

Calculator

Introduction

A basic calculator is a versatile tool designed to perform arithmetic calculations quickly and accurately. It's an essential device for performing mathematical operations ranging from simple addition and subtraction to more complex tasks like multiplication, division, and even basic scientific calculations. The calculator's user-friendly interface typically consists of a keypad with numerical digits, arithmetic operators, and other function buttons.

Use of HTML

In this program, we are using HTML to create content for the calculator UI; that means we are creating boxes, input fields, buttons and etc..

```
index.html style.css x
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="utf-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1">
6      <link rel="stylesheet" type="text/css" href="style.css">
7      <title>CALCULATOR</title>
8  </head>
9  <body>
10     <div class="container">
11         <div class="calculator">
12             <input type="text" name="" placeholder="0" id="screen">
13             <button onclick="Clear()">CL</button>
14             <button onclick="del()">DEL</button>
15             <button onclick="display('%')">%</button>
16             <button onclick="display('/')">/</button>
17             <button onclick="display('7')">7</button>
18             <button onclick="display('8')">8</button>
19             <button onclick="display('9')">9</button>
20             <button onclick="display('*')">*</button>
21             <button onclick="display('4')">4</button>
22             <button onclick="display('5')">5</button>
23             <button onclick="display('6')">6</button>
24             <button onclick="display('-')">-</button>
25             <button onclick="display('1')">1</button>
26             <button onclick="display('2')">2</button>
27             <button onclick="display('3')">3</button>
28             <button onclick="display('+')">+</button>
29             <button onclick="display('.')">.</button>
30             <button onclick="display('0')">0</button>
31             <button onclick="calculate()" class="equal">=</button>
32         </div>
33     </div>
34
35 </div>
36 </body>
37 </html>
```

Using CSS and JavaScript

We are using CSS for managing the content of HTML like the content color , width, height,font-size, padding , margin and we use java-script that they are different buttons and all these buttons have different functions .For example + buttons performs lie addition operation and – operator using doing subtraction operation that's all about possible by using java-script.

```
index.html x style.css x
*{
  margin: 0;
  padding: 0;
  box-sizing: border-box;
  background-color: #ecf0f3;
  font-family: sans-serif;
  outline: none;
}
.container{
  height: 100vh;
  display: flex;
  justify-content: center;
  align-items: center;
}
.calculator
{
  background-color: #ecf0f3;
  padding: 15px;
  border-radius: 30px;
  box-shadow: inset 5px 5px 12px #ffffff,
              5px 5px 12px rgba(0,0,0,.16);
  display: grid;
  grid-template-columns: repeat(4, 68px);
}
input
{
  grid-column: span 4;
  height: 70px;
  width: 260px;
  background-color: #ecf0f3;
  box-shadow: inset -5px -5px 12px #ffffff,
              inset 5px 5px 12px rgba(0,0,0,.16);
  border: none;
  border-radius: 30px;
  color: rgb(70,70,70);
  font-size: 50px;
  text-align: end;
  margin: auto;
  margin-top: 40px;
  margin-bottom: 30px;
  padding: 20px;
}
```

```
}
button{
  height: 48px;
  width: 48px;
  background-color: #ecf0f3;
  box-shadow: -5px -5px 12px #ffffff,
              5px 5px 12px rgba(0,0,0,.16);
  border: none;
  border-radius: 50%;
  margin: 8px;
  font-size: 16px;
}
.equal{
  width: 115px;
  border-radius: 40px;
  background-color: #ecf0f3;
  box-shadow: -5px -5px 12px #ffffff,
              5px 5px 12px rgba(0,0,0,.16);
}
```

```
</div>

<script type="text/javascript">
let outputScreen = document.getElementById('screen');

function display(num) {
  // body...
  outputScreen.value +=num;
}
function calculate() {
  // body...
  try{
    outputScreen.value = eval(outputScreen.value);
  }
  catch(err)
  {
    alert("Invalid");
  }
}
function clear()
{
  outputScreen.value="";
}
function del()
{
  outputScreen.value= outputScreen.value.slice(0,-1);
}
</script>
```