

Week 6 - Server side programming: Servlet

Requirements: Make an html form to send personal data to a server so that the server can display it back.

Server: GlassFish

Index file (html):

```
<html>
  <head>
    <title>Login</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
  </head>
  <body>
    <center><form name="loginForm" method="post"
action="NewServlet">
      Username: <input type="text" name="username" /><br><br>
      Password: <input type="password" name="password" /><br><br>
      Speaking language:
      <input type="checkbox" name="language" value="english"
/>English
      <input type="checkbox" name="language" value="french" />French
      <br><br>
      Gender:
      <input type="radio" name="gender" value="male" />Male
      <input type="radio" name="gender" value="female" />Female
      <br><br>
      Feedback:<br>
      <textarea rows="5" cols="30"
name="feedback"></textarea><br><br>
      Job Category:
```

```
<select name="jobCat">
    <option value="tech">Technology</option>
    <option value="admin">Administration</option>
    <option value="biology">Biology</option>
    <option value="science">Science</option>
</select><br><br>
<input type="submit" value="Login" />
</form></center>
</body>
</html>
```

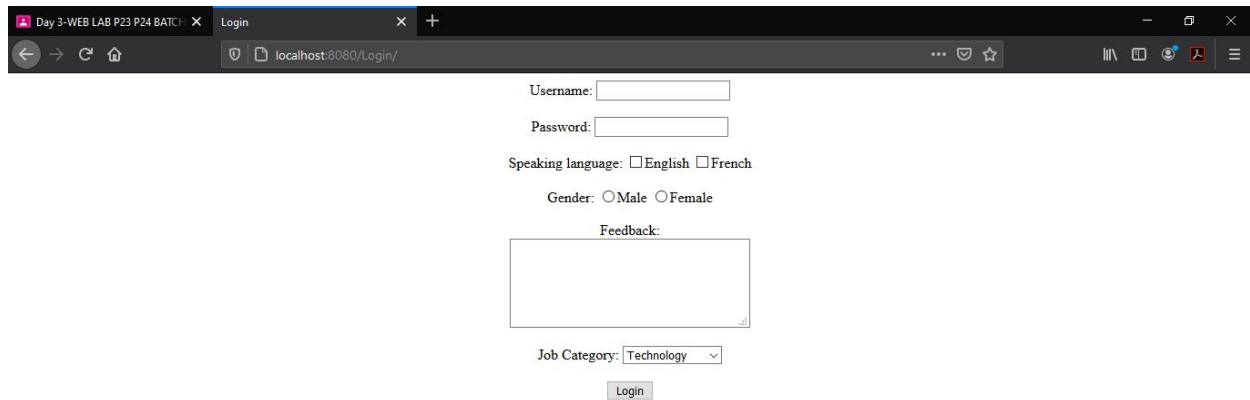
Servlet code:

```
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;

@WebServlet("/NewServlet")
public class NewServlet extends HttpServlet {
    protected void doPost(HttpServletRequest request,
        HttpServletResponse response) throws ServletException, IOException {
        String username = request.getParameter("username");
        String password = request.getParameter("password");
        String languages[] = request.getParameterValues("language");
        String gender = request.getParameter("gender");
        String feedback = request.getParameter("feedback");
        String category = request.getParameter("jobCat");
        System.out.println("username: " + username);
        System.out.println("password: " + password);
        // do some processing here...
        // get response writer
```

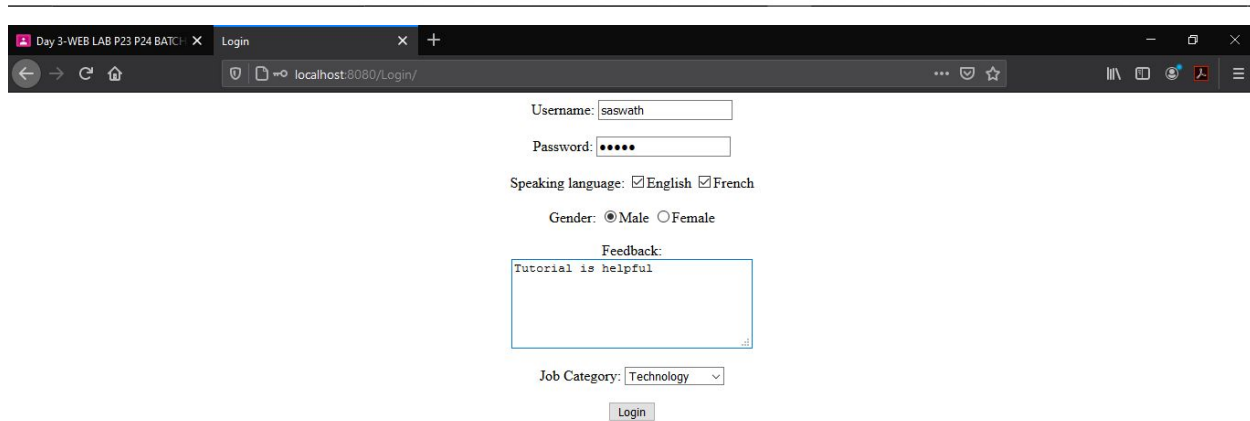
```
PrintWriter writer = response.getWriter();
// build HTML code
String htmlResponse = "<html>";
htmlResponse += "<h2>Your username is: " + username + "<br>";
htmlResponse += "Your password is: " + password + "<br>";
htmlResponse += "Your gender is: " + gender + "<br>";
htmlResponse += "Your job category is: " + category + "<br>";
htmlResponse += "Feedback is: " + feedback + "<br></h2>";
htmlResponse += "</html>";
// return response
writer.println(htmlResponse);
if(languages != null){
writer.println("<h2>Language(s):");
for(String lang : languages){
    writer.println(lang);
}
writer.println("</h2>");
}
}
```

Output:



A screenshot of a web browser window with the address bar showing 'localhost:8080/Login/'. The page contains a login form with the following elements:

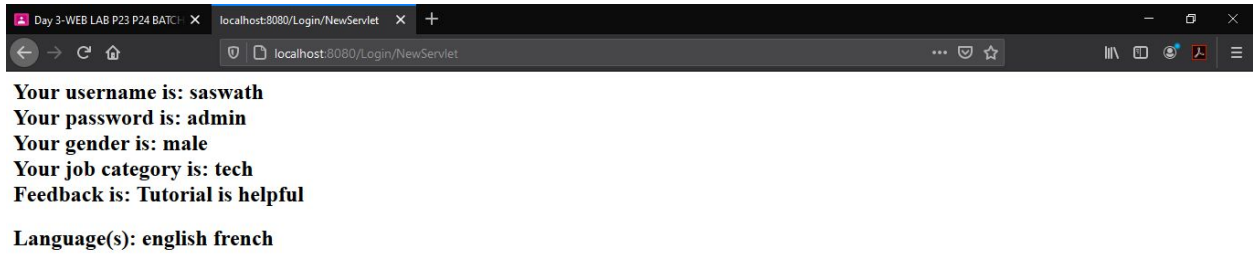
- Username:
- Password:
- Speaking language: ☐ English ☐ French
- Gender: ☐ Male ☐ Female
- Feedback:
- Job Category:
- Login button



A screenshot of the same web browser window, but now the login form is filled with data:

- Username:
- Password:
- Speaking language: ☒ English ☒ French
- Gender: ☒ Male ☐ Female
- Feedback:
- Job Category:
- Login button

Form with input data



Response from server