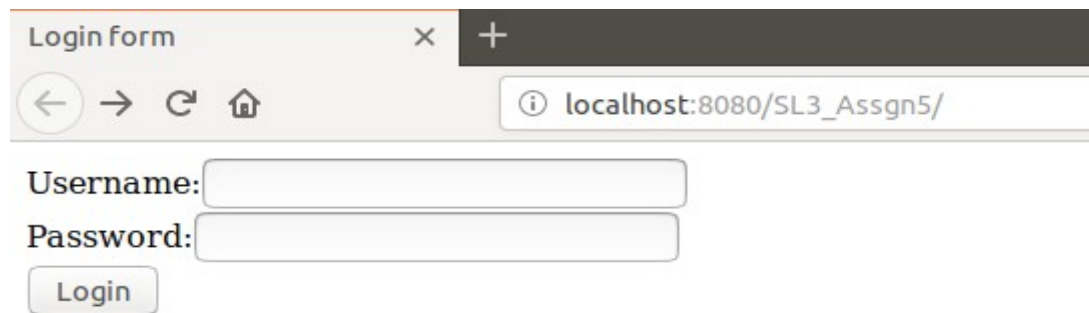**Name : Prajakta Keer**
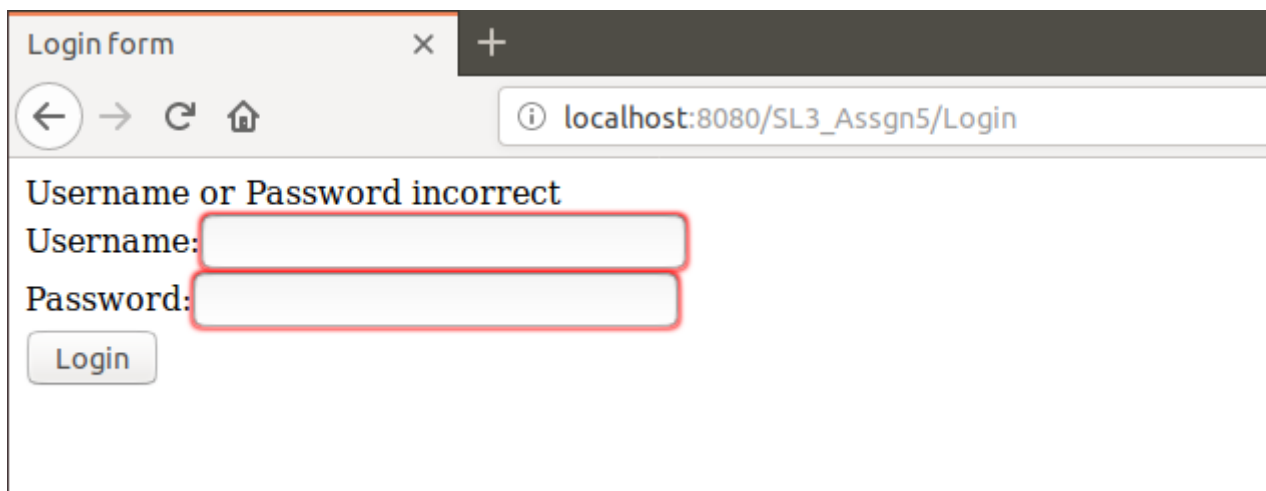**Class : TE 10**
**Roll No : 33231**

