

## Milestone #3 Self Evaluation

Name: Cole Cathcart

UCID: 30043556

Email: [cole.cathcart1@ucalgary.ca](mailto:cole.cathcart1@ucalgary.ca)

Gitlab repo: <https://gitlab.cpsc.ucalgary.ca/cole.cathcart1/cpsc411-term-project.git>

One area I'd like feedback from the TA:

- I was unsure how to handle functions in the symbol table. I considered simply having a list of all functions with their parameters within my semantic-checking function, but I thought it would be best to include them in the symbol table. My current implementation is to have all symbols in the table contain an optionally-empty vector of formal signatures, that way functions can simply be added as symbols and their formals are easily looked-up. However I realise this goes against the prof's suggestion of having symbols be as simple as possible. Is there a better way to handle functions?

Self Assessment: **4/8**. I gave myself this mark because I could not finish my semantic checker in time for the deadline. A major reason for this was that I did not finish my parser in time for milestone 2 and so the work compounded. Currently I would say it is about 80% implemented, however there are some bugs with my symbol table that still need to be sorted out. I am confident that the remaining cases will be quick to implement once the bugs are ironed out. I will break this mark down using the dimensions as outlined in the milestone 1 specification:

1.) Tool (milestone) properties: **0/2**

- My code does not crash on any inputs, however it does not produce the correct output on every test case
- Evidence: Please see the 'run.output' file located in my gitlab repository for errors, warnings, ast outputs etc. Please see the README.md file (on the repo) for instructions on how to run the code to verify there are no crashes

2.) Development practices: **1/2**

- Committing regularly to the repo: I believe I did this well for the most part, although on some occasions I probably waited too long and in-between commits and had commits that were too large as a result
- Commit messages: I believe my commit messages were sufficiently descriptive
- Evidence: Please see my repo's commit history

3.) Code qualities: **1/2**

- My code is fast and easy to build and run
- My code is fully documented and I believe my documentations are good overall
- I believe my code follows good coding practices and standard c++ conventions
- I have not fully completed my semantic checker as per the milestone 2 requirements
- Evidence: Please see the \*.cpp and \*.hpp files for evidence of good coding practices. For a fresh build output please see the beginning of the 'run.output' file in my repo

4.) Relationship with the environment: **2/2**

- Errors and warnings printed to stderr, regular output printed to stdout, exit codes set to non-zero numbers for error exits
- No extraneous garbage in outputs
- I believe my code is easy to run, and my README.md is well documented with clear instructions
- Evidence: Please see the outputs in the 'run.output' file in my repo, and the 'README.md' file in my repo