

# JAVA J2EE JDBC SETUP

1. Download Eclipse IDE for Java EE Developers and extract it to a proper directory in your machine. (Recommended : Eclipse Photon R).

<http://www.eclipse.org/downloads/packages/release/photon/r/eclipse-ide-java-ee-developers>

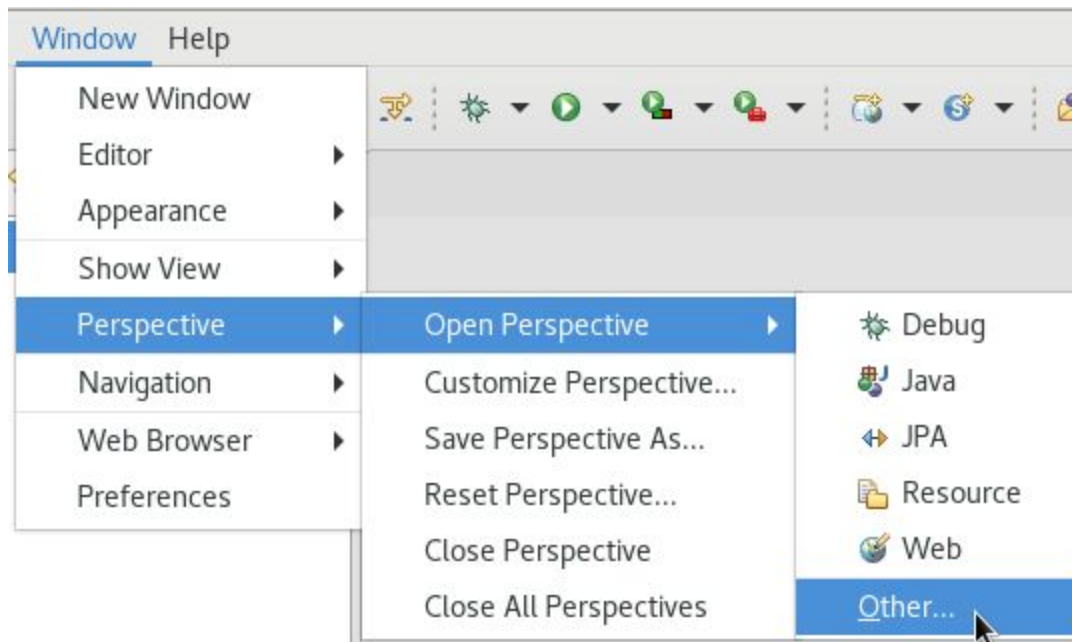
2. Download and Extract Apache Tomcat-7 Server to a proper directory in your machine

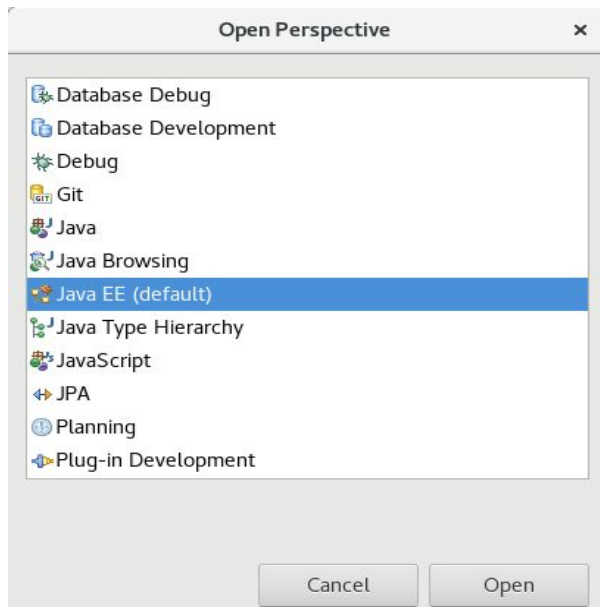
<https://tomcat.apache.org/download-70.cgi>

3. Download the Postgresql JDBC Driver.

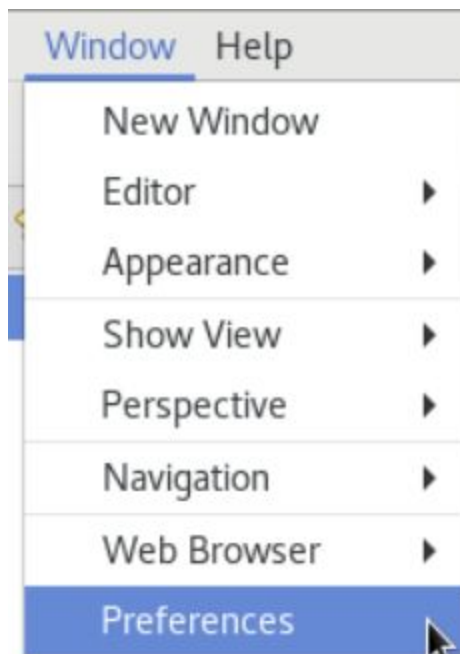
<https://jdbc.postgresql.org/download/postgresql-42.2.5.jar>

4. Launch your Eclipse IDE. Make sure that your Eclipse is set to default Java EE Perspective. From the menu bar, Window -> Perspective -> Open Perspective -> Other -> Java EE (default).





