Calculator Project Documentation

Introduction

The calculator project is a simple, interactive web-based calculator built using HTML, CSS, and JavaScript. It provides basic arithmetic operations and includes a sleek, modern UI.

Technologies Used

- HTML: For structuring the calculator.
- CSS: For styling and designing a modern UI.
- JavaScript: For handling logic and user interactions.

Project Files

1. HTML File (index.html)
2. CSS File (style.css)
3. JavaScript File (script.js)

HTML Structure

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <link rel="stylesheet" href="style.css" />
    <title>Calculator</title>
  </head>
  <body>
    <div class="container">
      <div class="calculator">
        <input type="text" id="inputBox" placeholder="0" />
        <div>
          <button class="button operator">AC</button>
          <button class="button operator">DEL</button>
          <button class="button operator">%</button>
          <button class="button operator">/</button>
        </div>
        <div>
          <button class="button">7</button>
          <button class="button">8</button>
          <button class="button">9</button>
          <button class="button operator">*</button>
        </div>
        <div>
          <button class="button">4</button>
          <button class="button">5</button>
          <button class="button">6</button>
          <button class="button operator">-</button>
```

CSS Styling

style.css > body

```css
@import url('https://fonts.googleapis.com/css2?family=Poppins:wght@500&display=swap');

*{
    margin: 0;
    padding: 0;
    box-sizing: border-box;
    font-family: 'Poppins', sans-serif;
}

body{
    width: 100%;
    height: 100vh;
    display: flex;
    justify-content: center;
    align-items: center;
    background: linear-gradient(45deg, #0a0a0a, #3a4452);
}

.calculator{
    border: 1px solid #717377;
    padding: 20px;
    border-radius: 16px;
    background: transparent;
    box-shadow: 0px 3px 15px rgba(113, 115, 119, 0.5);

}

input{
    width: 320px;
    border: none;
```

JavaScript Functionality

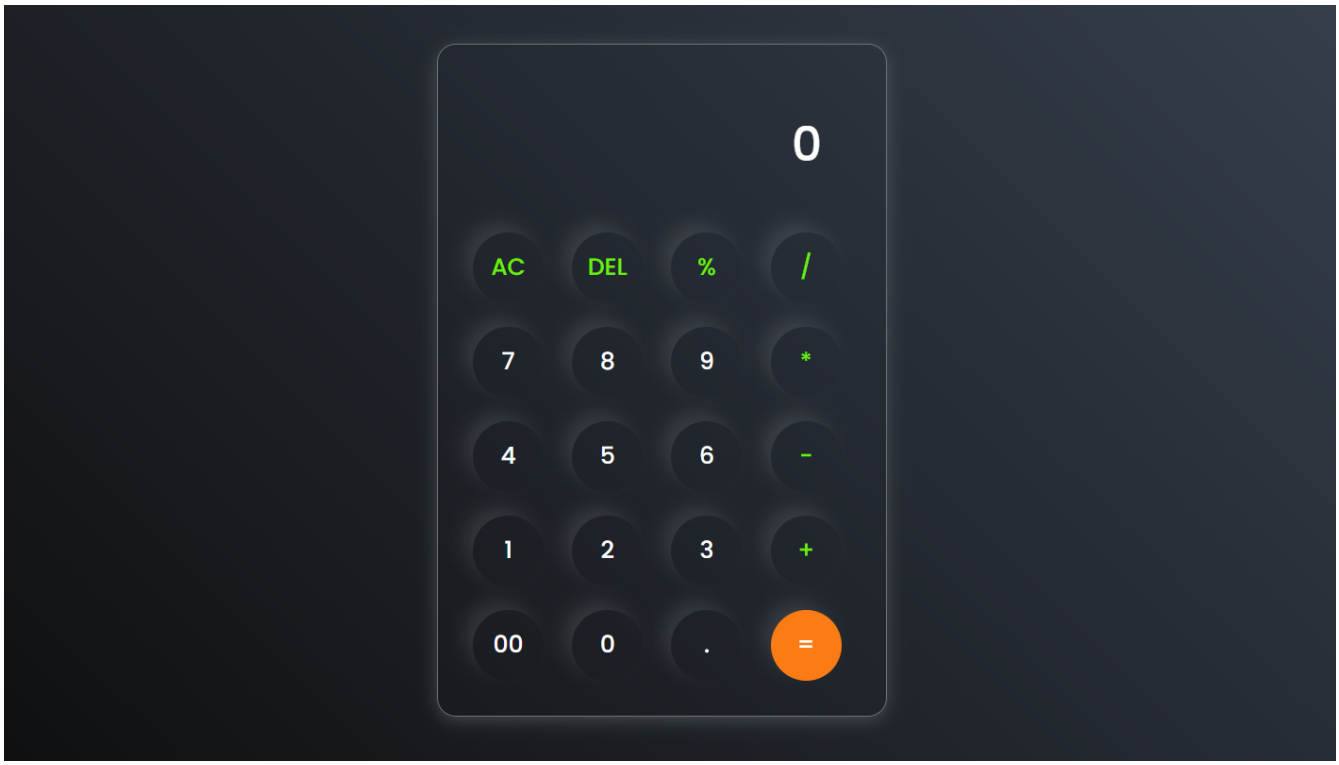
script.js > arr.forEach() callback > button.addEventListener('click') callback

```js
let input = document.getElementById('inputBox');
let buttons = document.querySelectorAll('button');

let string = "";
let arr = Array.from(buttons);
arr.forEach(button => {
    button.addEventListener('click', (e) =>{
        if(e.target.innerHTML == '='){
            string = eval(string);
            input.value = string;
        }

        else if(e.target.innerHTML == 'AC'){
            string = "";
            input.value = string;
        }
        else if(e.target.innerHTML == 'DEL'){
            string = string.substring(0, string.length-1);
            input.value = string;
        }
        else{
            string += e.target.innerHTML;
            input.value = string;
        }

    })
})
```

Features Implemented :-

✓• Basic arithmetic operations (+, -, *, /, %)
✓• Clear input (AC button)
✓• Delete last entry (DEL button)
✓• Real-time input display

Project Output :-



Conclusion :-

This project demonstrates how to build a functional and stylish calculator using HTML, CSS, and JavaScript. The logic implementation ensures smooth operations while maintaining a clean user experience.