Validation of the User Login

Project Details

Dynamic Web Project to illustrate validation of the User Login

Objective:

To Create a servlet-based web application that shows a login page and validates it. The correct values are hard-coded. On successful login, a dashboard page is shown. The dashboard will provide a link for logging out. Incorrect logins need to be handled by showing an error message page.

Problem statement:

As a part of developing an e-commerce web application, you have to prototype a login scenario for the user. There is no database involved here, so you have to use fixed values for login email id and password.

Requirements

- Show a login form in HTML
- Handle invalid logins and show appropriate error messages using servlets
- Show the dashboard page using servlets
- Handle logouts using servlets

Product Backlog:

1. Creating a Login Page using HTML
2. Creating a Admin Dashboard page using HTML
3. Create a CSS file to format the contents.
4. Create a servlet to get requests and send responses to the HTML files.
5. Validate the Login Process with appropriate Message
6. Logout function using servlet

Technologies and tools Used

• Servlet: to do the business logic and works a controller for the project.

• HTML: to design the pages.

• CSS: to format the contents.

• Eclipse: to write and run the code.

• Tomcat: to run and deploy servlet application.

Flowcharts of the Application
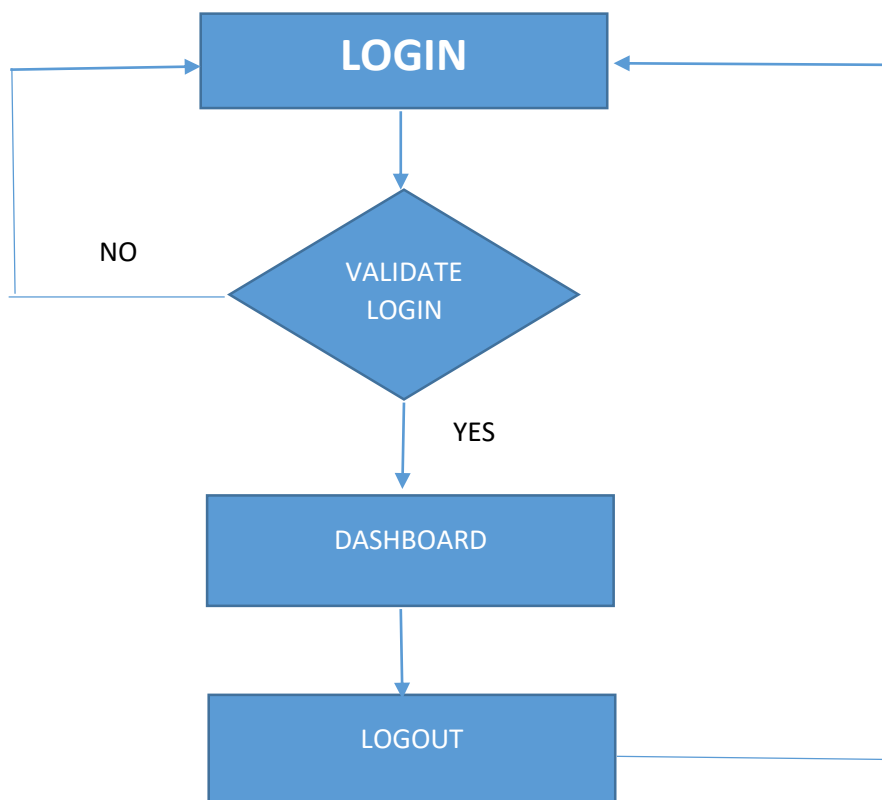
Core concepts used in the project.

• Object-Oriented: used to create and model objects for users and their credentials.

• HTML, CSS and JavaScript used to create pages

• Servlet is used to process request and provide response

How to run the program

• clone project

• Now run program on a server.

• To login you must enter admin for both username and password.

Github Link:

https://github.com/bibhu-otz/FSD-COURSE-III-PRACTICE-PROJECTS/tree/main/LoginSystem

Source Code :

