Assignment – Build a Mobile App

Deliverables		Due Time
Proposal	Electronic submission	**5:00pm, 04/09/2017 (Monday, Week 06)**
	Hardcopy submission	In the lecture of Week 06
Final	Electronic submission	**5:00pm, 20/10/2017 (Friday, Week 11)**
	Hardcopy submission	In the Presentation of Week 12
	Project Presentation	**6:00pm, 23/10/2017 (Monday, Week 12)**

INTRODUCTION

This assignment is worth **40%** of the total assessment of this course, including **10%** for the proposal (Part 1) and **30%** for the final (Part 2).

This is a **group** assignment and each group has up to **THREE** members. If you hope to complete the assignment by yourself or form a group with more members, you should first consult with the course coordinator in written form. Each group member must contribute to the assignment equally and the members will be awarded the same marks. Under certain circumstances, adjustment of marks may happen to group members at the discretion of the course coordinator.

TASK

You are required to design and implement a mobile application (e.g., Productivity, Communication, Entertainment, Education, Finance, Health, Utilities, and Game) for at least one of the three major mobile platforms: Android, iOS and Windows. The final app should be physically deployed/installed in a mobile device.

This assignment should be completed in two phases, Proposal Phase and Final Phase. **You are highly encouraged to conduct thorough research and come up with a solid plan in the proposal phase,** though the final app is not necessary the same as that of the proposal.

Proposal Phase
You are required to pick up an application (or a problem) and design a mobile app solution for the application/problem. In the proposal, you need to articulate the following components, but not limited to:
1. Application: background, related work, significance, requirements, and etc;
2. Solutions: storyboard of your app and technical approaches;
3. Plan: the building blocks of your system and the implementation schedule; and
4. Reflection of proposal writing.

Note that it is **NOT necessary** to follow the above headings in your proposal. You could imagine that the purpose of the proposal is to convince readers of your dream project and

explain how you plan to achieve it. A good proposal should also provide sufficient information on at least the following aspects: What is the problem that your app will solve? Why does the problem matter (e.g., motivation and significance)? What is the app solution to the problem? How will the solution be implemented (which should be clear for others to implement)?

As to **Reflection of proposal writing**, you need to explain what resources you have consulted and what guidelines you have applied to prepare your proposal. You are strongly encouraged to obtain some guidance on proposal writing from a wide range of resources (e.g. books, articles, and websites).

The proposal file must be of **Adobe Acrobat Portable Document Format (*.pdf)** format. No other file format is accepted. The proposal must **NOT** exceed **TWELVE** pages including references (single space and font size 12 for body text). A hardcopy submission is also required for the electronic copy of the proposal submitted.

Final Phase

You are required to implement the app and demo the app through a physical mobile device. The final delivery components include: 1) a workable app (including all the source codes), 2) a short (not more than 3 minutes) introduction video of your project, 3) a readme or manual, and 4) a final report and a presentation slide.

The introduction video must be compatible with the VLC media player and .mp4 file format is preferred. The report and manual files must be of **Adobe Acrobat Portable Document Format (*.pdf)** format. No other file format is accepted. The final report must **NOT** exceed **TWELVE** pages including references (single space and font size 12 for body text). A hardcopy submission is required for both the manual and the final report.

The report is to "sell" your application. A good report provides sufficient information on at least the following aspects: What is the problem that your app will solve? Why does the problem matter (e.g., motivation and significance)? What is the app solution to the problem? How is the solution implemented? How does the app work?

The manual is to guide a potential user on how to set up the working environment of your application and re-compile and re-deploy your app to a mobile device.

A section on **Reflection on preparing a presentation** is required in the report to explain what resources you have consulted and what guidelines you have applied to prepare your presentation. You are strongly encouraged to obtain some guidance on presentation skills from a wide range of resources (e.g. books, articles, and websites).

MARKING SCHEME

Proposal (10 marks)
1. (3 marks) Application: creativity, challenge, and novelty of the application domain.
2. (5 marks) Solutions: storyboard and technical approach.

3. (1 mark) Plan: clarity of the individual tasks.
4. (1 mark) Reflection: reflection on proposal writing.

Final (30 marks)

1. (15 marks) The app: creativity, challenge/efforts, and novelty of the application domain.
2. (5 marks) Documentation: assignment report (including reflection on preparing a presentation)
   In addition to content, the assignment report will also be assessed in terms of logic structure, typesetting, and language presentation.
3. (2 marks) Documentation: manual
   A manual is to provide sufficient information which will assure others to compile, install, and run your app.
4. (3 marks) Introduction video (about 3 to 5 minutes) of your project.
5. (5 marks) Presentation (Refer to the Notes to Presentation in the Appendix)
   You need to give an oral presentation on your app and the presentation will be marked in terms of clarity, understanding of the topic, and presentation skills.

If you use any third-party resources (e.g., libraries, tools, and media assets), you need to mention it in your report and presentation. If your app cannot be physically deployed and demonstrated through a mobile device, this part can be given 12 marks at most.

SUBMISSION

- One submission is required from each group.
- For the electronic submission of Proposal, the file should be submitted via e-Learning.
- For the electronic submission of Final, **1)** submit **the report file** via e-Learning; **2) zip all your project files** (e.g., final output such as programs, source codes, introduction video, readme file/manual, presentation slides, and report) and use your unikey as the name of the **zip file**; and **3)** create a shared URL of the zipped file using **a cloud storage** and email the URL to the course coordinator from your university email address. **Note that**: **1)** make sure that the access to your shared zip file does **not request** the course coordinator to sign in the cloud service; and **2)** follow the file size limit: introduction video file is about 100MB, and the zip file is about 200MB.
- It is your responsibility to ensure that 1) your zip file can be accessed and unzipped successfully, 2) your programs can be compiled and run successfully, and 3) your introduction video can be played successfully.
- **LATE** submission will be given **ZERO**.
- **PLAGIARISM** is where you use the work of another person and present it as your own. This is **STRICTLY PROHIBITED. Text-based similarity detecting software (e.g., Turnitin) will be used for all text-based written assignments and source codes. It is your responsibility to understand the Academic Honesty policies of the University of Sydney and the School of Information Technologies**.

Appendix – Notes to Project Presentation

The project presentation is to pitch your app.

Presentation
Each group has maximally **3 minutes** to present the assignment using the presentation material submitted. The presentation will be generally starting at the lecture time (i.e. 5:00pm) from Group 1 in the weekly lecture room. You should be familiar with the presentation facility in the room. Detailed presentation schedule will be available in due course.

Your presentation material should be compatible with the settings of the computer in the lecture room and **be copied to the computer by yourself before the lecture time (e.g., 5:00pm)**. If you use your personal laptop, you must 1) comply with safety regulations of the University of Sydney, and 2) have successful trial with the presentation facilities available in the lecture room.

Any delay may lead to penalty in marking, or even losing presentation opportunity. Should you have any difficulty, please feel free to contact the course coordinator.

Marking
The presentation will be assessed as follows:
1. [2 marks] Presentation content (e.g. logical flow and visual/audio aids)
2. [3 marks] Presentation skills (e.g., attitude/confidence, time, pace, and eye contact)