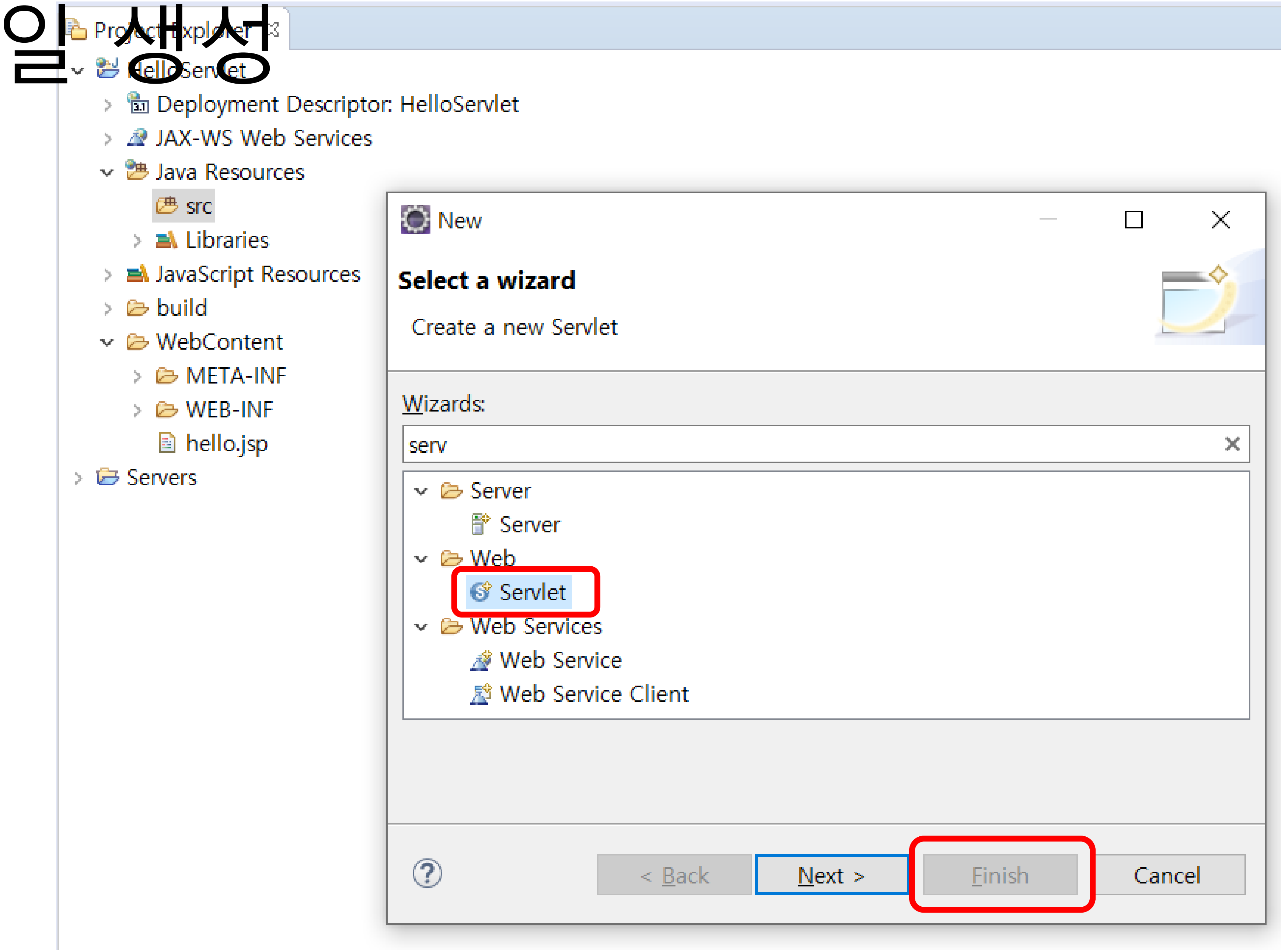
Ex2_Servlet

교사 최선경

Servlet 파일 생성

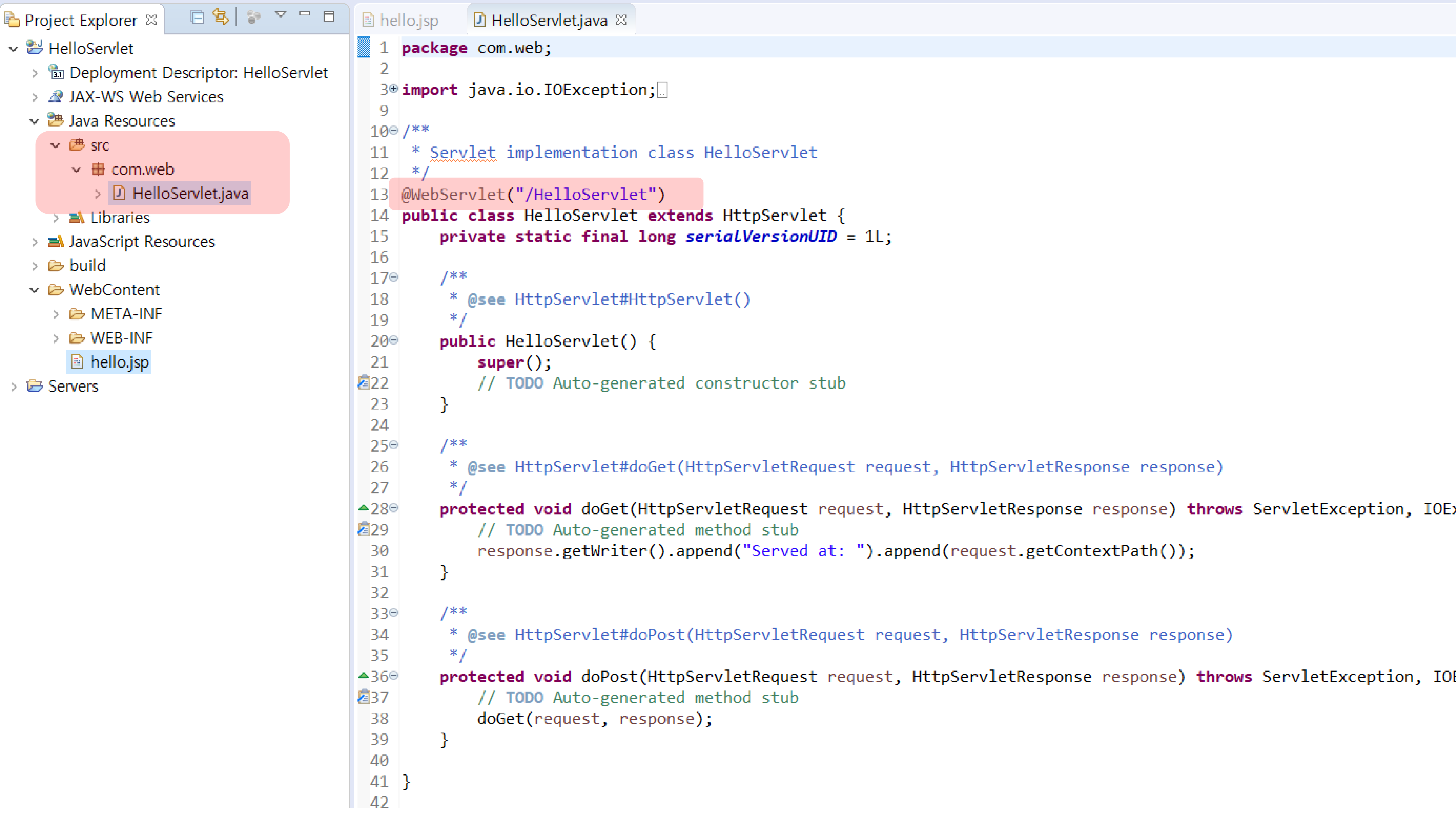


New

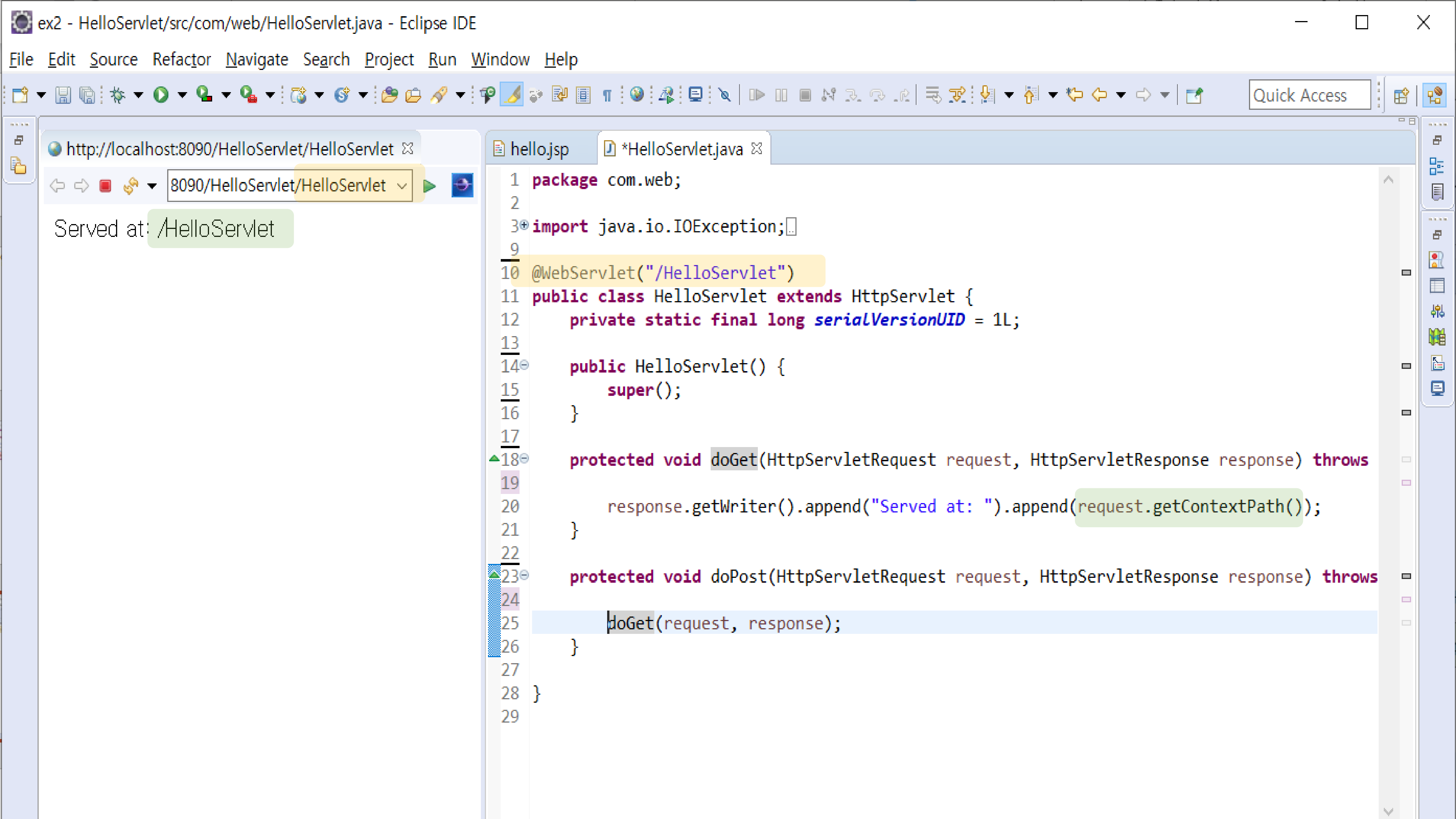
Select a wizard

Create a new Servlet

Wizards: serv



```java
package com.web;

import java.io.IOException;

/**
 * Servlet implementation class HelloServlet
 */
@WebServlet("/HelloServlet")
public class HelloServlet extends HttpServlet {
    private static final long serialVersionUID = 1L;

    /**
     * @see HttpServlet#HttpServlet()
     */
    public HelloServlet() {
        super();
        // TODO Auto-generated constructor stub
    }

    /**
     * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)
     */
    protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOEx
        // TODO Auto-generated method stub
        response.getWriter().append("Served at: ").append(request.getContextPath());
    }

    /**
     * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)
     */
    protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOE
        // TODO Auto-generated method stub
        doGet(request, response);
    }

}
```


ex2 - HelloServlet/src/com/web/HelloServlet.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Quick Access
http://localhost:8090/HelloServlet/HelloServlet
8090/HelloServlet/HelloServlet
hello.jsp
*HelloServlet.java

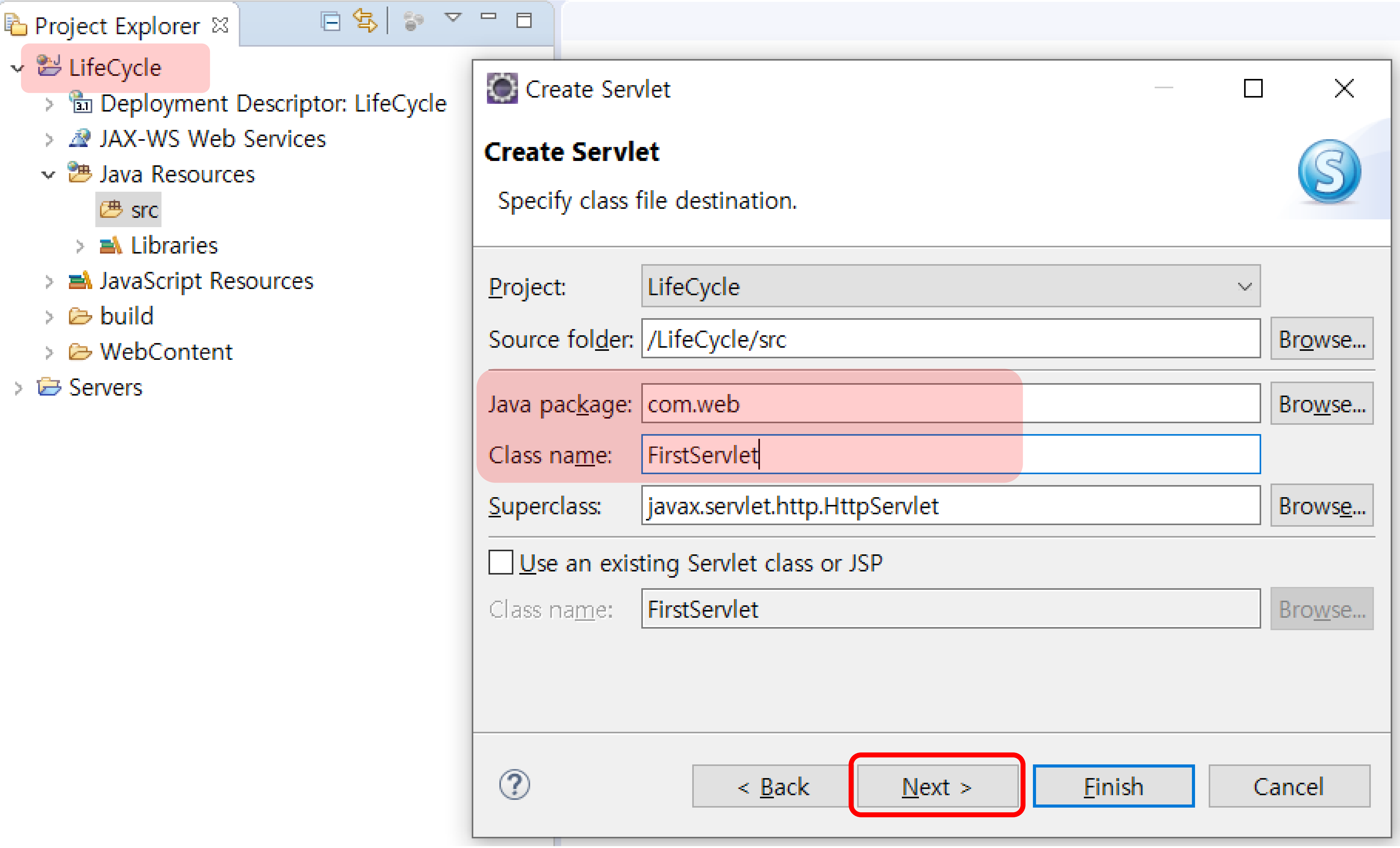
```
Served at: /HelloServlet
```

```java
package com.web;

import java.io.IOException;

@WebServlet("/HelloServlet")
public class HelloServlet extends HttpServlet {
    private static final long serialVersionUID = 1L;

    public HelloServlet() {
        super();
    }

    protected void doGet(HttpServletRequest request, HttpServletResponse response) throws

        response.getWriter().append("Served at: ").append(request.getContextPath());
    }

    protected void doPost(HttpServletRequest request, HttpServletResponse response) throws

        doGet(request, response);
    }

}
```

Servlet의 Url 경로 축약 방법

- 1. web.xml 을 사용
- 2. annotation 을 사용 (서블릿 3.0 부터 사용가능)
- ??? 경로를 줄여서 사용하는 이유 ?? 교재를 읽고 알아두자!

Ex2_2 LifeCycle



Create Servlet

Create Servlet

Specify class file destination.