5. Add a Server to your Eclipse IDE. From menu bar, Window -> Preferences -> Server -> Runtime Environments.



Click on the Add button to add a new Apache Tomcat Server to your Development Environment.

## New Server Runtime Environment

Define a new server runtime environment



Select the type of runtime environment:

type filter text

- Apache Tomcat v4.1
- Apache Tomcat v5.0
- Apache Tomcat v5.5
- Apache Tomcat v6.0
- Apache Tomcat v7.0**
- Apache Tomcat v8.0

Apache Tomcat v7.0 supports J2EE 1.2, 1.3, 1.4, and Java EE 5 and 6 Web modules.

☐ Create a new local server



< Back

Next >

Cancel

Finish

Select Apache Tomcat v7.0 and Click next

## Tomcat Server

Specify the installation directory



Name:

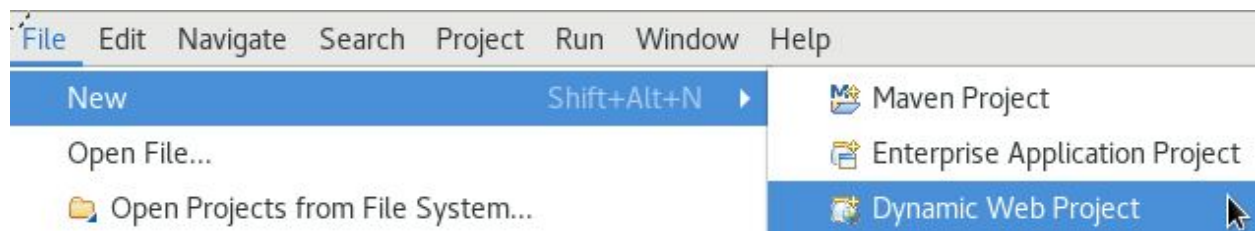
Tomcat installation directory:

apache-tomcat-7.0.47

JRE:  
 Workbench default JRE ▼


Mention the Tomcat Installation directory and hit finish.

6. Create a new Dynamic Web Project, From the menu bar, File -> New -> Dynamic Web Project.



Give a name to your project. Click Next.

**New Dynamic Web Project** ✕

**Dynamic Web Project** 

Create a standalone Dynamic Web project or add it to a new or existing Enterprise Application.

Project name:

Project location

☒ Use default location

Location:

Target runtime

Dynamic web module version

Configuration

A good starting point for working with Apache Tomcat v7.0 runtime. Additional facets can later be installed to add new functionality to the project.

EAR membership


☐ Add project to an EAR

EAR project name:

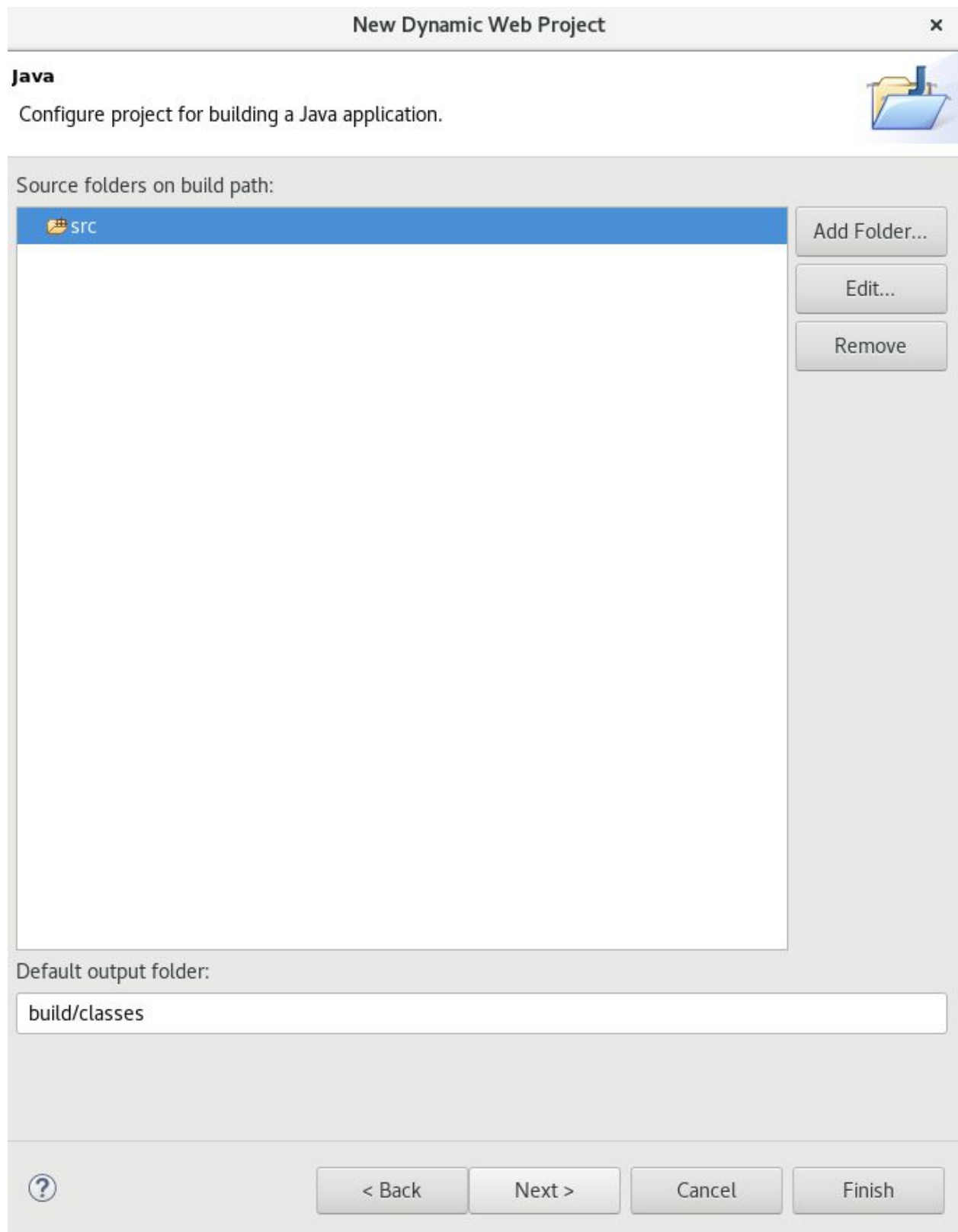
Working sets

☐ Add project to working sets

Working sets:




Click on “New Runtime” and choose the apache server in the target runtime tab. Then click Next



Select src as a source folder on build path and click Next

**New Dynamic Web Project** ✕

---


**Web Module** 

Configure web module settings.

Context root:

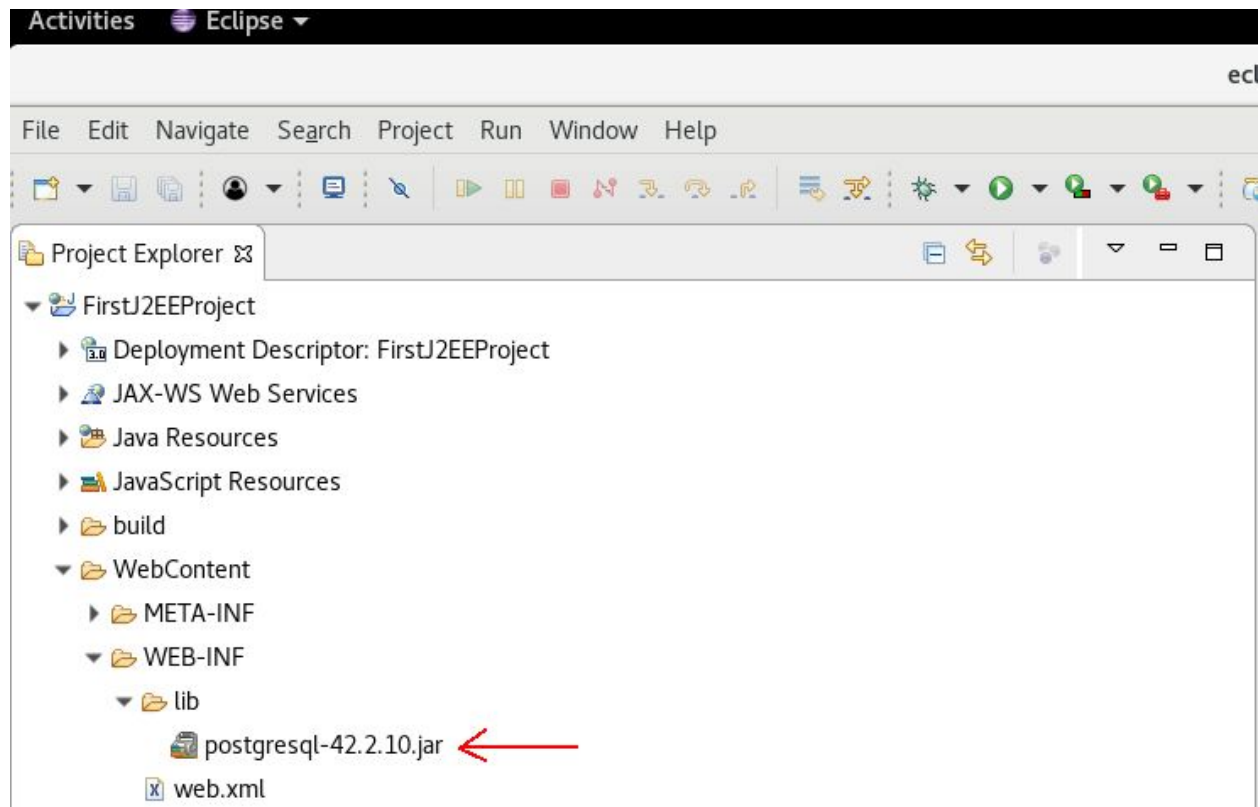
Content directory:

☒ Generate web.xml deployment descriptor



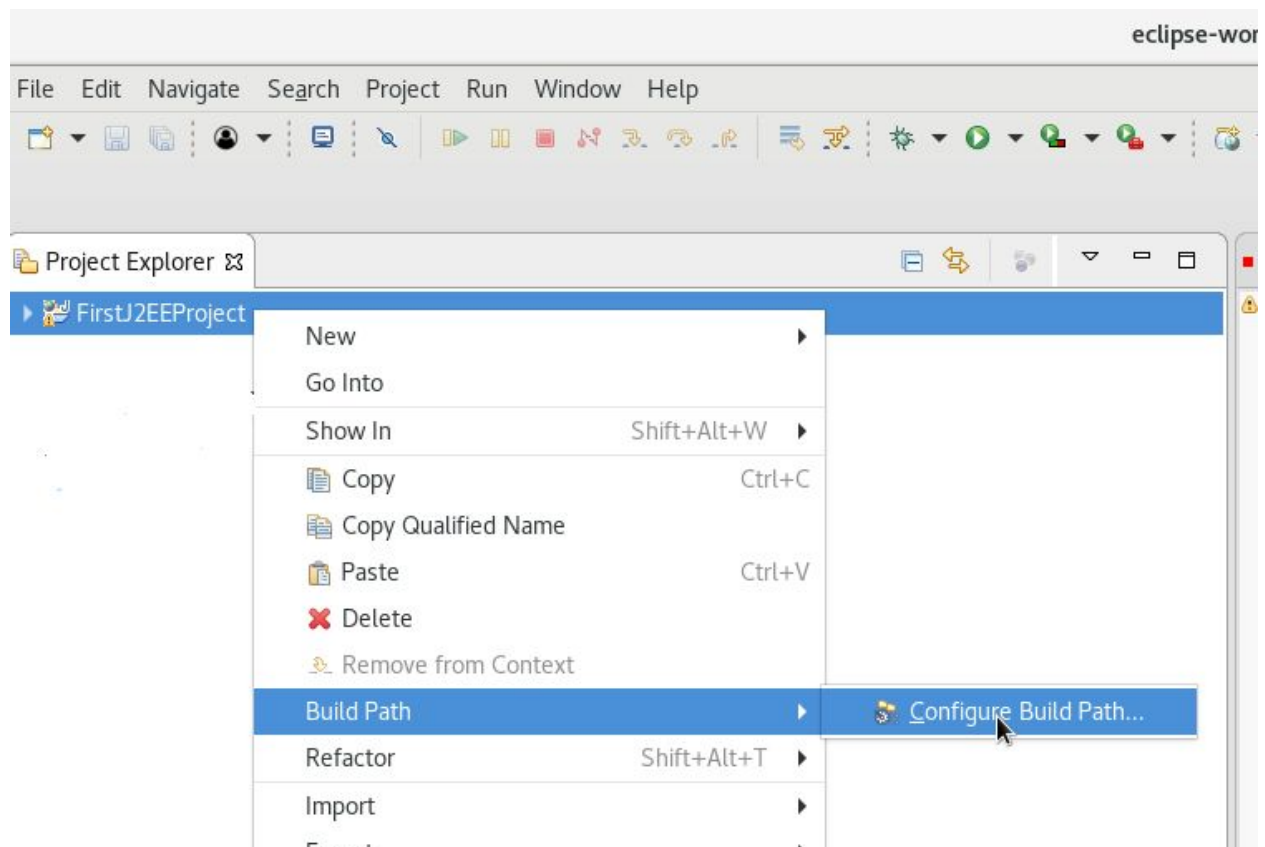
Don't forget to check-mark the Generate web.xml deployment descriptor. Then click finish

7. Copy and paste the downloaded postgres java jdbc driver jar file in lib folder .This will be in WebContent->WEB-INF->lib

