

## Javascript assignment

### 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: <b>Select.., ADD, SUBTRACT, MULTIPLY and DIVIDE.</b> <b>Set these values as its option tag text and option tag's 'value' attributes</b>
	Submit	An image for submit must be included using img tag
	Reset	An image for reset must be included using img tag

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="UTF-8">
```

```
<title>Simple Calculator</title>
```

```
<style>
```

```
body { font-family: Arial, sans-serif; margin: 40px; }
```

```
table { border-collapse: collapse; margin-bottom: 10px; }
```

```
td, th { padding: 8px 12px; border: 1px solid #888; }
```

```
.result { margin-top: 10px; font-weight: bold; }
```

```
input[type="number"] { width: 100px; }
```

```
select { width: 120px; }
```

```
button { border: none; background: none; }
```

```
img.btn-img { height: 30px; cursor: pointer; }
```

```
</style>
```

```
</head>
```

```
<body>
```

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

```
<form id="calcForm" onsubmit="calculate(event)">
```

```
<table>
```

```
<tr>
```

```
<td><label for="input1">Input1</label></td>
```

```
<td><input type="number" id="input1" name="input1" required></td>
```

```
</tr>
```

```
<tr>
```

```
<td><label for="input2">Input2</label></td>
```

```
<td><input type="number" id="input2" name="input2" required></td>
```

```
</tr>
```

```
<tr>
```

```
<td><label for="operation">Select Operation</label></td>
```

```
<td>
```

```
<select id="operation" name="operation" required>
```

```
<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>
```

```
</td>
```

```
</tr>

<tr>

  <td>

    <button type="submit">

      </button>

    </td>

    <td>

      <button type="button" onclick="resetForm()">

        </button>

      </td>

    </tr>

  </table>

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

</form>

<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 resultText = '';

if (operation === '') {
    resultText = 'Please select an operation.';
} else {
    switch(operation) {
        case 'ADD':
            resultText = `${num1} + ${num2} = ${num1 + num2}`;
            break;
        case 'SUBTRACT':
            resultText = `${num1} - ${num2} = ${num1 - num2}`;
            break;
        case 'MULTIPLY':
            resultText = `${num1} × ${num2} = ${num1 * num2}`;
            break;
        case 'DIVIDE':
            if (num2 === 0) {
                resultText = 'Cannot divide by zero.';
            } else {
                resultText = `${num1} ÷ ${num2} = ${num1 / num2}`;
            }
            break;
    }
}

document.getElementById('result').textContent = resultText;
```

```

    }

    function resetForm() {

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

        document.getElementById('result').textContent = "";

    }

</script>

</body>

</html>

```

## Simple Calculator

Input1	<input type="text"/>
Input2	<input type="text"/>
Select Operation	<input type="text" value="Select..."/> ▼
<input type="button" value="SUBMIT"/>	<input type="button" value="RESET"/>

### 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.

```
<!DOCTYPE html>
```

```
<html lang="en">

<head>

  <meta charset="UTF-8" />

  <title>Player Details</title>

  <style>

    body {

      font-family: 'Times New Roman', Times, serif;

      margin: 0;

      background: #f7fafd;

    }


    .header {

      background-color: #336699;

      color: white;

      text-align: center;

      padding: 14px 0;

      font-size: 2em;

      font-weight: bold;

      border: 1px solid #000;

      margin: 10px;

    }


    .container {

      background: #87ceeb;

      margin: 0 auto;

      border: 1px solid #000;

      max-width: 600px;

      padding: 20px 30px 10px 30px;
```

```
}
```

```
form label {  
    display: inline-block;  
    min-width: 130px;  
    font-style: italic;  
    color: #4a5e6e;  
    font-size: 1em;  
}
```

```
form label .required {  
    color: #ff2222;  
    font-style: normal;  
    margin-left: 2px;  
}
```

```
.form-row {  
    margin-bottom: 12px;  
    display: flex;  
    align-items: center;  
}
```

```
.form-row input[type="text"],  
.form-row input[type="email"],  
.form-row input[type="number"],  
.form-row select,  
.form-row textarea {  
    background: #fff;
```

```
border: 1px solid #888;
padding: 4px 6px;
width: 65%;
}
```

```
.form-row textarea {
  min-height: 50px;
}
```

```
.form-row input[type="checkbox"],
.form-row input[type="radio"] {
  margin-left: 10px;
}
```

```
.error {
  color: red;
  font-size: 0.95em;
  text-align: center;
}
```

```
.success {
  color: green;
  font-size: 1.2em;
  text-align: center;
  font-weight: bold;
  margin-top: 20px;
}
```



