

Simple Calculator

Introduction

The goal of this project is to develop *a simple web-based calculator* that performs basic arithmetic operations: addition, subtraction, multiplication, and division. The calculator should be able to handle decimal operations accurately and provide a clear way to reset the calculation or start anew. The calculator should be built using HTML, CSS and JavaScript

Housekeeping points

- This is a minimal example and may not follow some standard practices.
- We focus on the main flow, and not much error handling.

Problem Statement

Our task is as follows -

1. User Interface (UI) Design:

- Design a clean and intuitive UI for the calculator using HTML and CSS.
- The UI should include buttons for digits (0-9), operations (+, -, *, /), a clear button ('C'), and an equals button (=).
- Display a screen area where the current input and results are shown to the user.

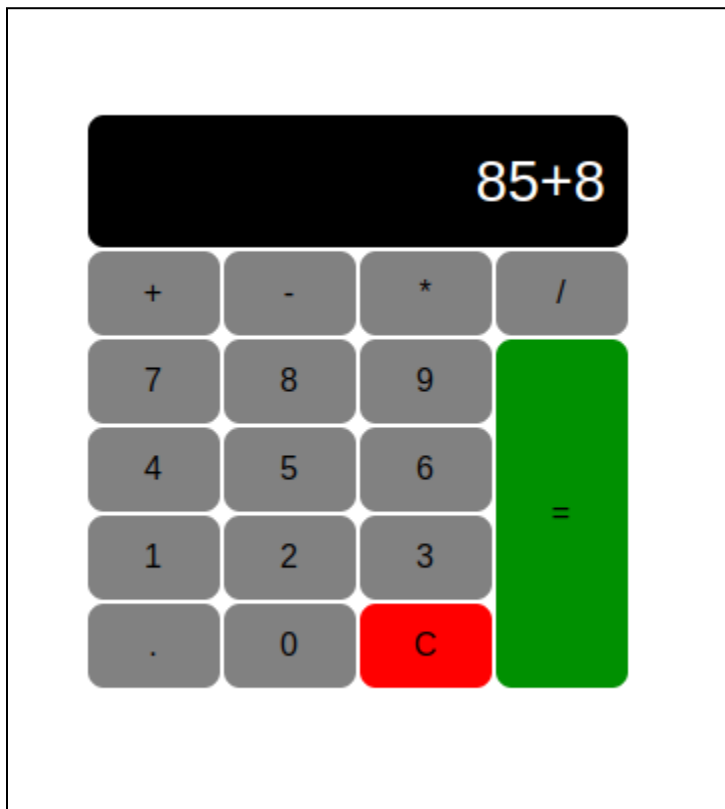
2. Core Functionality:

- Implement the core calculator functionalities using JavaScript:
 - Allow the user to input numbers by clicking the digit buttons.
 - Enable the calculator to perform basic arithmetic operations (addition, subtraction, multiplication, division) when the user clicks the respective operation buttons.
 - Display the result when the user clicks the equals button.
 - Ensure the calculator can handle decimal inputs correctly for all operations.
 - Implement the clear button ('C') functionality to reset the current operation and clear the display.

3. Input Validation and Error Handling:

- The calculator should prevent invalid operations, such as division by zero. In such cases, display an appropriate message or simply reset the calculation.
- Ensure that the user input is validated to avoid errors during calculation.

Sample screenshot provided for your reference -



Program Organization

You have been provided with a zip folder named **02_Simple Calculator_Source Code.zip** containing all the necessary files.

You have also been provided with a zip folder named **03_Simple Calculator_Sample Solution.zip** containing all the HTML, CSS and JavaScript code as a sample solution.

Deliverables

- Provide the source code files for the HTML, CSS, and JavaScript implementation of the calculator.

This problem statement presents an opportunity to demonstrate your proficiency in HTML, CSS, and JavaScript by creating a practical web-based tool. It challenges you to apply fundamental web development skills to build a functional, user-friendly application.