Coding Guidelines

for

Software Development

Version 0.1 (in progress)

Includes: C and C++

Last modified by David Dumont

"The goal of this guideline is to improve the reliability and comprehension of all software development"

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# Names

## Make name fit

Most of the comprehension of the code comes from this part. The name of a variable, a function or class MUST be specific.

Example:

"int iterationCount **=** 0**;"**

## Function names

The first character of a function name MUST be a lowercase letter.

Example:

"void track**()"**

## Variable names

The first character of a variable name MUST be a lowercase letter. Every word within the variable name MUST starts by a uppercase letter.

Example:

exampleOfAVariableName

### Member variable names

The first character MUST be an underscore "\_" and the second character a lowercase letter. Every word within the variable name MUST starts by a uppercase letter.

Example:

"int \_iterativeCount**;"**

# Formatting

## Line length

A line SHOULD not exceed 100 characters.

# Documentation

## Doxygen

MOST of the comments MUST respect doxygen standard format. The exception of this rule is the TODO comment.

Example of a doxygen comment :

see <http://www.stack.nl/~dimitri/doxygen/manual/docblocks.html>

Example of a TODO comment : // TODO Implement the "make coffee" module

## Explanation comments

Explanation comments SHOULD only be used when really needed. You SHOULD avoid explanation comments by using accurate variable names.

# Miscellaneous

## Use #ifndef macro in header files

For avoiding infinite loops in the link process, use #ifndef macro in header files.

Example :

#ifndef NAME\_OF\_FILE\_H

#define NAME\_OF\_FILE\_H

// Code ...

#endif