

JSP소개

Java Server Pages

JSP?

Java Server Pages

HTML내에 자바 코드를 삽입
웹 서버에서 웹페이지를 생성하여
웹 브라우저에 돌려주는
서버 사이드 스크립트 언어이다.

유사한 언어로는 PHP, ASP 등이 있다.

**서버에서 페이지를 구현하는 방법
자바를 통하여 가변적인 페이지를 만들 수 있다.**

개발환경 구축

JSP Development Environment

기본적으로 JSP를 작성하기 위한 JDK와
Java를 실행하기 위한 JRE

그리고 서버 어플리케이션을 가동해 주기 위한
웹서버가 필요하다.

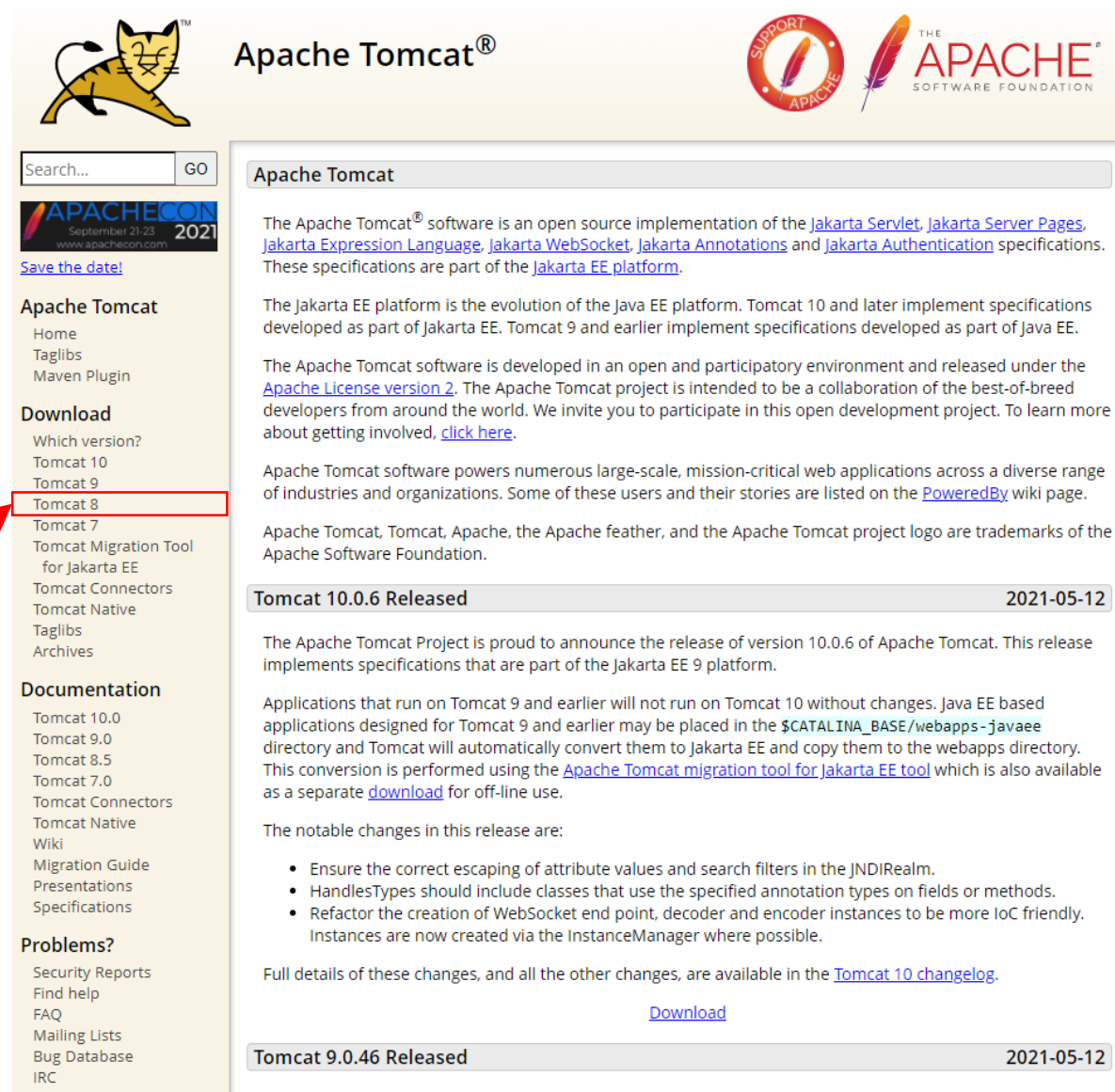
**가장 대중적으로 사용되고 있는 Tomcat을
사용하면 간단하게 구현이 가능하다.**

Tomcat 다운로드

개발을 위해서는 JRE와
JDK가 설치되어 있어야 하며

Eclipse와 같은 문서 편집툴
이 우선 설치되어 있어야 한다.

Tomcat은 버전이 여러가지가
있지만 8.5를 다운로드 한다.
(최신버전은 아니지만 가장 안정적이다)

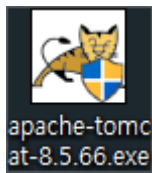


The screenshot shows the Apache Tomcat website. The left sidebar contains a navigation menu with sections: Apache Tomcat (Home, Taglibs, Maven Plugin), Download (Which version?, Tomcat 10, Tomcat 9, Tomcat 8, Tomcat 7, Tomcat Migration Tool for Jakarta EE, Tomcat Connectors, Tomcat Native, Taglibs, Archives), Documentation (Tomcat 10.0, Tomcat 9.0, Tomcat 8.5, Tomcat 7.0, Tomcat Connectors, Tomcat Native, Wiki, Migration Guide, Presentations, Specifications), and Problems? (Security Reports, Find help, FAQ, Mailing Lists, Bug Database, IRC). The 'Tomcat 8' link in the Download section is highlighted with a red box, and a red arrow points from the text '8.5를 다운로드 한다.' to it. The main content area features the Apache Tomcat logo, a search bar, and a 'GO' button. Below the search bar is a banner for 'APACHECON September 21-23 2021'. The main text describes the Apache Tomcat software as an open source implementation of the Jakarta Servlet, Jakarta Server Pages, Jakarta Expression Language, Jakarta WebSocket, Jakarta Annotations, and Jakarta Authentication specifications. It mentions that these specifications are part of the Jakarta EE platform. The text also states that the Jakarta EE platform is the evolution of the Java EE platform, and that Tomcat 10 and later implement specifications developed as part of Jakarta EE, while Tomcat 9 and earlier implement specifications developed as part of Java EE. The Apache Tomcat software is developed in an open and participatory environment and released under the Apache License version 2. The Apache Tomcat project is intended to be a collaboration of the best-of-breed developers from around the world. We invite you to participate in this open development project. To learn more about getting involved, click here. Apache Tomcat software powers numerous large-scale, mission-critical web applications across a diverse range of industries and organizations. Some of these users and their stories are listed on the PoweredBy wiki page. Apache Tomcat, Tomcat, Apache, the Apache feather, and the Apache Tomcat project logo are trademarks of the Apache Software Foundation. A section titled 'Tomcat 10.0.6 Released' with the date '2021-05-12' is shown. The text describes the release of version 10.0.6 of Apache Tomcat, which implements specifications that are part of the Jakarta EE 9 platform. Applications that run on Tomcat 9 and earlier will not run on Tomcat 10 without changes. Java EE based applications designed for Tomcat 9 and earlier may be placed in the \$CATALINA_BASE/webapps-javaee directory and Tomcat will automatically convert them to Jakarta EE and copy them to the webapps directory. This conversion is performed using the Apache Tomcat migration tool for Jakarta EE tool which is also available as a separate download for off-line use. The notable changes in this release are: Ensure the correct escaping of attribute values and search filters in the JNDIRealm. HandlesTypes should include classes that use the specified annotation types on fields or methods. Refactor the creation of WebSocket end point, decoder and encoder instances to be more IoC friendly. Instances are now created via the InstanceManager where possible. Full details of these changes, and all the other changes, are available in the Tomcat 10 changelog. A 'Download' link is provided. A section titled 'Tomcat 9.0.46 Released' with the date '2021-05-12' is also shown.

