

LAB EXPERIMENT : 04

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 build a simple web application with an HTML form to collect user data (name and age) and process this data using a Java Servlet, then display the results back to the user.

Algorithm:

1. Start

2. Create HTML Form:

- Create an HTML page (index.html) containing a form with input fields for name and age.

3. Submit Form:

- The user submits the form data via the HTTP POST method to the server.

4. Servlet Processing:

- The server receives the request at the specified URL pattern (in this case, /processData).
- The Servlet (UserServlet) is triggered to process the request.

5. Retrieve Form Data:

- The servlet fetches the form data using `request.getParameter("name")` and `request.getParameter("age")`.

6. Generate Response:

- The Servlet constructs an HTML response with the name and age, displaying them on the browser.

7. Display Results:

- The user sees their name and age displayed on the webpage after the form is processed.

8. End

Code :

HTML Form (index.html)

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
    <meta charset="UTF-8">
```

```
    <meta name="viewport" content="width=device-  
width, initial-scale=1.0">
```

```
    <title>User Form</title>
```

```
</head>
```

```
<body>
```

```
    <h1>Enter Your Information</h1>
```

```
    <form action="processData" method="POST">
```

```
        <label for="name">Name:</label>
```

```
        <input type="text" id="name" name="name"  
required><br><br>
```

```
        <label for="age">Age:</label>
```

```
<input type="number" id="age" name="age"
required><br><br>
```

```
<input type="submit" value="Submit">
```

```
</form>
```

```
</body>
```

```
</html>
```

Servlet to Process Form Data (UserServlet.java):

```
import javax.servlet.*;
```

```
import javax.servlet.http.*;
```

```
import java.io.*;
```

```
public class UserServlet extends HttpServlet {
```

```
    @Override
```

```
protected void doPost(HttpServletRequest request,  
    HttpServletResponse response) throws  
    ServletException, IOException {
```

```
    // Set the response content type
```

```
    response.setContentType("text/html");
```

```
    // Get PrintWriter to write the response
```

```
    PrintWriter out = response.getWriter();
```

```
    // Get form data from request
```

```
    String name = request.getParameter("name");
```

```
    String age = request.getParameter("age");
```

```
    // Generate the output HTML
```

```
    out.println("<html><body>");
```

```
    out.println("<h2>Form Data Received</h2>");
```

```
        out.println("<p>Name: " + name + "</p>");

        out.println("<p>Age: " + age + "</p>");

        out.println("</body></html>");

    }

}
```

Web.xml Configuration (web.xml):

```
<web-app xmlns="http://java.sun.com/xml/ns/javaee"
          xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
          xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
http://java.sun.com/xml/ns/javaee/web-app_3_0.xsd"
          version="3.0">

    <servlet>

        <servlet-name>UserServlet</servlet-name>
```

```
<servlet-class>UserServlet</servlet-class>  
  
</servlet>
```

```
<servlet-mapping>
```

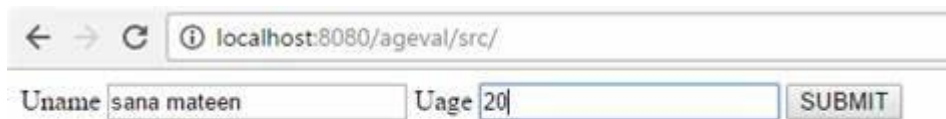
```
<servlet-name>UserServlet</servlet-name>
```

```
<url-pattern>/processData</url-pattern>
```

```
</servlet-mapping>
```

```
</web-app>
```

Output :



A screenshot of a web browser window. The address bar shows 'localhost:8080/ageval/src/'. Below the address bar, there is a form with two input fields: 'Username' containing the text 'sana mateen' and 'Age' containing the number '20'. To the right of these fields is a button labeled 'SUBMIT'.

Result:

- This result is displayed dynamically by the servlet, confirming that the user's input was successfully processed and shown on the browser. The name and age entered by the user are displayed as output after processing by the Servlet.

