

LAB EXPERIMENT : 05

Write a Servlet to demonstrate the difference between HTTP GET and POST methods by creating a form and handling requests accordingly.

AIM:

To create a simple web application where a user submits data via a form, and based on the HTTP method used (GET or POST), the Servlet processes the request and displays appropriate messages or handles data differently.

Algorithm:

1. Start:

- A user accesses the web page with an HTML form.

2. Create HTML Form:

- The form allows the user to input their name and age.
- The form can submit data using both GET and POST methods.

3. Submit Form with GET or POST:

- The user submits the form using either the GET method (appends data to the URL) or POST method (sends data in the request body).

4. Handle GET Request in Servlet:

- If the request method is GET, the Servlet will simply display the form data in the URL and show a confirmation message.

5. Handle POST Request in Servlet:

- If the request method is POST, the Servlet will process the data sent in the request body, handle it securely, and display the data back on the page.

6. Generate Response:

- The Servlet responds differently based on the HTTP method (GET or POST).
- GET method appends data to the URL, and POST method shows form submission results.

7. Display Results:

Display confirmation messages or the data entered by the user.

8. End.

Code :

Servlet Code (Java):

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

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

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

```
public class FormServlet extends HttpServlet {
```

```
    // Handle GET requests (display the form)
```

```
    @Override
```

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

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

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

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

```
out.println("<h2>Submit your information (GET  
Method)</h2>");
```

```
out.println("<form method='GET'  
action='FormServlet'>");
```

```
out.println("Name: <input type='text'  
name='name'><br>");
```

```
out.println("Age: <input type='number'  
name='age'><br>");
```

```
out.println("<input type='submit' value='Submit  
GET'>");
```

```
out.println("</form>");
```

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

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

```
        if (name != null && age != null) {

            out.println("<h3>GET Method- Submitted  
Data:</h3>");

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

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

        }

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

    }

    // Handle POST requests (process the data and display  
the result)

    @Override

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

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

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

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

```
out.println("<h2>Submit your information (POST  
Method)</h2>");
```

```
out.println("<form method='POST'  
action='FormServlet'>");
```

```
out.println("Name: <input type='text'  
name='name'><br>");
```

```
out.println("Age: <input type='number'  
name='age'><br>");
```

```
out.println("<input type='submit' value='Submit  
POST'>");
```

```
out.println("</form>");
```

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

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

```
if (name != null && age != null) {  
  
    out.println("<h3>POST Method- Submitted  
Data:</h3>");  
  
    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>FormServlet</servlet-name>`

`<servlet-class>FormServlet</servlet-class>`

`</servlet>`

`<servlet-mapping>`

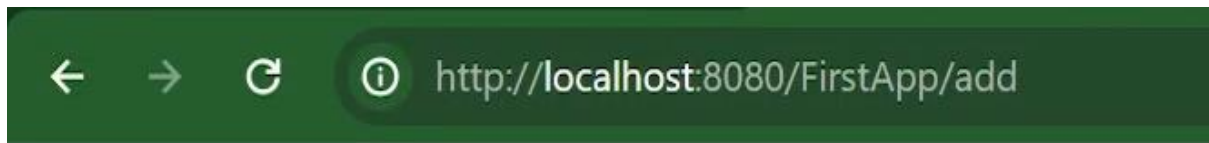
`<servlet-name>FormServlet</servlet-name>`

`<url-pattern>/FormServlet</url-pattern>`

`</servlet-mapping>`

`</web-app>`

Output:



Executing doGet method. The result is = 14

Result:

The Servlet will display two forms, one for the GET method and another for the POST method.

When using GET, the data will be displayed as part of the URL.

When using POST, the form data will be processed securely, and the result will not be visible in the URL.