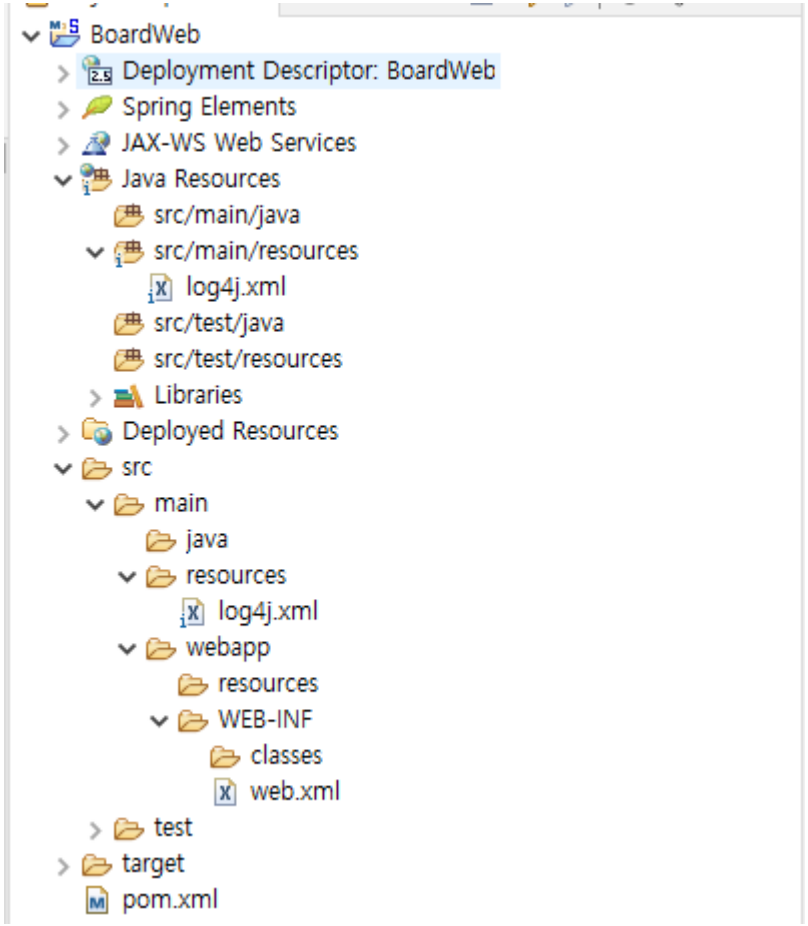
2. 실습프로젝트 생성

프로젝트선택 > Peoperties > Java Build Path > Libaries



2. 실습프로젝트 생성

프로젝트 생성시 생성된 파일 삭제



2. 실습프로젝트 생성

Web.xml 루트 엘리먼트 제외한 나머지 설정 삭제

```xml
<?xml version="1.0" encoding="UTF-8"?>
<web-app version="2.5" xmlns="http://java.sun.com/xml/ns/javaee"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://java.sun.com/xml/ns/javaee https://java.sun.com/xml/ns/javaee/web-app_2_5.xsd">

    <!-- The definition of the Root Spring Container shared by all Servlets and Filters -->
    <context-param>
        <param-name>contextConfigLocation</param-name>
        <param-value>/WEB-INF/spring/root-context.xml</param-value>
    </context-param>

    <!-- Creates the Spring Container shared by all Servlets and Filters -->
    <listener>
        <listener-class>org.springframework.web.context.ContextLoaderListener</listener-class>
    </listener>

    <!-- Processes application requests -->
    <servlet>
        <servlet-name>appServlet</servlet-name>
        <servlet-class>org.springframework.web.servlet.DispatcherServlet</servlet-class>
        <init-param>
            <param-name>contextConfigLocation</param-name>
            <param-value>/WEB-INF/spring/appServlet/servlet-context.xml</param-value>
        </init-param>
        <load-on-startup>1</load-on-startup>
    </servlet>

    <servlet-mapping>
        <servlet-name>appServlet</servlet-name>
        <url-pattern>/</url-pattern>
    </servlet-mapping>

</web-app>
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<web-app version="2.5" xmlns="http://java.sun.com/xml/ns/javaee"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://java.sun.com/xml/ns/javaee https://java.sun.com/xml/ns/javaee/web-app_2_5.xsd">

</web-app>
```

2. 실습프로젝트 생성

Pom.xml Spring 버전 변경 (4.2.4.RELEASE)

```
<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 https://maven.apache.org/maven-v4_0_0.xsd">
    <modelVersion>4.0.0</modelVersion>
    <groupId>com.ync</groupId>
    <artifactId>biz</artifactId>
    <name>BoardWeb</name>
    <packaging>war</packaging>
    <version>1.0.0-BUILD-SNAPSHOT</version>
    <properties>
        <java-version>1.6</java-version>
        <org.springframework-version>4.2.4.RELEASE</org.springframework-version>
        <org.aspectj-version>1.6.10</org.aspectj-version>
        <org.slf4j-version>1.6.6</org.slf4j-version>
    </properties>
    <dependencies>
        <!-- Spring -->
        <dependency>
```