CodeAlpha Virtual Internship

Frontend Development — Task 2

Project: Basic Calculator

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Internship Domain: Frontend Development

Company: CodeAlpha

# Task 2: Basic Calculator

In this task, I built a simple calculator using HTML, CSS, and JavaScript. The calculator performs basic arithmetic operations such as addition, subtraction, multiplication, and division. The design is kept clean with a light theme for better readability. The interface includes buttons for numbers (0–9), operators, a clear button, and an equal button to display results in real-time.

## 1. HTML Code

<!DOCTYPE html>  
<html lang="en">  
<head>  
 <meta charset="UTF-8">  
 <meta name="viewport" content="width=device-width, initial-scale=1.0">  
 <title>Basic Calculator | CodeAlpha Task 2</title>  
 <link rel="stylesheet" href="style.css">  
</head>  
<body>  
 <div class="calculator">  
 <input type="text" id="display" disabled>  
 <div class="buttons">  
 <button>7</button>  
 <button>8</button>  
 <button>9</button>  
 <button>/</button>  
 <button>4</button>  
 <button>5</button>  
 <button>6</button>  
 <button>\*</button>  
 <button>1</button>  
 <button>2</button>  
 <button>3</button>  
 <button>-</button>  
 <button>0</button>  
 <button>C</button>  
 <button>=</button>  
 <button>+</button>  
 </div>  
 </div>  
 <script src="script.js"></script>  
</body>  
</html>

## 2. CSS Code

body {  
 font-family: 'Poppins', sans-serif;  
 background-color: #f2f5f9;  
 display: flex;  
 justify-content: center;  
 align-items: center;  
 height: 100vh;  
}  
  
.calculator {  
 background: #ffffff;  
 padding: 20px;  
 border-radius: 10px;  
 box-shadow: 0 4px 10px rgba(0, 0, 0, 0.2);  
 width: 260px;  
}  
  
#display {  
 width: 100%;  
 height: 50px;  
 font-size: 1.5rem;  
 text-align: right;  
 margin-bottom: 15px;  
 border: none;  
 background: #eef2f5;  
 border-radius: 5px;  
 padding-right: 10px;  
}  
  
.buttons {  
 display: grid;  
 grid-template-columns: repeat(4, 1fr);  
 gap: 10px;  
}  
  
button {  
 padding: 15px;  
 font-size: 1.2rem;  
 border: none;  
 border-radius: 5px;  
 background-color: #e3eaf3;  
 cursor: pointer;  
 transition: background-color 0.2s;  
}  
  
button:hover {  
 background-color: #c7d7eb;  
}  
  
button:active {  
 background-color: #b5cce0;  
}  
  
button:nth-child(4n) {  
 background-color: #99bde5;  
 color: white;  
}  
  
button:nth-child(4n):hover {  
 background-color: #7da9da;  
}  
  
button:nth-child(15) {  
 background-color: #ff7f50;  
 color: white;  
}  
  
button:nth-child(15):hover {  
 background-color: #e5673f;  
}  
  
button:nth-child(14) {  
 background-color: #f4a261;  
 color: white;  
}  
  
button:nth-child(14):hover {  
 background-color: #e48b46;  
}

## 3. JavaScript Code

const display = document.getElementById('display');  
const buttons = document.querySelectorAll('button');  
  
let currentInput = '';  
  
buttons.forEach(button => {  
 button.addEventListener('click', () => {  
 const value = button.textContent;  
  
 if (value === 'C') {  
 currentInput = '';  
 display.value = '';  
 } else if (value === '=') {  
 try {  
 display.value = eval(currentInput);  
 currentInput = display.value;  
 } catch {  
 display.value = 'Error';  
 }  
 } else {  
 currentInput += value;  
 display.value = currentInput;  
 }  
 });  
});