**Coding Conventions & Code Style Guidelines**

Coding conventions or coding style guidelines are self-imposed rules for programming. They cover:

* Naming and declaration rules for variables and functions.
* Rules for the use of white space, indentation, and comments.
* Programming practices and principles.
* Things to avoid and things to be encouraged.

Coding conventions can be documented rules followed by a team of developers, a company or just an individual. It’s a good idea to follow guidelines as it:

* Makes it easier to maintain code.
* Improves code readability.
* Makes you look professional.

Below are a few examples of some basic guidelines you’d see with **JavaScript**

|  |  |
| --- | --- |
| **Avoid** | **Encourage** |
| // Avoid == when comparing  if ( num == 5 ) { … } | // Use equality === instead  if ( num === 5 ) { … } |
| // Avoid complicated string concat  const fullName = firstName + “ “ + lastName; | // Use template literals when concatenating strings  const fullName = `${firstName} {lastName}`; |
| // Avoid String() constructor when making strings  const name = String( “James” ) | // Better and easier to create string literal  const name = “James” |

**Style Guidelines and Coding Conventions to Follow**

Some guidelines have become popular and can be recommended as a good standard to follow in the particular language you use.

**The MDN -JavaScript- Guidelines (Basic)**

<https://developer.mozilla.org/en-US/docs/MDN/Guidelines/Code_guidelines/JavaScript>

**Airbnb -JavaScript- Style Guide (Advanced)**

<https://github.com/airbnb/javascript>

**PEP 8 -Python- Style Guidelines**

<https://www.python.org/dev/peps/pep-0008/>

* String Quotes and Whitespace <https://www.python.org/dev/peps/pep-0008/#string-quotes>
* Imports <https://www.python.org/dev/peps/pep-0008/#imports>
* Names to avoid <https://www.python.org/dev/peps/pep-0008/#names-to-avoid>
* Comments <https://www.python.org/dev/peps/pep-0008/#comments>

How to comment functions describing what the function does and returns as well as what each of the parameters are.

Text

Description automatically generated

**Code Linting**

**Linting** is the process of checking the source code for Programmatic as well as Stylistic errors. This is most helpful in identifying some common and uncommon mistakes that are made during coding. Other things it could show include:

- formatting discrepancy

- non-adherence to coding standards and conventions

- pinpointing possible logical errors in your program

A Lint or a Linter is a program that supports linting (verifying code quality). They are available for most languages like JavaScript, CSS, HTML, Python. Some Linters allow you to add optional rules like follow guidelines that Google or Airbnb follow.

**Python** <https://www.pylint.org/>

**JavaScript**  <https://jshint.com/>