



Write An Android App: Hea Wiki

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Overview

The HKUST Mainland Students and Scholars Society, UG Section (MSSSUG) organizes social, recreational and sports activities for members and also aims to safeguard member interests at HKUST. Although the MSSSUG has a website [8], it lacks up-to-date information and interactive features. It also has no smart-phone app. Thus, this final year project entailed developing an Android app to help HKUST MSSSUG members have more fun together. The app is named Hea Wiki: Wiki means Wikipedia, and Hea means having fun.

In Chinese education, academic grades are valued highly, and students often sacrifice their leisure time to read books and study for exams. Many MSSSUG students believe that studying hard and playing hard are both essential for university life. Therefore, this final year project was about developing an Android app which provides a platform for HKUST Mainland students to share their non-study related activities.

Every year, MSSSUG organizes a Peer Mentor Project (PMP) for new students from the Mainland. Students are split into ten groups, and fun activities are organized in these units. The main purpose of the Hea Wiki app is to facilitate communication among PMP group members and participation in group activities.

Objectives

The app should be neat and user-friendly in design and contain the following pages:

1. An index page to search for events and groups
2. Interactive pages that enable members to create new groups and events.
3. An administration page for adding, changing or deleting group pages and event pages.

To achieve most of these goals, a database was built to store member, group and event information and organize information neatly based on similar apps.

To achieve the fifth goal, the features of some popular chat-rooms were studied and used as models.

The biggest challenge was learning to design a user-friendly interface for the app. Some social-networking platforms, such as Wechat, Renren and Facebook, were good references for the design.

Design the Database

The database will be developed in order to store and withdraw information from a online server provider.

Also, the database for accounts will be developed in the effort for users to be able to log in and log out. Below is the table used to write the Database:

	Data 1	Data 2	Data3
Table 1	Username	password	groupname
Table 2	Eventname	description	pictures
Table 3	Groupname	eventname	username

Table 1 is used for storing sign up information.

Table 2 is used for new event.

Table 3 is to combine Table 1 and Table 2 together, more like an indexing Table.

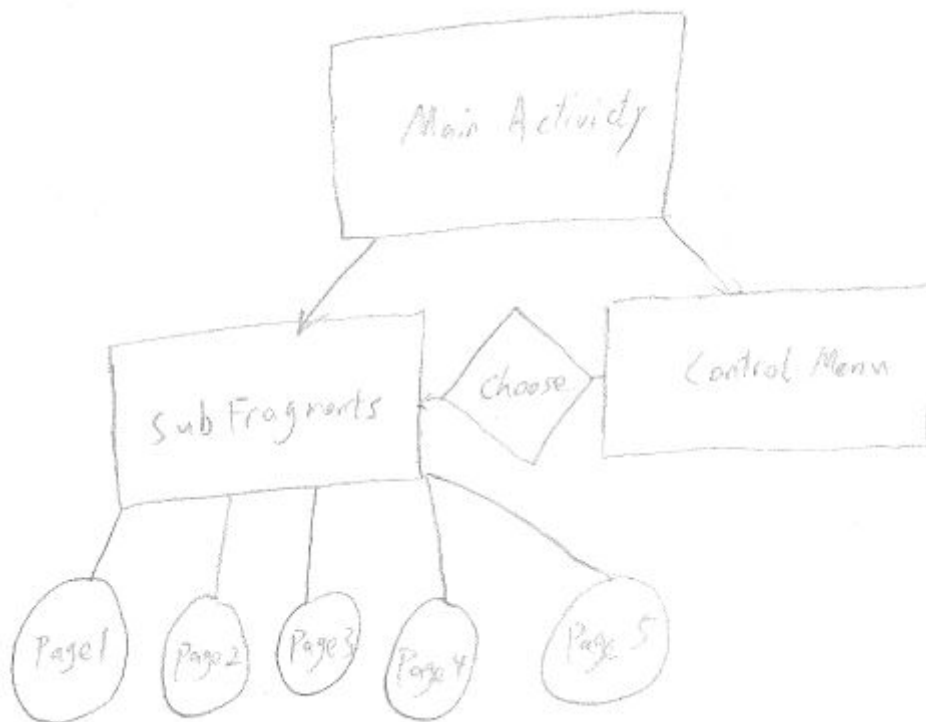


Figure 8- ER Diagram

Evaluation

The performance of app was evaluated according to the following manner:

1. Reliability - the amount of known but unsolved bugs.
2. User-friendliness - how easy the user interface is to use.
3. Speed - how fast the app responds to user input.
4. Scalability - the number of concurrent users the system can handle without noticeable delay.
5. Utility - The usefulness of the software compared with similar existing software.

The average result from volunteered testers:

User-friendliness: 4 Speed: 4 Scalability:3 Utility:3

Conclusion

The major accomplishment of the project is learning how to program an android app from a beginner, and finalizing a runnable android app is created with core functions of sign up, login, new events, change group, and view events from a dynamic list. The major problem encountered was that SQLite database does not provide online storage, so the data is stored offline. Some suggests to future android developers is that watch tutorials first, then program, or you will run into all sort of errors and unsolvable puzzles. There are many tutorials on Youtube that are really helpful by explaining the codes and give examples with them.