How to program in Javascript

The best style

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Coding Style

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

Good practices

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’;

Good practices

Line Length

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

```
1  if (id === 123 && moonPhase === 'Waning Gibbous' && zodiacSign === 'Libra') {
2    letTheSorceseyBegin();
3  }
```

Do **not** do this!

Do this instead!

```
1  if (
2    id === 123 &&
3    moonPhase === 'Waning Gibbous' &&
4    zodiacSign === 'Libra'
5  ) {
6    letTheSorceseyBegin();
7  }
```

Good practices

Indents

There are two types of indents:

- Horizontal indents: 2 or 4 spaces.

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

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

- Vertical indents: empty lines splitting code into logical blocks.

Good practices

Semicolons

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

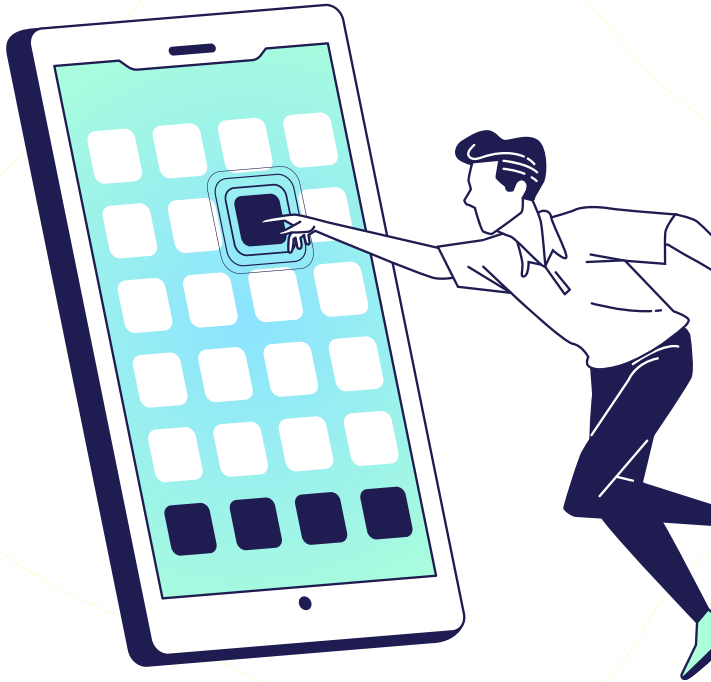
Nesting Levels

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.



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:

npm install --save-dev jsdoc

To run it:

npx jsdoc <filename>.js

If you have your code in other directory:

npx 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

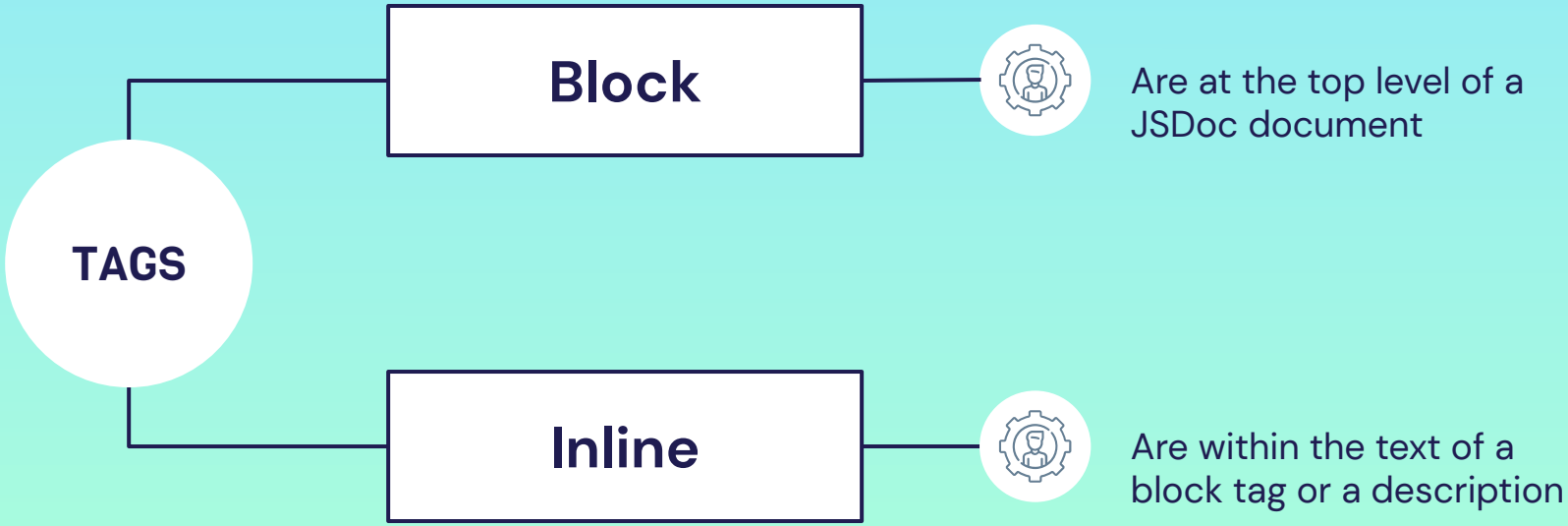
Log detailed information to the console as JSDoc runs. Defaults to false.

