

Lab Sheet 4

Create a servlet that receives user input from an HTML form and displays it back to the user.

Steps:

1. Create an HTML form to collect the user's name.
2. Create a Servlet (GetUserInputServlet) to handle the form submission and display the user's name.

HTML Form (index.html):

```
<html>

<head>

<title>TODO supply a title</title>

<meta charset="UTF-8">

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

</head>

<body bgcolor ="#ffbf00">


<div><h1><center>User input</center></h1></div>


<form action="getUserInput12" method="POST">

<table style = "width:70%">

<tr><th><h3> Name </h3></th><th><input type="text" name="un"</tr>

<tr><td colspan="2" align="center"><input type ="submit" value="save"</td></tr>

</form>

</table>

<tr>

<hr>

<h1>Calculate</h1>

<form action="CalculateSumServlet"method="post">

    First Number:<input type="number" name="num1" required><br>

    Second Number: <input type="number" name="num2" required><br>
```

```
<input type="submit" value="Calculate Sum">
```

```
</form>
```

```
</tr>
```

```
</form>
```

```
</body>
```

```
</html>
```

(getUserInput12.java)

```
import java.io.IOException;
```

```
import java.io.PrintWriter;
```

```
import javax.servlet.ServletException;
```

```
import javax.servlet.annotation.WebServlet;
```

```
import javax.servlet.http.HttpServlet;
```

```
import javax.servlet.http.HttpServletRequest;
```

```
import javax.servlet.http.HttpServletResponse;
```

```
/**
```

```
 *
```

```
 * @author student
```

```
 */
```

```
@WebServlet(urlPatterns = {"/getUserInput12"})
```

```
public class getUserInput12 extends HttpServlet {
```

```
    /**
```

```
     * Processes requests for both HTTP GET and POST
```

```
     * methods.
```

```
     *
```

```
     * @param request servlet request
```

```
     * @param response servlet response
```

```

    * @throws ServletException if a servlet-specific error occurs
    * @throws IOException if an I/O error occurs
    */
protected void processRequest(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
    String name = request.getParameter("un");
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
        /* TODO output your page here. You may use following sample code. */
        out.println("<!DOCTYPE html>");
        out.println("<html>");
        out.println("<head>");
        out.println("<title>Servlet getUserInput12</title>");
        out.println("</head>");
        out.println("<body>");
        out.println("<h1> Input name " + name + "</h1>");
        out.println("</body>");
        out.println("</html>");
    }
}

// <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the left to
edit the code.">

/**
 * Handles the HTTP <code>GET</code> method.
 *
 * @param request servlet request
 * @param response servlet response
 * @throws ServletException if a servlet-specific error occurs

