

Github URL

W01-P1: 取得畫面輸入，4 個按鈕，兩個輸出，共 7 個，透過 console.log 印出

The screenshot shows a web browser on the left displaying 'The Unconventional Calculator'. The interface includes a text input field, four buttons (+, -, *, /), and a display area showing '0' and 'Result: 0'. On the right, the VS Code editor shows the `app.js` file with the following JavaScript code:

```
1 const userInput = document.querySelector('#input-number');
2 const userAdd = document.querySelector('#btn-add');
3 const userSubtract = document.querySelector('#btn-subtract');
4 const userMultiply = document.querySelector('#btn-multiply');
5 const userDivide = document.querySelector('#btn-divide');
6 const userCalculation = document.querySelector('#btn-calculate');
7 const userResult = document.querySelector('#current-result');
8
9 console.log('userInput', userInput);
10 console.log('userAdd', userAdd);
11 console.log('userSubtract', userSubtract);
12 console.log('userMultiply', userMultiply);
13 console.log('userDivide', userDivide);
14 console.log('userCalculation', userCalculation);
15 console.log('userResult', userResult);
```

The DevTools console on the left shows the HTML structure of the calculator interface, including the input field and buttons, with their respective IDs and classes.

W01-P2: 能做加法計算 operand1 + operand2

The screenshot shows the web browser on the left with the calculator interface. The input field now contains '7', and the display area shows '13 + 7' and 'Result: 20'. On the right, the VS Code editor shows the `app.js` file with the following JavaScript code:

```
14 // console.log('userCalculation', userCalculation);
15 // console.log('userResult', userResult);
16
17 // const buttons = document.querySelectorAll('button');
18 // console.log('buttons', buttons);
19
20 const defaultResult = 0;
21 let currentResult = defaultResult;
22
23 function getUserInput() {
24   return parseInt(userInput.value);
25 }
26
27 function outputResult(result, text) {
28   userResult.textContent = result;
29   userCalculation.textContent = text;
30 }
31
32 //operand1 operator operand2
33 function add() {
34   const operand1 = currentResult;
35   const operand2 = getUserInput();
36   currentResult = operand1 + operand2;
37   console.log(`${operand1} + ${operand2} = ${currentResult}`);
38   const calcText = `${operand1} + ${operand2}`;
39   outputResult(currentResult, calcText);
40 }
41
42 function subtract() {
43   const operand1 = currentResult;
44   const operand2 = getUserInput();
45   currentResult = operand1 - operand2;
46   console.log(`${operand1} - ${operand2} = ${currentResult}`);
47   const calcText = `${operand1} - ${operand2}`;
48   outputResult(currentResult, calcText);
49 }
50
51 function multiply() {
```

The DevTools console on the left shows the calculation results: '0 + 6 = 6', '6 + 7 = 13', and '13 + 7 = 20', indicating that the calculator is performing the addition correctly.

W01-P3: 能做減法計算 operand1 - operand2

The screenshot shows a web browser on the left and a VS Code editor on the right. The browser displays 'The Unconventional Calculator' with a subtraction operation $4 - 1$ resulting in 3 . The VS Code editor shows the JavaScript code for the subtraction function.

Browser Console Log:

```
0 + 2 = 2    app.js:37
2 + 2 = 4    app.js:37
4 - 1 = 3    app.js:46
```

VS Code Code Snippet:

```
function subtract() {
  const operand1 = currentResult;
  const operand2 = getUserInput();
  currentResult = operand1 - operand2;
  console.log(`${operand1} - ${operand2} = ${currentResult}`);
  const calcText = `${operand1} - ${operand2}`;
  outputResult(currentResult, calcText);
}
```

W01-P4: 能做乘法計算 operand1 * operand2

The screenshot shows a web browser on the left and a VS Code editor on the right. The browser displays 'The Unconventional Calculator' with a multiplication operation $5 * 7$ resulting in 35 . The VS Code editor shows the JavaScript code for the multiplication function.