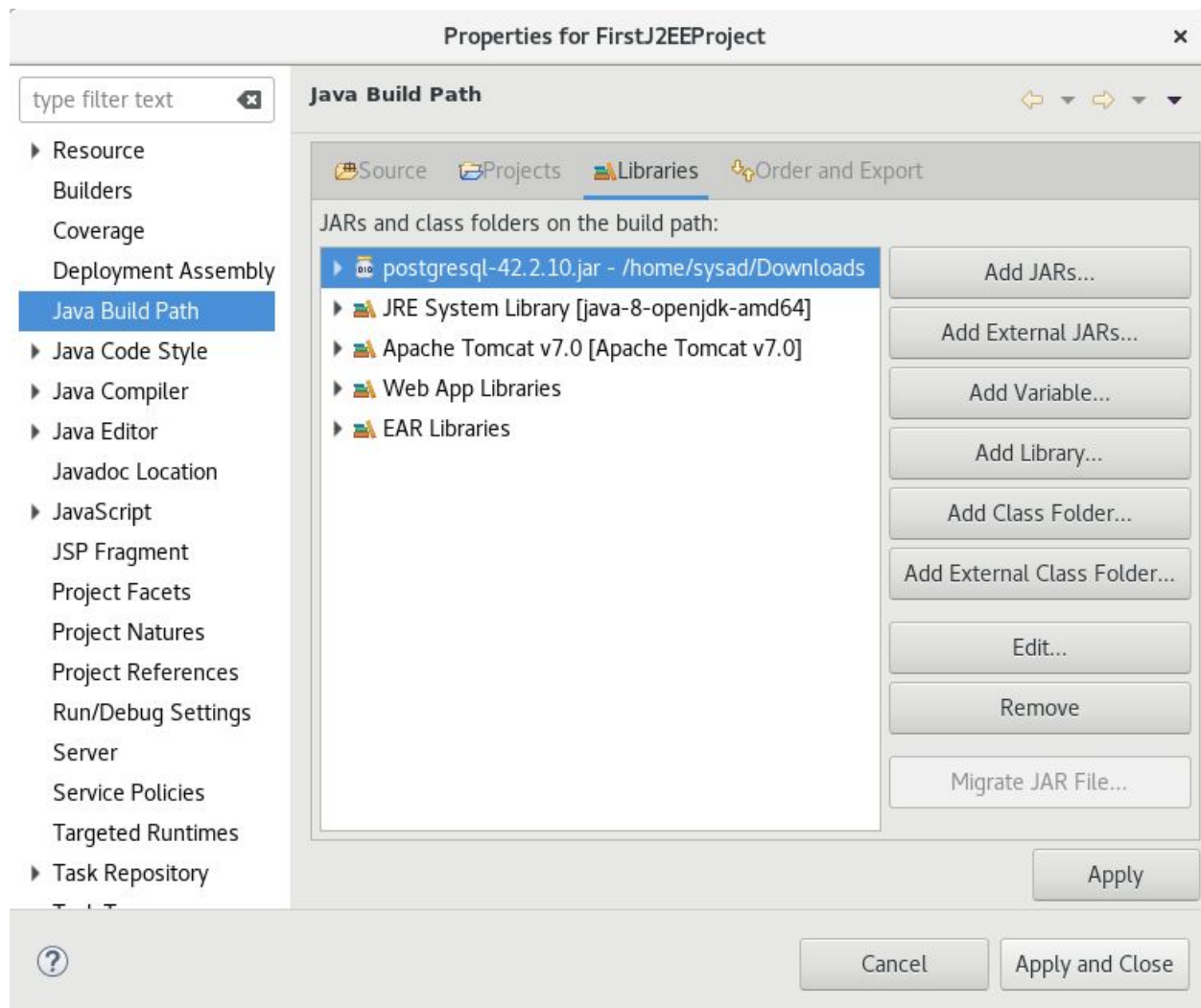


8. Right click on your project in the Project Explorer, then Build Path and Configure Build Path.

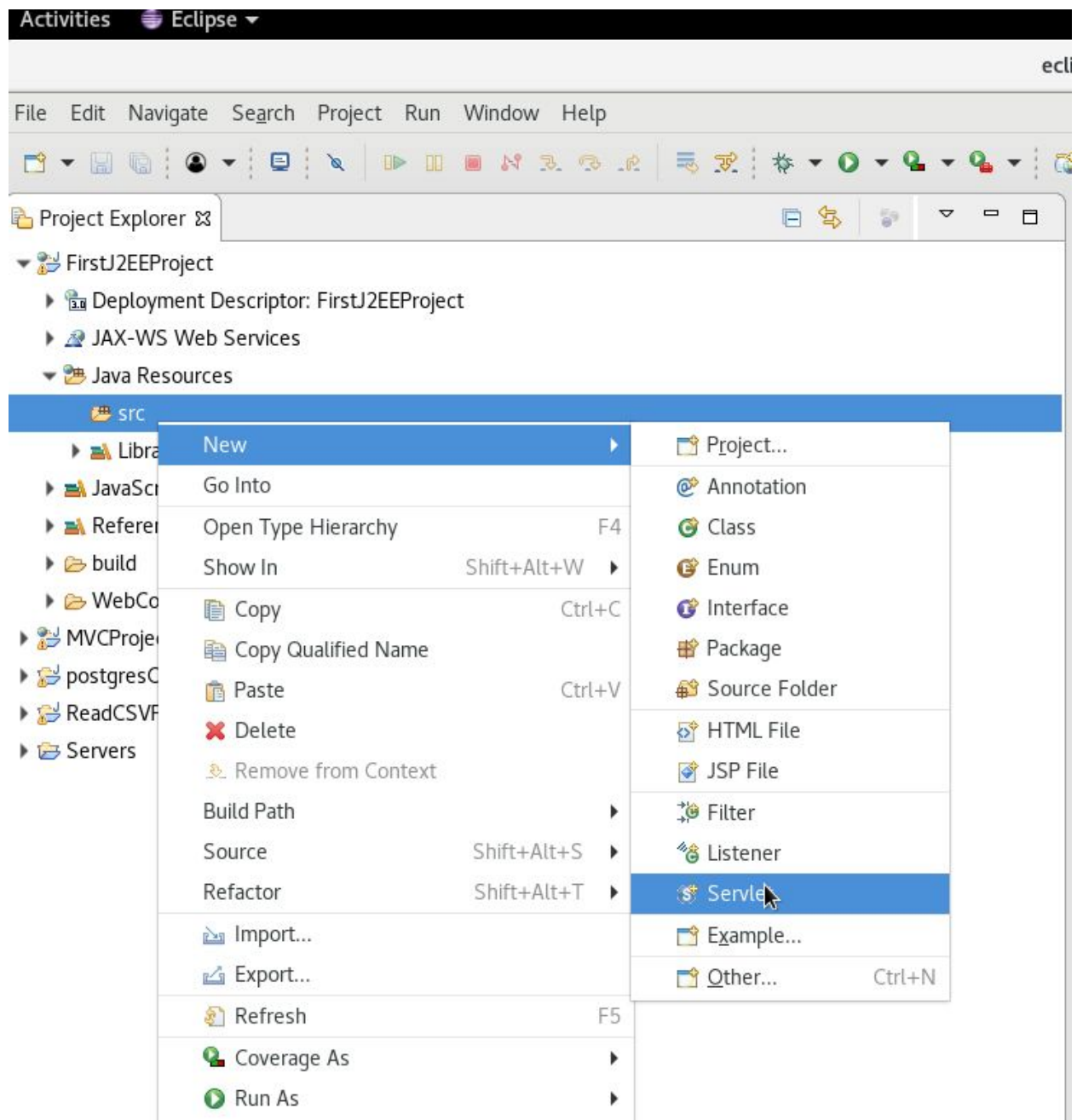




9. Goto the libraries tab --> Add external Jar --> postgresql.jar file. Click apply and close.



10. Right click on the project folder and then expand Java Resources. Then right click on src->New->Servlet.




11. Give the servlet name as StudentServlet. Then click Next and Finish.

Create Servlet

Create Servlet

Specify class file destination.



Project:

FirstJ2EEProject

Source folder:

/FirstJ2EEProject/src

Browse...

Java package:

Browse...

Class name:

StudentServlet

Superclass:

javax.servlet.http.HttpServlet


Browse...

☐ Use an existing Servlet class or JSP

Class name:

StudentServlet

Browse...



< Back

Next >

Cancel

Finish

**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?

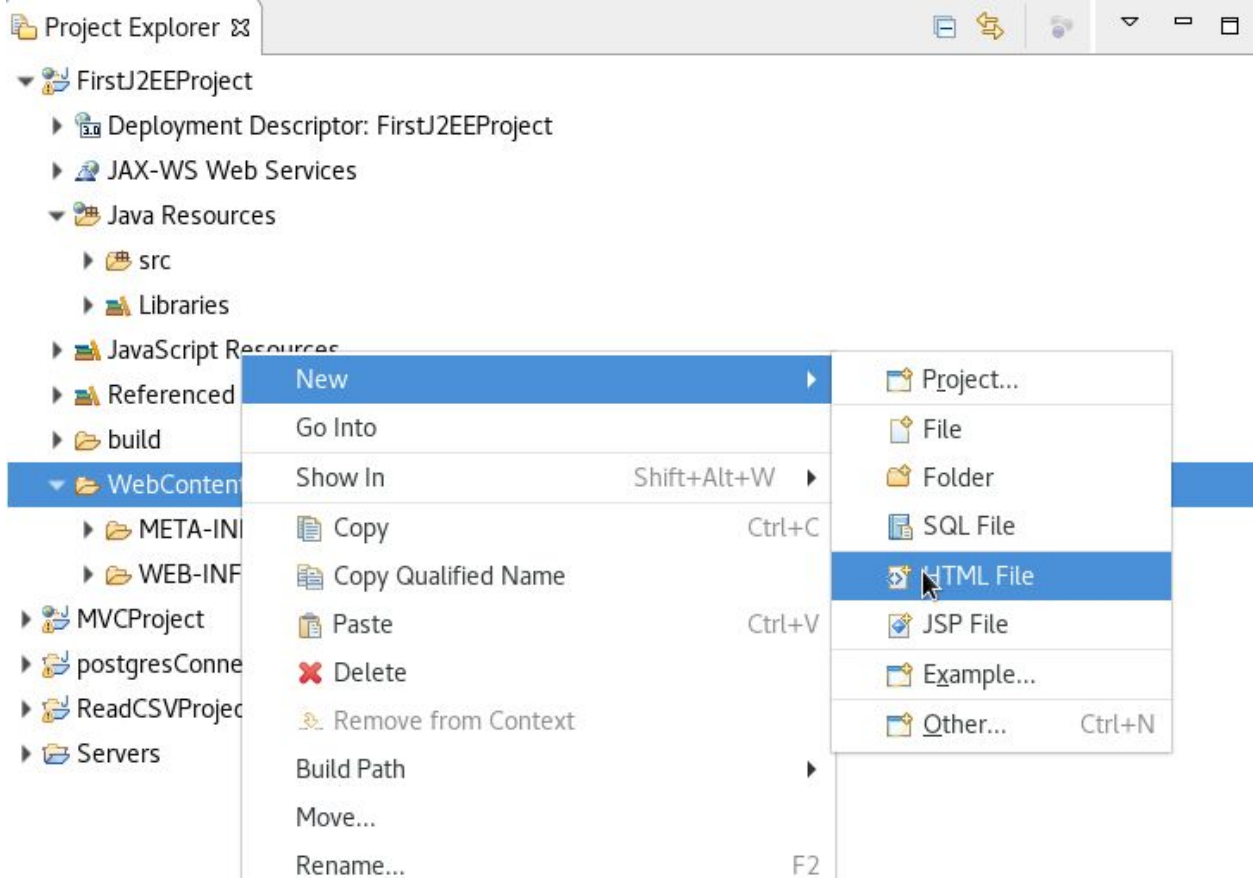
☒ Constructors from superclass

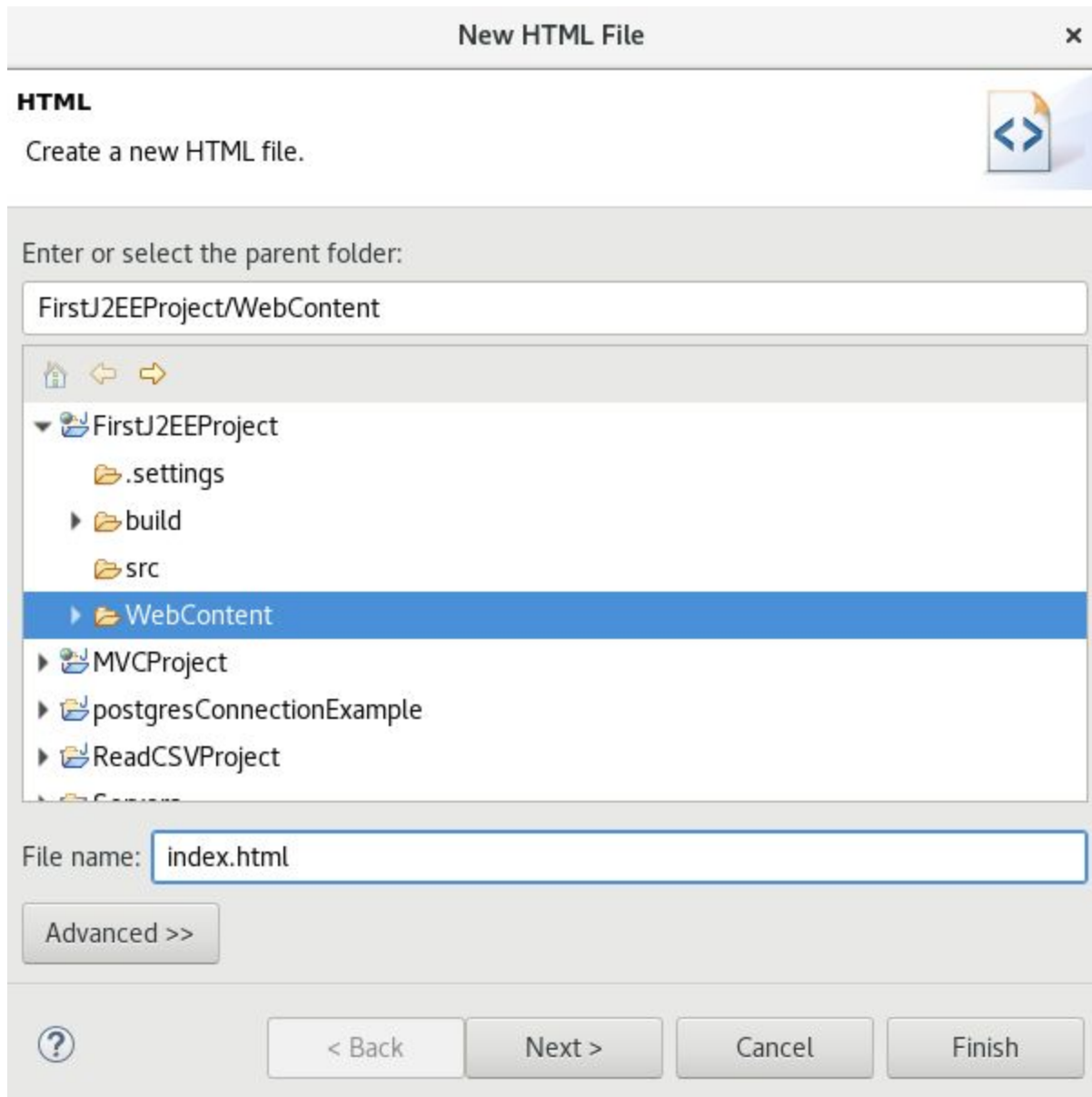
☒ Inherited abstract methods

<input type="checkbox"/> init	<input type="checkbox"/> destroy	<input type="checkbox"/> getServletConfig
<input type="checkbox"/> getServletInfo	<input type="checkbox"/> service	<input checked="" type="checkbox"/> doGet
<input checked="" type="checkbox"/> doPost	<input type="checkbox"/> doPut	<input type="checkbox"/> doDelete
<input type="checkbox"/> doHead	<input type="checkbox"/> doOptions	<input type="checkbox"/> doTrace

11. Copy-paste the code shared as StudentServlet.java.(First remove everything from servlet file,then do copy-paste)

12. Then Right click on WebContent folder -> New -> HTML file.Give the file name as index.html.Click Finish.





13. Copy-paste the code shared as index.html.(First remove everything from index.html file,then do copy paste)

14. Now go to web.xml present in WebContent->WEB-INF.  
Copy -paste the below code.This is known as servlet mapping.

This file can be opened as a text editor by right clicking and open with option.

