WT Lab Exp No.4

**Problem Statement:**

DesignandimplementasimplecalculatorusingJavaScriptforoperationslikeaddition,multiplication,subtraction

, division, square of number etc.

1. Design calculator interface like text field for input and output, buttons for numbers and operators etc.

2. Validate input values

3. Prompt/alerts for invalid values etc.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>JavaScript Calculator</title>

<script src=

"https://cdnjs.cloudflare.com/ajax/libs/mathjs/10.6.4/math.js"

integrity=

"sha512-BbVEDjbqdN3Eow8+empLMrJlxXRj5nEitiCAK5A1pUr66+jLVejo3PmjIaucRnjlB0P9R3rBUs3g5jXc8ti+fQ=="

crossorigin="anonymous"

referrerpolicy="no-referrer"></script>

<script src=

"https://cdnjs.cloudflare.com/ajax/libs/mathjs/10.6.4/math.min.js"

integrity=

"sha512-iphNRh6dPbeuPGIrQbCdbBF/qcqadKWLa35YPVfMZMHBSI6PLJh1om2xCTWhpVpmUyb4IvVS9iYnnYMkleVXLA=="

crossorigin="anonymous"

referrerpolicy="no-referrer"></script>

</head>

<!-- For styling -->

<style>

table {

border: 1px solid rgb(30, 227, 33);

margin-left: auto;

margin-right: auto;

}

input[type="button"] {

width: 100%;

padding: 20px 40px;

background-color: rgb(193, 31, 36);

color: rgb(17, 41, 145);

font-size: 24px;

font-weight: bold;

border: none;

border-radius: 5px;

}

input[type="text"] {

padding: 20px 30px;

font-size: 24px;

font-weight: bold;

border: none;

border-radius: 5px;

border: 2px solid black;

}

</style>

</head>

<body>

<!-- Use Table to Create Calculator Structure Design -->

<table id="calcu">

<tr>

<td colspan="3"><input type="text" id="result"></td>

<td><input type="button" value="c" onclick="clr()" /> </td>

</tr>

<tr>

<td><input type="button" value="1" onclick="dis('1')"

onkeydown="myFunction(event)"> </td>

<td><input type="button" value="2" onclick="dis('2')"

onkeydown="myFunction(event)"> </td>

<td><input type="button" value="3" onclick="dis('3')"

onkeydown="myFunction(event)"> </td>

<td><input type="button" value="/" onclick="dis('/')"

onkeydown="myFunction(event)"> </td>

</tr>

<tr>

<td><input type="button" value="4" onclick="dis('4')"

onkeydown="myFunction(event)"> </td>

<td><input type="button" value="5" onclick="dis('5')"

onkeydown="myFunction(event)"> </td>

<td><input type="button" value="6" onclick="dis('6')"

onkeydown="myFunction(event)"> </td>

<td><input type="button" value="\*" onclick="dis('\*')"

onkeydown="myFunction(event)"> </td>

</tr>

<tr>

<td><input type="button" value="7" onclick="dis('7')"

onkeydown="myFunction(event)"> </td>

<td><input type="button" value="8" onclick="dis('8')"

onkeydown="myFunction(event)"> </td>

<td><input type="button" value="9" onclick="dis('9')"

onkeydown="myFunction(event)"> </td>

<td><input type="button" value="-" onclick="dis('-')"

onkeydown="myFunction(event)"> </td>

</tr>

<tr>

<td><input type="button" value="0" onclick="dis('0')"

onkeydown="myFunction(event)"> </td>

<td><input type="button" value="." onclick="dis('.')"

onkeydown="myFunction(event)"> </td>

<!-- solve function call function solve to evaluate value -->

<td><input type="button" value="=" onclick="solve()"> </td>

<td><input type="button" value="+" onclick="dis('+')"

onkeydown="myFunction(event)"> </td>

</tr>

</table>

<script>

// Function that display value

function dis(val) {

document.getElementById("result").value += val

}

function myFunction(event) {

if (event.key == '0' || event.key == '1'

|| event.key == '2' || event.key == '3'

|| event.key == '4' || event.key == '5'

|| event.key == '6' || event.key == '7'

|| event.key == '8' || event.key == '9'

|| event.key == '+' || event.key == '-'

|| event.key == '\*' || event.key == '/')

document.getElementById("result").value += event.key;

}

var cal = document.getElementById("calcu");

cal.onkeyup = function (event) {

if (event.keyCode === 13) {

console.log("Enter");

let x = document.getElementById("result").value

console.log(x);

solve();

}

}

// Function that evaluates the digit and return result

function solve() {

let x = document.getElementById("result").value

let y = math.evaluate(x)

document.getElementById("result").value = y

}

// Function that clear the display

function clr() {

document.getElementById("result").value = ""

}

</script>

</body>

</html>

OUTPUT:-



