

Javascript

Comments

```
// this is a single line comment
```

```
/*  
*  
* This is a multi line comment  
*  
*/
```

Variable, arrays, objects

```
/*  
*  
* Javascript variables are not statically  
* typed, so you can declare a variable  
* without stating what type of data it is.  
*  
*/
```

```
var a = 25; // a number variable
```

```
var name = 'Renz' // a stringed variable
```

```
var aChar = '*'; // a character
```

```
var pie = 3.14; // float number
```

```
/*
```

```
*   Arrays consists of a set of data
```

```
*   or ordered lists of value
```

```
*/
```

```
var anArray = [25, 30, "Hello world"];
```

```
console.log(anArray[1]); // 30
```

```
/*
```

```
*
```

```
*   Objects are declared by a variable
```

```
*   and inside that variable has a number
```

```
*   of sets of variables
```

```
*
```

```
*/
```

```
var theObjects = {
```

```
    fname: "Renz",
```

```
    lname: "Pulvira",
```

```
    age: 18
```

```
}
```

```
// outputting a certain data in an object
```

```
console.log(theObjects.fname);
```

Expressions & Operators

You can do basic **arithmetic** in javascript such as using +,-,/,* in manipulating or calculating data.

```
// You can do basic arithmetic in javascript
// and can use variables to manipulate data

var a = 20;
var b = 30;
var result = a + b; // (a)20 + (b)30 = result
console.log(result); // result = 50

// Addition
var result = a + b; // result = 50
// Subtraction
var result = a - b; // result = -20
// Division
var result = a / b; // result = 1
// Multiplication
var result = a * b; // result = 600
// Modulo division
var result = a % b; // 0.66
```

Console commands

```
// outputting data to the console
console.log("Hello world"); // >Hello world

// An object
var object = {
  fname: "Renz",
  lname: "Pulvira"
};

// Outputting data in a data tree view
console.dir(object);

// Show an alert message to the webpage
alert("This is an alert message");
```

Loops

```
/* FOR LOOP
 *   A for loop needs 3 arguments
 *   initialization, condition, expression
 */
for(int x = 0; x < 5; x++){
  console.log(x);
}
```

```
}
```

```
/* WHILE LOOP
```

```
*   A while loop, loops through a block of code
```

```
*   and will not stop depending on the condition given.
```

```
*/
```

```
while(x != 25){
```

```
    console.log(x);
```

```
}
```

```
/* DO WHILE LOOP
```

```
*   A do while loop, has a little resemblance to the while
```

```
*   loop. do while loop runs the code atleast once. then
```

```
*   loops
```

```
*/
```

```
do {
```

```
    console.log(x);
```

```
} while(x != 25);
```

Functions

```
// A simple function with no arguments
```

```
function aFunction(){  
    console.log("Hello world");  
}
```

```
// A function with arguments
```

```
function aFunction(a, b){  
    var result = a + b;  
    console.log(result);  
}
```

```
// An anonymous function
```

```
/*  
 *   Anonymous functions consists  
 *   are activated/run automatically  
 *   when the page loads.  
 */
```

```
(function(){  
    console.log("hello world");  
});
```

```
/*  
 *  
 *   There are already  
 *   Premade functions  
 *   i.e,  
 */
```

```
function runThis(){
    console.log("HELLO");
}

/*
 *   This will run every
 *   3(3000) seconds
 *
 */
setInterval(runThis, 3000);
```

Setters and getters

```
/*
 *
 *   Setters and getters are very good practice
 *   Especially on OO programming. setters
 */

// get
var obj = {
    fname: "Renz",
    lname: "Pulvira",
    get fullName(){
        return this.fname + ' ' + this.lname;
    }
}
```

```
    }  
  }  
  
  console.log(obj.fullName); // Renz Pulvira  
  
  
  // set  
  var obj = {  
    age: null,  
    set herAge(age){  
      this.age = age;  
    }  
  }  
  
  obj.herAge = 25;  
  console.log(obj.age); // 25
```

Classes

Javascript is a **class-less** language. you can achieve to create classes by using functions or objects. classes in javascript are **Special functions**.

```
function student(firstname, lastname, theDom){  
  this.fname = firstname,  
  this.lname = lastname,
```



```
this.emailDom = theDom;
this.theEmail = emailAdd;
}

function emailAdd(){
    return this.fname + '.' + this.lname + this.emailDom;
}

var theStudent = new student('Renz', 'Pulvira', '@gmail.com');
alert(theStudent.theEmail());
```