## Purpose

The purpose of this application is to calculate the grade of students in course which user specified from the database user provided, user can choose to display the data they get from the database on excel and generate a corresponding report as a word document.

## Documentation

1. Click the “Run Macro” Button in the “index” sheet of excel file, a userform will show

Timeline

Description automatically generated

1. The userform will prompt user for the location of the database, click the “Import” button to open the file dialog, select the database(.mdb) file and click continue to proceed or cancel to close the form.

Graphical user interface, application

Description automatically generated

* 1. The file will be checked, it will be expected to only contain three tables named “grades”, “courses” and “students”.
  2. If the database does not match the expectation or the file type is wrong, a warning will pop up

Graphical user interface, application, table

Description automatically generated

1. A “Student Grades” userform will show after the verification of database. User can reimport another database by clicking the “Reimport Data button”, this will redirect them back to the previous import userform
2. The three options in the frame are the actions user can choose to do, the “Show Table” and “Generate Report” option are initially disabled. User can enable it after data selection settings complete.

Graphical user interface, application

Description automatically generated

1. By selecting “Data Selection Settings” option and click continue button, user will open a userform asking for course selection, select one of the course in the listbox and click “Confirm” to go back to previous userform(The course user selected will be used to sort the database).

Graphical user interface, text, application

Description automatically generated

1. The “Show Table” option will be enabled after course selection, the label on the right side of the userform will show the course code of the course that user selected.

Graphical user interface, application

Description automatically generated

1. Select “Show Table” option and click continue will generate a list and chart in “Data” sheet in the excel file, the sheet will automatically redirect to “Data”. The “Generate Report” option will also be enabled.

Graphical user interface, application, table, Excel

Description automatically generated

Chart

Description automatically generated

1. Select “Generate Report” option and click continue to create a Word document that contains the report of the corresponding data that is previously generated in “Data” sheet.