CAN301 MOBILE COMPUTING GROUP PROJECT

(60 POINTS)

INTRODUCTION

In this project you are asked to design and develop an app for Android devices. You are free to choose your topic. However, you are not allowed to develop apps using Unity or Unreal, as these libraries and developer tools are not the learning outcomes of this module. Your app should be easy to use, be able to work robustly on the Android device provided, and most importantly, show a good level of design creativity. It cannot be an app that does exactly the same thing as others on the app store. Instead, it should provide some improved or unique functionalities.

This is a group project. You should form groups of 4 to 6 members. Individual contributions to the project will be taken into account in grading. In the final presentation, each group should prepare a single set of slides and each member of the group must take turns to participate in the presentation. *ALL MEMBERS MUST CONTRIBUTE TO THE CODING OF THE APP*.

PROJECT COMPONENTS

This project consists of three components as follows

Components 1 - Final presentation (25%)	Dec 11
Components 2 - Final report + Code evaluation (55%)	Dec 11
Components 3 - Individual report (20%)	Dec 11

1 - PRESENTATION

In the final presentation, you will have 15 minutes to demonstrate your application. You are recommended to address the following issues:

- A brief description of your app including
    - Purpose - why is this project worth doing? Provide a clear and direct vision statement.
    - Target users - who are your target users, and how will your project serve them?
    - Related work - what have been done by other developers in the market? What makes your app stand out from the others'?
- A short demo of your app to demonstrate its key functionalities.
- What are the overall infrastructure and the key Android components you have used in developing your app?
- What have you done to improve the usability of your app?
- Any findings identified during the development/implementation/test of your project.
- Any challenges the team encountered throughout the whole development period.
- Percentage of contribution of each group member (sum up to 100% for a group). The percentage is decided with all of your group members. However, I might adjust your contribution based on the project code and report submitted.

  ** Each group member's marks are calculated based his supposed contribution versus his actual contribution. For example, if a team has 5 members, then each member should have a contribution of 20%.

Your presentation will be judged on its quality using the following metrics:

- Presentation: clarity, organization, time control, and completeness of the information presented
- Design: creativity, originality, functionality of the design.

Your demonstration will be graded based on the overall quality and how you address the above-listed key issues.

Rubrics:

1. 70% - 100%: Well-designed slides. Good organization of sections. Good speed control, Excellent fluency. Demo shows all important functions and the flow of demo is also clear.

2. 60% - 70%: Most parts of the presentations are done well, with one or two aspects being a bit lacking.
3. 50%~60%: Normal presentation skills and slides flow. Several parts could be improved. Demo shows a working app.
4. 40%~50%: Unclear slides flow with several typos on the slides. Fluency problems in the presentation. Demo is short and does not cover core functionality sufficiently.
5. Fail: Unorganized slides, can’t understand the presentation.

2 - GROUP REPORT AND CODE EVALUATION

REPORT

Each team will submit ONE copy of final report and source code to the LMO.

The report needs to describe the design and development process through which you arrived at the project. A guideline for the report content can be found in LMO. Please follow the guideline and add more explanations if necessary.

The report must be either in MS Word or PDF format. It should be at least 2000 words with single-spaced, 2-column pages in 10-point Times font on 8.5" ×11" paper. If you write your paper in MS Word, please follow the style of the guideline mentioned above. If you write your paper in LaTeX, you can use the IEEE style file at the following link:

http://www.ieee.org/conferences_events/conferences/publishing/templates.html

CODE

The code evaluation will focus on the quality and usability of your app, including whether it is robust and bug-free, and whether it promotes a user-friendly experience.

Rubrics:

1. 70%~100%: Very well-written report addressing all parts in the template clearly. The app is polished with innovative ideas and functionalities.
2. 60%~70%: Good report covering all parts. Easy to understand with very few mistakes in writing. The app has good functionalities and is working well.
3. 50%~60%: Sufficient report, covering most aspects of the app and development. Some typos or gramma issues. The app works but lacks innovation.
4. 40%~50%: Lacking report. Lacking sections needed. The app has serious bugs.
5. Fail: Report is very lacking and hard to understand. The app is not working.

3 – INDIVIDUAL REPORT

In the individual development report, you need to think beyond the current achievements of your project. Please answer the following questions in the report:

1. Do features of your app work as intend? Do they synergize well with other features?
2. If you are given with more time, what features/UI will you add to your app? how would you extend the current features/UIs? Any features/UI need to be reworked?
    a. Keep in mind what you have discussed in the lecture of context awareness.
    b. Alternatively, you can propose a reworked design of this app and explain why these designs are better than the current one.

A minimum of 800 words are required for this report. It should follow the same font and paragraph format as the group report while the sections to be included need to be decided by you. Your work will be marked based on how well you answer the aforementioned questions.

Rubrics:

1. 70%~100%: Very well-written report addressing all issues. The extension looks feasible and is innovative
2. 60%~70%: Good report covering all parts. Easy to understand with very few mistakes in writing. The extension looks feasible and is well-considered.
3. 50%~60%: Sufficient report. The extension is feasible.
4. 40%~50%: Lacking report. Lacking sections needed. The extension description shows a lacking consideration on feasibility or synergy.
5. Fail: Report is very lacking and hard to understand. The idea is not going to working.