Project: LifeCycle

Source folder: /LifeCycle/src

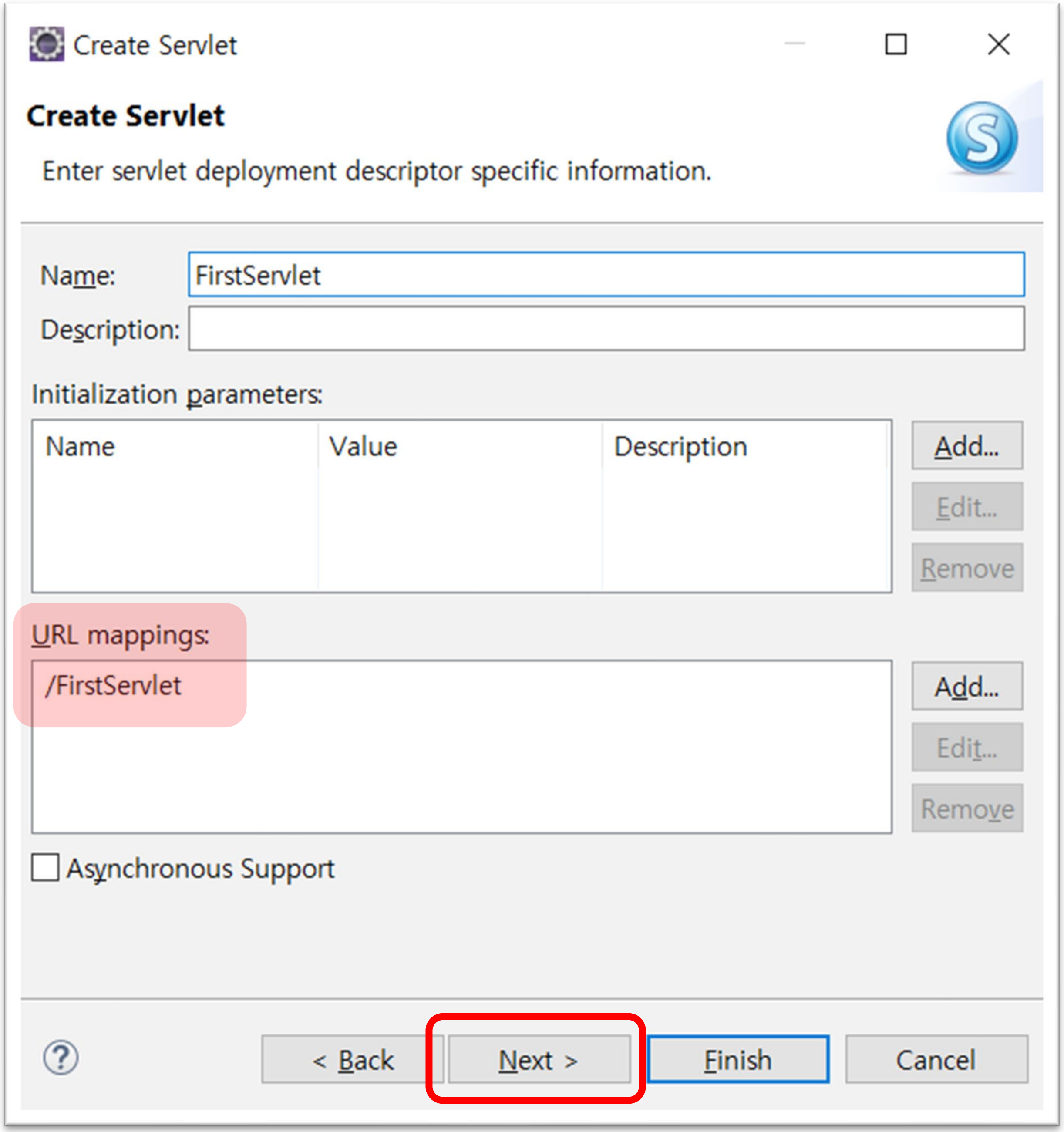
Java package: com.web

Class name: FirstServlet

Superclass: javax.servlet.http.HttpServlet

□ Use an existing Servlet class or JSP

Class name: FirstServlet



Create Servlet

Create Servlet

Enter servlet deployment descriptor specific information.

Name: FirstServlet

Description:

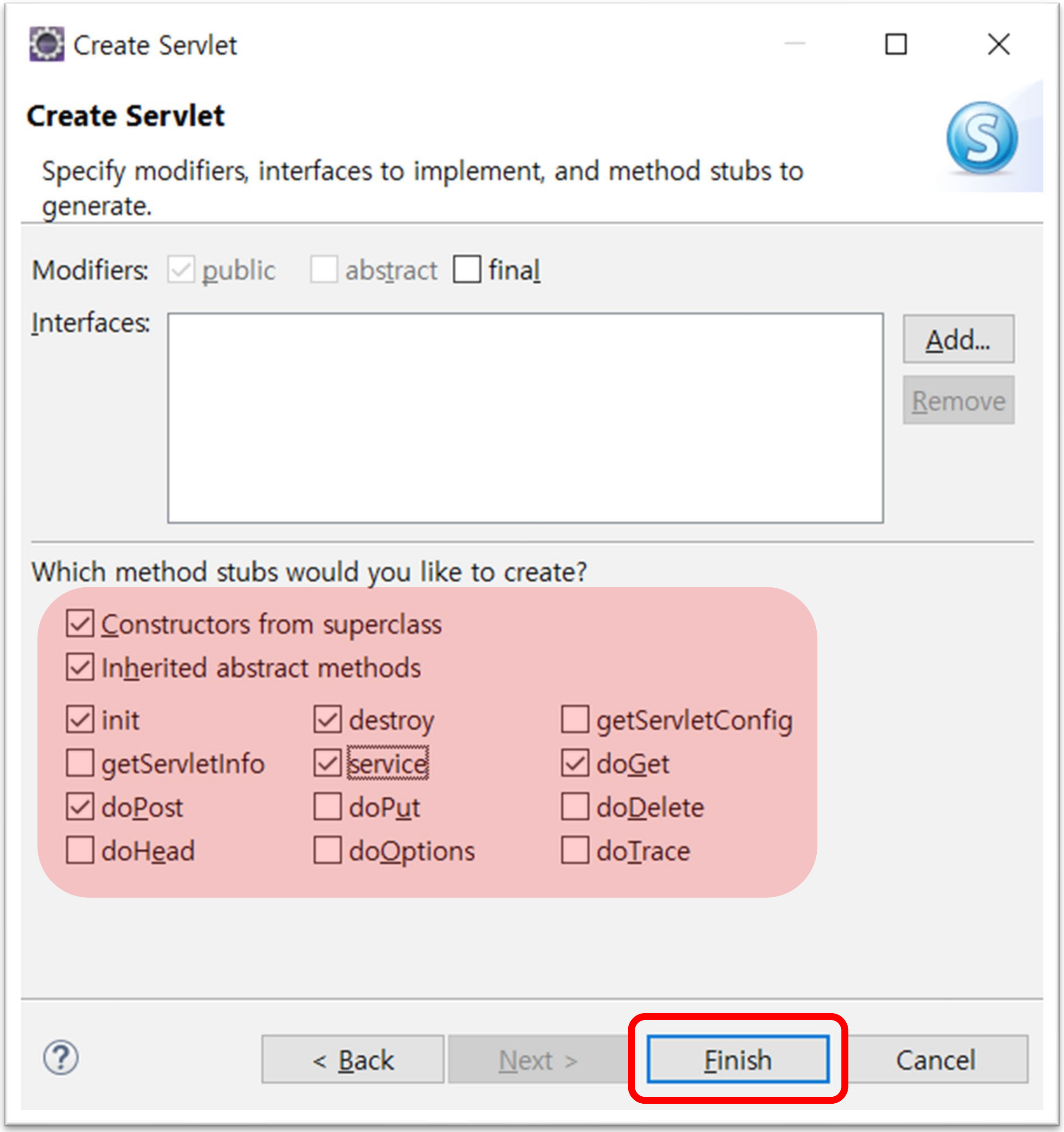
Initialization parameters:

Name	Value	Description

URL mappings:

/FirstServlet

□ Asynchronous Support



Create Servlet

Create Servlet

Specify modifiers, interfaces to implement, and method stubs to generate.

Modifiers: ☑ public □ abstract □ final

Interfaces:

Which method stubs would you like to create?

