CTT008/CS162 Final project – Student management system

Class: 17CLC2, 17APCS1-2

Use-cases:

- **All roles:**
    1. Login
    2. Show menu
    3. View info
    4. Change password
    5. Logout/Exit
- **Academic staff:**
    6. Import students of a class from a csv file
    7. Add a new student to a class
    8. Edit an existing student
    9. Remove a student
    10. Change students from class A to class B
    11. Add a new empty class
    12. View list of classes
    13. View list of students in a class

    14. Import courses from a csv file
    15. Add a new course
    16. Edit an existing course
    17. Remove a course
    18. View list of courses

    19. Import courses' schedules from a csv file
    20. Add a course's schedule
    21. Edit a course's schedule (remember to check collided cases)
    22. Remove a course's schedule
    23. View list of schedules.

    24. Search and view attendance list of a course
    25. Export attendance list to a csv file

    26. Search and view scoreboard of a course
    27. Export a scoreboard to a csv file
- **Lecturer:**
    28. Import scoreboard of a course (midterm, final, lab, bonus)
    29. Edit grade of a student
    30. View a scoreboard
- **Student:**
    31. Check-in.

32. View check-in result
33. View his/her scores of a course
34. View schedules

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

- Menu
- 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…