

# How to program in Javascript

The best style

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### **JSDOC**

Is an API documentation generator for JavaScript.

The JSDoc tool will scan your source code and generate an HTML documentation website for you.



### How to use it?



### To install:

sudo apt install jsdoc-toolkit

### To run it:

jsdoc <filename>.js

If you have your code in other directory:

jsdoc -d=<directoryname> <filename>.js

# Featured options.

### -c <value>, --configure <value>

The path to a JSDoc configuration file. Defaults to conf.json or conf.json.EXAMPLE in the directory where JSDoc is installed.

### -d <value>, --destination <value>

The path to the output folder for the generated documentation. For JSDoc's built-in Haruki template, use console to dump data to the console. Defaults to ./out.

### --match <value>

Only run tests whose names contain value.

### u <value>, --tutorials <value>

Directory in which JSDoc should search for tutorials. If omitted, no tutorial pages will be generated. See the tutorial instructions for more information.

### --verbose

Log detailed information to the console as JSDoc runs.

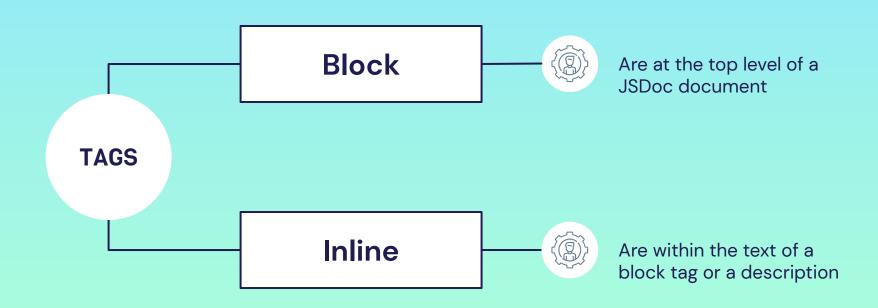
Defaults to false.

### -t <value>, --template <value>

The path to the template to use for generating output. Defaults to templates/default, JSDoc's built-in default template.

# Tags Block vs Inline

Both types are invoked using @tag



# Tags that we will use the most in practices

- <u>@author</u>
- <u>@class</u>
- @classdesc
- @constant
- @constructs
- @default

- <u>@example</u>
- <u>@exports</u>
- <u>@name</u>
- <u>@param</u>
- <u>@private</u>
- <u>@protected</u>

- @public
- <u>@requires</u>
- @returns
- <u>@see</u>
- @summary
- <u>@tutorial</u>



# **Coding Style**

Our code must be as clean and easy to read as possible.



### **Curly Braces**

If (number < 0) alert ('Power \${number} is not supported');

Don't just use one letter to declare variables.

let n = 'Alejandro';

Use a meaningful name for the variable.

let namePerson = 'Nerea';



### Line Length

To have a good practice we will avoid having a long line of code.

```
if (id === 123 && moonPhase === 'Waning Gibbous' && zodiacSign === 'Libra') {
   letTheSorceseyBegin();
}
```





```
if (
id === 123 &&
moonPhase === 'Waning Gibbous' &&
zodiacSign === 'Libra'
} {
letTheSorceseyBegin();
}
```

### Indents

There are two types of indents:

Horizontal indents: 2 spaces.

```
function pow(number, power) {
  let result = 1;

for(let i = 0; i < power; i++) {
  result *= number;
  }
  return result;
}</pre>
```

 Vertical indents: empty lines splitting code into logical blocks.

### **Semicolons**

A semicolon should be present after statement, even if it could possibly be skipped.

### **Nesting Levels**

Try to avoid nesting code too many levels deep.

### **Function Placement**

If you are writing several "helper" functions and the code that uses them, there are three ways to organize the function:

- 1. Declarate the functions above the code that uses them.
- 2. Code first, then functions.
- 3. Mixed: a function is declared where it's first used.



## **ESLint**

Is a linter that examines JavaScript, following standards customizable by the programmer. It is fully configurable and you can indicate which rules you want to use and which you prefer to ignore.



# Install and run



Install

npm install --save-dev eslint



npx eslint

We must have the latest version of NPM

# Setting

For the initial configuration of the ESLint we will run:

# npm eslint --int

This will start a wizard to configure ESLint in our project.

A few questions for configurations will be displayed.



1. To check syntax only 2. To check syntax and find problems 3. To check syntax, find problems and enforce code style	01	Where does your code run?  1. Browser 2. Node 3. Both
What type of modules does your project use?  1. JavaScript modules (import / export) 2. CommonJS (require/exports)	02	What format do you want your config file to be in?  JavaScript, YAML and JSON
Which framework does your project use?  1. React 2. Vue.js 3. None of these	03	Would you like to instal them now with npm?  Automatically install the necessary NPM packages

# Use a popular style guide

Promoters	GitHub	Package name
<u>Airbnb</u>	<u>@airbnb/javascript</u>	eslint-config-airbnb
<u>StardJS</u>	<u>@standard/standard</u>	eslint-config-standard
<u>Google</u>	@google/eslint-config-google	eslint-config-google

# **Answer questions about style**

# What style of indentation do you use?

Tabulators or spaces. rules.ident

# What quotes do you use for strings?

Double quotes or single quotes for strings rules.quotes.



# Inspect your JavaScript file(s)



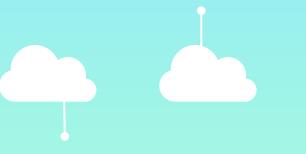
This option inspects all our JavaScript files in our project to determine which style guide should be used.

# **Configuration format**

What format do you want your config file to be in?

### 2. YAML

Will generate a configuration file .estlintrc.taml or eslintrc.yml



### 1. JavaScript

Will generate a configuration file .eslintrc.js

### 3. JSON

It will generate a configuration file .eslintrc.json.
This format does not support comments but with
the ESLint tool it will allow us to support comments
of the type / \* \* /

It's free to code with style



# **THANKS!**



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