**Design a simple login and signup form with validation using HTML, CSS & JavaScript.**

A picture containing text, indoor

Description automatically generated

Hello readers! Welcome to my first blog. Since this is my first blog let me introduce myself first. I am Melani Sandalika an undergraduate of Faculty of Information Technology, University of Moratuwa.

By going through this blog, you will be able to get an idea to create a simple login and signup form with validation using HTML, CSS & JavaScript.

A signup form is a HTML form that enable users to register in order to access a website, social media, or any other system. Login forms enable users to access that particular system by identifying and authenticating themselves.

Let’s see how I have created my Login & Signup form step by step.

1. **Form Structure**

First, we have to create the web page structure using HTML. As you can see, this Login form and Signup form consist in the same web page. First, create the Login form and Signup form separately.

To create the form, we need to use the <form> tag. Login form is made up of three <input> elements.

* text field for the username

 <input type="text" name="name" id="logName" placeholder="Username">

* password field the password

 <input type="password" name="password" id="logPassword" placeholder="Password">

* submit field for the login button

<input type="submit" value="Login">

* Other than these three elements, Signup form includes email field for the user email address.

<input type="email" name="email" id="signEmail" placeholder="Email">

Within the <input> tag there is an attribute called id. It is used to access and manipulate the element in JavaScript. Placeholder attribute shows the expected value of an input field.

1. **Styling**

By using CSS, we can add more color to our web page. There are three ways to insert a style sheet. You can use inline CSS by adding a style attribute to the relevant element and including CSS properties. If not, you can use internal CSS which is used inside the <style> element, inside the <head> section. Other way is create an external CSS file with the .css extension and link it into the HTML file.

 <link rel="stylesheet" type="text/css" href="style.css">

Then within the CSS file we can add styles to our web page using id and class. Here are some major CSS styles which I have used to style the web page.

* Background image

We can add a background image to the body of the web page by using background-image property. Within the brackets mention the path to the background image.

body{

    background-image: url(background.jpg);

background-size: cover;

    background-repeat: no-repeat;

}

* Transparent box

Use background-color property to add transparency to your element. Alpha parameter in the RGBA color value specifies the opacity of a color. 0.0 is full opacity and 1.0 is full opaque. We can change the alpha value as we want.

.box{

   width: 380px;

   height: 500px;

   background-color:rgba(0, 0, 0, 0.7);

}

* Login icon

To add a login icon at top of the form we can use following code sample.

.box img{

   width:100px;

   margin-top:-50px ;

}

* Input Elements

We can style the input fields using input[type=……….]. Within the square bracket you have to mention the type of the input. By using the hover selector, we can change the property values smoothly when we mouse over them.

input[type=submit]{

    border: 3px solid #df80ff;

    border-radius: 25px;

    background-color:#600080 ;

    color: #ffffff;

   cursor:pointer;

}

input[type=submit]:hover{

     background-color:#ffffff;

     color: #000000;

     font-weight: bold;

}

1. **Animation**

In order to display Login form and Signup form in one web page we have to add an animation part using JavaScript and jquery. As you can see, there are two links called “LOGIN” and “SIGNUP”. When, you click LOGIN, Login form will appear on the web page. When you click “SIGNUP”, Login form will disappear, and Signup form will display on the web page.

First create a JavaScript file with .js extension. Then link that JS file into the HTML file using <script> tag. If we include the <script> tag within the <head> section, JavaScript file will load before loading the HTML file and may occurs few problems. So, it is a best practice to include the <script> tag above the closing </body> tag to speed up the website response time.

1. **Form Validation**

User inputs can be validated by JavaScript. Function can be called when user submit the form. When function returns true only, user can login or signup. Otherwise, user will receive an error message.

<form class="login" name="loginForm" onsubmit="return validateLoginForm()" method="POST">

We can use document.getElementbyID(“ID\_name”).value to grab the values input by the user in the form field. Then we needs assign those values to variables. Now we can check the required conditions by using if/else conditions and return true or false. variable\_name.length can be used to get the length of an input. If the user inputs are not valid, we display an error message in red color.

document.getElementById("errorMsg").innerHTML = "Your password must include atleast 8 characters"

If the user inputs are valid, alert will be displayed.

alert("Successfully logged in");

Okay. Now we are done. Let’s see how it works. Try with yourself!