EXP 4: SERVLET PROGRAM 2

Create a web form that accepts a user's name and age. Write a Servlet to process the form data and display it back on the browser.

AIM:

To create a web-based application using **HTML** and **Java Servlets** that accepts a user's name and age through a form and displays the submitted data back to the user in the browser.

ALGORITHM:

Step 1: Create an HTML form (index.html)

- Use <form> to accept user input for name and age.
- Set the form method to POST and action to the servlet URL (e.g., /process).

Step 2: Create the Java Servlet (UserFormServlet.java)

- Import necessary packages from jakarta.servlet.* and jakarta.servlet.http.*.
- Extend the HttpServlet class.
- Override the doPost() method to:
 - o Retrieve name and age using request.getParameter().
 - o Generate an HTML response displaying the data using response.getWriter().

Step 3: Configure the servlet in web.xml

- Register the servlet class with a <servlet> tag.
- Map the servlet to the form action URL using <servlet-mapping>.

Step 4: Compile the servlet

- Use the servlet API JAR from Tomcat's lib folder in the classpath.
- Compile using javac -cp.

Step 5: Deploy the application

- Place index.html in the root of the web app (webapps/EXP4/).
- Place web.xml in WEB-INF.
- Place compiled .class files in WEB-INF/classes.

Step 6: Start the Tomcat Server

- Run startup.bat from Tomcat/bin/.
- Access the application at http://localhost:8080/EXP4/.

SOURCE CODE:

UserFormServlet.java

```
WEB-INF > classes > J UserFormServlet.java > ...
      // File: EXP4/WEB-INF/classes/UserFormServlet.java
      import jakarta.servlet.ServletException;
      import jakarta.servlet.http.HttpServlet;
      import jakarta.servlet.http.HttpServletRequest;
      import jakarta.servlet.http.HttpServletResponse;
      import java.io.IOException;
      import java.io.PrintWriter;
 10
      public class UserFormServlet extends HttpServlet {
 11
          protected void doPost(HttpServletRequest request, HttpServletResponse response)
                  throws ServletException, IOException {
 12
 13
 14
               String username = request.getParameter("username");
 15
               String age = request.getParameter("age");
 16
               response.setContentType("text/html");
 17
               PrintWriter out = response.getWriter();
 18
               out.println(x:"<html><body>");
 19
               out.println(x:"<h2>User Details Received</h2>");
 20
               out.println("Name: " + username + "");
 21
               out.println("Age: " + age + "");
 22
 23
               out.println(x:"</body></html>");
 24
```

Web.xml

```
WEB-INF > Neb.xml
      <!-- File: EXP4/WEB-INF/web.xml -->
      <web-app xmlns="https://jakarta.ee/xml/ns/jakartaee"</pre>
  2
               xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
               xsi:schemaLocation="https://jakarta.ee/xml/ns/jakartaee
               https://jakarta.ee/xml/ns/jakartaee/web-app_5_0.xsd"
  5
              version="5.0">
  6
  7
          <servlet>
  8
              <servlet-name>UserFormServlet</servlet-name>
 10
              <servlet-class>UserFormServlet</servlet-class>
 11
          </servlet>
 12
          <servlet-mapping>
 14
              <servlet-name>UserFormServlet</servlet-name>
 15
              <url-pattern>/process</url-pattern>
 16
          </servlet-mapping>
 17
 18
          <welcome-file-list>
          <welcome-file>index.html</welcome-file>
 19
          </welcome-file-list>
 21
      </web-app>
```

Index.html

```
o index.html > ...
     <!-- File: EXP4/index.html -->
 2
     <!DOCTYPE html>
 3
     <html>
     <head>
 5
         <title>User Form</title>
 6
     </head>
 7
     <body>
 8
         <h2>Enter Your Details</h2>
 9
         <form action="process" method="post">
10
            Name: <input type="text" name="username"><br><br>
11
            12
            <input type="submit" value="Submit">
13
         </form>
14
     </body>
     </html>
15
```

OUTPUT:



Enter Your Details

Name: nandy
Age: 19
Submit



Name: nandy

Age: 19

RESULT:

Thus, the program was executed successfully.