Tomcat 다운로드

Tomcat은 여러가지 방법으로
설치가 가능하지만
가장 간편한 방법은

windows 설치 파일로
다운로드 받아 실행하는 것이
다.



Download

Which version?
Tomcat 10
Tomcat 9
Tomcat 8
Tomcat 7
Tomcat Migration Tool
for Jakarta EE
Tomcat Connectors
Tomcat Native
Taglibs
Archives

Documentation

Tomcat 10.0
Tomcat 9.0
Tomcat 8.5
Tomcat 7.0
Tomcat Connectors
Tomcat Native
Wiki
Migration Guide
Presentations
Specifications

Problems?

Security Reports
Find help
Mailing Lists
Bug Database
IRC

Get Involved

Overview
Source code
Buildbot
Translations
Tools

Media

Twitter
YouTube
Blog

[KEYS](#) | [8.5.66](#) | [Browse](#) | [Archives](#)

Release Integrity

You **must** [verify](#) the integrity of the downloaded files. We provide OpenPGP signatures for every release file. This signature should be matched against the [KEYS](#) file which contains the OpenPGP keys of Tomcat's Release Managers. We also provide [SHA-512](#) checksums for every release file. After you download the file, you should calculate a checksum for your download, and make sure it is the same as ours.

Mirrors

You are currently using <https://mirror.naver.com/apache/>. If you encounter a problem with this mirror, please select another mirror. If all mirrors are failing, there are *backup* mirrors (at the end of the mirrors list) that should be available.

Other mirrors:

8.5.66

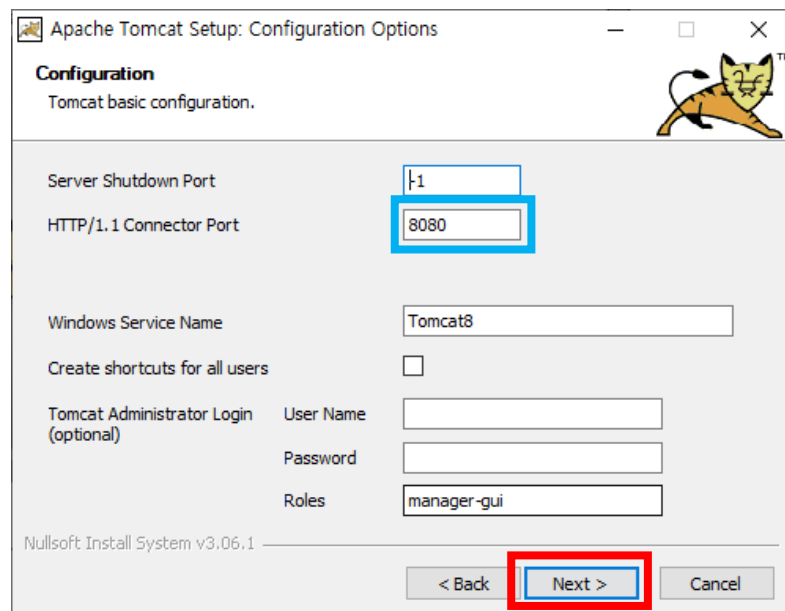
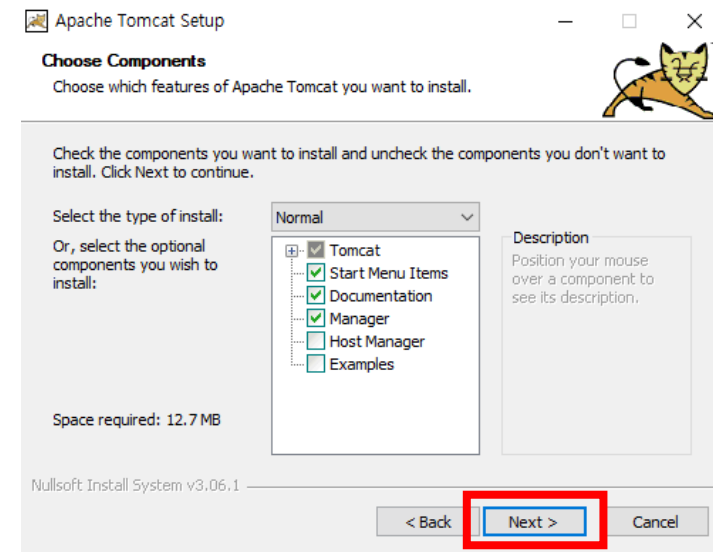
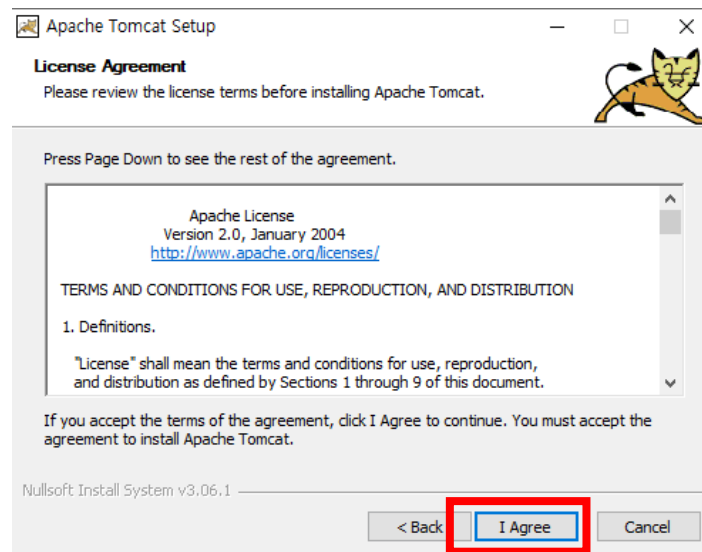
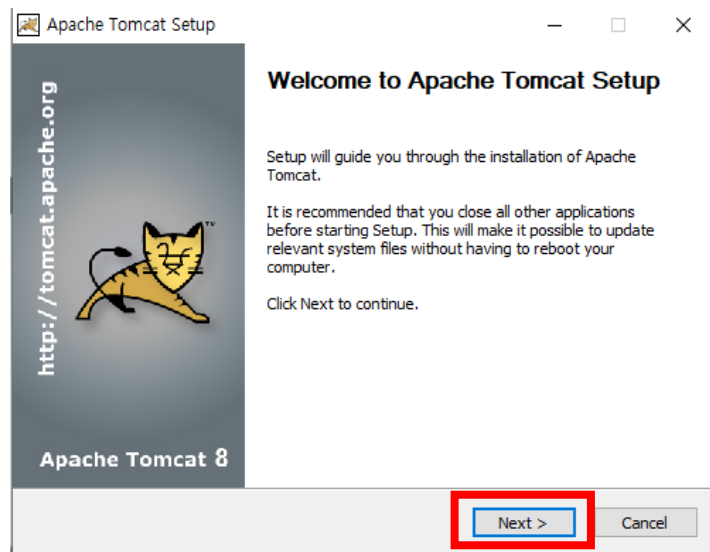
Please see the [README](#) file for packaging information. It explains what every distribution contains.

Binary Distributions

- Core:
 - [zip \(pgp, sha512\)](#)
 - [tar.gz \(pgp, sha512\)](#)
 - [32-bit Windows zip \(pgp, sha512\)](#)
 - [64-bit Windows zip \(pgp, sha512\)](#)
 - [32-bit/64-bit Windows Service Installer \(pgp, sha512\)](#)
- Full documentation:
 - [tar.gz \(pgp, sha512\)](#)
- Deployer:
 - [zip \(pgp, sha512\)](#)
 - [tar.gz \(pgp, sha512\)](#)
- Extras:
 - [JMX Remote jar \(pgp, sha512\)](#)
 - [Web services jar \(pgp, sha512\)](#)
- Embedded:
 - [tar.gz \(pgp, sha512\)](#)
 - [zip \(pgp, sha512\)](#)

Source Code Distributions

Tomcat 설치



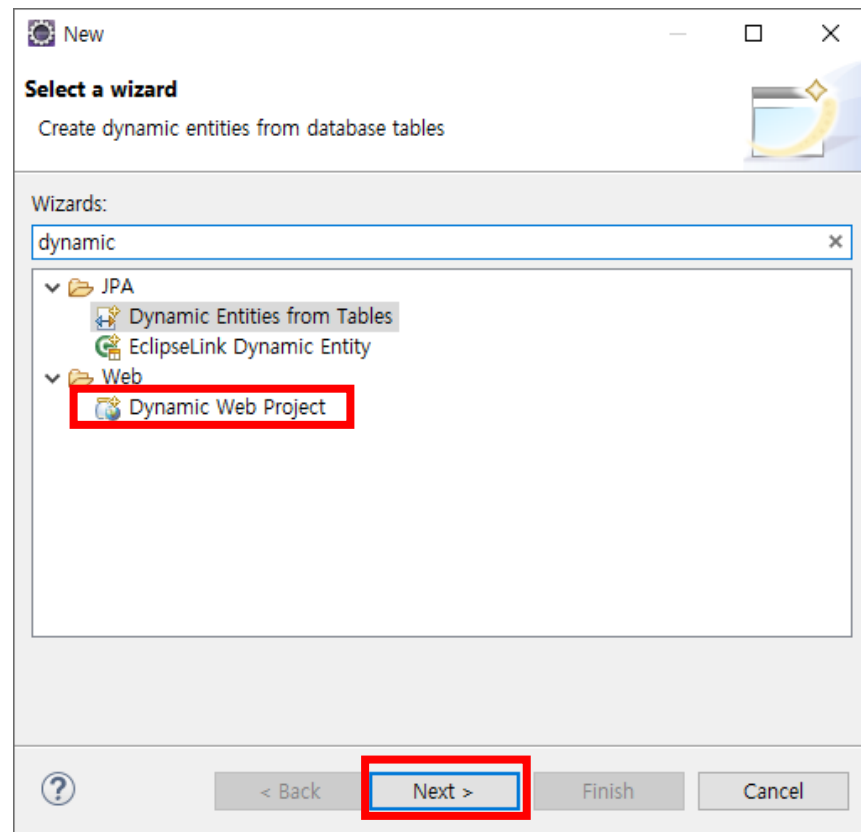
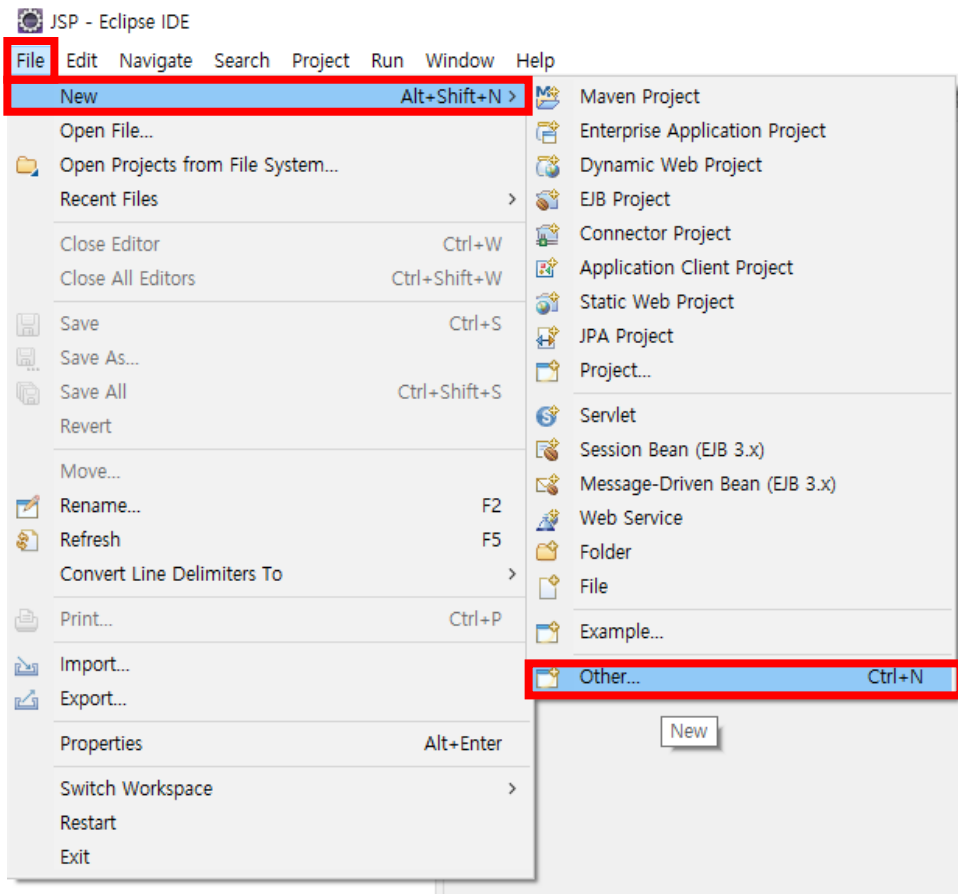
설정 port번호는 중요하니
8080을 기억해 두어야 한다.

설치가 완료된 경로를 기억해두면
개발에 있어 편리하다.

