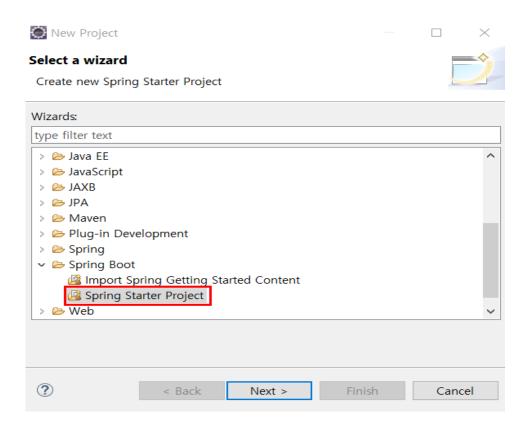
spring boot예제



spring boot 프로젝트

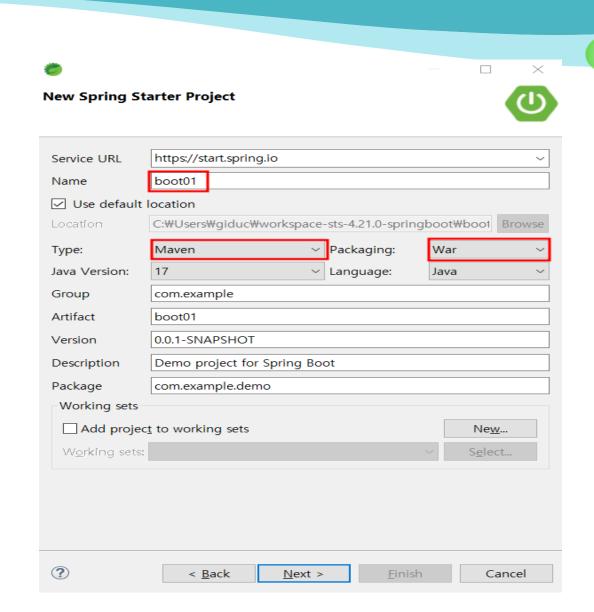
❖ boot01 project 생성

[File] - New - Project



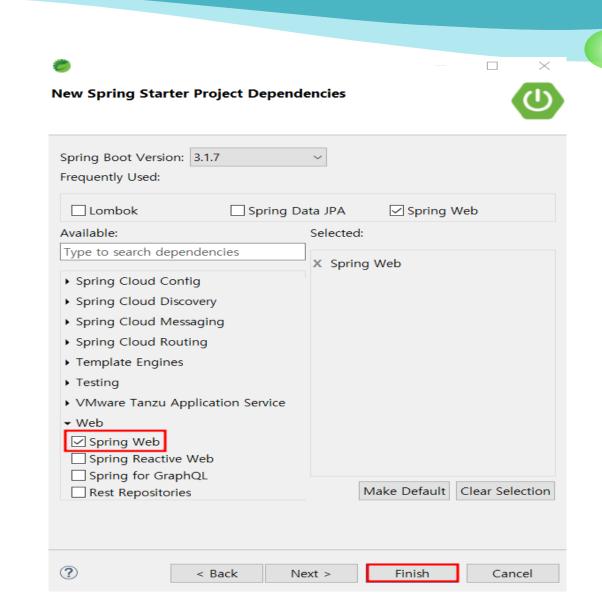
spring boot 프로젝트

- ❖ boot01 project 생성
- Name: boot01
- > Type : Maven, Gradle
- Packaging : War, Jar



