SUJAL Kulshrestha

Section :- P (P2) Roll No :- 47

POINTS CLEARED

- ✓ Develop a web application using HTML, CSS and JavaScript to implement a graphical calculator which performs only addition, subtraction, multiplication and division.

TOPICS LEARNED

- Using of disabled property to disable typing on the display of calculator.
- Using onclick attribute to execute the function or function calling.
- Text shadow CSS property to make the text look 3D.
- :hover, for reaction when the button is hovered by mouse pointer/cursor.
- :active, for reaction when the button is selected.

MODULE LEARNED

- Implementing JavaScript to HTML
- Using .js for external JavaScript file
- Many Attribute / Properties of JavaScript

EXPLANATION

Here, I used a lot of properties and attributes which allow me to introduce validation of data given by user. I made a fully functional CASIO (example) Calculator, It performs all the major +,-,*, and / functions. The validation used here are clr(),display(), and result() functions.
Many of the CSS properties I used are already mentioned in previous project, so now in this project I'm going to introduce some JavaScript properties / attributes.
Some of them are :-

- function name_of_function() {} – This is used to create a calling Function.
- var variable_name – This is used to determine new variable.
- If (condition) {} – This is used for conditional statements
- else {} – This is used when if condition is not satisfied.
- return value – This returns the value as given.

Some new tags properties / attributes are :-

- type="value" – This determine the type of data we are dealing with.
- rel="stylesheet" – This determine the type of external file we are implementing in html.
- src="image.png"- This determines the source location of the file.

Some CSS new properties :-

- ✓ text-shadow: 0 0 10px black; - This is used to give a shadow background to the text which creates 3D effect.
- ✓ Button.input:hover {} - Reaction to the hover of the mouse pointer/cursor.
- ✓ Button.input:active () - Reaction to the selection of the object specified.

HTML INPUT CODE

```
<html>
  <head>
    <link rel="stylesheet" type="text/css" href="Style.css">
    <script type="text/javascript" src="Setup.js"></script>
  </head>
  <body>
    <br/><br/><br/>
    <table>
      <tr>
        <td></td>
        <td class="Logo" colspan="2">
          CASIO
        </td>
        <td></td>
      </tr>
      <tr>
        <td colspan = "3">
          <input class="display" type="text" id="display" disabled>
        </td>
        <td>
          <input class="Button" type="button" name = "clr" value="CLR" onclick="clr()">
        </td>
      </tr>
      <tr>
        <td>
          <input class="Button" type="button" name = "7" value="7" onclick="display(value)">
        </td>
        <td>
          <input class="Button" type="button" name = "8" value="8" onclick="display(value)">
        </td>
        <td>
          <input class="Button" type="button" name = "9" value="9" onclick="display(value)">
        </td>
        <td>
          <input class="Button" type="button" name = "+" value="+" onclick="display(value)">
        </td>
      </tr>
      <tr>
        <td>
          <input class="Button" type="button" name = "4" value="4" onclick="display(value)">
        </td>
        <td>
          <input class="Button" type="button" name = "5" value="5" onclick="display(value)">
        </td>
        <td>
```

```
            <input class="Button" type="button" name = "6" value="6" onclick="display(value)">
          </td>
          <td>
            <input class="Button" type="button" name = "-" value="-" onclick="display(value)">
          </td>
        </tr>
        <tr>
          <td>
            <input class="Button" type="button" name = "1" value="1" onclick="display(value)">
          </td>
          <td>
            <input class="Button" type="button" name = "2" value="2" onclick="display(value)">
          </td>
          <td>
            <input class="Button" type="button" name = "3" value="3" onclick="display(value)">
          </td>
          <td>
            <input class="Button" type="button" name = "/" value="/" onclick="display(value)">
          </td>
        </tr>
        <tr>
          <td>
            <input class="Button" type="button" name = "." value="." onclick="display(value)">
          </td>
          <td>
            <input class="Button" type="button" name = "0" value="0" onclick="display(value)">
          </td>
          <td>
            <input class="Button" type="button" name = "=" value="=" onclick="result()">
          </td>
          <td>
            <input class="Button" type="button" name = "*" value="*" onclick="display(value)">
          </td>
        </tr>
      </table>
    </body>
</html>
```

