

Lab 2: Simple Student Management System

This lab is using basic C++ programming language to create a simple student management system which practices you using simple class definition, array data structure, branch and loop statements and user input and output in C++.

Your system should have 4 basic features:

- (a) Add a student;
- (b) Delete a student;
- (c) List all students;
- (d) Quit

1. Your program should have a menu like above (you can design the menu using ASCII art). It receives **user-input from keyboard** to do difference operations. Each operation except “Quit” finished your program should show the menu again waiting user to do further things.

2. In your program, **you are required to create a class named “Student”** which has “ID”, “name” and another your own designed property.

3. Your class definition should follow best practice like all properties should be declared as private members; getters and setters; overloaded constructor.

4. You are free to choose **using basic array data structure or other C++ container like “vector”** to implement this assignment.

Grading Rubric:

- 1. A “Student” class definition with at least 3 properties: 10 pts.
- 2. Class definition in best practice: 10 pts.
- 3. Use array or other container data structure: 10 pts.
- 4. Add a student feature: 10 pts.
- 5. Delete a student feature: 10 pts.
- 6. List all students feature: 10 pts.
- 7. Use branch and loop statements to create a menu to control the program with user I/O: 20 pts.
- 8. No compiling errors: 10 pts.
- 9. Good Submission: 10 pts.