JS BASICS

```
WHAT YOU CAN USE
                                EXAMPLE
                                // Include external script should be in head tags with defer
                               keyword
External script
                                <head>
                                    <script src="main.js" defer></script>
                                </head>
                                /* This is
                                   a multiple line comment
Comment code
                                // This is a single line comment
                                // Write on console
                               console.log("PNC");
Write on console
                               console.table(array);
                                // Declare a constant
                                const RED = "RED"
Declare a variable or a constant
                                // Declare a variable
                                let count = 0
                                // 0 to 2
                                for (let i=0; i<=2; i++) {
                                    console.log(i);
                                }
Loop on a specific range
                                // 5 to 2
                                for (let i=5; i>=2; i--) {
                                      console.log(i);
                                }
                                // loop by index
                                array = ["a", "b", "c", "dd"]
                                for(index in array){
Loop on an array: by value or
                                      console.log(array[index]);
by index
                                }
                                // loop by value
                                for(value of array){
                                      console.log(value);
```

```
let x = 0;
                               while(x != 5){
Loop with while
                                   console.log(x);
                                   X++;
                               }
                               // if - else if - else
                               let a = 10;
                               if (a > 4){
                                console.log("yes");
                               } else if (a < 10) {
Conditions
                                 console.log("No");
                               } else if (a == 10) {
                                 console.log("Maybe");
                               } else {
                                 console.log("Okay");
                               }
                               // increment
                               x = 10;
                               X++;
                               // OR
                               x += 1
                               // module
Operations on numbers
                               console.log(10%3);
                               // power
                               console.log(4 ** 2);
                               // Substring
                               "abcd".substring(1);  // bcd
                               // Access to a character
                               "abcd" [2];
                                                            // c
                               // To upper / to lower case
                               "aBcD".toUpperCase();  // ABCD
"aBcD".toLowerCase();  // abcd
                               "aBcD".toLowerCase();
Operations on strings
                               // string to integer
                               let text = "33";
                               parseInt(text);
                                                           // 33
                               // integer to string
                              let number = 68;
                              number.toString(); // '68'
                               // == double equal
                               4 == 5
                                                           // false
Operations on Booleans
                               "4" == 4
                                                           // true
```

```
// === triple equal
                              4 === 5 // false
                              "4" === 4 // false
                              // logical operators
                              (true and 4>1) or false // true
                              // Create empty array
                              let array = [];
                              // Create array with values
                              let numbers = [1,2,3,4,5,6];
                              // Access using index
                              numbers[2];
                                                       // 3
                              // Insert value at the end
                              [1,2,3].push(20); // [1,2,3,20]
                              // Remove last index
                                                 // [1,2]
                               [1,2,3].pop();
Operations on arrays
                              // Remove a value at specific index
                              [1,2,3].splice(0, 1); // [2,3]
                              // Insert value at a specific index
                              [1,2,3].splice(1, 0, 99); // [1,99,2,3]
                              // Check if array including value
                               [1,2,3].includes(2); // true
                              // Get the index of the first occurrence of a value
                               [1,2,3,2,2].indexOf(2); // 1
                              // Create an object with properties
                               let student = {name: "him", age:20};
Operations on objects
                              // Access to an object property
                              student.name)
                              // Add a new property
                               student.address = "Cambodia"
                              // Declare a function with parameter
                              function average(a, b) {
                                 return (a + b) / 2;
                              }
Functions
                              // Declare a function - arrow style
                              const average = (a, b) \Rightarrow (a + b) / 2;
                              // call a function
                               average(10, 20);
```

RECOMMENDATIONS

DONT USE	WHY?	INSTEAD USE
var	var will declare the variable globally	Let or const
alert / confirm	Not user friendly	Use the console to log something