# JavaScript Coding Standards

These are some coding standards when writing JavaScript. A program can be used and handled by many people, and by keeping these standards it can help improve readability for whoever may come to modify or fix your code in the future.

## JavaScript Files

All JavaScript should be stored in .js files and linked to in the html. It should not be embedded in the html unless the code is specific to a single session.

## Whitespace

* A keyword followed by left parenthesis (“(“) should be separated by a space “while (true) {“
* A function and its invoking should not be separated by a space “function(blah)”
* The word function is always followed with one space.
* No space should separate a unary operator and its operand except when the operator is a word. (unary -> “i++”)
* All binary operators should be separated from their operands by a space on each side except period and( left parenthesis and [ left bracket.
* Every , comma should be followed by a space or a line break.
* Each ; semicolon at the end of a statement should be followed with a line break.
* Each ; semicolon in the control part of a for statement should be followed with a space.
* Every statement begins aligned with current indentation
* The indentation increases by 4 spaces when the last token on the previous line is {, [, (. The matching closing token will be the first token on a line, restoring the previous indentation.

## Comments

Be generous with comments, these can help in the future for either you or anyone else looking at the code. Only make comments that are useful, focus on what is not immediately obvious, there’s no need to put comments in place where it is obvious what is going on.

## Variable Declarations

* All variables should be declared before being used, this makes the program easier to read.
* Implied global variables should never be used, and the use of global variables should be minimized.
* Define all variables at the top of the function.

## Function Declarations

* There should be no space between the name of a function and the ( left parenthesis of its parameter list.
* There should be one space between the ) right parenthesis and the { left curly brace that begins the statement body.
* The body itself is indented four spaces.
* The } right curly brace is aligned with the line containing the beginning of the declaration of the function.

## Names

* Made from upper case letters, lower case letters, digits 0-9, underscore (“\_”)
* Do not use underscore (‘\_’) as the first or last character of a name.
* Variables and functions use camelCase
* Constructor functions (Classes) begin with a capital letter
* Global variables should be in all caps

## Statements

* Put a ; semicolon at the end of every simple statement.

**IF statements**

if (condition) {

statements

} else if (condition) {

statements

} else {

statements

}

**FOR statement**

for (initialization; condition; update) {

statements

}

**WHILE statement**

while (condition) {

statements

}