CSS INPUT CODE

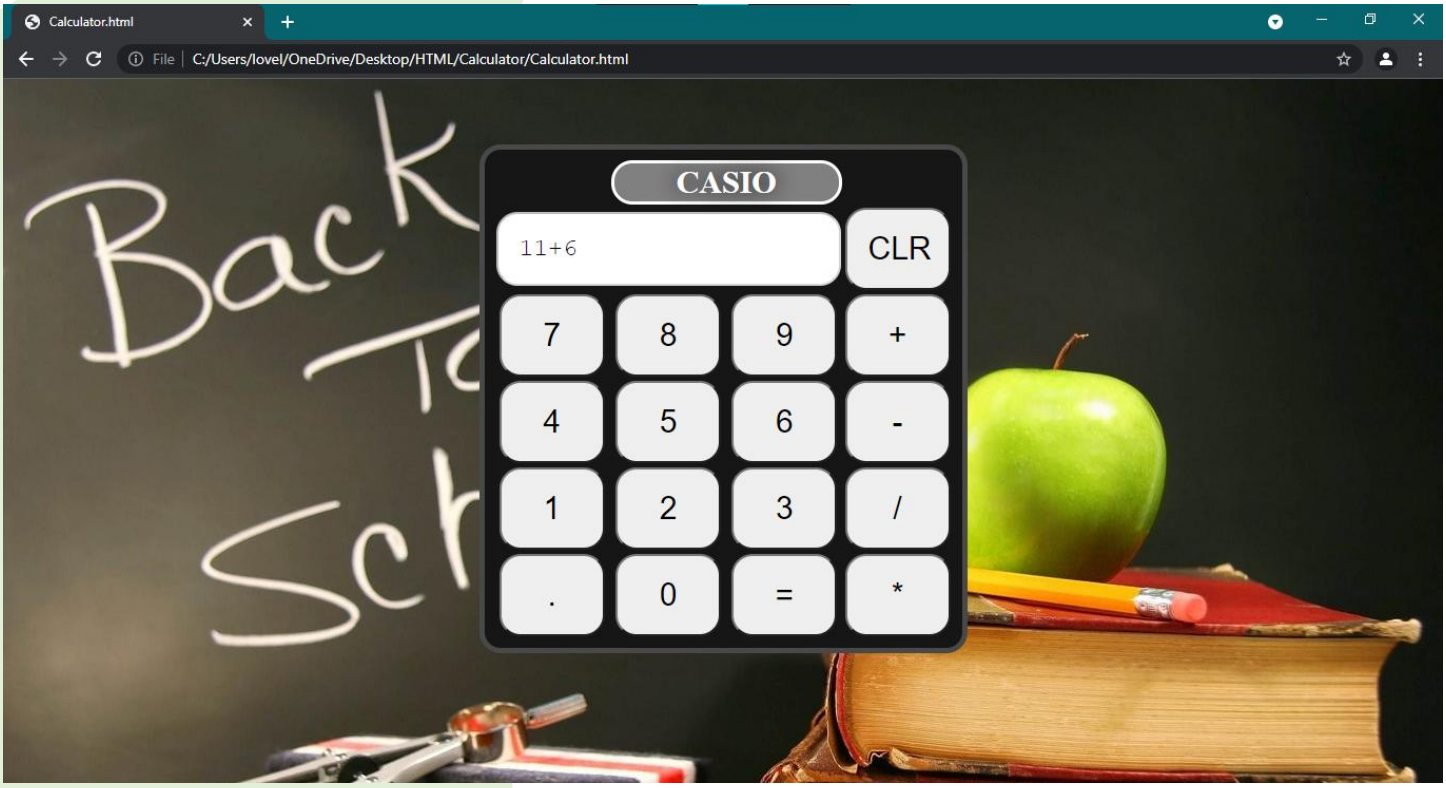
```
table {
    margin-left: auto;
    margin-right: auto;
    border: 5px solid rgb(73, 73, 73);
    border-radius: 20px;
    padding: 8px;
    background-color: rgb(22, 22, 22);
}
td {
    font-weight: bold;
    color:white;
    text-align: center;
    font-size: 30px;
    font-family: 'Times New Roman', Times, serif;
}
td.Logo {
    border-radius: 20px;
    background-color: gray;
    border: 3px solid white;
    text-shadow: 0 0 20px black;
}
input.display {
    font-size: 23px;
    padding: 20px;
    border-radius: 20px;
    background-color: white;
    color: black;
    font-family: 'Courier New', Courier, monospace;
}
input.Button {
    width: 100px;
    font-size: 30px;
    padding: 20px;
    border-radius: 20px;
}
input.Button:hover {
    background-color: grey;
}
input.Button:active {
    background-color: white;
}
body {
    background-image: url("Calc.png");
    background-size: cover;
}
```

JAVASCRIPT INPUT CODE

```
function display(x) {
   document.getElementById("display").value+=x;
}
function result() {
   var y = document.getElementById("display").value;
   var result = eval(y);
   document.getElementById("display").value = result;
}
function clr() {
   document.getElementById("display").value="";
}
```

ATTATCHED IMAGE

OUTPUT


Calculator.html
File | C:/Users/lovel/OneDrive/Desktop/HTML/Calculator/Calculator.html
CASIO
11+6
CLR
7
8
9
+
4
5
6
-
1
2
3
/
.
0
=
*