KB금융그룹 | 국민의 평생 금융파트너

2024년 상반기 K-디지털 트레이닝

웹 어플리케이션 프로젝트

[KB] IT's Your Life

KB 국민은행

톰캣 다운로드

- https://tomcat.apache.org/

Tomcat 서버 설치

✅ **톰캣 다운로드**

Tomcat 서버 설치

- ☑ **압축 해제**
  - ○ C:\apache-tomcat-9.0.74

내 PC > 로컬 디스크 (C:) > apache-tomcat-9.0.74 >

이름	수정한 날짜
bin → **Tomcat 실행 파일**	2023-05-03 오후 2:51
conf	2023-05-03 오후 2:51
lib → **JSP/Servlet 라이브러리**	2023-05-03 오후 2:51
logs	2023-04-13 오전 8:10
temp	2023-05-03 오후 2:51
webapps → **웹 어플리케이션 관리**	2023-05-03 오후 2:51
work	2023-04-13 오전 8:10
BUILDING.txt	2023-04-13 오전 8:10
CONTRIBUTING.md	2023-04-13 오전 8:10
LICENSE	2023-04-13 오전 8:10
NOTICE	2023-04-13 오전 8:10
README.md	2023-04-13 오전 8:10
RELEASE-NOTES	2023-04-13 오전 8:10
RUNNING.txt	2023-04-13 오전 8:10

