

VG101 — Introduction to Computer and Programming

Code quality requirements

Manuel — UM-JI (Summer 2018)

- Fill in this form before every assignment and project submission
- Submissions missing this form will be disregarded
- If any of the rules is broken a –25% penalty will be applied
- This form is not allowed during the exams

Rules common to all languages

Any code that is not compiling (C/C++) or returning an error (MATLAB) will not be graded.

- Source code quality:
 - ☐ The code is indented
 - ☐ The variable names are meaningful
 - ☐ The code is split and organised into functions
 - ☐ All the opened files have been closed
- Documentation quality:
 - ☐ The code shows simple comments explaining the main steps
 - ☐ A README file documenting the implementation choices is provided
 - ☐ The README file is in pure text format
 - ☐ The README file includes the names and student IDs of the all the contributors
 - ☐ The README file explains what inputs are expected and provides an example
 - ☐ The README file features a “Bugs section” where known issues that could not be solved on time are listed

C and C++ specific rules

- Variables:
 - ☐ No global variable is used
 - ☐ Any dynamically allocated memory has been released
- Functions and keywords not to use:
 - ☐ `goto` // not a good practice
 - ☐ `system` // not a good practice
 - ☐ `fflush(stdin)` // not in the C standard, meaningless and leading to unexpected behaviors
 - ☐ `friend` // C++ only, not a good practice
- Code structure:
 - ☐ The `main` function is only used to dispatch the work to other functions
 - ☐ No function is coded in a header file
 - ☐ All the headers files feature “header guards”
 - ☐ Unless specified otherwise, the provided template is used to organise the code