2021 Assignment Theme - Tutorial Marks App

The following information is relevant for Assignments 1, 2, 3, 4, and 5. In case of any contradictions, individual assignment specifications are final.

Background

Almost all University tutors are tasked with marking off class attendance and marking off work completed by their students. This task varies from class to class, week to week, and even tutor to tutor in terms of how this is done. Many tutors used paper printouts, others scribble student IDs on a piece of paper and work out attendance later. Other tutors might type into a Word or Excel document, and some might choose to enter directly into a learning management system like MyLO. Some classes simply need to check attendance, while others (like KIT305/607) require multiple checkpoints to be marked off. Sometimes a grade out of 100 or A/B/C/D is required instead of a simple checkbox. The point is, there are lots of different ways a tutorial might be run.

A big inhibitor to most tutors entering marks straight into MyLO is the usability of the system, and the added cognitive load required to use it during class. Being a tutor can be stressful at times, and things can become too busy to interact with MyLO on a laptop, particularly with large class sizes. When tutors resort to pen and paper recording, mistakes in marking can be made when transferring the marks to MyLO, such as incorrect student IDs, or missed students.

There is an opportunity to design a *usable* mobile application that helps University tutors record attendance and marking data. Such an app (if designed well, and targeting the important Usability Goals), may prove to be *useful* to tutors, and ultimately *used* by Universities around the world.

Usability of this app is key. A well-designed app may reduce the number of marking mistakes by tutors, and speed up the marking process during tutorials, allowing for more time helping students. A key factor in each of the assignments will be how *efficient* your application is.

Requirements of the Mobile Application Design

Throughout Assignments 1-5, you will be tasked with designing, prototyping, implementing, and testing a tutorial marking application. The requirements are split into "core", and "additional". For your Assignment 1, you may prototype additional features and be creative, however for Assignments 2, 3, and 4 (Android, iOS, Cross-Platform), you are only required to implement what is described here (this is done for practical reasons--there will be no marks lost for your prototype not matching your coded application, as you are not expected to have time or knowledge to fully code your idea).

- Users should be able to enter in marks for students on a weekly basis.

- Students must have a name and student ID associated with them.

- Users should be able to see a summary of marks for an individual student.

- Users should be able to see a summary of marks for a given week.

- Users should be able to add new students at any time (some students show up later in semester)

- Users should be able to remove a student from the class list at any time (some students leave)

Additional Features

- Each week may have a different "marking scheme". Possible schemes include:
  - Checkbox attendance
  - Multiple checkboxes (for multiple checkpoints)
  - Score out of 100 (or score out of X)
  - Grade level (HD/DN/CR/PP/NN)
  - Grade Level (A/B/C/D/F)
  - (the grade for each student in a week should use the same marking scheme)

- When the marking scheme for all weeks is the same, a total score should be shown.

- Users should be able to use the application's built-in share functionality to share a comma-separated list of scores for each student

- Users should be able to associate an image with a student (either by taking a picture or from phone gallery)
  - This is a bit of a contrived feature, we just want to assess if you can use the Camera API on each platform 😊

Features Out of Scope

You are not required to implement multiple units, or multiple tutorial classes (assume a single tutorial slot).

You are not required to implement student/grade import/export from MyLO (other than basic "share" functionality described above).

You are not required to implement any quizzes or work completed within the app. The app should require data inputted by the tutor, and is not designed to be used by the students in any way.

You are not required to implement any sign-in functionality (even though this would be important in a real life app to prevent cheating).

You are not required to implement any features to facilitate group-work.