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

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

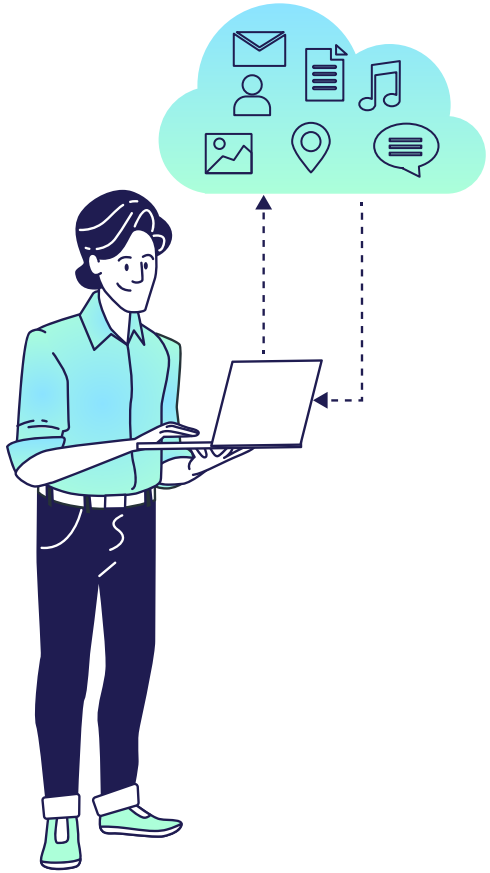
Tags Block vs Inline

Both types are invoked using @tag



Tags that we will use the most in practices

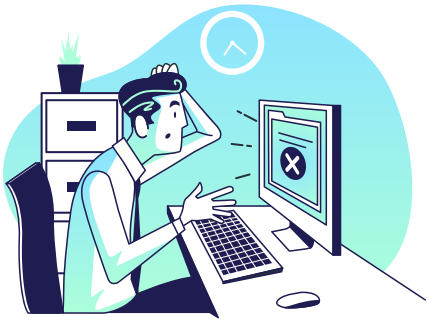
- @author
- @class
- @classdesc
- @constant
- @constructs
- @default
- @example
- @exports
- @name
- @param
- @private
- @protected
- @public
- @requires
- @returns
- @see
- @summary
- @tutorial



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

Run

npx eslint

We must have the latest version of NPM

Setting

For the initial configuration of the ESLint we will run:

npx eslint --init

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

A few questions for configurations will be displayed.

01

How would you like to use ESLint?

1. To check syntax only
2. To check syntax and find problems
3. To check syntax, find problems and enforce code style

02

What type of modules does your project use?

1. JavaScript modules (import / export)
2. CommonJS (require/exports)

03

Which framework does your project use?

1. React
2. Vue.js
3. None of these

04

Where does your code run?

1. Browser
2. Node
3. Both

05

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

JavaScript, YAML and JSON

06

Would you like to install them now with npm?

Automatically install the necessary NPM packages

Use a popular style guide

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

Answer questions about style

What style of indentation do you use?

Tabulators or spaces.
rules.indent

What quotes do you use for strings?

Double quotes or single quotes for strings
rules.quotes.

What line endings do you use?

Windows or Linux
rule.linebreak-style

Do you require semicolons?

Use semicolon or not use it.
rule.semi

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.yaml 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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