

### Language itself

Language for web 98% site use it create dynamic and interactive web content like applications and browsers

JS is an interpreted language, it's a dynamic typing language and a weakly typed language.

As JS use a form of automatic memory management it's garbage collected.

JS is both an oriented object language and a functional language, the particularity of it's OOP is in inheritance which is very complete and easy to use.

### Language environment

To execute JavaScript in a browser you have two options either put it inside a script element anywhere inside an HTML document, or put it inside an external JavaScript file (with a .js extension).

To run JS you only need a text editor and a web browser where you can execute it by implementing it in an html code, this means it's a multiplatform language which can be used on all the OS and does not have any impact on your local machine.

If you want to run it in a terminal you need node.js.

### Library

**jQuery** It makes things simpler for HTML document manipulation and traversal, animation, event handling, and Ajax.

**React.js** Just design a simple view for individual states in your app. Next, it will render and update the right component efficiently upon data changes.

**D3.js** Document manipulation based on data.

**Lodash** JS utility library that makes it easier to work with numbers, arrays, strings, objects, etc.

**Algolia Places** JavaScript library that provides an easy and distributed way of using address auto-completion on your site. It's a blazingly fast and wonderfully accurate tool that can help increase your site user experience.

### To go further

The philosophy behind the creation of JS is simplicity, composability, uniformity as the only programming language native to the web browser.

JS is used for :

- Adding interactive behavior to web pages
- Creating web and mobile apps
- Building web servers and developing server applications
- Game development (in browser)

### Syntax and data structures

```
console.log()
```

```
let a = b
```

```
const a = b
```

```
a + b
```

```
`${a} text ${b}`
```

```
if (condition){Do something; else if ( ){}; else {
for (var i = 0; i <= 11; i++){ Do something; }
```

```
while (condition){ Do something; }
```

```
let arr = []
```

```
arr.push()
```

```
const readline = require('readline').createInterface({
  input: process.stdin,
  output: process.stdout})
```

```
class ClassName { constructor( var ){this.var;} MethodName{
  this.var = value;
}}
```

### Pour plus