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app>
....
```

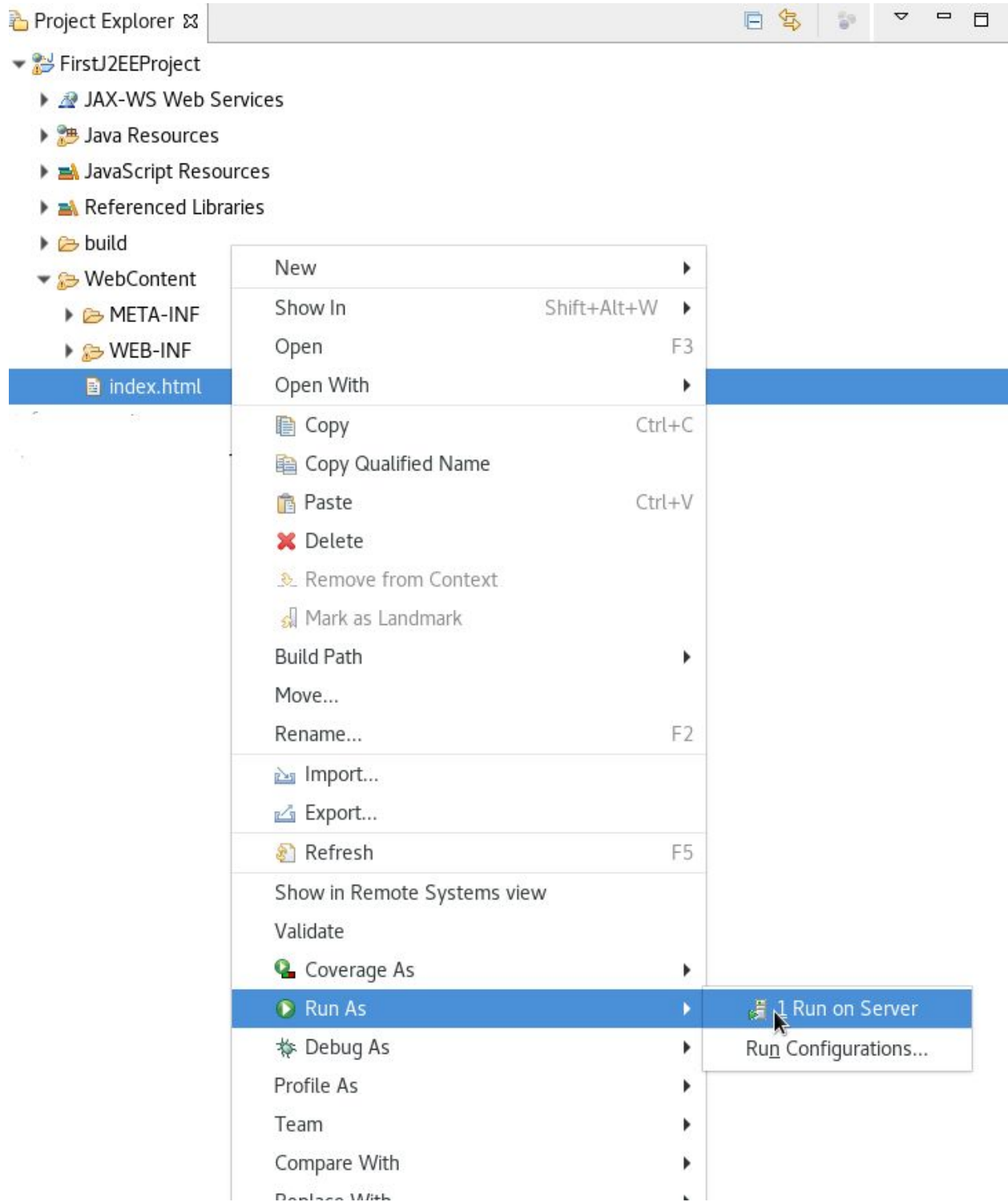
```
<welcome-file-list>
  <welcome-file>index.html</welcome-file>
</welcome-file-list>

<servlet>
  <servlet-name>StudentServlet</servlet-name>
  <servlet-class>StudentServlet</servlet-class>
</servlet>

<servlet-mapping>
  <servlet-name>StudentServlet</servlet-name>
  <url-pattern>/StudentServlet</url-pattern>
</servlet-mapping>
</web-app>
```

15. Right click on index.html -> Run As -> Run On Server. Then click Finish.





16. You will get the index.html running on the browser.



A screenshot of a web browser window. The address bar shows 'localhost:8080/FirstJ2EEProject/index.html'. Below the address bar, there is a form with the text 'Enter Student Id:' followed by a text input field and a 'Submit' button.

17. Enter the id as 30772.

You should see the output as :



A screenshot of a web browser window. The address bar shows 'localhost:8080/FirstJ2EEProject1/StudentServlet?id=30772'. Below the address bar, the output text reads: 'Student id is 30772 Student name is Inoue' followed by '==== 1 rows found ====='.