CMP1127M – Programming and Data Structures - Assessment 2

Learning Outcome	Criterion	Pass	2:2	2:1	1st
[LO2] apply appropriate data structures in common programming solutions;	The data structures used in the application (20%)	Basic data structures are used in the application. For example, an array is used to hold the 'Modules'.	Multiple data structures are used in the code. There may also be evidence of other collection containers, for example lists or queues.	Multiple data structures or containers such as arrays, lists and queues are used in the code.	Data structures or containers such as arrays, lists and queues are used effectively in the code. Consideration has been made to their application and use. Further credit may be awarded for extra features as well as their effectiveness, such as sorting or a search function for example.
[LO3] implement programs consisting of multiple procedures; .	The application implementation (40%)	A simple GUI implementation or a console implementation is presented. The application works, however, features may not be complete, be missing, or may not be implemented visually well. GUI: The code behind the forms is satisfactory, but could be improved, for example, by further addressing commenting, exception handling and/or identifier naming. Console: The console application contains the essential requirements.	A GUI application is presented which displays all of the basic features. There may be some issue with the visual layout of the components on the form, for example, they may not completely conform to accepted layout conventions. The code behind the forms displays effective commenting, identifier naming and some exception handling. Multiple methods and classes may be linked together.	A GUI application is presented which displays all of the required features. The visual layout of the components on the form are good and largely conform to accepted layout conventions. The code behind the forms displays effective commenting, identifier naming and exception handling. Multiple methods and classes are linked together. There may be multiple forms in the application.	A GUI application is presented which displays all of the required features and may include additional features also. The visual layout of the components on the form are excellent and conform to accepted layout conventions. Additional credit will be given here for further features which are added effectively. The code behind the forms is well written and displays effective commenting, identifier naming and exception handling. Multiple methods and classes are linked together well. Multiple forms, if evident, are well implemented. Further credit may be given here for exceptional coding.

	The application design (20%)	A basic class diagram or other UML features for the application are presented. A brief written explanation illustrates how the application was developed. This addresses some of the features of the GUI/console application. The formatting is satisfactory but could be improved.	A range of UML design features for the GUI application are presented. The written description addresses how the GUI application operates.	A set of UML designs, as specified in the brief, for the GUI application are presented which use a common standard to describe the various classes developed and showing how they are implemented. The written description is broad in its reporting of how the GUI application operates. Diagrams may be used to supplement the text. A good use of references is evident.	A comprehensive set of UML designs for the GUI application are presented which use a common standard to describe the various classes used and how they communicate with each other. They are exhaustive in their description of the classes used in the GUI application. The written description is comprehensive in its reporting of how the GUI application operates. Diagrams are be used to complement the text, and these are effective. An excellent use of references is used to support the documentation.
[LO4] apply simple testing techniques.	The testing of the application (20%)	A basic testing strategy is evident. Black box and white box testing is described briefly.	Evidence of testing and results are provided. The strategy describes how the method is used, but the tests described may not fully test the application.	A methodical approach to developing the test plans and presentation of results is evident. The required tests are conducted and their results are presented.	Methodical approach to developing excellent test plans and presentation of results. A comprehensive range of tests are adopted and justified by reference to theory referred to in lectures. Further credit may be given for the completeness of the tests and their reporting.
Weighting	Weighting is indicated on individual criteria.				