JavaScript Calculator

Description: -

This project is a simple, fully functional calculator built using **HTML**, **CSS**, and **JavaScript**. The calculator performs basic arithmetic operations such as addition, subtraction, multiplication, and division, while also supporting advanced features like square root, percentage calculation, and memory functions (M+, M-, MR, MC).

Features: -

- **Basic Arithmetic Operations**:

  - Addition (+)

  - Subtraction (-)

  - Multiplication (*)

  - Division (/)

- **Advanced Functions**:

  - **Square Root (√)**: Calculate the square root of the current value on the display.

  - **Percentage (%)**: Convert the current value to a percentage.

- **Memory Functions**:

  - **Memory Add (M+)**: Adds the current value on the display to memory.

  - **Memory Subtract (M-)**: Subtracts the current value from the memory.

  - **Memory Recall (MR)**: Displays the value stored in memory.

  - **Memory Clear (MC)**: Clears the value stored in memory.

- **Additional Features**:

  - **Clear (C)**: Resets the display and clears any stored values or operators.

  - **Decimal Point (.)**: Supports floating-point numbers.

  - **Equal (=)**: Performs the calculation based on the current input.

Usage Instructions: -

1. Basic Arithmetic Operations

- Press any number button (0-9) to enter the number on the display.

- To perform an operation, click on one of the operator buttons (+, -, *, /).

- Enter the second number and then press the **=** button to see the result.

- Example: Press 8, then +, then 2, then =. The result 10 will be displayed.

2. Clearing the Display

- If you want to reset the calculator at any time, press the **C** button. This will clear the display and reset all the current values and operations.

3. Decimal Numbers

- To enter decimal numbers, press the. button.

- Example: Press 2, then., then 5 to enter 2.5.

4. Square Root (√)

- To calculate the square root of a number, enter the number and press the **√** button.

- Example: Press 9, then √, and the result will be 3.

5. Percentage (%)

- To convert a number to a percentage, enter the number and press the **%** button. The number will be divided by 100.

- Example: Press 50, then %, and the result will be 0.5.

6. Memory Functions

- **Memory Add (M+)**: Adds the current display value to memory. The memory persists even after pressing other buttons.

- **Memory Subtract (M-)**: Subtracts the current display value from the memory.

- **Memory Recall (MR)**: Shows the value stored in memory on the display.

- **Memory Clear (MC)**: Clears the memory value.

7. Equals (=)

- To complete a calculation, press the **=** button. The result of the calculation will be displayed.

Installation

1. Download the project files: **index.html**, **styles.css**, and **script.js**.

2. Open the **index.html** file in your web browser.

Files Structure

- **index.html**: The main HTML file containing the calculator's structure and buttons.

- **styles.css**: The CSS file for styling the calculator layout and appearance.

- **script.js**: The JavaScript file that handles all the calculator's logic and functionality.

Browser Compatibility: -

This calculator works on all modern web browsers, including:

- Google Chrome

- Mozilla Firefox

- Safari

- Microsoft Edge

Future Improvements

- Adding more scientific calculator functions such as trigonometric operations (sin, cos, tan).

- Improving the UI/UX with animations and responsive design for mobile users.

- Implementing keyboard support for inputting values directly using the keyboard.