```

```

    * @throws IOException if an I/O error occurs
    */

    @Override
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        processRequest(request, response);
    }

    /**
     * Handles the HTTP <code>POST</code> method.
     *
     * @param request servlet request
     * @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs
     */
    @Override
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        processRequest(request, response);
    }

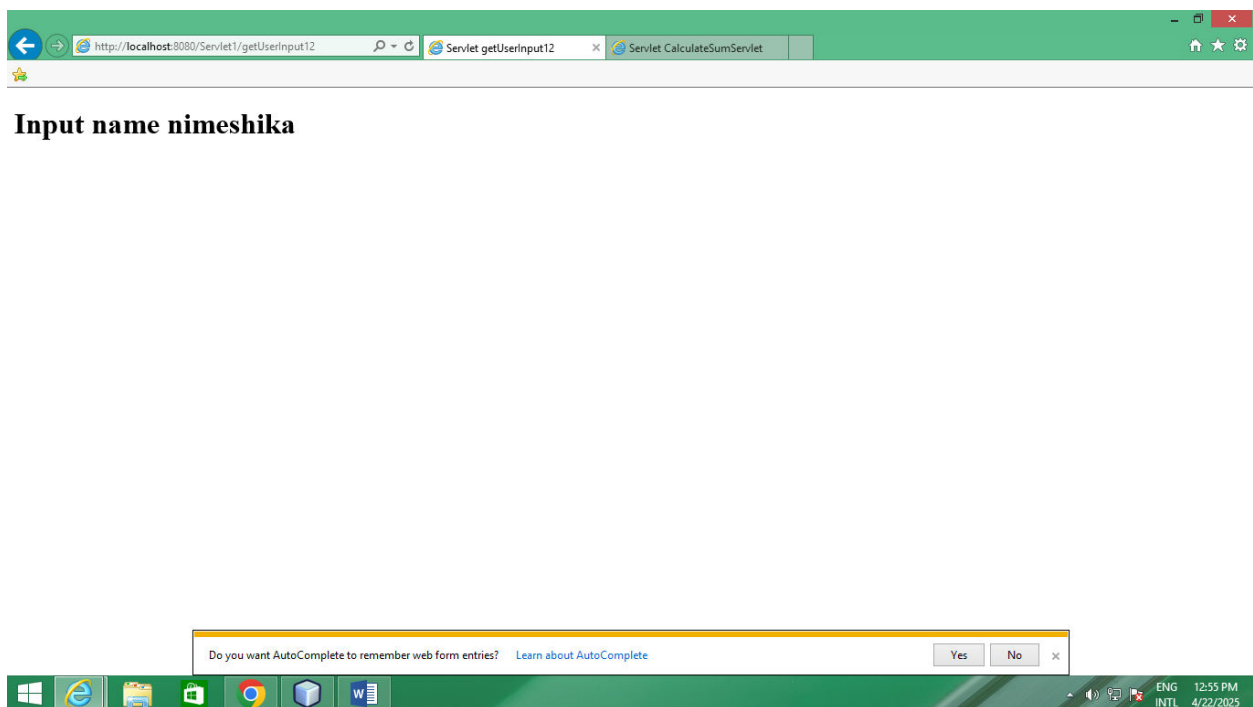
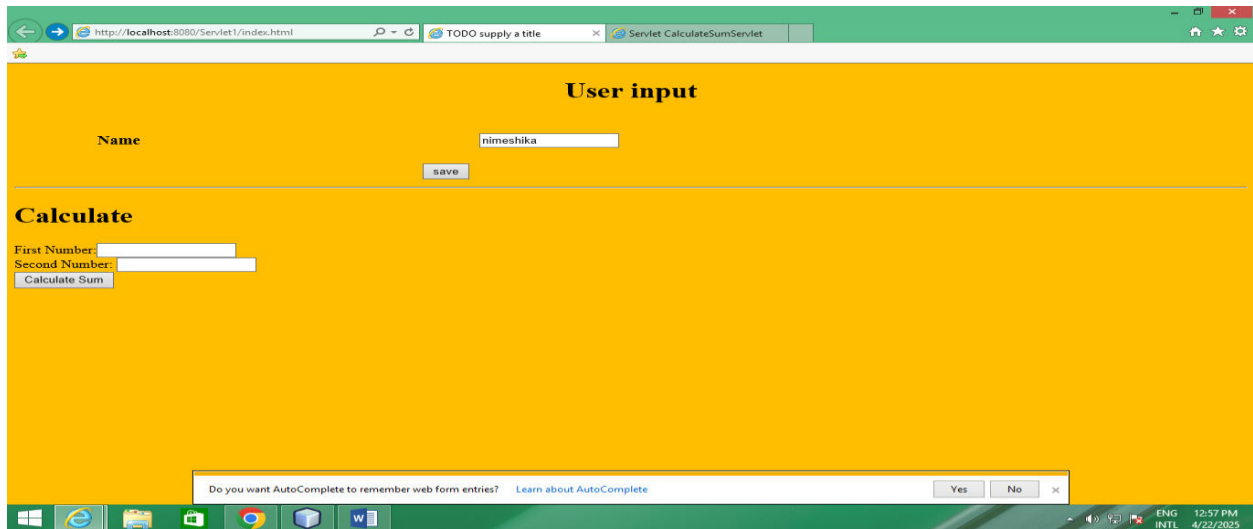
    /**
     * Returns a short description of the servlet.
     *
     * @return a String containing servlet description
     */
    @Override
    public String getServletInfo() {

```

```
return "Short description";
```

```
}// </editor-fold>
```

```
}
```



```

import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;


/**
 *
 * @author student
 */
@WebServlet(urlPatterns = {"/CalculateSumServlet"})
public class CalculateSumServlet extends HttpServlet {


    /**
     * Processes requests for both HTTP GET and POST
     * methods.
     *
     * @param request servlet request
     * @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs
     */
    protected void processRequest(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {

        int num1 = Integer.parseInt(request.getParameter("num1"));

```

```

int num2 = Integer.parseInt(request.getParameter("num2"));

int sum = num1 + num2;


response.setContentType("text/html;charset=UTF-8");
try (PrintWriter out = response.getWriter()) {
    /* TODO output your page here. You may use following sample code. */
    out.println("<!DOCTYPE html>");
    out.println("<html>");
    out.println("<head>");
    out.println("<title>Servlet CalculateSumServlet</title>");
    out.println("</head>");
    out.println("<body>");
    out.println("<h1> Calculate Sum</h1>");
    out.println("<h3> First user input:"+num1+"</h1>");
    out.println("<h3> Second user input:"+num2+"</h1>");
    out.println("<h1> Answer:"+sum+"</h1>");

    //out.println("<h1>The sum of " + num1 + " and " + num2 + " is: " + sum + "</h1>");
    //out.println("<h1>Servlet CalculateSumServlet at " + request.getContextPath() + "</h1>");
    out.println("</body>");
    out.println("</html>");
}
}

// <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the left to
edit the code.">

/**
 * Handles the HTTP <code>GET</code> method.
 *
 * @param request servlet request

```

```
* @param response servlet response
* @throws ServletException if a servlet-specific error occurs
* @throws IOException if an I/O error occurs
*/
```

```
@Override
```

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

```
/**
```

```
* Handles the HTTP <code>POST</code> method.
*
```

```
* @param request servlet request
* @param response servlet response
* @throws ServletException if a servlet-specific error occurs
* @throws IOException if an I/O error occurs
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@Override
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```
protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
    processRequest(request, response);
}
```

```
/**
```

```
* Returns a short description of the servlet.
*
* @return a String containing servlet description
*/
```



```
@Override  
public String getServletInfo() {  
    return "Short description";  
    }// </editor-fold>  
  
}
```

