C++ guideline: conventions

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1 Naming stuff

1.1 Generic guideline

1. Use explicit names that express ideas, concepts.
   Example: phone_book VS number_vector

2. Prefer underscore to camel case for readability.
   Example: number_of_element VS numberOfElement
   Comment: this rule is followed by the Standard Library.

3. In general, avoid capital letters.
   Comment: this rule is followed by the Standard Library.

1.2 Specific guidelines

1.2.1 Variables

1. Do not embed the type in the name because it lowers the abstraction level.
   Examples: do not use something like `char* pc_buffer` or `int i_number`.
   Remark: embedding the type in the variable name is a nightmare of maintenance
   and consistency: suppose you decide to change your `int` to a `double`, how many
   names will you have to change to maintain the consistency?

1.2.2 User-defined types (classes)

1. Capitalize names for user-defined types.
   Examples: Widget, My_Super_Class.

1.2.3 Macros

1. Use all-capital names for macros [1].

Bibliography

[1] Bjarne Stroustrup. *The C++ Programming Language*. 4th ed. Addison-Wesley, 2013. ISBN: 978-0-321-56384-2.