COMP7506 Smart phone apps development
Group Project

Deadlines:
Optional sharing with teaching team and peer classmates during the second half of our last lecture **on 23th April, 2025 (Wednesday) or 25th April, 2025 (Friday)**.
Final deliverables to be submitted **on or before 4th May, 2025 (Sunday) 11:59pm**.
Late penalty:
Marks will be deducted by N*3%, where N is the number of days after submission deadline (minimum marks = 0).
Weighting: 30% (of the whole course)

Group

This is a group project. Each group is formed by 1 – 6 members. For groups with more than 1 member, each member should complete the *Peer Review Form* which can be downloaded from Moodle. A group can contain members from both class A and class B, but they should present in the class which more group members come from. Grouping system will be available on Moodle after the add-drop period.

Theme: Developing a smart phone application from scratch

Details:

Develop a smart phone application for Android, iOS or both platforms. Hybrid application is also acceptable. The complexity of the application should depend on the manpower available. For example, a 6-member team can aim at a comprehensive application with various features while a 2-member team can aim at a simpler application. The category of your application is not limited but you may follow the few we introduced in the first lecture.

- Mobile game
- Entertainment
- Information
- Social network
- News
- …

Possible topic can be as follows:

- About Hong Kong or China (e.g., history, culture, news, social or political issues)
- About our university (e.g., information for visitors, etc.)
- About our programme (e.g., an app to connect MSc(CS) alumni)
- About learning (e.g., peer learning, learning a topic in a funny way etc.)
- Any others…

- Hint: Try to think about what you need daily and how a mobile app can help you…

In this group project, each team should perform the following tasks:

1) Do a background research. List at least 3 similar applications in the market, summarize their features and point out their shortcomings / possible improvements.
2) Design a smart phone application based on your findings in 1). For example, if your background research is about smart phone games, you should design a new smart phone game.
3) Develop your designed application using one of the following IDEs: i) Android Studio for Android applications; ii) Xcode for iOS applications; or iii) cross-platform tools like React Native, Flutter, Unity and Unreal for cross-platform applications. You may also use PHP, Python or others for the server program (when necessary). Hybrid application and mini program are also acceptable.

Deliverables:

Each team should submit the following items to Moodle. Submission systems will be created later.

1) A document file (at least 2 pages) with:
   - Results of your background research
   - A summary of your application. It may include images and diagrams if you feel they better convey your message. Basically, you should include the category, motivation, design and features of your application.
   - Contributions of each member (if your team consists of more than one member)
2) Source code of your application with a readme file stating how to compile and execute your application.
3) An introductory video (at most 5 minutes) demonstrating main features of your application and how to use it.

Marking schemes: (Total: 40%)

Marks will be given based on the following:

- Background research (6%)
- Design, functionality and creativity (6%)
- Implementation and overall quality (16%)
- Introductory video (12%)

Good Examples from students in past semesters:

https://www.facebook.com/comp7506/ or search "Comp7506 Smart Phone Apps Development – HKU" in Facebook.