☑ Constructors from superclass

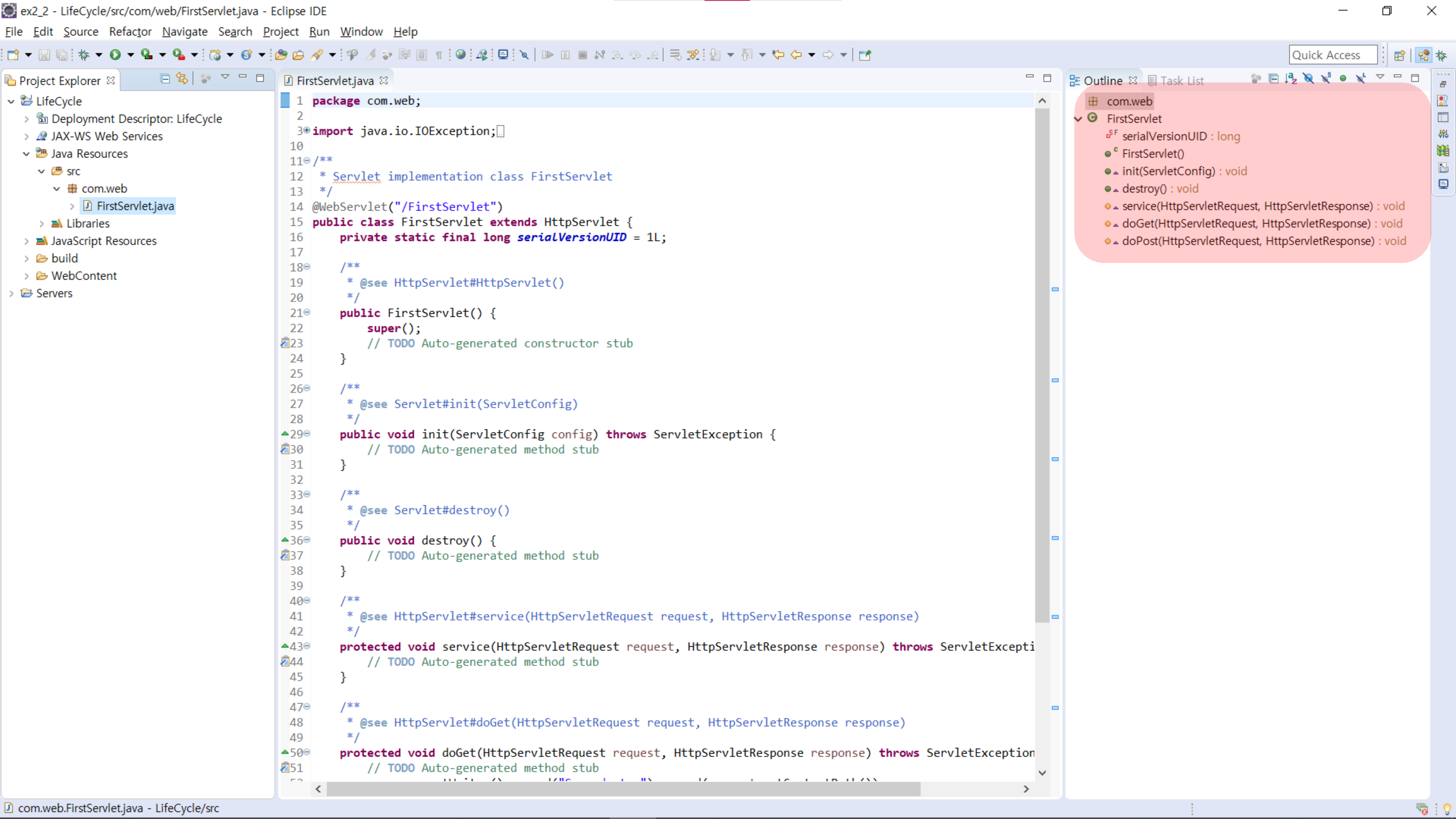
☑ Inherited abstract methods

☑ init ☑ destroy □ getServletConfig

□ getServletInfo ☑ service ☑ doGet

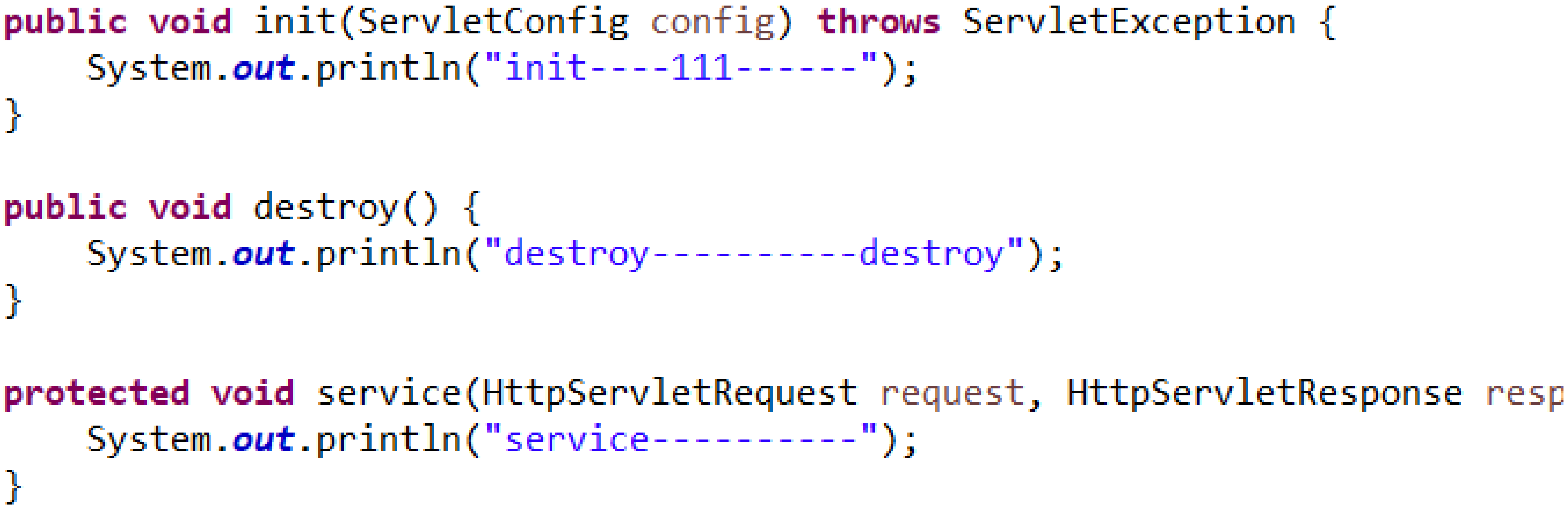
☑ doPost □ doPut □ doDelete

□ doHead □ doOptions □ doTrace

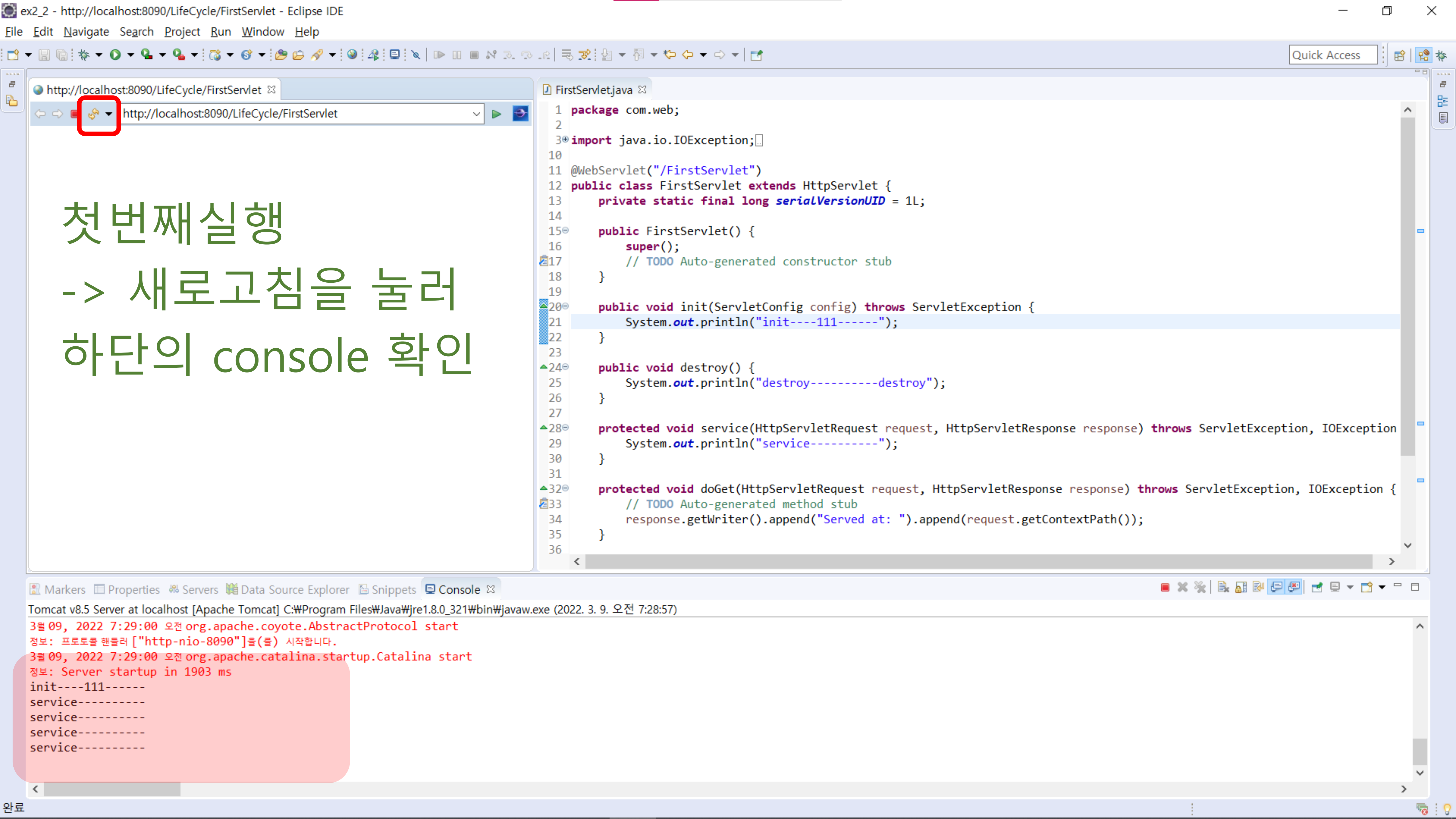

ex2_2 - LifeCycle/src/com/web/FirstServlet.java - Eclipse IDE
File
Edit
Source
Refactor
Navigate
Search
Project
Run
Window
Help
Quick Access
Project Explorer
LifeCycle
Deployment Descriptor: LifeCycle
JAX-WS Web Services
Java Resources
src
com.web
FirstServlet.java
Libraries
JavaScript Resources
build
WebContent
Servers
FirstServlet.java
Outline
Task List
com.web
FirstServlet
serialVersionUID : long
FirstServlet()
init(ServletConfig) : void
destroy() : void
service(HttpServletRequest, HttpServletResponse) : void
doGet(HttpServletRequest, HttpServletResponse) : void
doPost(HttpServletRequest, HttpServletResponse) : void
com.web.FirstServlet.java - LifeCycle/src

```java
package com.web;

import java.io.IOException;□

/**
 * Servlet implementation class FirstServlet
 */
@WebServlet("/FirstServlet")
public class FirstServlet extends HttpServlet {
    private static final long serialVersionUID = 1L;

    /**
     * @see HttpServlet#HttpServlet()
     */
    public FirstServlet() {
        super();
        // TODO Auto-generated constructor stub
    }

    /**
     * @see Servlet#init(ServletConfig)
     */
    public void init(ServletConfig config) throws ServletException {
        // TODO Auto-generated method stub
    }

    /**
     * @see Servlet#destroy()
     */
    public void destroy() {
        // TODO Auto-generated method stub
    }

    /**
     * @see HttpServlet#service(HttpServletRequest request, HttpServletResponse response)
     */
    protected void service(HttpServletRequest request, HttpServletResponse response) throws ServletExcepti
        // TODO Auto-generated method stub
    }

    /**
     * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)
     */
    protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException
        // TODO Auto-generated method stub
```

코드 수정



```
public void init(ServletConfig config) throws ServletException {
    System.out.println("init----111------");
}

public void destroy() {
    System.out.println("destroy----------destroy");
}

protected void service(HttpServletRequest request, HttpServletResponse resp
    System.out.println("service----------");
}
```



ex2_2 - http://localhost:8090/LifeCycle/FirstServlet - Eclipse IDE
File Edit Navigate Search Project Run Window Help
Quick Access
http://localhost:8090/LifeCycle/FirstServlet
FirstServlet.java
Markers
Properties
Servers
Data Source Explorer
Snippets
Console
완료

