

C++ Coding Standard for the Black Box Optimization Competition

Topic	Coding Standard
Variables	<p>Variables should always be lowercase and, if necessary, use underscores. They should also be as descriptive as possible.</p> <p>Examples</p> <pre>double kse_eval string result int counter</pre> <p>Code without standard</p> <pre>double kseEval string Result int iCounter</pre>
Functions	<p>Functions, like variables, should always be lowercase and, if necessary, use underscores. They should also be as descriptive as possible. They must, as well, have a header comment, and have comments on the most important parts. The first brace should be on the same line as the function declaration. Critical code inside functions must be commented.</p> <p>Examples</p> <pre>/* selection * * This function takes as a parameter a *vector of individuals, and based on their *respective fitness, * proceeds to select the *best ones. This function returns the best individuals as a vector of iterators. * * parameters: vector<individual> * return: vector<vector<individual> :: iterator> */ vector<vector<individual> :: iterator> selection(vector<individual> population){ [...] }</pre> <p>Code without standard</p> <pre>vector<vector<individual> :: iterator> selection(vector<individual> population) { [...] }</pre>

Operators	<p>When dealing with operators, there must always be a blank space between its arguments and itself.</p> <hr/> <p>Examples</p> <pre>int result = 5 + 3 double var_3 = var_1 * var_2</pre> <hr/> <p>Code without standard</p> <pre>int result=5/3 int modulo=var_1%var_2</pre>
Loops	<p>When using a for function, if applicable, use continues instead of an if else function.</p> <hr/> <p>Examples</p> <pre>do{ if (var){ [...] continue; } [...]; } while(true);</pre> <hr/> <p>Code without standard</p> <pre>do{ if (var){ [...] continue; } else{ [...]; } } while(true);</pre>