내 PC > 로컬 디스크 (C:) > Program Files > Apache Software Foundation > Tomcat 8.5 >

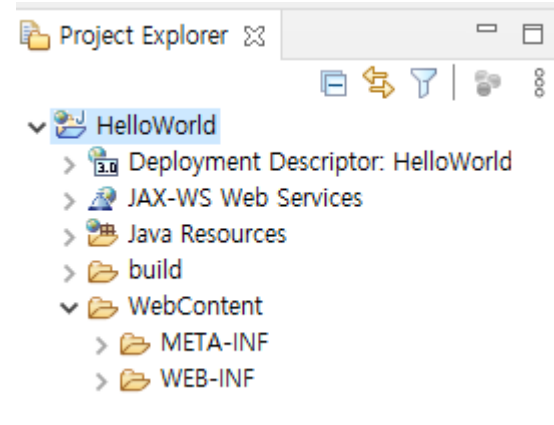
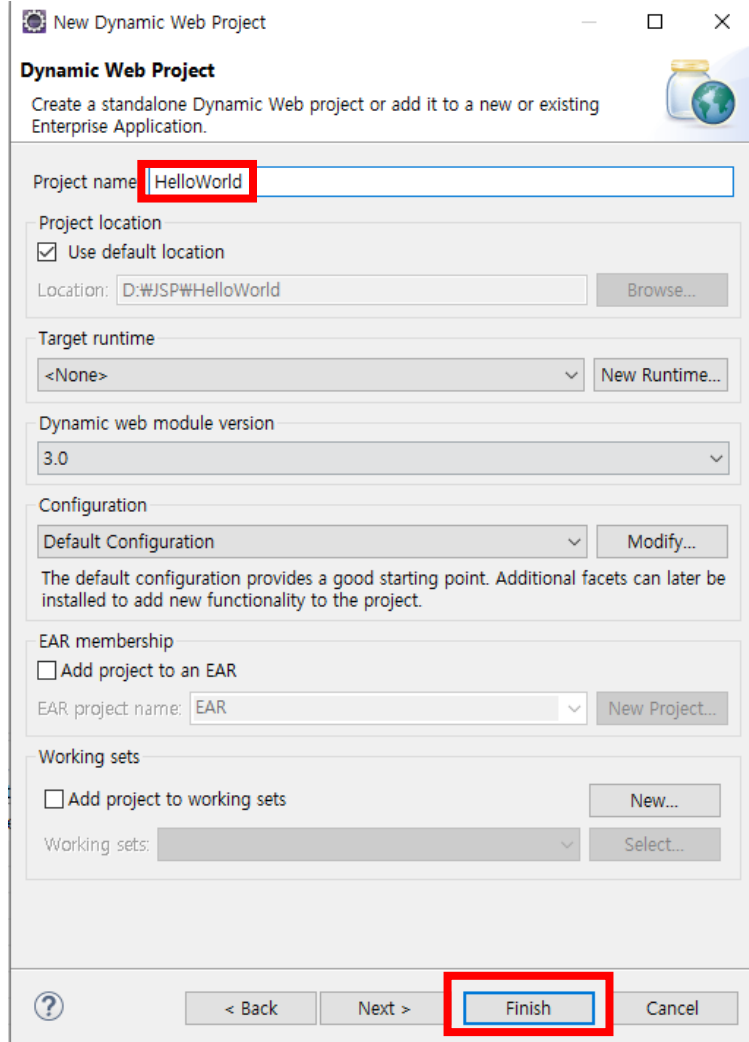
Eclipse 실행

Dynamic Web Project를 제작한다.



Eclipse 실행

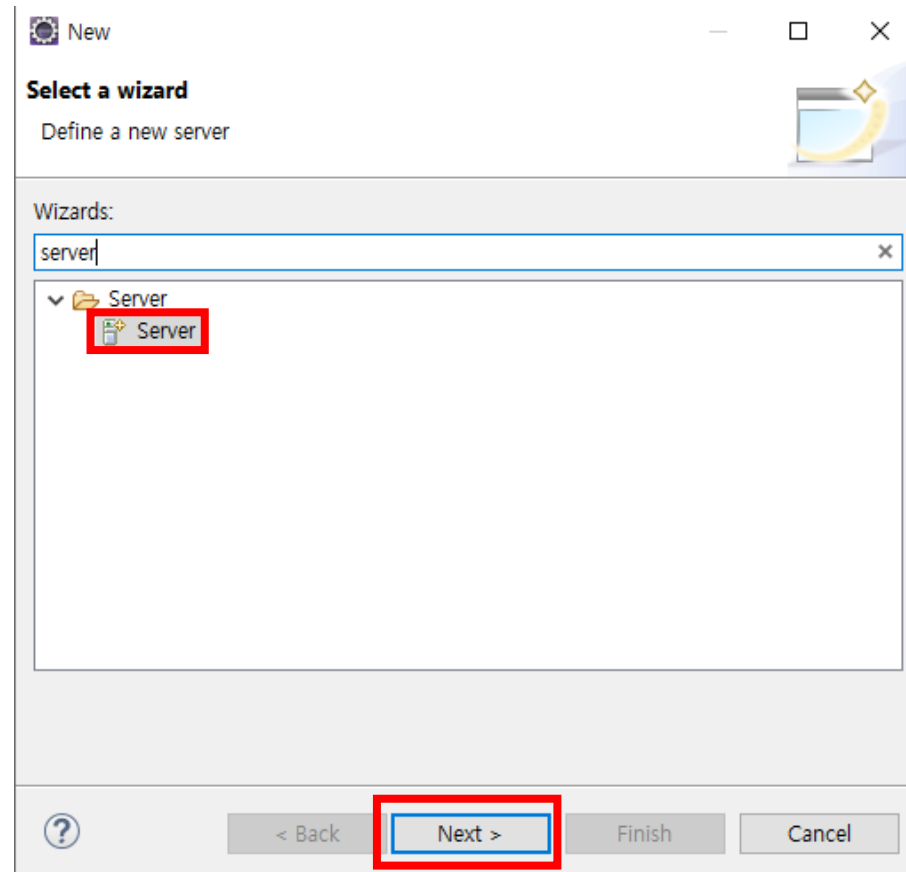
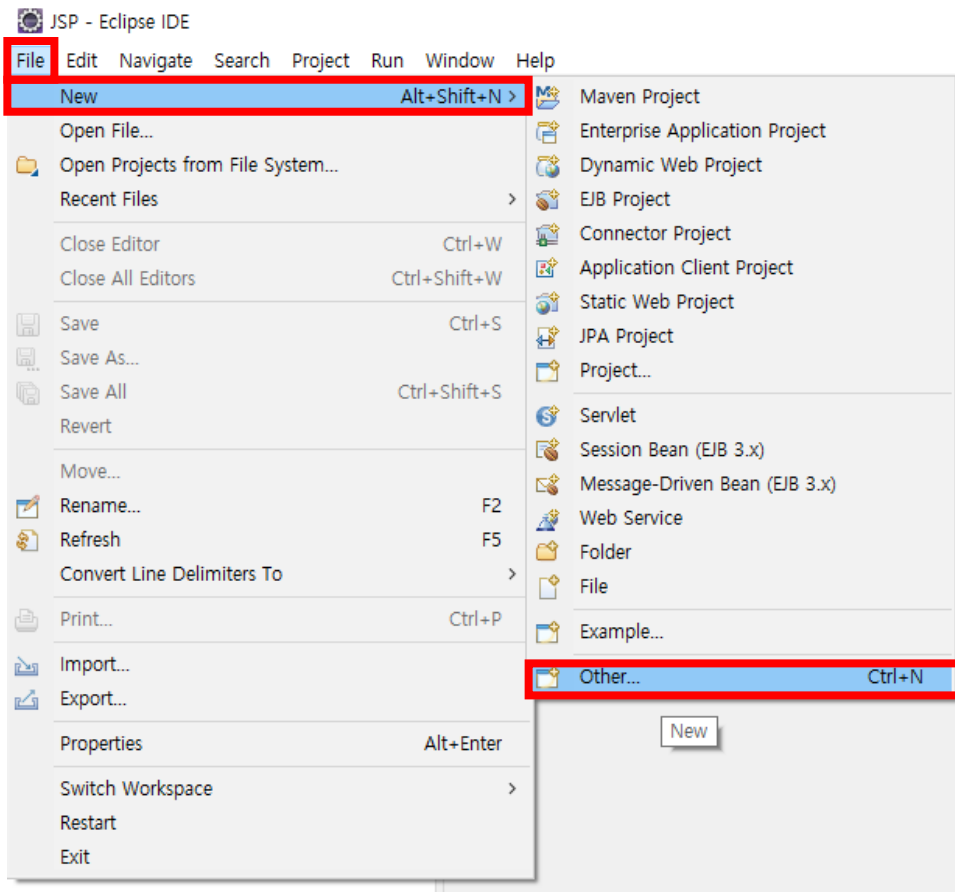
Dynamic Web Project를 제작한다.



