

CS 161A/B Programming Assignment and Exam (C++) Rubric

[C++ Style Guide](#)

**** Submissions not per assignment requirements will not be accepted. ****

	Exceeds	Meets	Approaching	Not Yet	No Evidence
Syntax and Logic Ability to understand and follow the rules of the programming language.	4 points Program has no syntax errors, and works for all test data. All required coding constructs specified in the assignment document are present and used correctly.	3 points Program works for at least 80% of test data.	2 points Program works for at least 20% of test data.	1 point Program does not work for any test data, or does not compile.	0 points No submission
Coding Constructs¹ Ability to include required coding constructs as specified in the assignment document.	4 points All required coding constructs specified in the assignment document are present and used correctly.	3 points All required coding constructs specified in the assignment document are present - some may be used incorrectly.	2 points All required coding constructs specified in the assignment document are present but may be used incorrectly causing errors in output.	1 point Missing required coding constructs specified in the assignment document.	0 points No submission.
Code Style Ability to format and document code for readability.	1 point All instructor defined style guidelines are followed.	.75 points Most of the instructor defined style guidelines are followed.	.5 points Some of the instructor defined style guidelines are followed.	.25 points None of the instructor defined style guidelines are followed.	0 points No submission.

User Interface (UI) Ability to interact meaningfully with the user including prompts for input and errors and appropriate messages for output.	1 point User interaction is clearly designed according to assignment requirements and UI style guidelines.	.75 points User interaction is unclear or ambiguous.	.5 points User interaction is missing input prompts or output labels according to UI style guidelines.	.25 points No user interaction but the program runs.	0 points No submission.
Algorithmic Design Ability to demonstrate algorithm planning.	2 points Algorithms are systematically planned and written and includes items a to d in the Algorithmic Design Document Requirements section of the Assignment document.	1.5 points Algorithms are systematically planned and written and may be missing 1 of the items a to d in the Algorithmic Design Document Requirements section of the Assignment document.	1 point Partial algorithm submitted and may be missing 2 of the items a to d in the Algorithmic Design Document Requirements section of the Assignment document.	.5 points Partial algorithm submitted and may be missing more than 2 of the items a to d in the Algorithmic Design Document Requirements section of the Assignment document.	0 points No Submission or No evidence of algorithmic planning.

¹**Coding Constructs** as specified in the assignment document, including conditionals, loops, lists, and functions (if applicable).