Tomcat 서버 설치

☑ **한글 로그 문자셋 설정(윈도우 만)**

○ C:₩apache-tomcat-9.0.89₩conf₩logging.properties

```
..
###############################################################
# Handler specific properties.
# Describes specific configuration info for Handlers.
###############################################################

1catalina.org.apache.juli.AsyncFileHandler.level = FINE
1catalina.org.apache.juli.AsyncFileHandler.directory = ${catalina.base}/logs
1catalina.org.apache.juli.AsyncFileHandler.prefix = catalina.
1catalina.org.apache.juli.AsyncFileHandler.maxDays = 90
# 1catalina.org.apache.juli.AsyncFileHandler.encoding = UTF-8
1catalina.org.apache.juli.AsyncFileHandler.encoding = EUC-KR

…
```
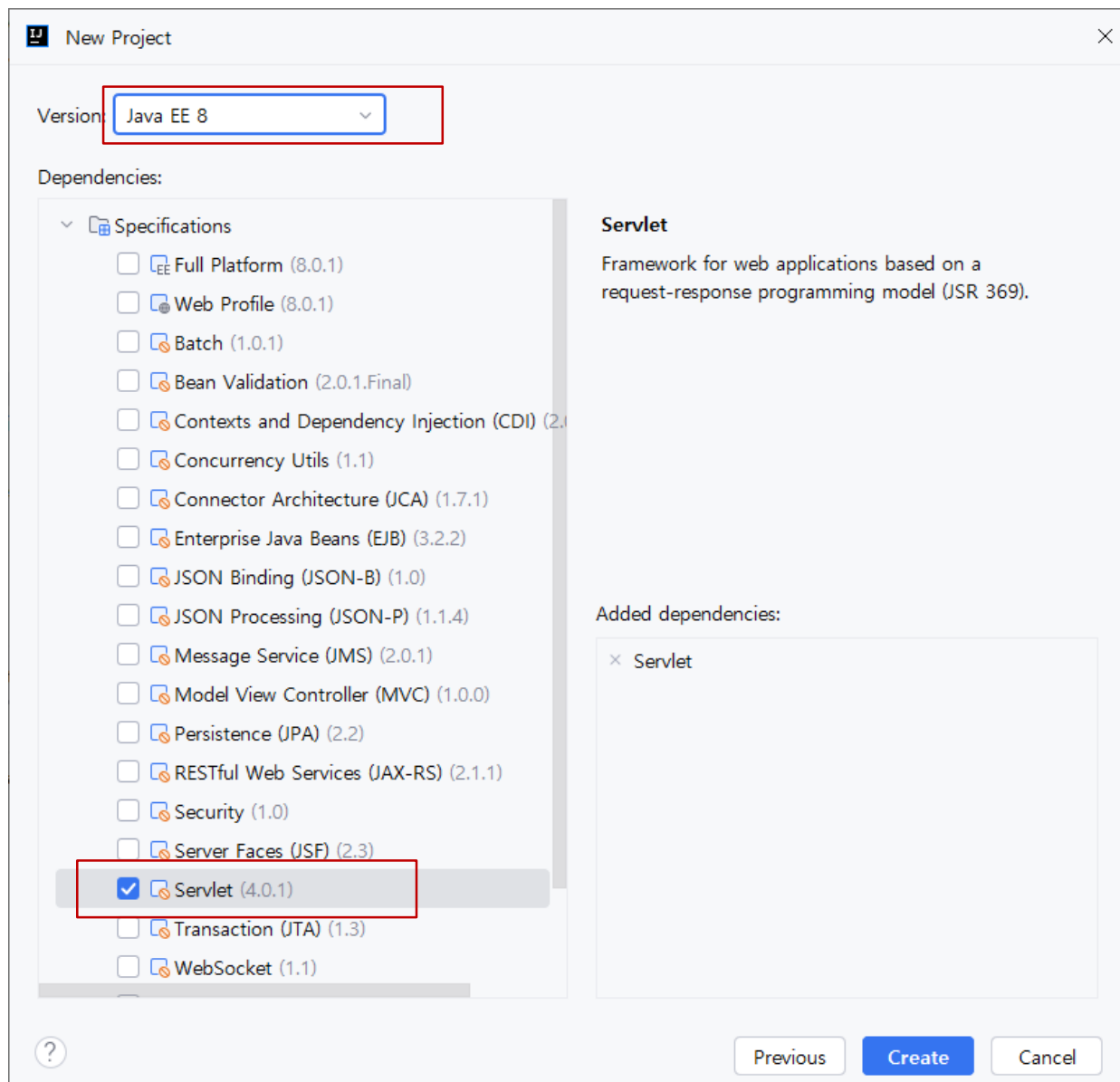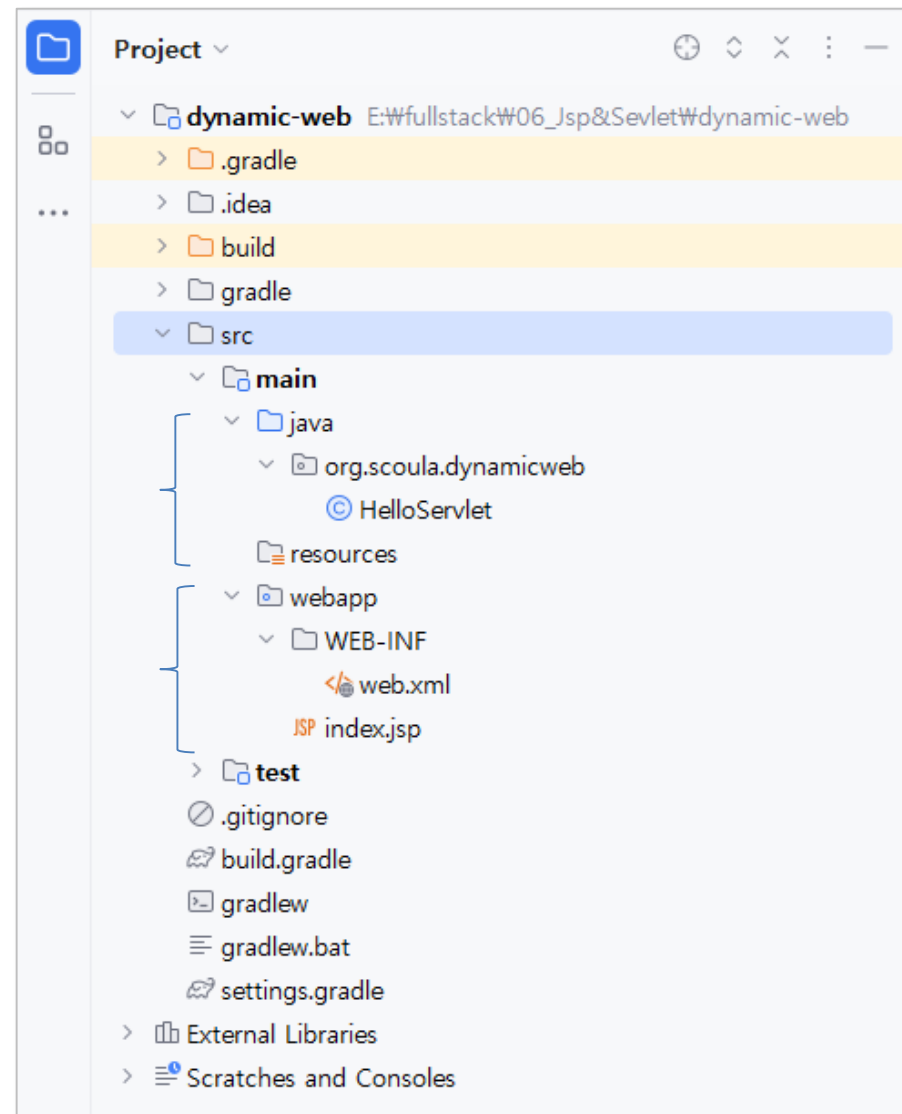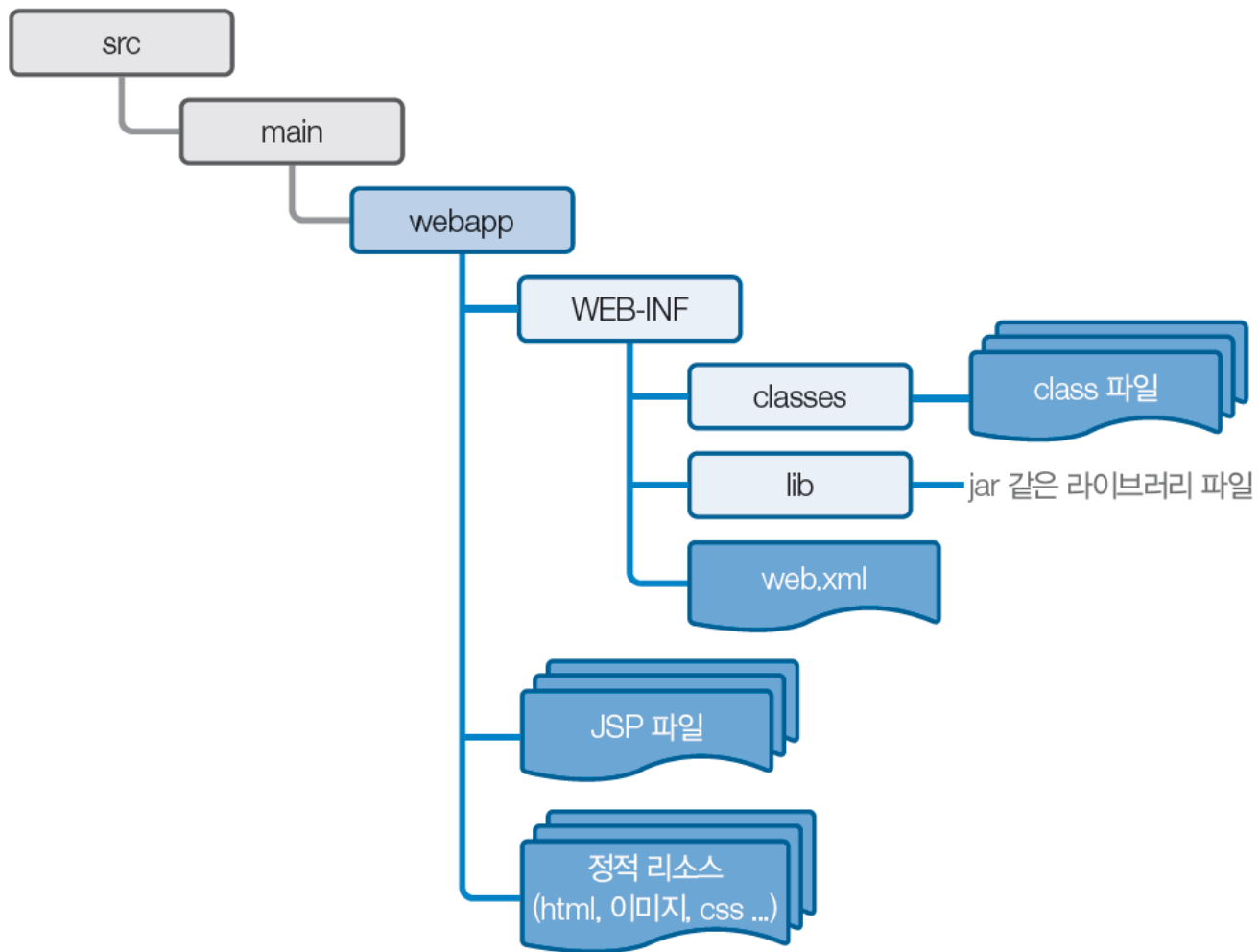
프로젝트 만들기

