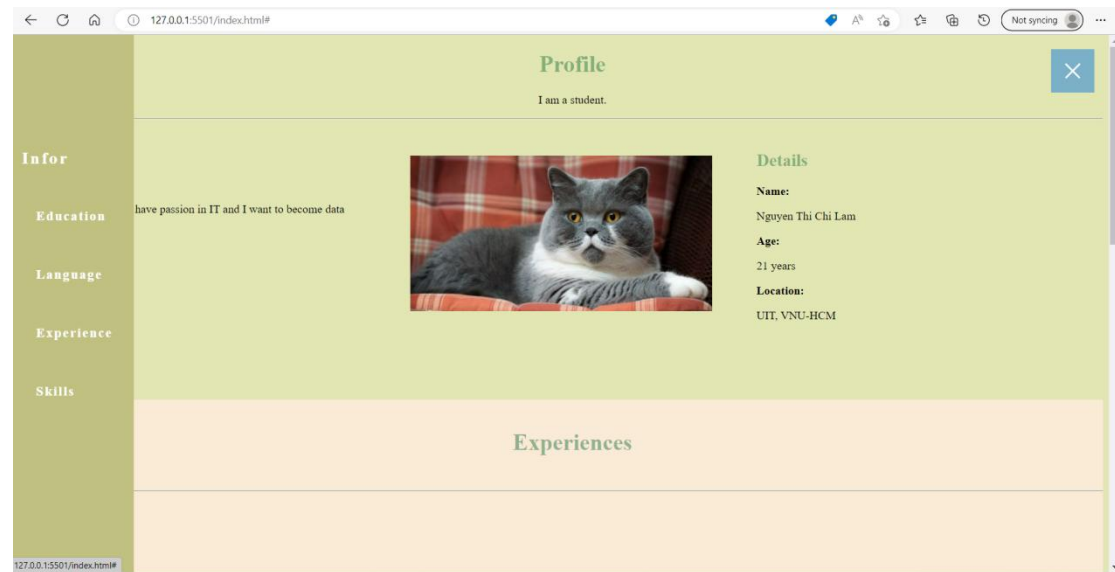
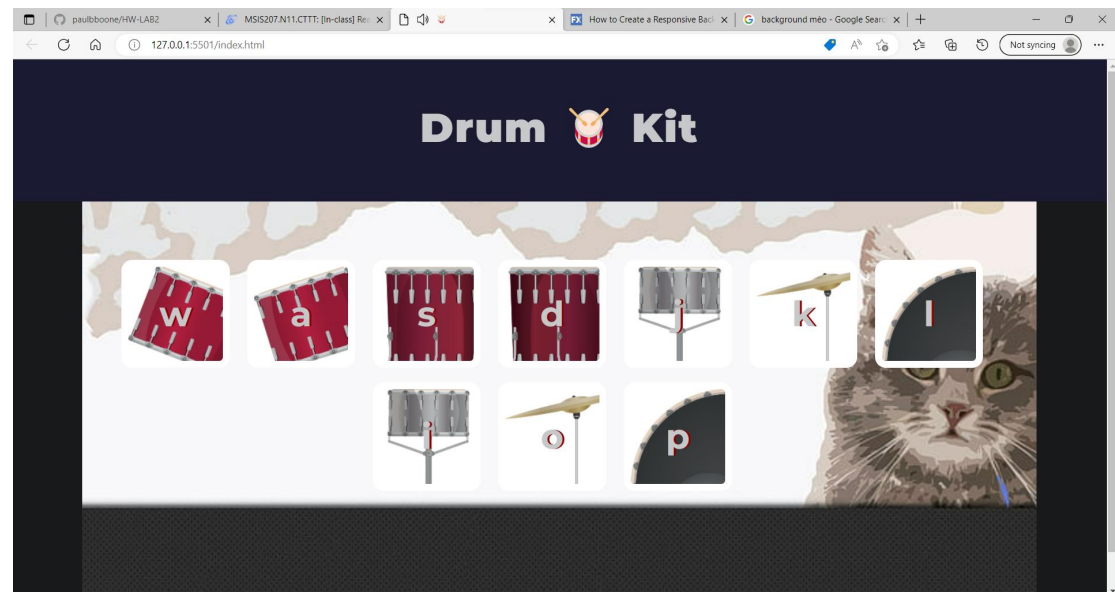


Link Git: [paulbboone/HW-LAB2 \(github.com\)](https://github.com/paulbboone/HW-LAB2)

HW1:



HW2:



HW3:

```

1  function MakeMultiFilter(array) {
2      var originalArray = array;
3      var currentArray = originalArray;
4      return function arrayFilterer1(pred, callback) {
5          if (typeof pred !== "function") return currentArray;
6          // Filter out things
7          currentArray = currentArray.filter(pred);
8          // If callback is a function, execute callback
9          if (typeof callback === "function")
10             callback.call(originalArray, currentArray);
11         return arrayFilterer1;
12     };
13 }
14
15 // Invoking MakeMultiFilter() with originalArray = [1, 2, 3] returns a
16 // function, saved in the variable arrayFilterer1, that can be used to
17 // repeatedly filter the input array
18 var arrayFilterer1 = MakeMultiFilter([1, 2, 3]);
19
20 // Call arrayFilterer1 (with a callback function) to filter out all the numbers
21 // not equal to 2.
22 arrayFilterer1(
23     function (elem) {
24         return elem !== 2; // check if element is not equal to 2
25     },
26     function (currentArray) {
27         // 'this' within the callback function should refer to originalArray which is [1, 2, 3]
28         console.log(this); // prints [1, 2, 3]
29         console.log(currentArray); // prints [1, 3]
30     }
31 );
32
33 // Call arrayFilterer1 (without a callback function) to filter out all the
34 // elements not equal to 3.
35 arrayFilterer1(function (elem) {
36     return elem !== 3; // check if element is not equal to 3
37 });
38
39 // Calling arrayFilterer1 with no filterCriteria should return the currentArray.
40 var currentArray = arrayFilterer1();
41 console.log("currentArray", currentArray); // prints [1] since we filtered out 2 and 3
42
43 // Since arrayFilterer returns itself, calls can be chained
44 function filterTwos(elem) {
45     return elem !== 2;
46 }
47 function filterThrees(elem) {
48     return elem !== 3;
49 }
50 var arrayFilterer2 = MakeMultiFilter([1, 2, 3]);
51 var currentArray2 = arrayFilterer2(filterTwos)(filterThrees());
52 console.log("currentArray2", currentArray2); // prints [1] since we filtered out 2 and 3
53
54 // Multiple active filters at the same time
55 var arrayFilterer3 = MakeMultiFilter([1, 2, 3]);
56 var arrayFilterer4 = MakeMultiFilter([4, 5, 6]);
57 console.log(arrayFilterer3(filterTwos)()); // prints [1, 3]
58 console.log(arrayFilterer4(filterThrees)()); // prints [4, 5, 6]

```