spring boot 프로젝트

- ❖ boot01 project 생성
- Web
 - Spring Web 체크

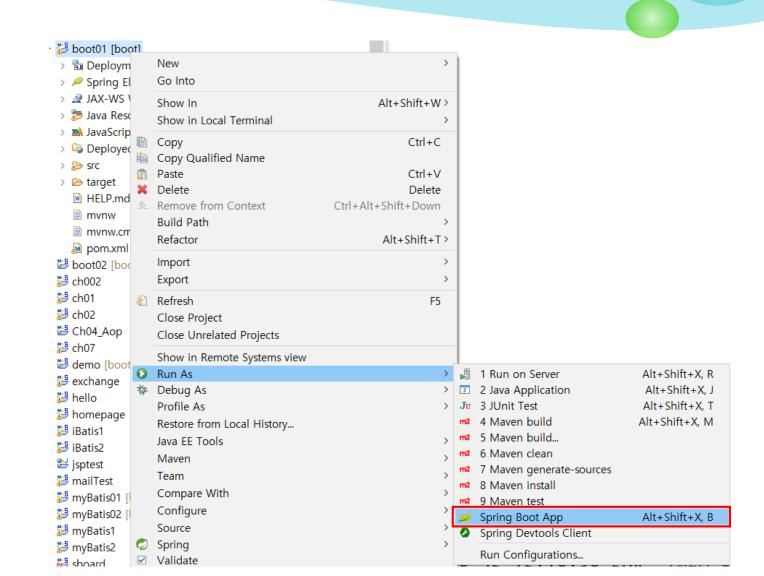


spring boot 서버 실행

❖ boot01 project 실행 내장 Tomcat 실행

boot01 - 오른마우스 클릭

- Run As
- Spring Boot App



spring boot 서버 실행

❖ boot01 project 실행 결과

다음과 같이 출력되면 성공~!!

```
🔝 Markers 🗔 Properties 🤲 Servers 🛍 Data Source Explorer 🕒 Snippets 📮 Console 🖂 🦐 Progress
                                                                                                           & X 💥
boot01 - Boot01Application [Spring Boot App] C:\Program Files\Java\rightarrow ire1.8.0_221\rightarrow bin\rightarrow iavaw.exe (2020. 8. 25. 오후 3:26:48)
 ======| |===========
 :: Spring Boot ::
                             (v2.2.9.RELEASE)
2020-08-25 15:26:50.480
                            INFO 10868 ---
                                                           main] com.example.demo.Boot01Application
                                                           main] com.example.demo.Boot01Application
2020-08-25 15:26:50.483
                            INFO 10868 ---
2020-08-25 15:26:51.444
                            INFO 10868 ---
                                                           main] o.s.b.w.embedded.tomcat.TomcatWebServer
2020-08-25 15:26:51.455
                            INFO 10868 ---
                                                           main] o.apache.catalina.core.StandardService
                                                           main | org.apache.catalina.core.StandardEngine
2020-08-25 15:26:51.456
                            INFO 10868 ---
                                                           main] org.apache.jasper.servlet.TldScanner
2020-08-25 15:26:51.723
                            INFO 10868 ---
2020-08-25 15:26:51.727
                            INFO 10868 ---
                                                           main] o.a.c.c.C.[Tomcat].[localhost].[/]
2020-08-25 15:26:51.727
                            INFO 10868 ---
                                                           main] w.s.c.ServletWebServerApplicationContext
2020-08-25 15:26:51.889
                            INFO 10868 ---
                                                           main] o.s.s.concurrent.ThreadPoolTaskExecutor
                                                           main] o.s.b.w.embedded.tomcat.TomcatWebServer
2020-08-25 15:26:52.051
                            INFO 10868 ---
2020-08-25 15:26:52.054
                            INFO 10868 ---
                                                           main | com.example.demo.Boot01Application
```

의존 라이브러리 추가

pom.xml

pom.xml 파일에 필요한 의존 라이브러리를 추가한다.

```
<dependencies>
       <!-- 내장 Tomcat실행시 jsp 파일을 사용하기 위한 의존 라이브러리 -->
       <dependency>
               <groupId>org.apache.tomcat.embed</groupId>
               <artifactId>tomcat-embed-jasper</artifactId>
               <scope>provided</scope>
       </dependency>
       <!-- jakarta jstl -->
       <dependency>
               <groupId>org.glassfish.web</groupId>
               <artifactId>jakarta.servlet.jsp.jstl</artifactId>
               <version>3.0.0</version>
       </dependency>
</dependencies>
```

환경 설정파일 수정

❖ 환경 설정 파일 수정

main / resources / application.properties

port
server.port=80

prefix and suffix
spring.mvc.view.prefix=/WEB-INF/views/
spring.mvc.view.suffix=.jsp