```
.footer {  
    background-color: #336699;  
    color: white;  
    text-align: center;  
    padding: 15px 0;  
    margin: 10px;  
    border: 1px solid #000;  
}
```

```
.footer button {  
    font-size: 1em;  
    padding: 6px 25px;  
    margin: 5px 10px;  
    border: 1px solid #aaa;  
    background-color: white;  
    color: black;  
    cursor: pointer;  
    border-radius: 5px;  
}
```

```
.footer button:hover {  
    background-color: #f0f0f0;  
}
```

```
@media (max-width: 600px) {  
    .container {  
        padding: 12px;  
        max-width: 95vw;  
    }  
}
```

```
}

.form-row {
    flex-direction: column;
    align-items: flex-start;
}

form label {
    margin-bottom: 4px;
}

.form-row input,
.form-row select,
.form-row textarea {
    width: 100%;
}

}

</style>
</head>
<body>
    <div class="header">Player Details</div>

    <div class="container" id="form-section">
        <form id="playerForm" autocomplete="off">
            <div class="form-row">
                <label for="player_name">Name<span class="required">*</span></label>
                <input type="text" id="player_name" name="player_name" required>
            </div>
            <div class="form-row">
                <label for="dob">DOB<span class="required">*</span></label>
                <input type="text" id="dob" name="dob" placeholder="DD/MM/YYYY">
            </div>
        </form>
    </div>
</body>
</html>
```

required>

</div>

<div class="form-row">

<label for="age">Age<span class="required">\*</span></label>

<input type="text" id="age" name="age" required>

</div>

<div class="form-row">

<label for="email">Email Id<span class="required">\*</span></label>

<input type="email" id="email" name="email" required>

</div>

<div class="form-row">

<label for="country">Country<span class="required">\*</span></label>

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

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

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

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

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

<option value="New Zealand">New Zealand</option>

<option value="South Africa">South Africa</option>

</select>

</div>

<div class="form-row">

<label>Skill<span class="required">\*</span></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_style" value="Right Handed">Right Handed
<input type="radio" name="bat_style" value="Left Handed">Left Handed
</div>
<div class="form-row">
  <label>Bowl Style</label>
  <input type="radio" name="bowl_style" value="Right Handed">Right Handed
  <input type="radio" name="bowl_style" value="Left Handed">Left Handed
</div>
<div class="form-row">
  <label for="matches">Matches<span class="required">*</span></label>
  <input type="text" id="matches" name="matches" required>
</div>
<div class="form-row">
  <label for="runs">Runs<span class="required">*</span></label>
  <input type="text" id="runs" name="runs" required>
</div>
<div class="form-row">
  <label for="wickets">Wickets<span class="required">*</span></label>
  <input type="text" id="wickets" name="wickets" required>
</div>
<div class="form-row">
  <label for="achievements">Achievements</label>
  <textarea id="achievements" name="achievements" placeholder="Your
Achievements in Cricket"></textarea>
</div>
<div class="error" id="errorBox"></div>
</form>
</div>
```

```
<div id="success-section" style="display:none;">
  <div class="success">Application submitted successfully!</div>
</div>
```

```
<div class="footer">
  <button type="submit" form="playerForm">Submit</button>
  <button type="reset" form="playerForm">Reset</button>
</div>
```

```
<script>
  document.getElementById('playerForm').addEventListener('submit', function(e) {
    e.preventDefault();
    let errors = [];
    const name = document.getElementById('player_name').value.trim();
    const dob = document.getElementById('dob').value.trim();
    const age = document.getElementById('age').value.trim();
    const email = document.getElementById('email').value.trim();
    const country = document.getElementById('country').value;
    const matches = document.getElementById('matches').value.trim();
    const runs = document.getElementById('runs').value.trim();
    const wickets = document.getElementById('wickets').value.trim();
    const skills = document.querySelectorAll('input[name="skill"]:checked');
    const batStyle = document.querySelector('input[name="bat_style"]:checked');
    const bowlStyle = document.querySelector('input[name="bowl_style"]:checked');

    if (!name || !dob || !age || !email || !country || !matches || !runs || !wickets) {
      errors.push("All fields marked with * are required.");
    }
  });
</script>
```

```
}  
  
if (skills.length === 0) {  
    errors.push("Please select at least one Skill.");  
}  
  
if (!batStyle) {  
    errors.push("Please select Bat Style.");  
}  
  
if (!bowlStyle) {  
    errors.push("Please select Bowl Style.");  
}  
  
if (age && !/^\\d+$/\\.test(age)) {  
    errors.push("Age must be a number.");  
}  
  
if (matches && !/^\\d+$/\\.test(matches)) {  
    errors.push("Matches played must be a number.");  
}  
  
if (runs && !/^\\d+$/\\.test(runs)) {  
    errors.push("Runs must be a number.");  
}  
  
if (wickets && !/^\\d+$/\\.test(wickets)) {  
    errors.push("Wickets must be a number.");  
}  
  
if (name && !/^[A-Za-z\\s]+$/\\.test(name)) {  
    errors.push("Player name should contain alphabets and spaces only.");  
}  
  
if (email && !/^[\\w\\.-]+@[\\w\\.-]+\\.\\w{2,}$/\\.test(email)) {  
    errors.push("Email should be in the correct format.");  
}
```

```
    if (errors.length > 0) {  
        document.getElementById('errorBox').innerHTML = errors.join("<br>");  
    } else {  
        document.getElementById('form-section').style.display = 'none';  
        document.querySelector('.footer').style.display = 'none';  
        document.getElementById('success-section').style.display = 'block';  
    }  
});  
  
document.getElementById('playerForm').addEventListener('reset', function() {  
    setTimeout(() => { document.getElementById('errorBox').textContent = ""; }, 50);  
});  
</script>  
</body>  
</html>
```





```
padding-top: 50px;

font-family: Arial, sans-serif;
}

label {

font-size: 18px;

margin: 10px;

cursor: pointer;

}

input[type="radio"] {

margin-right: 6px;

}

</style>

</head>

<body>


<h2>Choose your Background Color:</h2>


<label><input type="radio" name="color" value="steelblue" onchange="changeColor(this.value)">
Steel Blue</label>


<label><input type="radio" name="color" value="coral" onchange="changeColor(this.value)">
Coral</label>


<label><input type="radio" name="color" value="lightblue" onchange="changeColor(this.value)">
Light Blue</label>


<label><input type="radio" name="color" value="lightgreen" onchange="changeColor(this.value)">
Light Green</label>


<label><input type="radio" name="color" value="lightcoral" onchange="changeColor(this.value)">
Light Coral</label>


<label><input type="radio" name="color" value="beige" onchange="changeColor(this.value)">
```

