

# CTT008/CS162 Final project – Student management system

Class: 16CLC1, 16CLC2, 16CTT

## Use-cases:

- **All roles:**
  - Login
  - Show menu
  - Logout/Exit
- **Academic staff:**
  - Import courses
  - Import student lists
  - Import schedules
  - Export scores of student or course
  - Export lists of student who was present or absent in class
- **Lecturer:**
  - Import scores
- **Student:**
  - Check-in class

## Data structures:

- **User:**
  - Username
    - If user is a student, username is student ID
    - If user is a academic staff or lecturer, username is short name. Eg: htthanh, tploc, ltathao...
  - Full name
  - Email
  - Mobile phone
  - Type:
    - 0 – Student
    - 1 – Academic staff
    - 2 – Lecturer
  - Password
  - Class (if applicable). Eg: 16CLC1, 16CLC2, 16CTT
- **Course:**
  - Course code. Eg: CTT008, CS161
  - Year. Eg: 2016-2017
  - Semester. Eg: 1, 2, 3
  - Course name
  - Lecturer username
  - Start at (date)
  - End at (date)
  - From (time)

- To (time)
  - Date of week. Eg: Monday, Tuesday...
- **Presence:**
  - Course code
  - Year
  - Semester
  - Student ID
  - Week
- **Score:**
  - Course code
  - Year
  - Semester
  - Student ID
  - Midterm score
  - Lab score
  - Final score

## Requirements

- Data must be stored in file. You can define your own format but it must store all the information as describe above.
- Data can be stored in SQLite database instead of file (optional).
- Hash password (optional). Tip: SHA1, SHA256...