프로젝트가 생성된 것을 확인

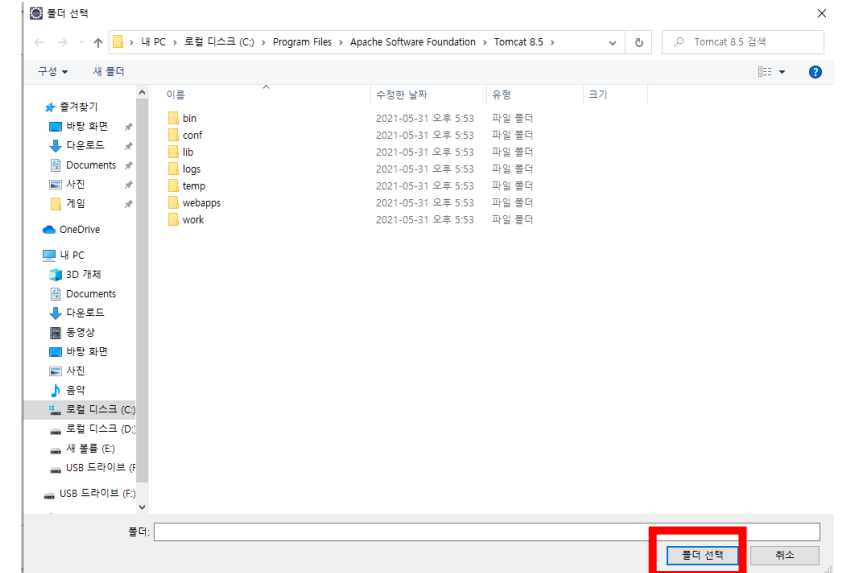
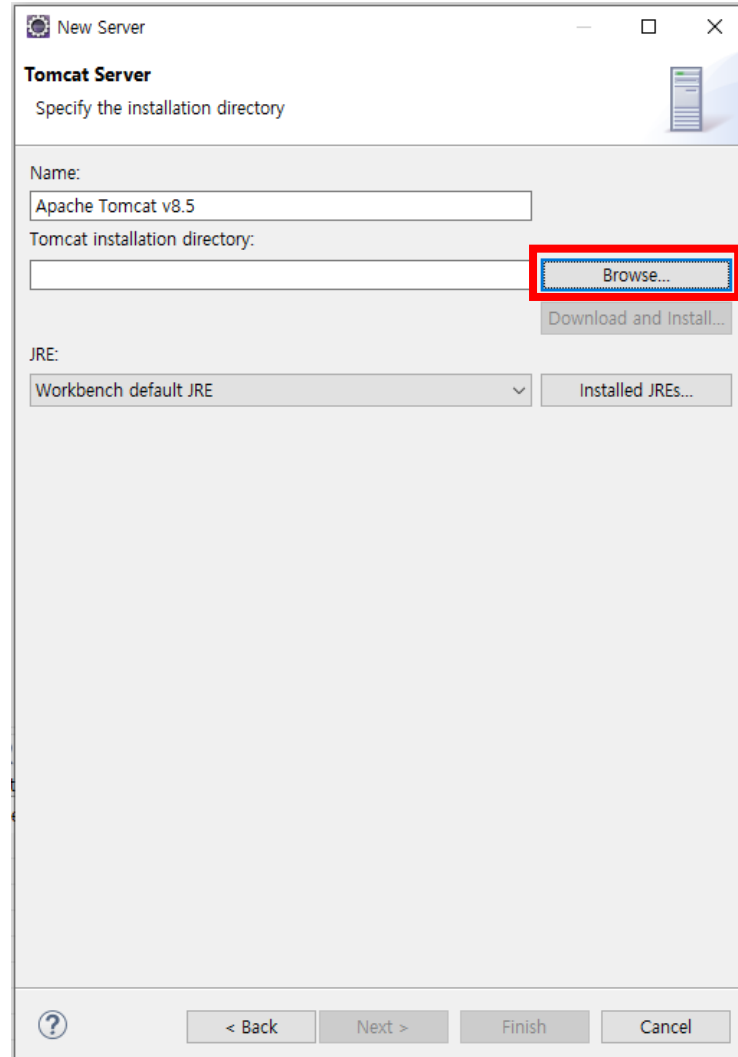
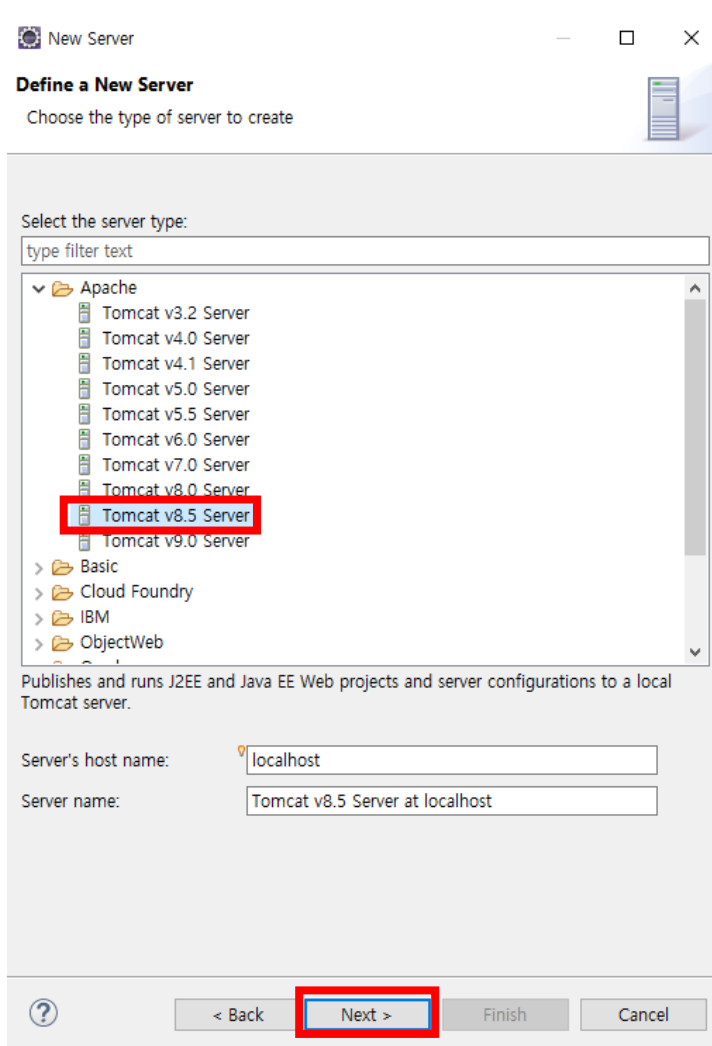
Eclipse 실행

Server를 제작한다.

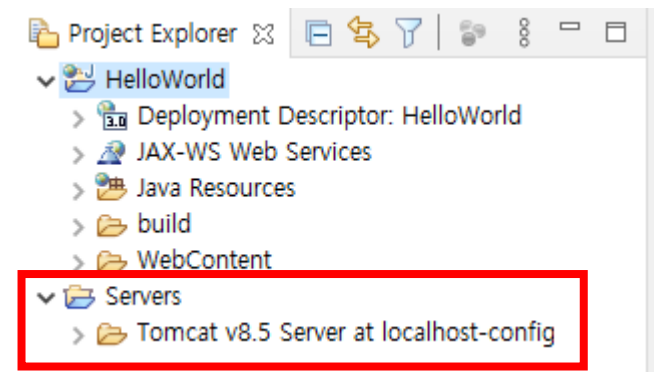


Eclipse 실행

Server를 제작한다.