White</label>

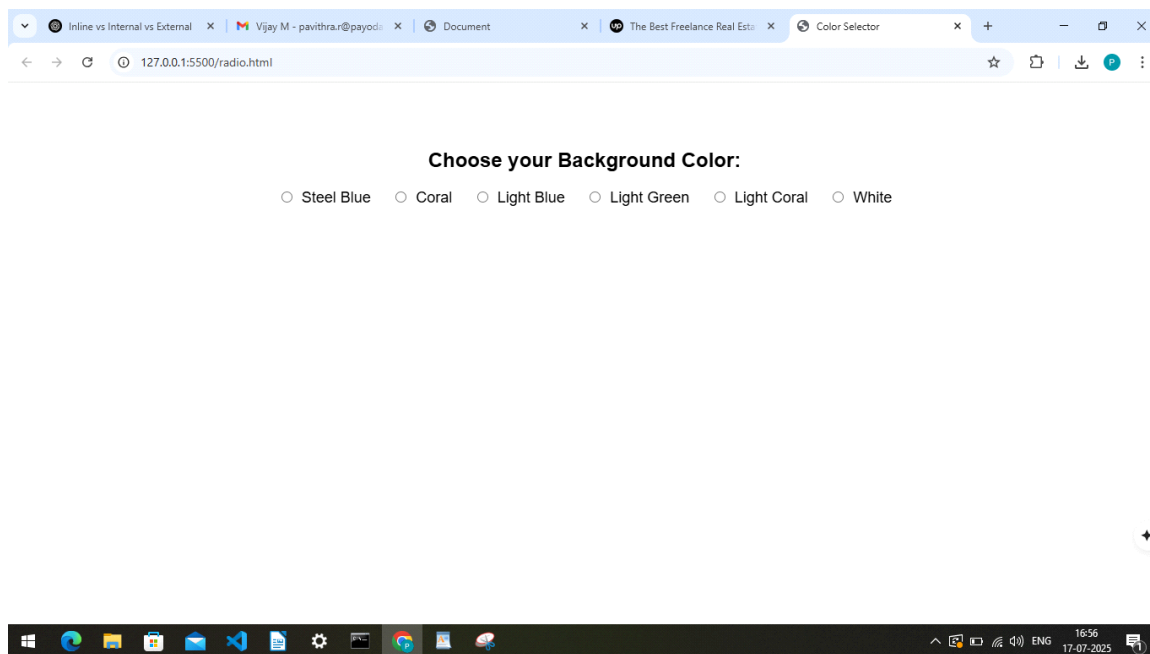
<script>

```
function changeColor(color) {  
    document.body.style.backgroundColor = color;  
}
```

</script>

</body>

</html>



After choosing your preferred background colour:

