Shivani's Calculator - Documentation

# 1. Introduction

Mishra's Calculator is a web-based application built with HTML, CSS, and JavaScript. It provides basic arithmetic operations such as addition, subtraction, multiplication, and division. Additionally, the application includes memory functions like memory recall, add, and subtract. It also maintains a history of calculations performed.

# 2. Features

The key features of the Mishra's Calculator are as follows:

1. Basic Arithmetic Operations: The calculator supports addition, subtraction, multiplication, and division.

2. Memory Functions: Users can store, recall, add to, and subtract from memory (M+, M-, MR, MC).

3. Calculation History: The calculator maintains a history of past calculations and their results.

4. Error Handling: It handles division by zero and invalid expressions, providing alerts for such cases.

5. Keyboard Shortcuts: The calculator supports keyboard input for easier usage.

# 3. Functionality

The Mishra's Calculator performs the following tasks:

1. appendValue(value): Appends the specified value to the display when a button is clicked.

2. clearDisplay(): Clears the display.

3. calculate(): Evaluates the expression on the display and updates the result.

4. memoryRecall(): Recalls the value stored in memory and displays it.

5. memoryClear(): Clears the stored memory.

6. memoryAdd(): Adds the current display value to the stored memory.

7. memorySubtract(): Subtracts the current display value from the stored memory.

# 4. Calculation History

The application stores all calculations and their results in a history list. This list is displayed below the calculator, allowing users to review previous calculations. Users can clear the history using the 'Clear History' button.

# 5. Keyboard Input

The calculator supports keyboard input, which includes the following keys:

1. Numbers (0-9)

2. Arithmetic operators (+, -, \*, /)

3. Decimal point (.)

4. Enter (to calculate)

5. Backspace (to delete the last character)

6. Escape (to clear the display)

# 6. Conclusion

Mishra's Calculator is a simple, yet functional web-based calculator that allows users to perform basic arithmetic calculations while also storing and managing the results in a history. The memory functionality further enhances its usability, and error handling ensures that users are notified of any issues with their input.