File > New Project

- Name: dynamic-web
- Location: C:\fullstack\06_Jsp&Sevlet
- Template: Web application
- Build system: Gradle
- GroupId: org.scoula
- ArtifactId: dynamic-web

Dynamic Web Project 만들기

✅ **프로젝트 만들기**

KB국민은행

✓ **프로젝트 기본구조**

8
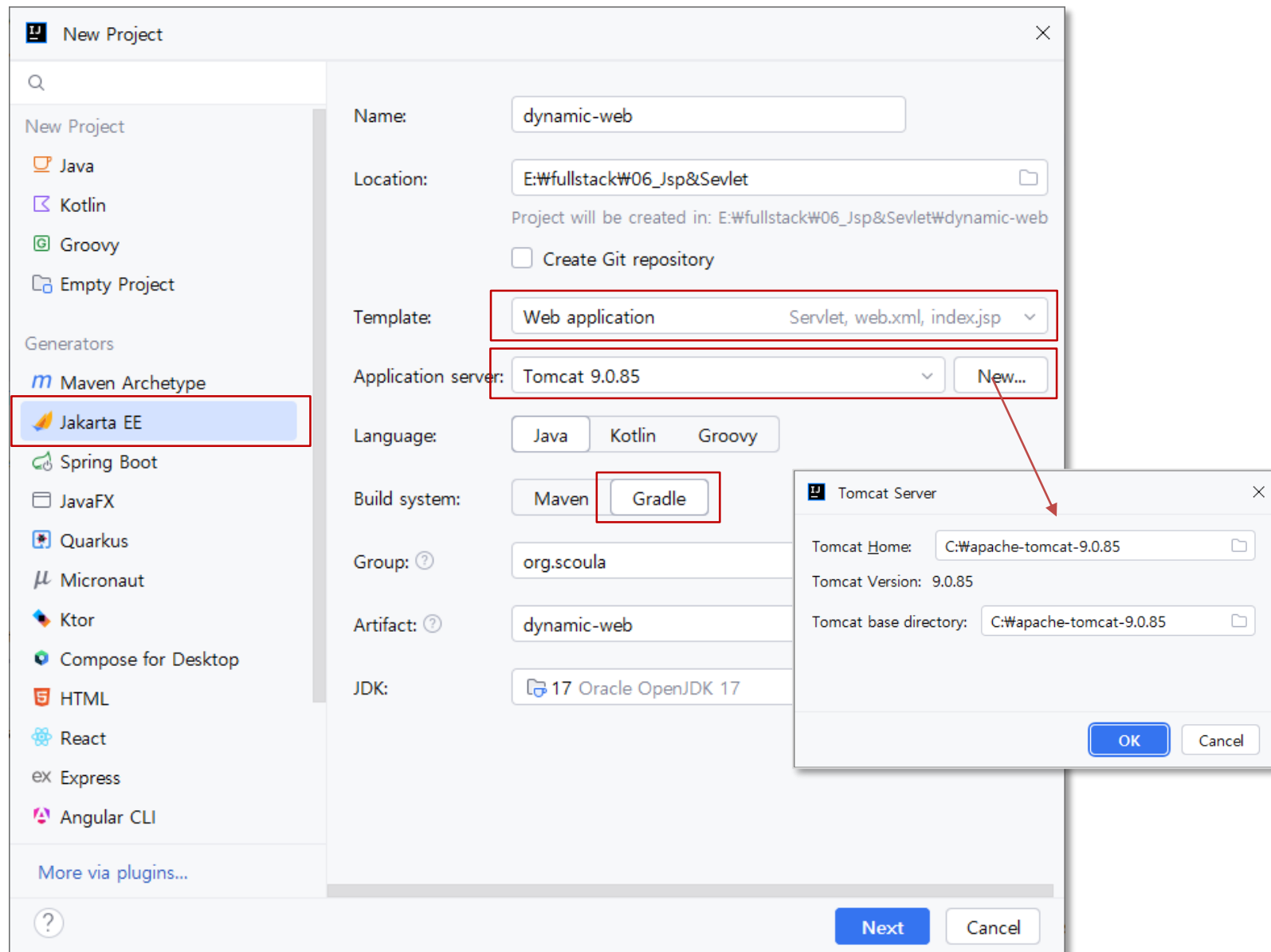
webapp/WEB-INF/web.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns="http://xmlns.jcp.org/xml/ns/javaee"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee http://xmlns.jcp.org/xml/ns/javaee/web-app_4_0.xsd"
        version="4.0">
</web-app>
```

cf] Servlet 3.1 버전인 경우

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns="http://xmlns.jcp.org/xml/ns/javaee"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee http://xmlns.jcp.org/xml/ns/javaee/web-app_3_1.xsd"
        id="WebApp_ID" version="3.1">
</web-app>
```

