

# STIA1014 Project

## (Student Info System)

Write a Java application that represents a simple Student Information System. This application provides a GUI that allows a user to select and perform the following operations:

- Enter (add) student data and store in a list for Student data. The data for each student are name, matric no., program, total course work mark (full mark 100), final exam mark (full mark 100), and grade. Program can be only one of the following:
  - o B.Sc.Math,
  - o B.Sc.Multimedia.
  - o B.Sc. Ind.Grade is not entered by the user but is calculated after the user has input the total course work mark and final exam mark. Grade is calculated based on the total mark (course work mark \* 60% + final exam mark \* 40%) and assigned according to the UUM grading scheme (e.g. if total mark is  $\geq 90$  then grade is A+ etc.).
- Display all information (matric no, name, program, course work mark, final exam mark and grade obtained) of all of the students that have been added in the system.
- Search a student based on his/her matric no. If found, all of his/her data will be displayed in a suitable format. If the student is not found, a suitable message should be displayed to the user.
- Show the grade distributions eg. how many students get A+, how many students get A, etc.

In writing this application, you **must** use:

- objects created from your own defined class(es)
- an array to store the list of Student objects created
- GUI classes for your application's user interface. The design of the user interface is totally up to your own creativity as long as it can support all of the required operations.