**Problem Statement:- Understand servlet life cycle, create login page and apply proper validations with appropriate messages using doGet()/ doPost() methods.**
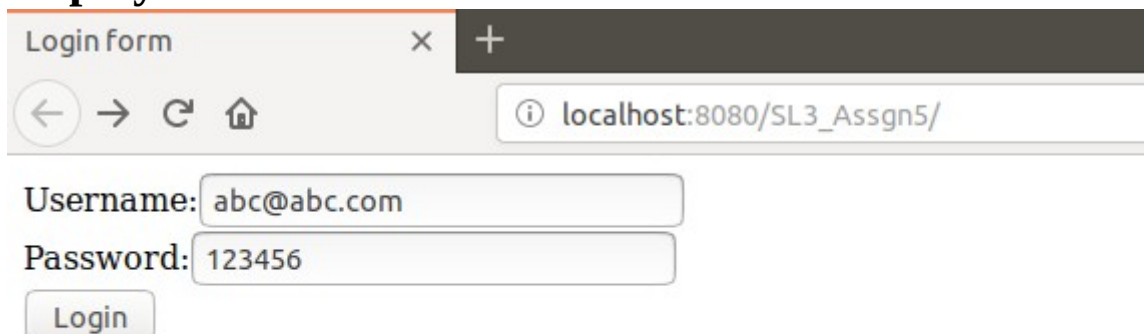
## Design of login page :



## Validation for null input :



## After inserting correct login credentials welcome message is displayed:

localhost:8080/SL3_Assgn5 ×   +

← → C ⌂          ⓘ localhost:8080/SL3_Assgn5/Login
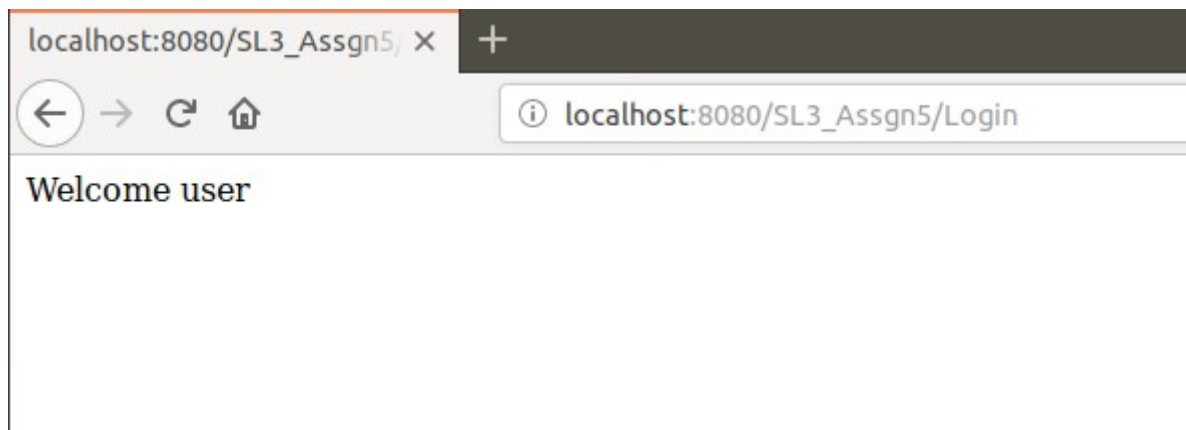
Welcome user

**After inserting invalid credentials :**

Login form          ×   +

← → C ⌂          ⓘ localhost:8080/SL3_Assgn5/Login

Username or Password incorrect
Username: fvgf
Password: freferf
Login
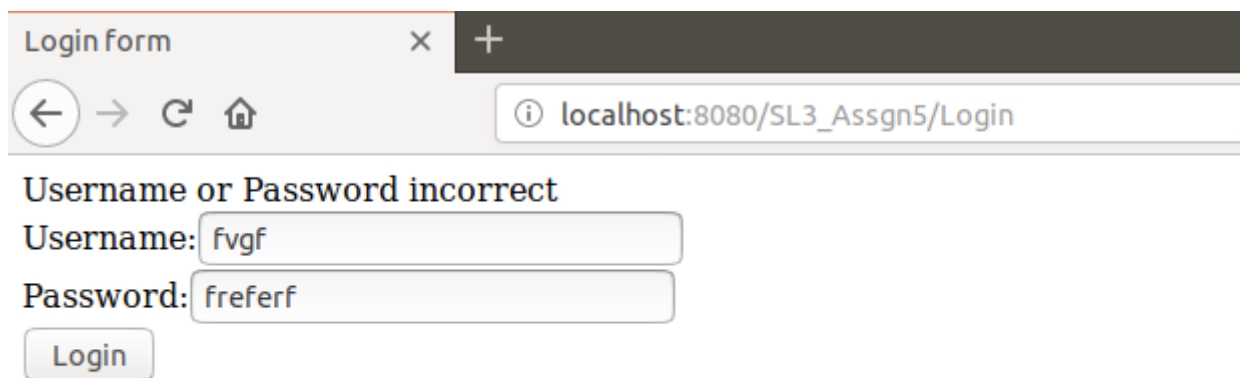
**List of files :**
- **index.html**
- **web.xml**
- **Login.java**
- **validate.java**
- **Welcome.java**

**Code for index.html :**

```html
<html>
  <head>
    <title>Login form</title>
  </head>
  <body>
    <form method="post" action="Login">
    Username:<input type="text" name="uname" required/><br/>

    Password:<input type="text" name="pass" required/><br/>
    <input type="submit" value="Login" />
    </form>
  </body>
</html>
```

**Code for web.xml :**

```xml
<?xml version="1.0" encoding="UTF-8"?>
<web-app version="4.0"
xmlns="http://xmlns.jcp.org/xml/ns/javaee"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee
http://xmlns.jcp.org/xml/ns/javaee/web-app_4_0.xsd">
  <servlet>
    <servlet-name>Login</servlet-name>
    <servlet-class>Login</servlet-class>
  </servlet>
  <servlet>
    <servlet-name>Welcome</servlet-name>
    <servlet-class>Welcome</servlet-class>
  </servlet>
  <servlet-mapping>
    <servlet-name>Login</servlet-name>
    <url-pattern>/Login</url-pattern>
  </servlet-mapping>
```

```xml
    <servlet-mapping>
        <servlet-name>Welcome</servlet-name>
        <url-pattern>/Welcome</url-pattern>
    </servlet-mapping>
</web-app>
```

**Code for Login.java :**

```java
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.sql.*;

public class Login extends HttpServlet {

    protected void doPost(HttpServletRequest request,
HttpServletResponse response)
            throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");

        String uname = request.getParameter("uname");
        String pass = request.getParameter("pass");
        PrintWriter out = response.getWriter();

        if(validate.checkUser(uname, pass)) {
            RequestDispatcher r =
request.getRequestDispatcher("Welcome");
            r.forward(request, response);
        }
        else
        {
            out.println("Username or Password incorrect");
            RequestDispatcher r =
request.getRequestDispatcher("index.html");
            r.include(request, response);
        }
```

```java
      out.close();
   }
}


Code for validate.java:
//import java.io.PrintWriter;
import java.sql.*;

public class validate {
   public static boolean checkUser(String uname,String pass)
   {
      boolean st =false;
      try {

         //loading drivers for mysql
         Class.forName("com.mysql.jdbc.Driver");

         //creating connection with the database
         Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/sl3_a
5?useSSL=false","root","password");
         PreparedStatement ps = con.prepareStatement("select *
from register where email=? and pass=?");
         ps.setString(1, uname);
         ps.setString(2, pass);
         ResultSet rs =ps.executeQuery();
         st = rs.next();
      }
      catch(Exception e) {
         e.printStackTrace();
      }
      return st;
   }
}
```

**Code for Welcome.java :**

```java
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.sql.*;

public class Welcome extends HttpServlet {

    protected void doPost(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        PrintWriter out = response.getWriter();
        out.println("Welcome user");
    }
}
```

**References :**

- [https://www.studytonight.com/servlet/login-system-example-in-servlet.php](https://www.studytonight.com/servlet/login-system-example-in-servlet.php)#
- **SL3 Lab Manual**
- **Video Recording uploaded in MS Teams**