

Custom PSG for C++

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1 Variable/Function/Class/Struct Declaration

Variable declarations are made in the following format `type nameOfVariable;`. If there are multiple variables of the same type each one will be declared on separate lines. If the name of the variable contains multiple words, first one will begin with lowercase letter and the other with uppercase.

Functions will be declared in the ordinary format, but there should be space between brackets and name of function. The restriction for its name is same as for variables (This is done to distinguish the names of vars and funcs from classes and structs). E.g. `type nameOfFunc (type1 arg1, type2 arg2, ...)`

Structures :

```
struct NameOfStruct {  
    ...  
};
```

Classes :

```
class ClassName {  
    ...  
} objectName;
```

2 If statement and Loops

In general control statements are written in the form :

```
statement (expression){  
    some code  
}
```

If there is an else after an if it will be written on same line as closing brace of the if statement.

While and do loops are written as control statements. For loops have the following format :

```
for (type iter = value; condition; expressions)
```

3 Expressions

All binary arithmetic, comparison, and assignment operators other than `++` and `--` must be spaced from their operands by a single space. The operands, however, do not have to be spaced from parentheses. Unary operators, such as `!` or `++`, do not have to be spaced.

4 Comments

The comments is preferable to be of the forma `/*...*/`(because they look better), but for inline purpose `//` is accepted. If you want to comment a block of code the comment should be placed above the first line of the block, otherwise if for a line the comment comes after the line of code.

5 Includes and macros

First in a program are written includes and then macros. There is an exception if the macro is of type `#if` or `#ifndef`, then it is written first. The names of macro constants should be capitalized. Of course for macro functions the rule from above(from declaration of functions) applies.

6 Block spacing

Within a function/class the code should be organized in blocks. The Loops and Control Statements should be separated with empty lines. Also declared variables can be in the same block with the statement where they are used.