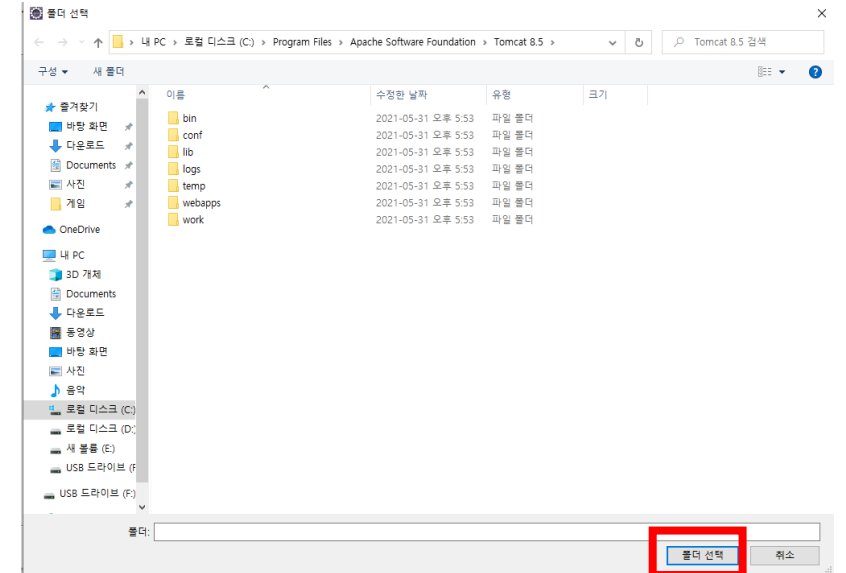
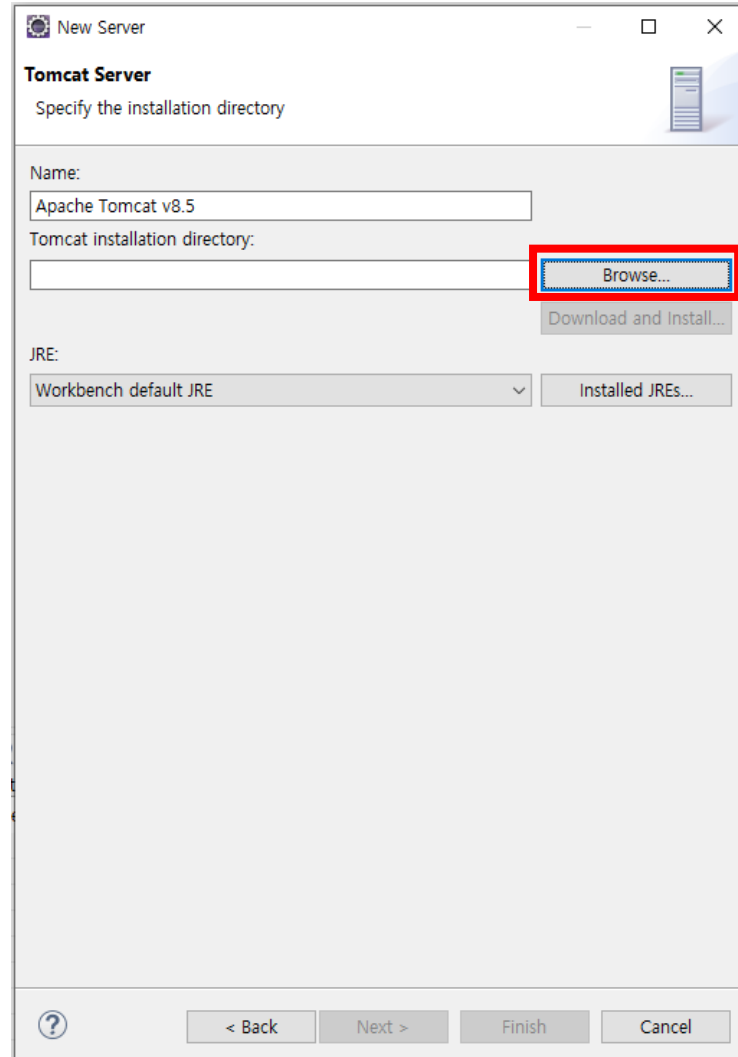
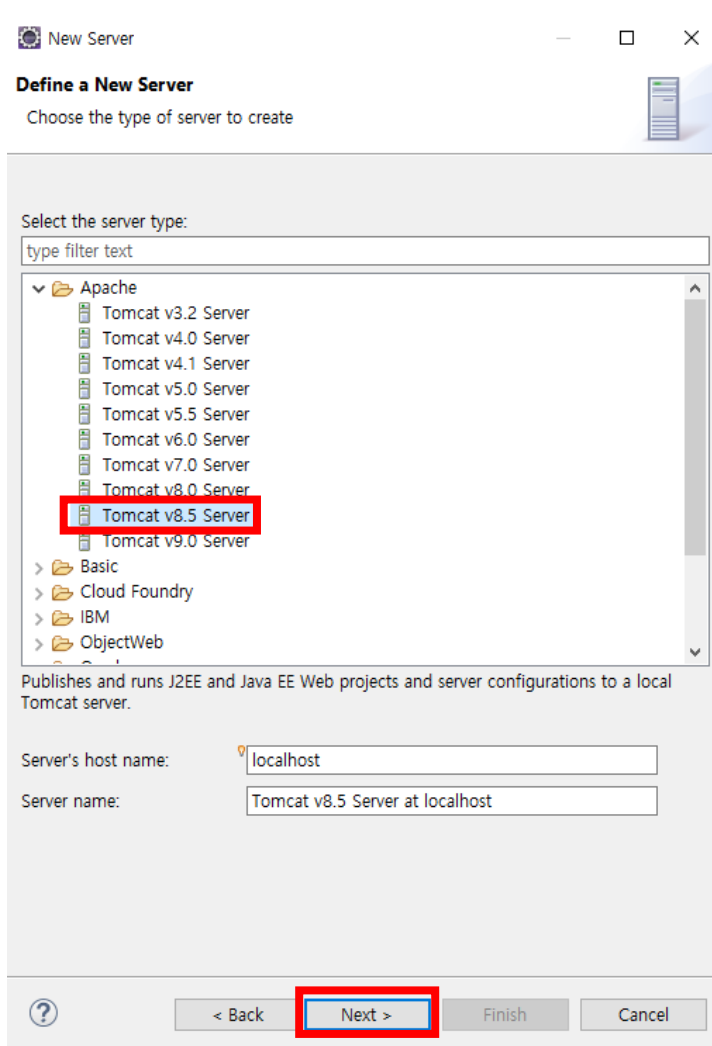


설치경로를 확인

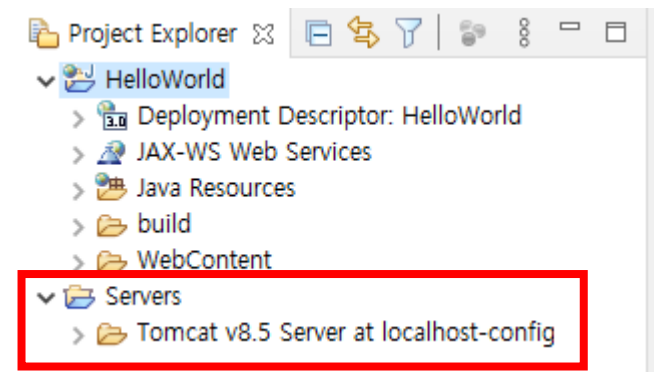


Eclipse 실행

Server를 제작한다.

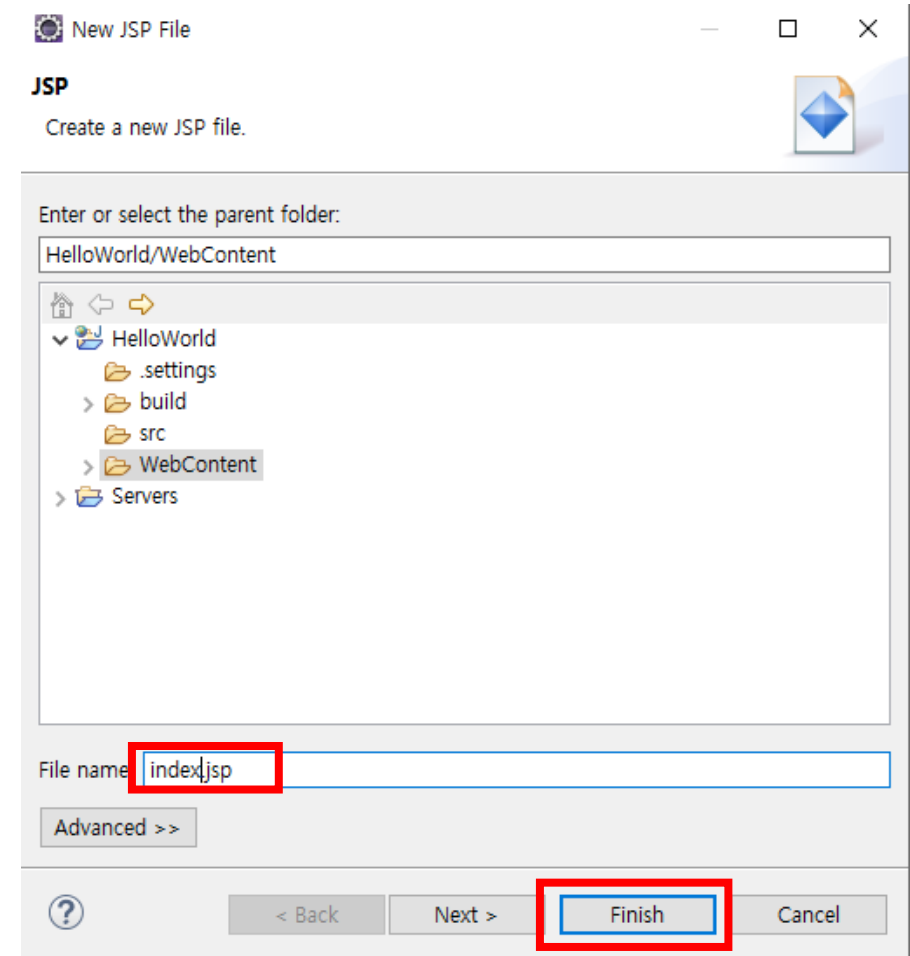
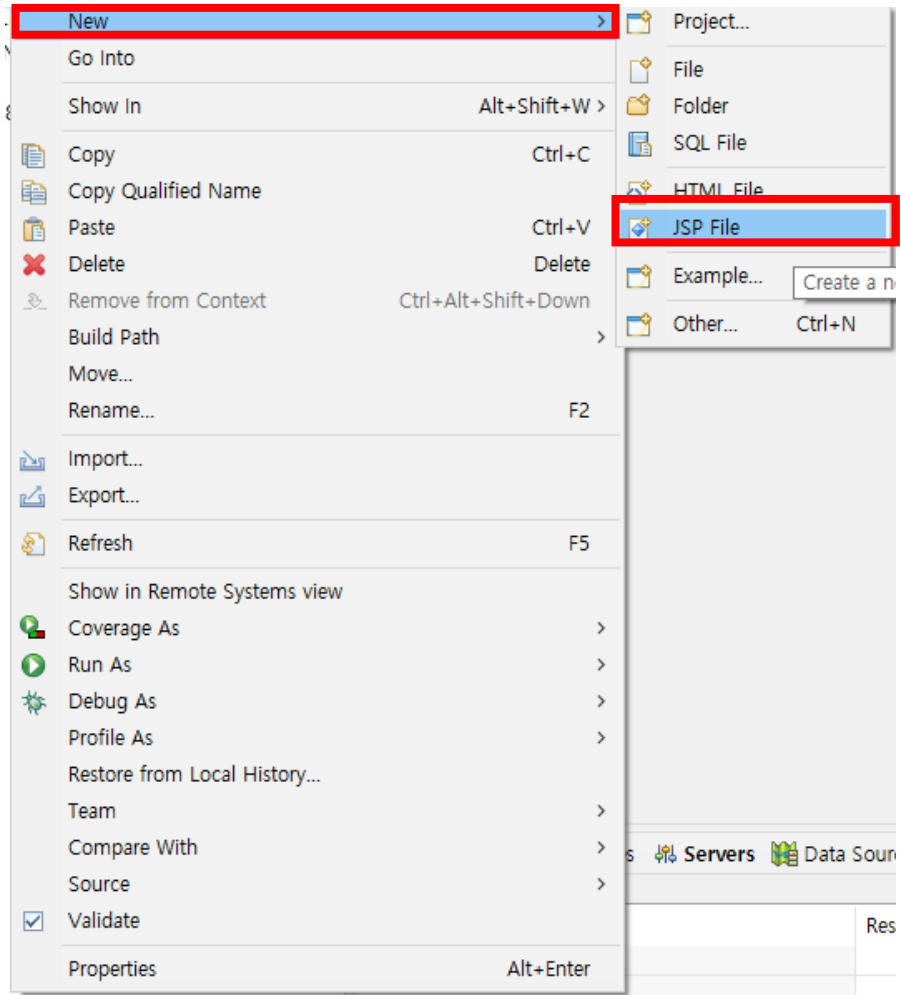


설치경로를 확인



JSP 제작

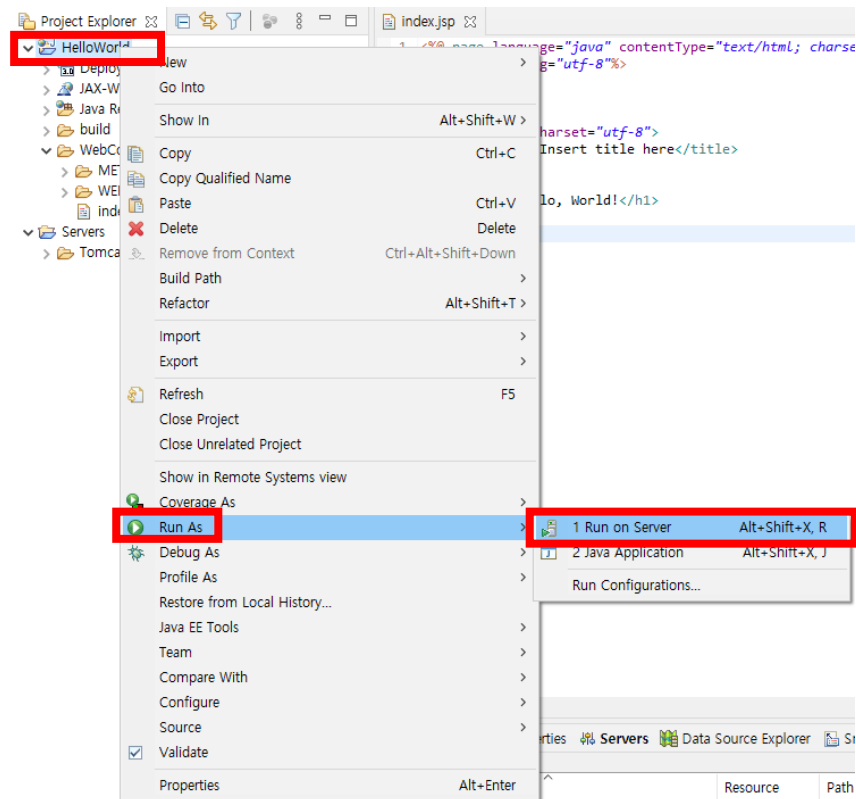
WebContent -> 오른쪽 -> new -> JSP File



JSP 제작

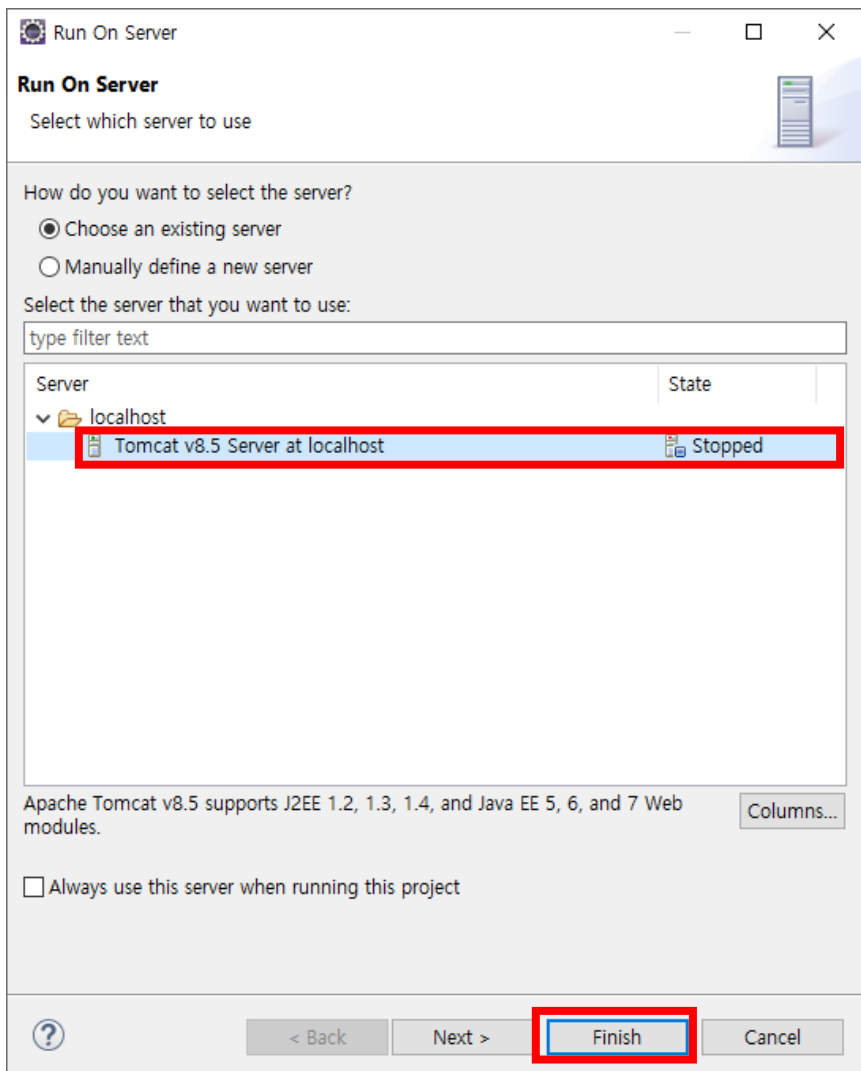
파일 내 내용 입력
프로젝트 이름에 오른쪽 클릭 -> run as -> run on server 선택

```
*index.jsp
1 <%@ page language="java" contentType="text/html; charset=utf-8"
2   pageEncoding="utf-8"%>
3 <!DOCTYPE html>
4 <html>
5 <head>
6   <meta charset="utf-8">
7   <title>Insert title here</title>
8 </head>
9 <body>
10  <h1>Hello, World!</h1>
11 </body>
12 </html>
```



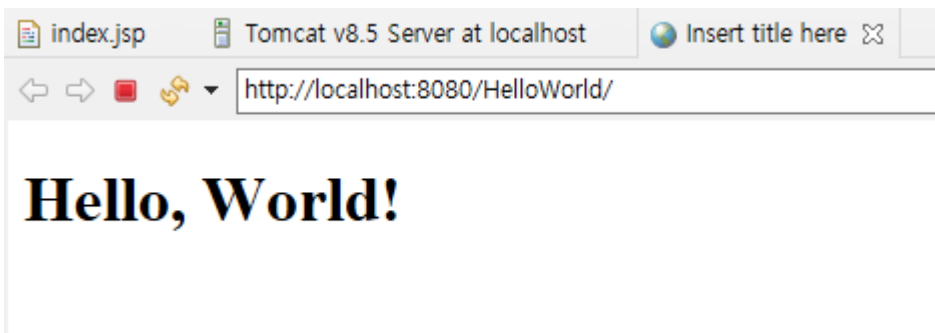
JSP 제작

서버를 선택하고 실행



```
5월 31, 2021 9:56:53 오후 org.apache.tomcat.util.net.NioSelectorPool getSharedSelector
정보: Using a shared selector for servlet write/read
5월 31, 2021 9:56:53 오후 org.apache.catalina.startup.Catalina load
정보: Initialization processed in 469 ms
5월 31, 2021 9:56:53 오후 org.apache.catalina.core.StandardService startInternal
정보: 서비스 [Catalina]을(를) 시작합니다.
5월 31, 2021 9:56:53 오후 org.apache.catalina.core.StandardEngine startInternal
정보: 서버 엔진을 시작합니다: [Apache Tomcat/8.5.66]
5월 31, 2021 9:56:53 오후 org.apache.coyote.AbstractProtocol start
정보: 프로토콜 핸들러 ["http-nio-8080"]을(를) 시작합니다.
5월 31, 2021 9:56:53 오후 org.apache.catalina.startup.Catalina start
정보: Server startup in 190 ms
```

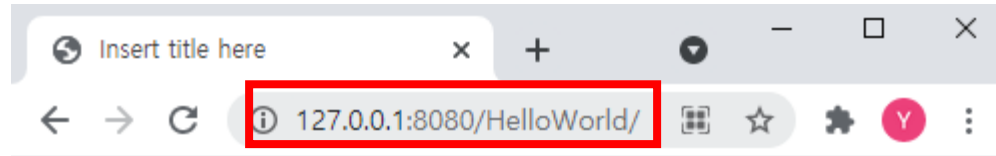
해당 정보 메시지는 오류가 아니다.



첫번째 프로그램이 가동되었음을 확인

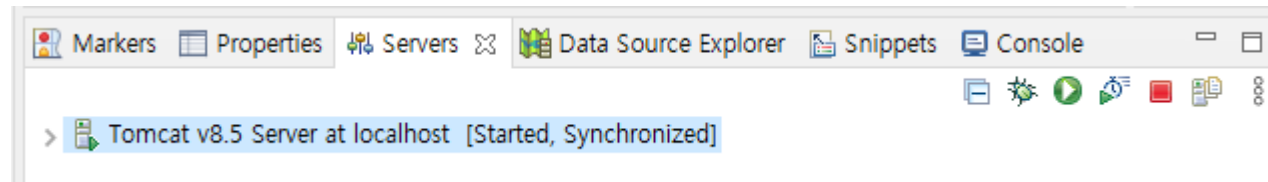
서버 구동

해당 서버에 해당 프로그램이 실행중이므로
웹 브라우저를 통해서도 접속이 가능하다.



Hello, World!

<http://127.0.0.1:8080/HelloWorld/>
를 통해서 접속이 가능해진다.



다만 서버가 켜져 있는 경우에만 가능하다