DAY 8

NAME: Nandhini V
DATE: 17-07-2025

Tasks:

Exercise 1:

1.Simple Calculator

Label Name	Element Name	Constraints
Input1	input1	This element is to get the first input. Type should be 'number'
Input2	input2	This element is to get the second input. Type should be 'number'
Select Operation	Operation	A drop down list contains the following values: **Select.. ADD, SUBTRACT, MULTIPLY and DIVIDE.** **Set these values as its option tag text and option tag's 'value' attributes**
	Submit	An image for submit must be included using img tag
	Reset	An image for reset must be included using img tag

Code:

```
<!DOCTYPE html>

<html>

<head>

  <title>Simple Calculator</title>

  <style>

    body {
```

```css
    display: flex;

    justify-content: center;

    align-items: center;

    height: 100vh;

    background-color: #f5f5f5;

    overflow-y: hidden;

}

.calc {

    border-radius: 12px;

    box-shadow: 0 0 10px rgba(0, 0, 0, 0.2);

    padding: 25px 30px;

    background-color: white;

}

label {

    font-weight: bold;

}

input[type="number"],

select {

    width: 300px;

    padding: 8px;

    margin-top: 5px;

    margin-bottom: 15px;

    border: 1px solid #ccc;

    border-radius: 6px;

}
```

```css
    img {

        margin: 10px 10px 0 10px;

        cursor: pointer;

    }

    #output {

        margin-top: 20px;

        font-weight: bold;

        color: green;

        text-align: center;

    }
</style>

<script>
    function calculate(event) {

        event.preventDefault();

        const num1 = parseFloat(document.getElementById("input1").value);

        const num2 = parseFloat(document.getElementById("input2").value);

        const operation = document.getElementById("operation").value;

        let result = "";

        if (isNaN(num1) || isNaN(num2)) {

            result = "Please enter valid numbers!";

        } else {

            switch (operation) {

                case "ADD":
```

```javascript
                    result = "Result: " + (num1 + num2);

                    break;

                case "SUBTRACT":

                    result = "Result: " + (num1 - num2);

                    break;

                case "MULTIPLY":

                    result = "Result: " + (num1 * num2);

                    break;

                case "DIVIDE":

                    result = num2 !== 0 ? "Result: " + (num1 / num2) : "Cannot divide by zero!";

                    break;

                default:

                    result = "Please select a valid operation.";

            }

        }

        document.getElementById("output").innerHTML = result;

    }

    function resetForm() {

        document.getElementById("calcForm").reset();

        document.getElementById("output").innerHTML = "";

        return false;

    }

</script>

</head>
```

```html
<body>
    <div class="calc">
        <h2>Simple Calculator</h2>
        <form id="calcForm" onsubmit="calculate(event)">
            <label for="input1">Input1:</label><br>
            <input type="number" id="input1" name="input1"><br>


            <label for="input2">Input2:</label><br>
            <input type="number" id="input2" name="input2"><br>


            <label for="operation">Select Operation:</label><br>
            <select id="operation" name="Operation">
                <option value="">Select...</option>
                <option value="ADD">ADD</option>
                <option value="SUBTRACT">SUBTRACT</option>
                <option value="MULTIPLY">MULTIPLY</option>
                <option value="DIVIDE">DIVIDE</option>
            </select><br>


            <img
src="https://www.transparentpng.com/thumb/submit-button/1u2PSi-submit-button-free-download
.png"
                alt="Submit" width="80" height="30" onclick="calculate(event)" style="margin-left:
60px;">


            <img src="https://www.clker.com/cliparts/f/U/Z/H/1/E/button-reset-md.png"
                alt="Reset" width="80" height="30" onclick="return resetForm();">
```
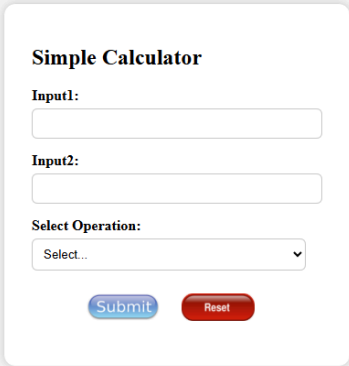
```
        </form>

        <div id="output"></div>

    </div>

</body>

</html>
```

Screenshot:

Exercise 2:

2. Player Application Form Validation

In the player application form created, do the following validation using JavaScript.

1. All fields are mandatory

2. Matches played, runs scored, wickets and age should be numbers

3. Player name should contain alphabets only

4. Email should be in the correct format

If all validation rules are satisfied, success page should be displayed.

Code:

index.html

```html
<!DOCTYPE html>

<html>

<head>

    <title>Player Details</title>

    <style>

        body {

            font-family: Arial, sans-serif;

            background-color: #ffffff;

        }

        .container {

            width: 650px;

            margin: 30px auto;

            border: 2px solid #acabab;

            padding: 10px;

        }

        .container h2 {

            margin-bottom: 10px;

            margin-top: 0px;

            padding: 10px;

            text-align: center;

            background-color: #067eb9;

            color: white;

            font-size: 24px;
```

```css
        font-weight: bold;

        border: 2px solid black;

    }

    .form-body {

        padding: 20px;

        border: 2px solid black;

        background-color: #add8e6;

    }

    .form-buttons {

        text-align: center;

        padding: 15px;

        background-color: #056a9c;

        border: 2px solid black;

        margin-top: 10px;

    }

    label {

        display: inline-block;

        width: 130px;

        font-style: italic;

        font-weight: bold;

    }

    input[type="text"],

    input[type="date"],

    input[type="email"],

    input[type="number"],
```

```css
select,
textarea {
    width: 250px;
    padding: 5px;
    margin: 5px 0;
    border-radius: 5px;
    border: 1px solid #ccc;
}
textarea {
    resize: none;
}
.required::after {
    content: "*";
    color: red;
}
.form-row {
    margin-bottom: 10px;
    margin-left: 100px;
}
input[type="submit"],
input[type="reset"] {
    width: 100px;
    height: 35px;
    margin: 5px 15px;
    border-radius: 5px;
```

```
        border: 1px solid #ccc;

        background-color: ffffff;

        color: black;

        font-weight: bold;

        cursor: pointer;

      }

    </style>

</head>

<body>

    <div class="container">

        <h2>Player Details</h2>


        <form onsubmit="return validateForm();">

            <div class="form-body">

                <div class="form-row">

                    <label class="required">Name</label>

                    <input type="text" id="name" name="name" required placeholder="Enter your
name">

                </div>


                <div class="form-row">

                    <label class="required">DOB</label>

                    <input type="date" id="dob" name="dob" required>

                </div>


                <div class="form-row">
```

```html
        <label class="required">Age</label>

        <input type="number" id="age" name="age" required placeholder="Enter your
age">

      </div>


      <div class="form-row">

        <label class="required">Email Id</label>

        <input type="email" id="email" name="email" required
placeholder="abc12@xyz.com">

      </div>


      <div class="form-row">

        <label class="required">Country</label>

        <select id="country" name="country" required>

          <option value="">--Select--</option>

          <option>India</option>

          <option>USA</option>

          <option>UK</option>

        </select>

      </div>


      <div class="form-row">

        <label class="required">Skill</label>

        <input type="checkbox" name="skill" value="Batting">Batting

        <input type="checkbox" name="skill" value="Bowling">Bowling

      </div>
```

```
<div class="form-row">

  <label>Bat Style</label>

  <input type="radio" name="bat" value="Right">Right Handed

  <input type="radio" name="bat" value="Left">Left Handed

</div>


<div class="form-row">

  <label>Bowl Style</label>

  <input type="radio" name="bowl" value="Right">Right Handed

  <input type="radio" name="bowl" value="Left">Left Handed

</div>


<div class="form-row">

  <label class="required">Matches</label>

    <input type="number" id="matches" name="matches" required
placeholder="Matches Played">

  </div>


<div class="form-row">

  <label class="required">Runs</label>

    <input type="number" id="runs" name="runs" required placeholder="Total runs
scored">

  </div>


<div class="form-row">
```

```html
            <label class="required">Wickets</label>

            <input type="number" id="wickets" name="wickets" required
placeholder="Wickets">

        </div>


        <div class="form-row">

            <label>Achievements</label>

            <textarea rows="4" cols="30" placeholder="Your Achievements in
Cricket"></textarea>

        </div>

    </div>


    <div class="form-buttons">

        <input type="submit" value="Submit">

        <input type="reset" value="Reset">

    </div>

  </form>

</div>


<script>
  function validateForm() {

    const name = document.getElementById("name").value.trim();

    const age = document.getElementById("age").value.trim();

    const email = document.getElementById("email").value.trim();

    const matches = document.getElementById("matches").value.trim();

    const runs = document.getElementById("runs").value.trim();
```

```javascript
const wickets = document.getElementById("wickets").value.trim();


const nameRegex = /^[A-Za-z\s]+$/;

const emailRegex = /^[^\s@]+@[^\s@]+\.[^\s@]+$/;


if (!nameRegex.test(name)) {

    alert("Name must contain alphabets only.");

    return false;

}


if (isNaN(age) || age === "") {

    alert("Age must be a valid number.");

    return false;

}


if (!emailRegex.test(email)) {

    alert("Please enter a valid email address.");

    return false;

}


if (isNaN(matches) || matches === "") {

    alert("Matches played must be a number.");

    return false;

}
```

```
        if (isNaN(runs) || runs === "") {

            alert("Runs scored must be a number.");

            return false;

        }


        if (isNaN(wickets) || wickets === "") {

            alert("Wickets must be a number.");

            return false;

        }


        alert("Form submitted successfully!");

        window.location.href = "success.html";

        return false;

    }

    </script>

</body>

</html>
```

success.html

```
<!DOCTYPE html>

<html>

<head>

    <title>Success</title>

    <style>

        body {
```

```
        color: #1fb141;

        font-family: Arial, sans-serif;

        text-align: center;

        padding-top: 250px;

      }

    </style>

  </head>

<body>

    <h2>Form Submitted Successfully!!</h2>

    <p>Thank you.</p>

</body>

</html>
```

Screenshot:

<div style="border: 1px solid black; text-align: center;">

Form Submitted Successfully!!

Thank you.

</div>

Exercise 3:

Create a html page with radio buttons to select colors. Selected color should be applied as the background colour of the page.

Code:

```
<!DOCTYPE html>

<html>

<head>

  <title>Color Selector</title>

  <style>

    body {

        font-family: Arial, sans-serif;

        display: flex;

        flex-direction: column;

        align-items: center;

        justify-content: center;
```

```
            height: 100vh;

            margin: 0;

            transition: background-color 0.3s ease;

        }

        .color-option {

            margin: 10px;

            font-size: 18px;

        }

        h2 {

            margin-bottom: 30px;

            color: #333;

        }

    </style>

</head>

<body>

    <h2>Select a Color to Change Background</h2>

    <div class="color-option">

        <input type="radio" name="bgColor" value="lightblue"
onclick="changeBackground(this.value)"> Light Blue

    </div>

    <div class="color-option">

        <input type="radio" name="bgColor" value="lightgreen"
onclick="changeBackground(this.value)"> Light Green

    </div>

    <div class="color-option">

        <input type="radio" name="bgColor" value="orange"
onclick="changeBackground(this.value)"> Orange
```

```
    </div>

    <div class="color-option">

        <input type="radio" name="bgColor" value="lightcoral"
onclick="changeBackground(this.value)"> Light Coral

    </div>

    <div class="color-option">

        <input type="radio" name="bgColor" value="silver"
onclick="changeBackground(this.value)"> Silver

    </div>

    <script>

        function changeBackground(color) {

            document.body.style.backgroundColor = color;

        }

    </script>

</body>

</html>
```

Screenshot:

Select a Color to Change Background

○ Light Blue
○ Light Green
○ Orange
○ Light Coral
● Silver