Index.html

```html
<!DOCTYPE html>
<<html>
<head>

    <title></title>

    <link rel="preconnect"
href="https://fonts.gstatic.com"/>
    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/f
ont-awesome/5.15.4/css/all.min.css"/>
    <link
href="https://fonts.googleapis.com/css2?family
=Poppins:wght@300;500;600&display=swap"
rel="stylesheet">
    <!--Stylesheet-->
```

```css
<style media="screen">
    *,
*:before,
*:after{
    padding: 0;
    margin: 0;
    box-sizing: border-box;
}
body{
    background-color: #080710;
}
.background{
    width: 430px;
    height: 520px;
    position: absolute;
    transform: translate(-50%,-50%);
    left: 50%;
    top: 50%;
}
.background .shape{
    height: 200px;
    width: 200px;
    position: absolute;
    border-radius: 50%;
}
.shape:first-child{
    background: linear-gradient(
        #1845ad,
        #23a2f6
```

```css
    );
    left: -80px;
    top: -80px;
}
.shape:last-child{
    background: linear-gradient(
        to right,
        #ff512f,
        #f09819
    );
    right: -30px;
    bottom: -80px;
}
form{
    height: 520px;
    width: 400px;
    background-color: rgba(255,255,255,0.13);
    position: absolute;
    transform: translate(-50%,-50%);
    top: 50%;
    left: 50%;
    border-radius: 10px;
    backdrop-filter: blur(10px);
    border: 2px solid rgba(255,255,255,0.1);
    box-shadow: 0 0 40px rgba(8,7,16,0.6);
    padding: 50px 35px;
}
form *{
    font-family: 'Poppins',sans-serif;
```

```css
    color: #ffffff;
    letter-spacing: 0.5px;
    outline: none;
    border: none;
}
form h3{
    font-size: 32px;
    font-weight: 500;
    line-height: 42px;
    text-align: center;
}

label{
    display: block;
    margin-top: 30px;
    font-size: 16px;
    font-weight: 500;
}
input{
    display: block;
    height: 50px;
    width: 100%;
    background-color: rgba(255,255,255,0.07);
    border-radius: 3px;
    padding: 0 10px;
    margin-top: 8px;
    font-size: 14px;
    font-weight: 300;
}
```

```css
::placeholder{
    color: #e5e5e5;
}
.btn{
    margin-top: 50px;
    width: 100%;
    background-color: #ffffff;
    color: #080710;
    padding: 15px 0;
    font-size: 18px;
    font-weight: 600;
    border-radius: 5px;
    cursor: pointer;
}

    </style>
</head>
<body>
    <div class="background">
        <div class="shape"></div>
        <div class="shape"></div>
    </div>
    <form method="post" action="login">
        <h3>Login</h3>
        <center><div id="error"
style="color:red;font-
size:15px"></div></center>
        <label for="username">Username</label>
```

```html
        <input type="email" placeholder="Email
" id="username" name="email"
onfocus="hiderror();" required>

        <label for="password">Password</label>
        <input type="password"
placeholder="Password" id="password"
name="pass" required>
        <input type="submit" value="Login"
class="btn" />


    </form>
    <script>
        function hiderror()
        {

    document.getElementById('error').innerHTML
='';
        }
    </script>
</body>
</html>
```

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");

        PrintWriter out = response.getWriter();


        String email = request.getParameter("email");

        String pass = request.getParameter("pass");


        if(checkUser(email, pass))

        {

            RequestDispatcher rs = request.getRequestDispatcher("Dashboard");

            rs.forward(request, response);

        }

        else

        {

            request.getRequestDispatcher("index.html").include(request, response);
```

```java
        out.println("<script>document.getElementById('error').innerHTML='Invalid    Credential';
</script>");

    }

  }


  public boolean checkUser(String email,String pass)

  {


    if(email.equals("admin@gmail.com") && pass.equals("admin"))

    {

            return true;

    }else {

        return false;

    }

  }

}
```

Dashboard.java

```java
import java.io.*;

import javax.servlet.*;

import javax.servlet.http.*;

import java.sql.*;


public class Dashboard extends HttpServlet {
```

```java
    protected void doPost(HttpServletRequest request, HttpServletResponse response)

        throws ServletException, IOException {

        response.setContentType("text/html");

        PrintWriter pw=response.getWriter();


        response.sendRedirect("DashBoard.html");


        pw.close();
      /*response.setContentType("text/html;charset=UTF-8");

      PrintWriter out = response.getWriter();

      out.println("Welcome user");*/

    }

}
```

Logout.java

```java
            import java.io.*;

import javax.servlet.*;

import javax.servlet.http.*;

import java.sql.*;


public class Dashboard extends HttpServlet {

```

```
protected void doPost(HttpServletRequest request, HttpServletResponse response)

    throws ServletException, IOException {

            response.setContentType("text/html");

            PrintWriter pw=response.getWriter();


            response.sendRedirect("DashBoard.html");


            pw.close();

    /*response.setContentType("text/html;charset=UTF-8");

    PrintWriter out = response.getWriter();

    out.println("Welcome user");*/

    }

}
```

Screenshots: