CMP 2067M, Advanced Software Development, Assessment 2

Learning Outcome	Criterion	Pass	2:2	2:1	1st
[LO3] Use advanced Object Oriented principles and programming techniques in software development	Quality of technical report: Introduction, Methods (Design – Pseudo code), Results, Extensions (20%)	Introduction is weak. No Object Oriented principles have been employed in the design. Pseudo code is ill-defined. Results are presented without making sense. An evaluation is not performed or does not address the efficacy of the algorithm.	Introduction provides a good overview. Basic Object Oriented design principles have been employed and analysed. Pseudo code is representative of the program. Results are presented but not appropriately. An evaluation of the results is presented. For the design, features such as pseudocode, flowcharts etc will be expected here.	Introduction provides an accurate overview. Advanced Object Oriented design principles have been employed and analysed. Pseudo code is well-formed. Results clearly illustrating the expected outputs are appropriately presented and evaluated. Well written and presented pseudocode and flowcharts which illustrate how the various parts of the algorithm work are expected here. More OO related design, such as a UML representation of the application may also be presented.	Meeting all previous requirements AND including A. a lucid evaluation of the algorithm B. a thorough analysis and discussion of the non-trivial extensions implemented in the application. The grade awarded in this section will reflect how well the discussion and analysis of the application and its extension(s) are made.
[LO4] Apply advanced logical and mathematical techniques in software development and programming.	Design, implementation and demonstration of an algorithm using advanced Object Oriented techniques in C++ (80%)	A satisfactory attempt to solve the task has been made but the program executes with unexpected or incorrect results.	The program produces the expected results for the task, but limited Object Oriented principles have been employed. C++ principles such as .h and .cpp files, well constructed classes, functions, member variables and a good use of commenting will be expected here.	The program produces the expected results for the task, and advanced Object Oriented principles have been successfully employed. For example, the use of inheritance, templates or polymorphism will be expected here.	Meeting all previous requirements AND including an implementation of a non-trivial extension. The extension should produce the expected results. The grade awarded in this section will reflect how well the extension has been applied.