Browser Console Log:

```
0 + 1 = 1    app.js:37
1 * 5 = 5    app.js:55
5 * 7 = 35   app.js:55
```

VS Code Code Snippet:

```
function multiply() {
  const operand1 = currentResult;
  const operand2 = getUserInput();
  currentResult = operand1 * operand2;
  console.log(`${operand1} * ${operand2} = ${currentResult}`);
  const calcText = `${operand1} * ${operand2}`;
  outputResult(currentResult, calcText);
}
```

W01-P5: 能做除法計算 operand1 / operand2

The screenshot shows a web browser window displaying "The Unconventional Calculator" and a VS Code editor showing the JavaScript code for the application. The browser window shows the calculator interface with the number 3 entered, the division operator selected, and the result 4 displayed. The VS Code editor shows the JavaScript code for the calculator, including the divide function.

Browser Window:

- URL: 127.0.0.1:5500/demo/w01/index.html
- Page Title: The Unconventional Calculator
- Calculator Interface: Shows the number 3 entered, the division operator selected, and the result 4 displayed.

VS Code Editor:

```
demo > w01 > js > JS app.js > ...
44 const operand2 = getUserInput();
45 currentResult = operand1 - operand2;
46 console.log(`${operand1} - ${operand2} = ${currentResult}`);
47 const calcText = `${operand1} - ${operand2}`;
48 outputResult(currentResult, calcText);
49 }
50
51 function multiply() {
52   const operand1 = currentResult;
53   const operand2 = getUserInput();
54   currentResult = operand1 * operand2;
55   console.log(`${operand1} * ${operand2} = ${currentResult}`);
56   const calcText = `${operand1} * ${operand2}`;
57   outputResult(currentResult, calcText);
58 }
59
60 function divide() {
61   const operand1 = currentResult;
62   const operand2 = getUserInput();
63   currentResult = operand1 / operand2;
64   console.log(`${operand1} / ${operand2} = ${currentResult}`);
65   const calcText = `${operand1} / ${operand2}`;
66   outputResult(currentResult, calcText);
67 }
68
69 userAdd.addEventListener('click', add);
70 userSubtract.addEventListener('click', subtract);
71 userMultiply.addEventListener('click', multiply);
72 userDivide.addEventListener('click', divide);
```

W01-P6: 能做四則計算，加減乘除都要執行一遍，可任意順序，結果要正確

The screenshot shows a web browser window displaying "The Unconventional Calculator" and a VS Code editor showing the JavaScript code for the application. The browser window shows the calculator interface with the number 2 entered, the division operator selected, and the result 16 displayed. The VS Code editor shows the JavaScript code for the calculator, including the divide function.

Browser Window:

- URL: 127.0.0.1:5500/demo/w01/index.html
- Page Title: The Unconventional Calculator
- Calculator Interface: Shows the number 2 entered, the division operator selected, and the result 16 displayed.

VS Code Editor:

```
demo > w01 > js > JS app.js > ...
38 console.log(`${operand1} + ${operand2} = ${currentResult}`);
39 const calcText = `${operand1} + ${operand2}`;
40 outputResult(currentResult, calcText);
41 }
42
43 function subtract() {
44   const operand1 = currentResult;
45   const operand2 = getUserInput();
46   currentResult = operand1 - operand2;
47   console.log(`${operand1} - ${operand2} = ${currentResult}`);
48   const calcText = `${operand1} - ${operand2}`;
49   outputResult(currentResult, calcText);
50 }
51
52 function multiply() {
53   const operand1 = currentResult;
54   const operand2 = getUserInput();
55   currentResult = operand1 * operand2;
56   console.log(`${operand1} * ${operand2} = ${currentResult}`);
57   const calcText = `${operand1} * ${operand2}`;
58   outputResult(currentResult, calcText);
59 }
60
61 function divide() {
62   const operand1 = currentResult;
63   const operand2 = getUserInput();
64   currentResult = operand1 / operand2;
65   console.log(`${operand1} / ${operand2} = ${currentResult}`);
66   const calcText = `${operand1} / ${operand2}`;
67   outputResult(currentResult, calcText);
68 }
69
70 userAdd.addEventListener('click', add);
71 userSubtract.addEventListener('click', subtract);
72 userMultiply.addEventListener('click', multiply);
73 userDivide.addEventListener('click', divide);
```