

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

index.html

```
<!DOCTYPE html>

<html>

<head>

    <title>Simple Calculator</title>

    <style>

        body {

            font-family: Arial;

            text-align: center;

            background-color: #f2f2f2;

            padding-top: 50px;

        }

        .calculator {

            background-color: #ffffff;

            border: 2px solid #ccc;

            padding: 30px;

            width: 350px;
```

```
        margin: auto;

        border-radius: 10px;

        box-shadow: 0px 0px 10px #aaa;
    }

    input, select {

        width: 200px;

        padding: 8px;

        margin: 10px 0;
    }

    .buttons img {

        width: 40px;

        height: 40px;

        cursor: pointer;

        margin: 10px;
    }

    #result {

        font-weight: bold;

        margin-top: 15px;

        font-size: 18px;

        color: #421818;
    }

</style>

</head>

<body>

<div class="calculator">

    <h2>Simple Calculator</h2>
```

```
<label>Input1:</label><br>

<input type="number" id="input1" name="input1"><br>

<label>Input2:</label><br>

<input type="number" id="input2" name="input2"><br>

<label>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>

<div class="buttons">

    

    

</div>

<div id="result"></div>

</div>

<script>

function calculate() {

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

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

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

    const resultBox = document.getElementById("result");

    if (input1 === "" || input2 === "") {

        resultBox.innerHTML = "Please enter both numbers.";

    }

}
```

```
        return;
    }

    if (operation === "") {
        resultBox.innerHTML = "Please select an operation.";
        return;
    }

    const num1 = parseFloat(input1);
    const num2 = parseFloat(input2);

    let result;

    switch (operation) {
        case "ADD":
            result = num1 + num2;
            break;

        case "SUBTRACT":
            result = num1 - num2;
            break;

        case "MULTIPLY":
            result = num1 * num2;
            break;

        case "DIVIDE":
            if (num2 === 0) {
                resultBox.innerHTML = "Cannot divide by zero!";
                return;
            }

            result = num1 / num2;
            break;
    }
}
```

```
        default:

            resultBox.innerHTML = "Invalid operation selected.";

            return;

        }

        resultBox.innerHTML = "Result: " + result;
    }

    function resetForm() {

        document.getElementById("input1").value = "";

        document.getElementById("input2").value = "";

        document.getElementById("Operation").value = "";

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

    }

</script>

</body>

</html>
```

Simple Calculator

Input1:

Input2:

Select Operation:

ADD

▼

=

RESET

Result: 15

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.

index.html

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>Player Details Form</title>
```

```
<style>
```

```
    body {
```

```
        font-family: Arial;
```

```
    }
```

```
    .form-container {
```

```
        width: 600px;
```

```
        margin: auto;
```

```
        background-color: #a2dff7;
```

```
        border: 2px solid #1a4f7a;
```

```
        padding: 20px;
```

```
    }
```

```
    .form-container h2 {
```

```
        background-color: #1a4f7a;
```

```
        color: white;
```

```
        text-align: center;
```

```
        padding: 10px;
```

```
        margin-top: 0;
```

```
    }
```

```
    label {
```

```
        display: inline-block;
```

```
        width: 120px;
```

```
        font-weight: bold;
```

```
        margin-bottom: 10px;
```

```
    }
```

```

input[type="text"], input[type="email"], textarea, select {

    width: 60%;

    padding: 5px;

    margin-bottom: 10px;

}

.form-actions {

    text-align: center;

    padding: 10px;

}

.error {

    color: red;

    font-size: 14px;

}

</style>

</head>

<body>

    <div class="form-container">

        <h2>Player Details</h2>

        <form id="playerForm" onsubmit="return validateForm()">

            <label>Name*</label><input type="text" id="name" placeholder="Enter your
name"><br>

            <label>DOB*</label><input type="text" id="dob" placeholder="DD/MM/YYYY"><br>

            <label>Age*</label><input type="text" id="age" placeholder="Enter your age"><br>

            <label>Email Id*</label><input type="text" id="email"
placeholder="abc12@xyz.com"><br>

            <label>Country*</label>

            <select id="country">

```



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

<option value="India" selected>India</option>

<option value="Australia">Australia</option>

<option value="England">England</option>

</select><br>

<label>Skill*</label>

<input type="checkbox" id="batting"> Batting

<input type="checkbox" id="bowling"> Bowling<br><br>

<label>Bat Style</label>

<input type="radio" name="batStyle"> Right Handed

<input type="radio" name="batStyle"> Left Handed<br><br>

<label>Bowl Style</label>

<input type="radio" name="bowlStyle"> Right Handed

<input type="radio" name="bowlStyle"> Left Handed<br><br>

<label>Matches*</label><input type="text" id="matches" placeholder="Matches
Played"><br>

<label>Runs*</label><input type="text" id="runs" placeholder="Total runs scored"><br>

<label>Wickets*</label><input type="text" id="wickets" placeholder="Wickets"><br>

<label>Achievements</label><br>

<textarea id="achievements" rows="4" cols="50" placeholder="Your Achievements in
Cricket"></textarea><br><br>

<div class="form-actions">

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

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

</div>

</form>

</div>
```

<script>

```
function validateForm() {

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

    var dob = document.getElementById("dob").value.trim();

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

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

    var country = document.getElementById("country").value;

    var batting = document.getElementById("batting").checked;

    var bowling = document.getElementById("bowling").checked;

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

    var runs = document.getElementById("runs").value.trim();

    var wickets = document.getElementById("wickets").value.trim();

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

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

    var numberRegex = /^\d+$/;

    if (name === "" || dob === "" || age === "" || email === "" || country === "" || matches
=== "" || runs === "" || wickets === "") {

        alert("All fields marked with * are mandatory.");

        return false;

    }

    if (!nameRegex.test(name)) {

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

        return false;

    }

    if (!numberRegex.test(age)) {

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

```
        return false;
    }
    if (!numberRegex.test(matches)) {
        alert("Matches played must be a valid number.");
        return false;
    }
    if (!numberRegex.test(runs)) {
        alert("Runs must be a valid number.");
        return false;
    }
    if (!numberRegex.test(wickets)) {
        alert("Wickets must be a valid number.");
        return false;
    }
    if (!emailRegex.test(email)) {
        alert("Please enter a valid email address.");
        return false;
    }
    if (!batting && !bowling) {
        alert("Please select at least one skill (Batting or Bowling).");
        return false;
    }
    alert("Form submitted successfully!");

    return true;
}
```

</script>

</body>

</html>

Player Details

Name*

Enter your name

DOB*

DD/MM/YYYY

Age*

Enter your age

Email Id*

abc12@xyz.com

Country*

India

Skill*

☐ Batting ☐ Bowling

Bat Style

☐ Right Handed ☐ Left Handed

Bowl Style

☐ Right Handed ☐ Left Handed

Matches*

Matches Played

Runs*

Total runs scored

Wickets*

Wickets

Achievements

Your Achievements in Cricket

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

index.html

<!DOCTYPE html>

<html>

<head>

<style>

```

        body {
            text-align: center;
        }
    </style>
</head>
<body>
    <h2>Select a Background Color:</h2>
    <div class="color-option">
        <label><input type="radio" name="bgColor" value="white" checked> White</label>
        <label><input type="radio" name="bgColor" value="lightblue"> Light Blue</label>
        <label><input type="radio" name="bgColor" value="lightgreen"> Light Green</label>
        <label><input type="radio" name="bgColor" value="lightyellow"> Light
Yellow</label>
        <label><input type="radio" name="bgColor" value="lavender"> Lavender</label>
    </div>
    <script>
        var radio=document.getElementsByName("bgColor");
        for(var i=0;i<radio.length;i++){
            radio[i].addEventListener("change",function(){
                if(this.checked){
                    document.body.style.backgroundColor = this.value;
                }
            });
            if(radio[i].checked){
                document.body.style.backgroundColor = radio[i].value;
            }
        }
    </script>

```

</body>

</html>

Select a Background Color:

☐ White ☐ Light Blue ☒ Light Green ☐ Light Yellow ☐ Lavender