❖ webapp / **WEB-INF / views** 폴더 생성

Controller 생성

❖ Controller 생성 (1/2)

/main/java/com/example/demo/controller - SampleController.java 생성

```
package com.example.demo.controller;

import java.io.lOException;
import java.util.Random;

import javax.servlet.http.HttpServletResponse;

import org.springframework.stereotype.Controller;
import org.springframework.ui.Model;
```

import org.springframework.web.bind.annotation.RequestMapping;

import org.springframework.web.bind.annotation.ResponseBody;

Controller 생성

❖ Controller 생성 (2/2)

```
@Controller
public class SampleController {
           @RequestMapping("/hi")
           @ResponseBody
           public void hello(HttpServletResponse response) throws IOException {
                 response.getWriter().print("Hello world~!!!");
           @RequestMapping("/abc")
           @ResponseBody
           public String abc() {
                 return "hi abc";
           @RequestMapping("/hello")
           public String hello() {
                 return "hello";
           @RequestMapping("/gugu")
           public String gugu(Model model) {
                 Random r = new Random();
                                                                 // 2 ~ 9단
                 int dan = r.nextInt(8) + 2;
                 model.addAttribute("dan", dan);
                 return "gugu";
```

Controller 생성

❖ Controller 생성

/main/java/com/example/demo/controller - HomeController.java 생성

```
package com.example.demo.controller;
import org.springframework.stereotype.Controller;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.ResponseBody;
import org.springframework.web.bind.annotation.RestController;
@RestController
public class HelloController {
        @RequestMapping("/welcome")
        public String welcome() {
                return "welcome to spring boot";
```

View 생성

❖ View 생성

webapp / WEB-INF / views - hello.jsp 생성

```
<%@ page language="java" contentType="text/html; charset=UTF-8"</pre>
   pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>hello</title>
</head>
<body>
hello.jsp page ~!!
</body>
</html>
```

View 생성

❖ View 생성

webapp / WEB-INF / views - gugu.jsp 생성

```
<%@ page language="java" contentType="text/html; charset=UTF-8"</pre>
  pageEncoding="UTF-8"%>
<%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>구구단 출력</title>
</head>
<body>
[ ${dan} 단 ] <br><br>
<c:forEach var="i" begin="1" end="9">
         {dan} * {i} = {dan * i} < br >
</c:forEach>
</body>
</html>
```

View 생성

❖ View 생성 : webapp - index.jsp 생성

```
<%@ page language="java" contentType="text/html; charset=UTF-8"</p>
  pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Insert title here</title>
<script src="http://code.jquery.com/jquery-latest.js"></script>
<script>
            $(document).ready(function(){
                         $("#sel").change(function(){
                                      var sel = $("#sel").val();
                                      location.href=sel;
                         });
            });
</script>
</head>
<body>
선택 :
<select id="sel">
            <option value="">메뉴</option>
             <option value="hi">hi</option>
             <option value="welcome">welcome</option>
             <option value="abc">abc</option>
             <option value="hello">hello</option>
            <option value="gugu">구구단</option>
</select>
</body>
</html>
```

boot01 프로젝트 접속

🍫 boot01 프로젝트 접속 : 외부 Tomcat 실행할 경우

외부 Tomcat 실행후에 boot01 프로젝트 접속해보자~!!

http://localhost/boot01/index.jsp : webapp/index.jsp 파일이 자동으로 실행됨

http://localhost/boot01/hi

http://localhost/boot01/welcome

http://localhost/boot01/abc

http://localhost/boot01/hello

http://localhost/boot01/gugu

boot01 프로젝트 접속

❖ boot01 프로젝트 접속 : 내장 Tomcat 실행할 경우

내장 Tomcat 실행후에 boot01 프로젝트 접속해보자~!! (boot01 프로젝트명이 경로상에서 빠진다.)

http://localhost/index.html : resources/static/index.html 파일이 자동으로 실행됨

http://localhost/hi

http://localhost/welcome

http://localhost/abc

http://localhost/hello

http://localhost/gugu