첫번째실행

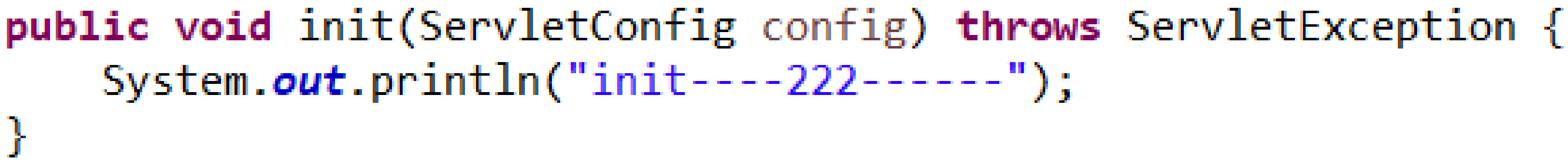
-> 새로고침을 눌러

하단의 console 확인

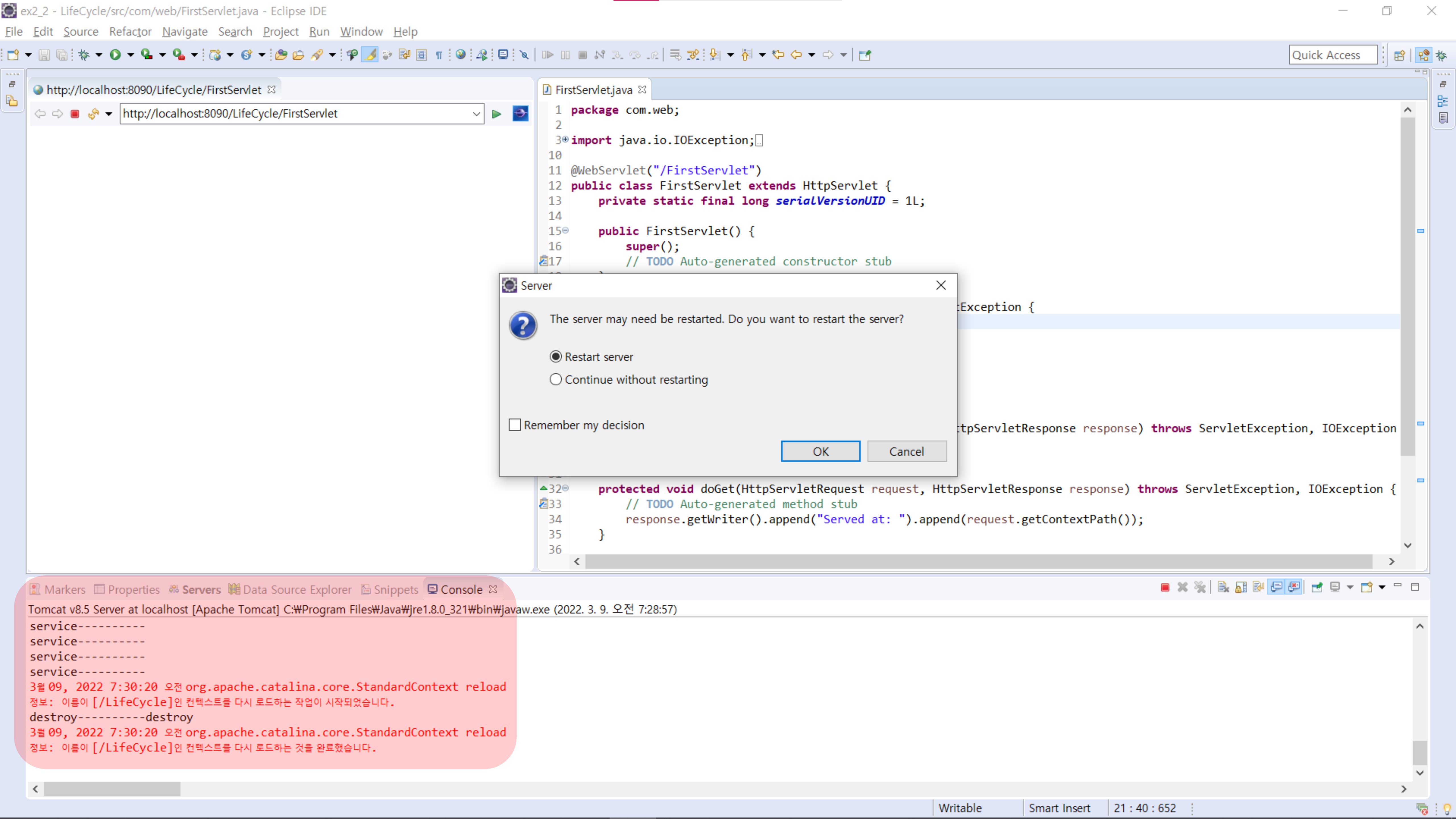
```java
package com.web;

import java.io.IOException;

@WebServlet("/FirstServlet")
public class FirstServlet extends HttpServlet {
    private static final long serialVersionUID = 1L;

    public FirstServlet() {
        super();
        // TODO Auto-generated constructor stub
    }

    public void init(ServletConfig config) throws ServletException {
        System.out.println("init----111------");
    }

    public void destroy() {
        System.out.println("destroy---------destroy");
    }

    protected void service(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException
        System.out.println("service----------");
    }

    protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {
        // TODO Auto-generated method stub
        response.getWriter().append("Served at: ").append(request.getContextPath());
    }

```

```
Tomcat v8.5 Server at localhost [Apache Tomcat] C:₩Program Files₩Java₩jre1.8.0_321₩bin₩javaw.exe (2022. 3. 9. 오전 7:28:57)
3월 09, 2022 7:29:00 오전 org.apache.coyote.AbstractProtocol start
정보: 프로토콜 핸들러 ["http-nio-8090"]을(를) 시작합니다.
3월 09, 2022 7:29:00 오전 org.apache.catalina.startup.Catalina start
정보: Server startup in 1903 ms
init----111------
service----------
service----------
service----------
service----------
```

수정후 재실행~ 직전에 확인해보자



```
public void init(ServletConfig config) throws ServletException {
    System.out.println("init----222------");
}
```


ex2_2 - LifeCycle/src/com/web/FirstServlet.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Quick Access
http://localhost:8090/LifeCycle/FirstServlet
FirstServlet.java
Markers Properties Servers Data Source Explorer Snippets Console
Writable
Smart Insert
21 : 40 : 652

```
package com.web;

import java.io.IOException;

@WebServlet("/FirstServlet")
public class FirstServlet extends HttpServlet {
    private static final long serialVersionUID = 1L;

    public FirstServlet() {
        super();
        // TODO Auto-generated constructor stub
```

```
Exception {
```

```
tpServletResponse response) throws ServletException, IOException
```

```
    protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {
        // TODO Auto-generated method stub
        response.getWriter().append("Served at: ").append(request.getContextPath());
    }
```

Server

The server may need be restarted. Do you want to restart the server?

● Restart server

○ Continue without restarting

☐ Remember my decision

OK Cancel

Tomcat v8.5 Server at localhost [Apache Tomcat] C:₩Program Files₩Java₩jre1.8.0_321₩bin₩javaw.exe (2022. 3. 9. 오전 7:28:57)

```
service----------
service----------
service----------
service----------
3월 09, 2022 7:30:20 오전 org.apache.catalina.core.StandardContext reload
정보: 이름이 [/LifeCycle]인 컨텍스트를 다시 로드하는 작업이 시작되었습니다.
destroy---------destroy
3월 09, 2022 7:30:20 오전 org.apache.catalina.core.StandardContext reload
정보: 이름이 [/LifeCycle]인 컨텍스트를 다시 로드하는 것을 완료했습니다.
```

Servlet의 LifeCycle 생명주기

- 1. init 초기화
- 2. service 클라이언트의 요청 처리
- 3. destroy 자원의 해제시
- ??? 서블릿의 실행흐름을 이해한다
- 생성 -> 실행…실행…실행…실행… -> 소멸