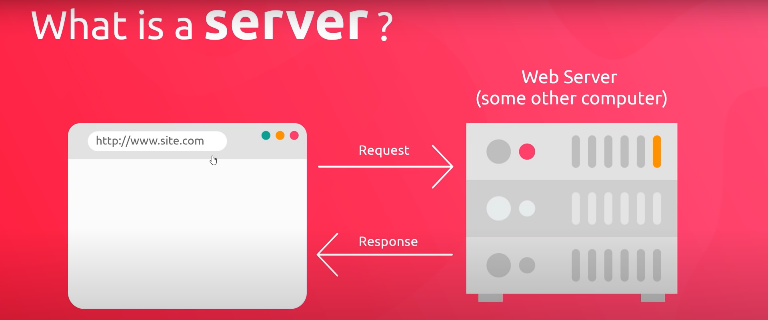
**JavaScript**

**Introduce**

Utilize in sites and servers

Utilize in make mobile apps, program robots and create a VR game.

What is server?

**Syntax Basics & Types**

alert ('to generate an alert');

Right way link to an external page in JavaScript!

<script src="sandbox.js" ></script> to link an external file

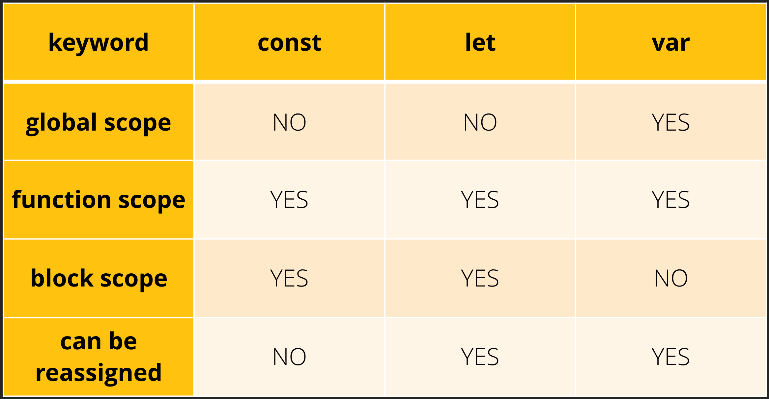
In js ; limited line of code

console.log (); stores information in the browser console

**Variables**:

data stored in the computer's memory.

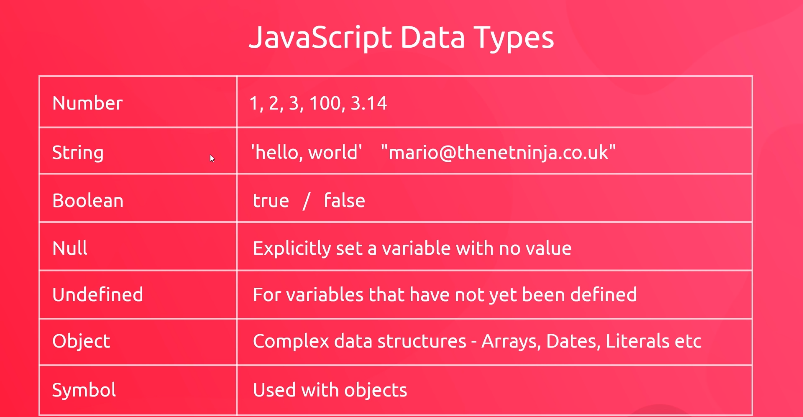
create variables let or var example: let age = 27;

const creates a variable whose value is fixed, that is, a read-only constant. This does not mean that the value is immutable, only that the constant variable cannot be changed or returned.

When we want to use two words in a variable, we use CamelCase example let myAge = 25;

To insert comments in JS, use // comment

For comments on multiple lines, use / \* at the beginning and \* /

**Data Types**

Concatenation junction of two words

**// getting individual characters**

console.log(fullName[3]);

**// string length**

console.log(fullName.length);

.toUpperCase to capitalize

.toLowerCase to tiny

(); indicates a method

**// Find the argument**

let index = email.indexOf('@');

console.log('index of the @ sign:', index);

lastIndexOf () **finds the last character**

**Slice()** method cuts a fraction of the string

**substr** works similar to the slice with the differences between: If start> stop, then substring will change these 2 arguments, If NaN any of the arguments is negative or is, it will be treated as if it were 0.

The function of the **replace('', '')** method is to replace one character with another

++ adds 1 more to the variable, the opposite also occurs when we use it - in the variable++ adds 1 more to the variable, the opposite also occurs when we use it - in the variable

NaN not a number

**Template String Way**

`` to create template strings without JavaScript

In the template we use ${} to add the variable

**Creating html templates**

Let html = ‘`;

**Object**

Creating an array: let x = [‘y’, ‘z’, ‘a’];

Where we can store several elements inside the array, its main utility and in the storage of data collections that are related to each other.

to replace a value: x[1] = ‘b’

it is not ideal to store two different types of data in the array with a string and a number

**Methods:**

**.join** all elements into a single string

**.indexof** provides indexes of that value

**.concat** concatenates arrays

**.push** sends a new value to the matrix alternating the original value

**.pop** destructive command that modifies the original array

**Symbol**

**Null & undefined**

null and undefined have the similarity that both represent the complete lack of value

The difference is that undefined is the absence of something in the variable. It indicates that a variable has never been defined or that someone has assigned undefined to clear a variable, whereas null is a null value assigned to an object.

You can use null to clear data stored on a form, for example, function removes data that has been stored.

**Boolean**

Booleans represent two special values; these are true or false.

**Methods can return Booleans**:

let result = email.includes('@');

console.log(age != 25);

console.log(name == 'camille');

In JavaScript lowercase letters are larger than uppercase letters.

**Type conversion**

It is not possible to convert letters into numbers **NaN**!

**String(y)** returns a string from a number variable y;

**String(false/true)** converting Booleans to Strings;

**Number("3.14")** returns 3.14 converting Strings to Numbers;

**Number(false)** returns 0 **Number(true)** returns 1 converting Booleans to Numbers;

**Punctuation:**

(.) class selector

(#) id