build.gradle

```
plugins {
  id 'java'
  id 'war'
}

group 'org.scoula'
version '1.0-SNAPSHOT'

repositories {
  mavenCentral()
}

ext {
  junitVersion = '5.9.2'
}

sourceCompatibility = '1.17'
targetCompatibility = '1.17'

tasks.withType(JavaCompile) {
  options.encoding = 'UTF-8'
}
```

```
dependencies {
  compileOnly('javax.servlet:javax.servlet-api:4.0.1')

  testImplementation("org.junit.jupiter:junit-jupiter-api:${junitVersion}")
  testRuntimeOnly("org.junit.jupiter:junit-jupiter-engine:${junitVersion}")
}

test {
useJUnitPlatform()}
```
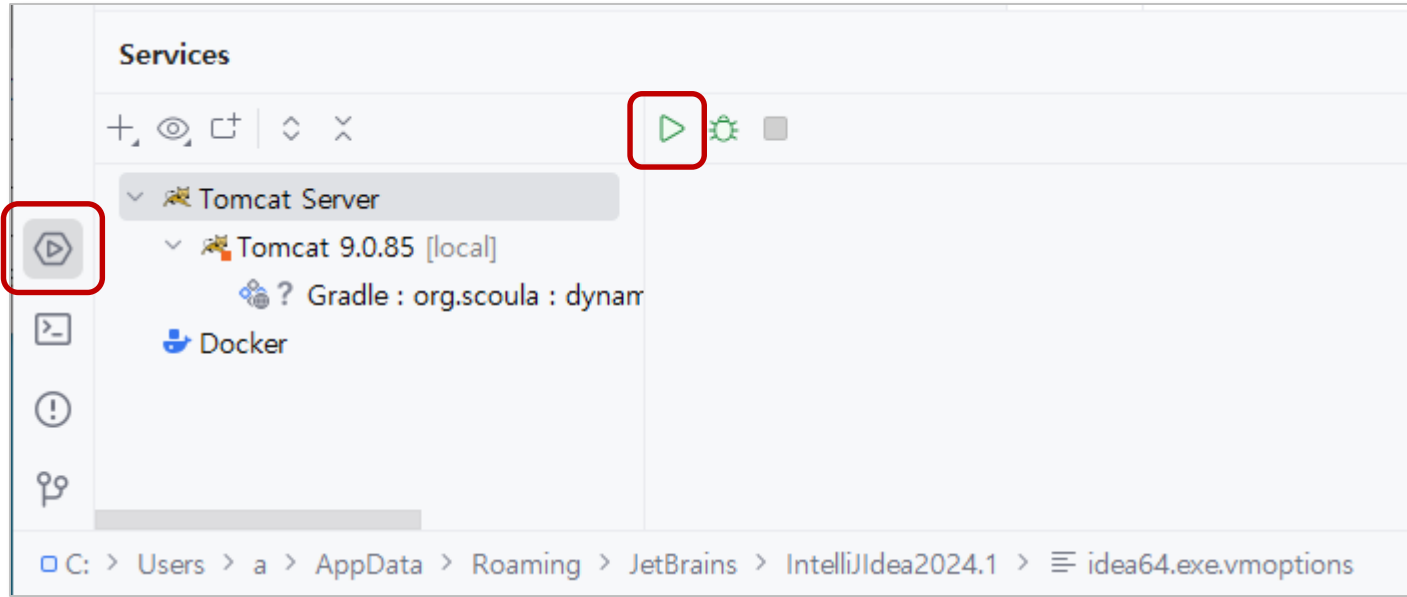
Dynamic Web Project 만들기

✅ **톰캣의 실행 및 재기동**

Context Path(Application name)

http://localhost:8080/**Gradle___org_scoula___dynamic_web_1_0_SNAPSHOT_war/**

Hello World!

Hello Servlet

✏ webapp/index.jsp

```jsp
<%@ page contentType="text/html; charset=UTF-8" pageEncoding="UTF-8" %>
<!DOCTYPE html>
<html>
<head>
  <title>JSP - Hello World</title>
</head>
<body>
<h1><%= "Hello World!" %></h1>
<br/>
<a href="hello-servlet">Hello Servlet</a>
</body>
</html>
```

Context Path(Application name)

http://localhost:8080/**Gradle___org_scoula___dynamic_web_1_0_SNAPSHOT_war/**

Hello World!

Hello Servlet

✍ HelloServlet.java

```java
package org.scoula.dynamicweb;

import java.io.*;
import javax.servlet.http.*;
import javax.servlet.annotation.*;

@WebServlet(name = "helloServlet", value = "/hello-servlet")
public class HelloServlet extends HttpServlet {
    private String message;

    public void init() {
        message = "Hello World!";
    }

    public void doGet(HttpServletRequest request, HttpServletResponse response) throws IOException {
        response.setContentType("text/html");

        // Hello
        PrintWriter out = response.getWriter();
        out.println("<html><body>");
        out.println("<h1>" + message + "</h1>");
        out.println("</body></html>");
    }

    public void destroy() {
    }
}
```
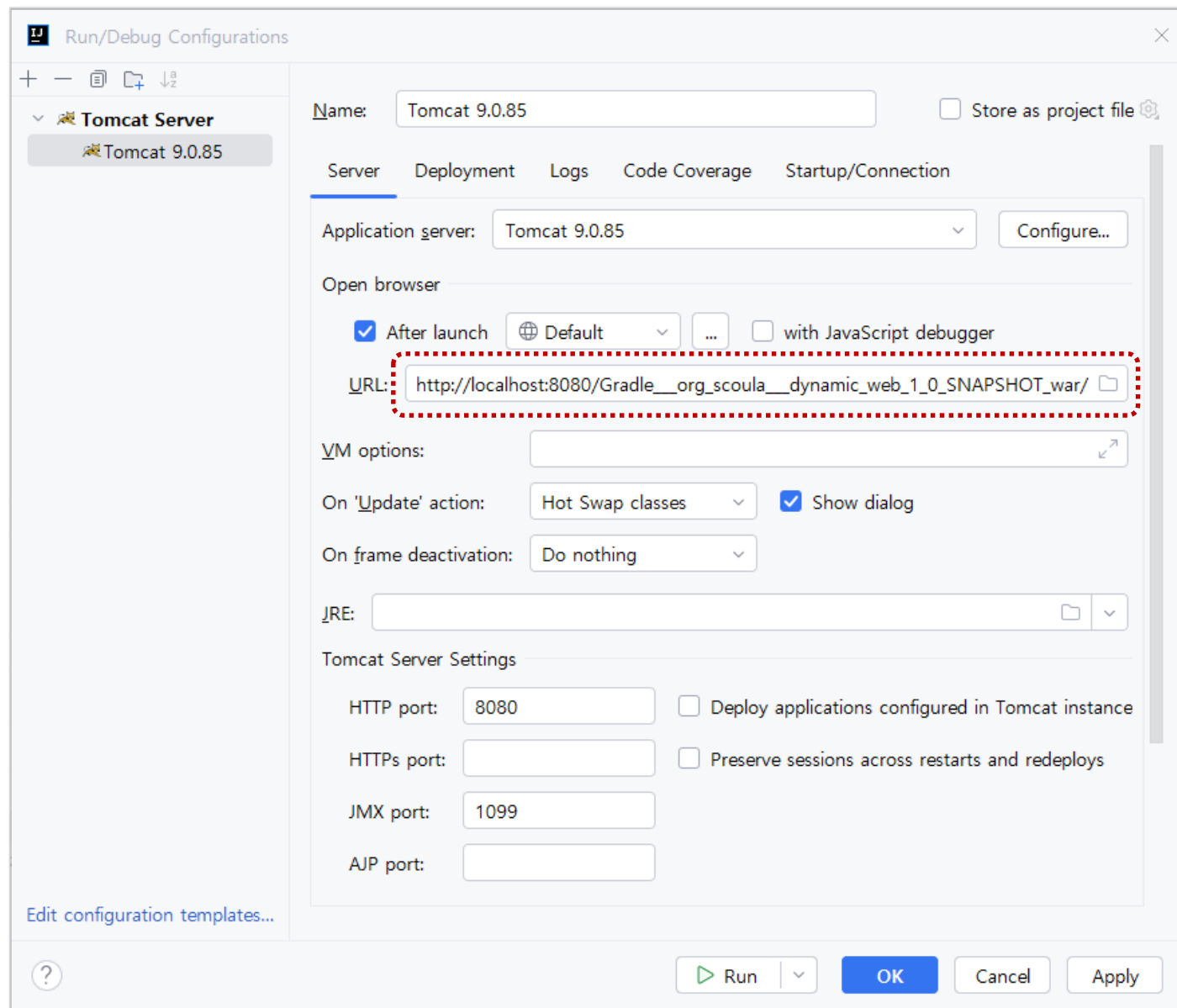
Context Path(Application name)

http://localhost:8080/**Gradle___org_scoula___dynamic_web_1_0_SNAPSHOT_war**/hello-servlet
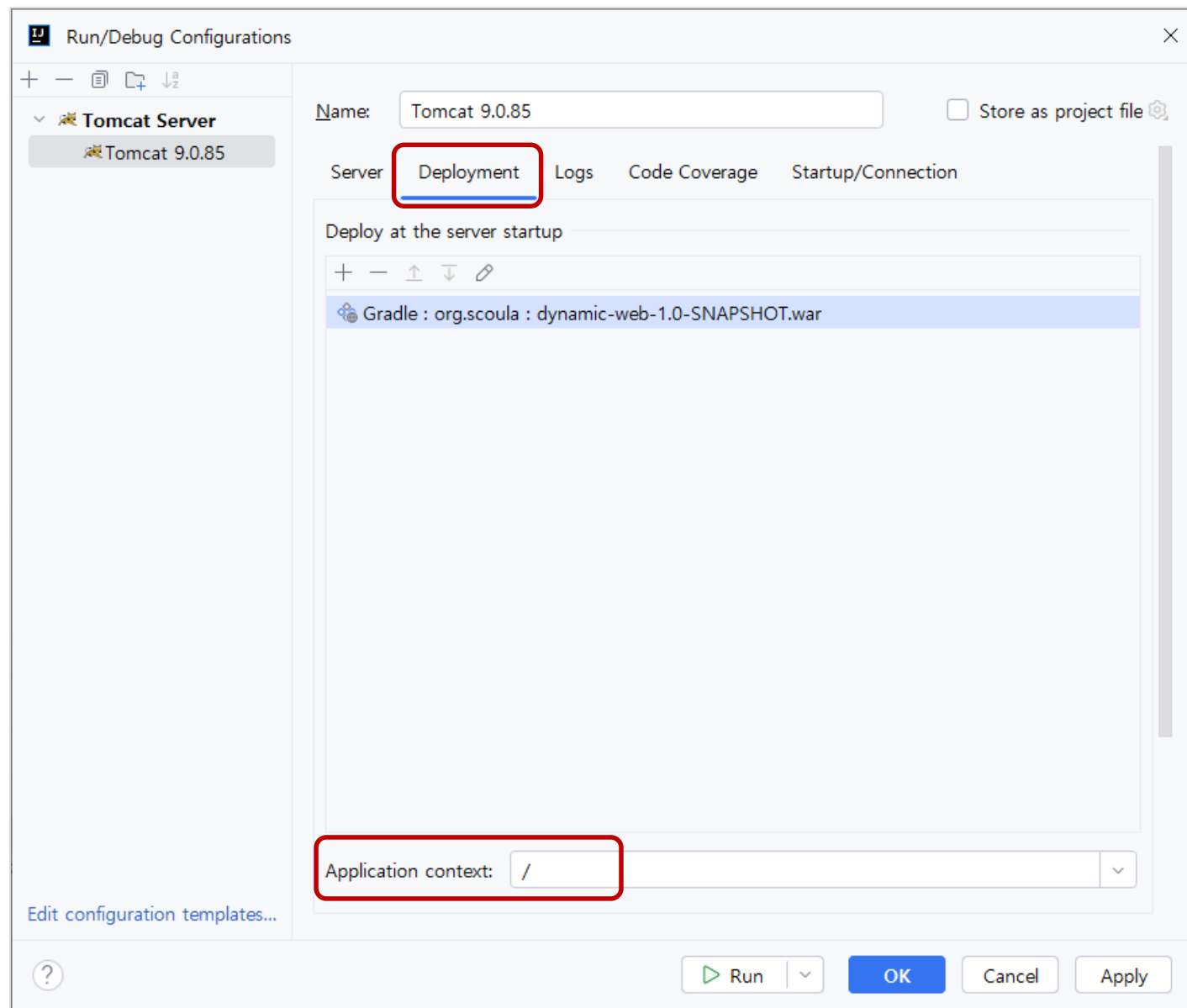
Hello World!

☑ 톰캣 서버 설정

○ **context path 확인**

☑ 톰캣 서버 설정

- ○ **context path 변경**

✍ HelloServlet.java (수정)

```java
package org.scoula.dynamicweb;

import java.io.*;
import javax.servlet.http.*;
import javax.servlet.annotation.*;

@WebServlet(name = "helloServlet", value = "/hello-servlet")
public class HelloServlet extends HttpServlet {
    private String message;

    public void init() {
        message = "Hello Servlet!";
    }

    public void doGet(HttpServletRequest request, HttpServletResponse response) throws IOException {
        response.setContentType("text/html");

        // Hello
        PrintWriter out = response.getWriter();
        out.println("<html><body>");
        out.println("<h1>" + message + "</h1>");
        out.println("</body></html>");
    }

    public void destroy() {
    }
}
```
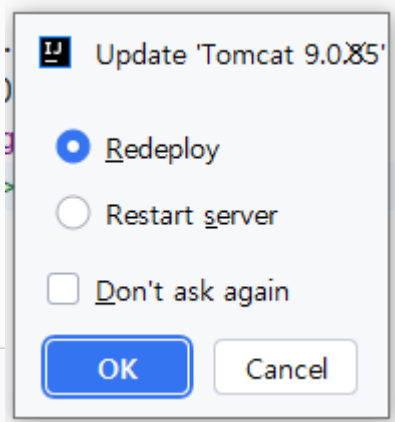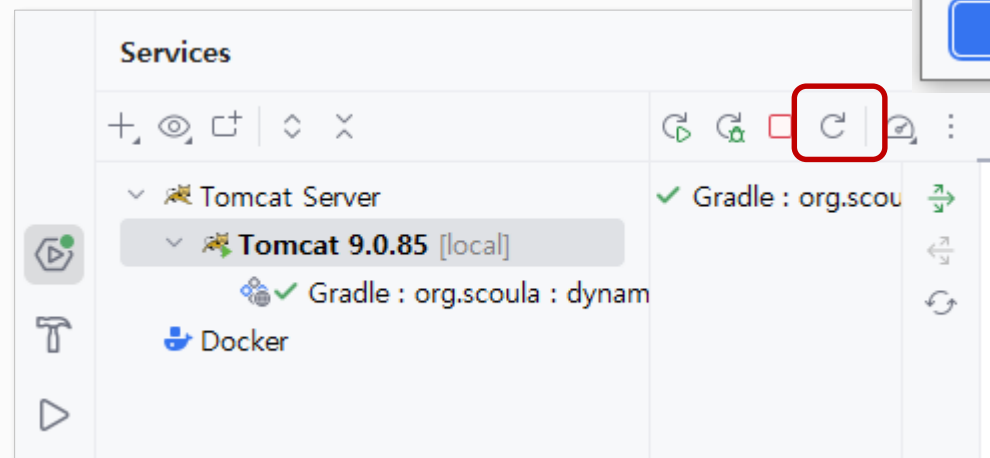
Update 'Tomcat 9.0.85'
- ● Redeploy
- ○ Restart server
- ☐ Don't ask again

OK   Cancel

Services

Tomcat Server   ✓ Gradle : org.scou
  Tomcat 9.0.85 [local]
    ✓ Gradle : org.scoula : dynam
  Docker

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Dynamic Web Project 만들기

- ✅ **프로젝트 템플릿 만들기**
  - ○ **File > New Projects Setup >
    Save Project as Template...**