MINOR PROJECT

Calculator Project

Developing a Calculator after learning basic of HTML, CSS & JavaScript is one of the best ways to understand the core concept and implement it to make something useful. This Calculator you can modify as per your need to perform both simple and complex calculations. It should include +, -, *, / operations along with calculating modulo (%) and performing square of a number. Also, add AC (All Clear) button to clear the current text and Equal key for performing the operation. The calculator should perform operation using both Decimal and Whole numbers.

- ## HTML CODE:

```html
<!DOCTYPE html>
<html lang="en" dir="ltr">

<head>
  <meta charset="utf-8">
  <title>Simple Calculator using HTML, CSS and JavaScript</title>
  <h1>CALCULATOR</h1>
  <link rel="stylesheet" href="styles.css">
</head>

<body>
  <div id ="container">

<table>
  <tr>
    <td colspan="3"> <input class="display-box" type="text" id="result"
disabled /> </td>

    <!-- clearScreen() function clears all the values -->
    <td> <input type="button" value="%" onclick="display('%')" /> </td>
    <td> <input type="button" value="C" onclick="clearScreen()" id="btn" />
</td>
  </div>

  </tr>

<div id="first">
  <tr style="background-color: aqua;">
    <!-- display() function displays the value of clicked button -->
```

```html
        <td> <input type="button" value="1" onclick="display('1')" /> </td>
    <td> <input type="button" value="2" onclick="display('2')" /> </td>
    <td> <input type="button" value="3" onclick="display('3')" /> </td>
    <td> <input type="button" value="/" onclick="display('/')" /> </td>

  </tr>
  </div>
  <div id="second">
  <tr style="background-color: plum;">
    <td> <input type="button" value="4" onclick="display('4')" /> </td>
    <td> <input type="button" value="5" onclick="display('5')" /> </td>
    <td> <input type="button" value="6" onclick="display('6')" /> </td>
    <td> <input type="button" value="-" onclick="display('-')" /> </td>
  </tr>
</div>
<div id="third">

  <tr style="background-color: lawngreen;">
    <td> <input type="button" value="7" onclick="display('7')" /> </td>
    <td> <input type="button" value="8" onclick="display('8')" /> </td>
    <td> <input type="button" value="9" onclick="display('9')" /> </td>
    <td> <input type="button" value="+" onclick="display('+')" /> </td>
  </tr>
  </div>
  <div id="fourth">
  <tr style="background-color: burlywood;font-size: large;color: aqua;">

    <td> <input type="button" value="." onclick="display('.')" /> </td>
    <td> <input type="button" value="0" onclick="display('0')" /> </td>


    <!-- calculate() function evaluates the mathematical expression -->
    <td> <input type="button" value="=" onclick="calculate()" id="btn" />
</td>
    <td> <input type="button" value="*" onclick="display('*')" /> </td>
  </tr>
  </div>
</table>

<script type="text/javascript" src="script.js"></script>

</body>

</html>
```

- ## CSS CODE:

```css
#grid-container{
```

```css
    background-color: aqua;
    margin:20px;
    display: flex;



}
#first{
    background-color: bisque;
    border: 3cm;
    margin:10px;

}
#second{
    background-color:paleturquoise;
    border: 3cm;

}
#third{
    background-color: blueviolet;
    border: 3cm;
}
#fourth{
    background-color: yellowgreen;
    border: 3cm;
}
```

- **JAVASCRIPT CODE:**

```javascript
const input = document.getElementById('inputtext');
const buttons = document.querySelectorAll('button');

function calculate(expression) {
    console.log(expression);
    console.log(typeof(expression));
    try {
        return new Function('return ' + expression)();
    } catch (error) {
        return 'Malformed Operation';
    }
}


function operation(buttonValue) {
    if (buttonValue === 'C') {
        input.value = '';
    } else if (buttonValue === 'DEL') {
        input.value = input.value.slice(0, -1);
    } else if (buttonValue === '=') {
        input.value = calculate(input.value);
```

```
} else {
        input.value += buttonValue;
}
}

buttons.forEach(button => {
let buttonValue = button.innerText;
button.addEventListener('click', function () {
operation(buttonValue);
});
});
```

- **OUTPUT:**

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