

Computer Engineering Program



# Curriculum Schedule Management Application

## Calendar Plus+

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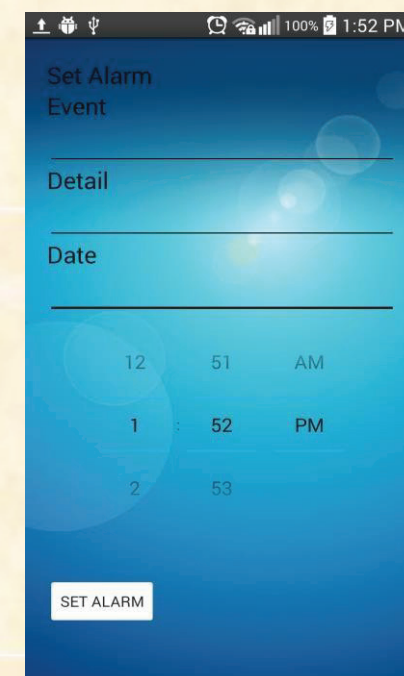
## Objective

The project aims to develop an Android based calendar application customized to HKUST students. This application has mainly 3 functions.

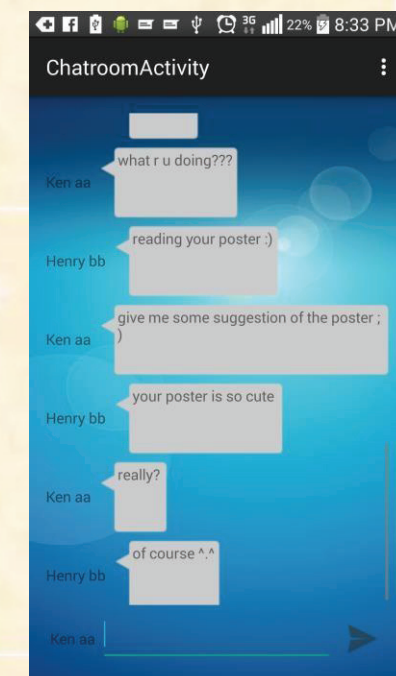
- Add and manage their curriculum schedule
- Add an event alarm
- Communicate with others via chat room.



Add course page

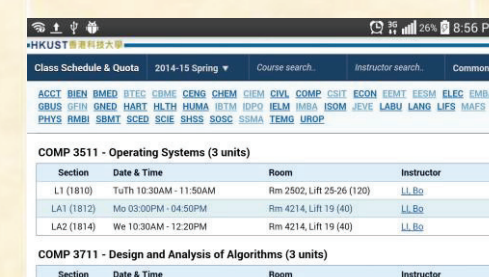
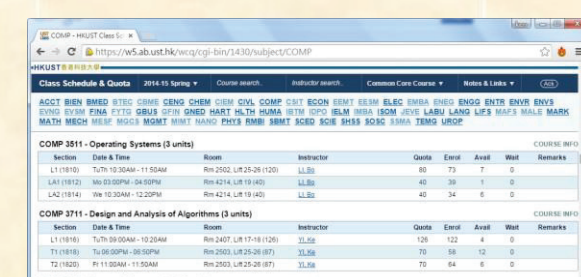


Alarm setting

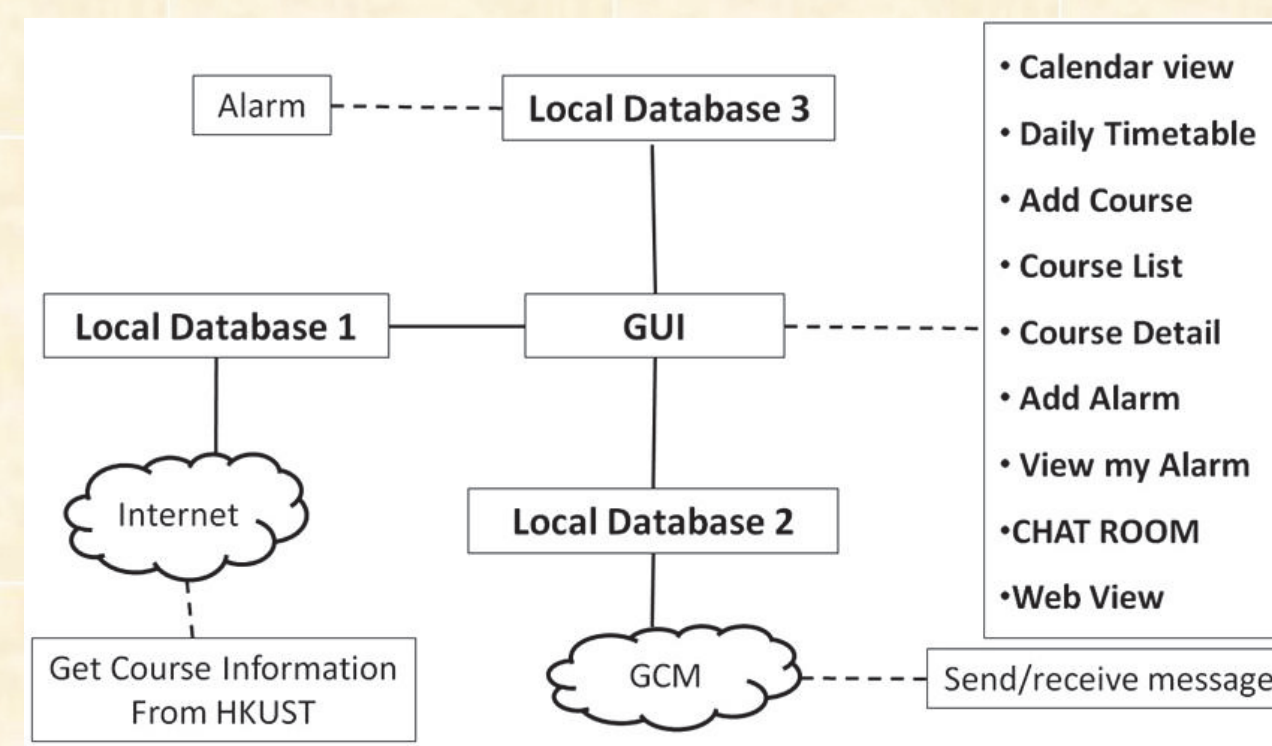


Chat room

HKUST student always concern about their course quota during the add drop period. Our application provides a function to view our HKUST Class & Quota.



## System Architecture



- GUI

The Graphical User Interface (GUI) displays the calendar view, daily timetable, add, display and delete courses and alarms. Also, a user interface is used for the chat room.

- Local Database

Local Database 1: It is used for saving the course information downloaded from HKUST class schedule & quota webpage.

Local Database 2: It is used for chat room to save the messages sent and received through Google cloud message (GCM).

Local Database 3: It is used for saving the alarm message.

- GCM

It is Google Cloud Message, which is a server used for sending and receiving message of chat room, provided by Google.

## Implementation

### Database Implementation

SQLiteDatabase is used for the implementation of the databases of the application. The database is built by extending the SQLiteOpenHelper, which is a helper class for managing the SQLiteDatabases.

### Google Cloud Messaging Implementation

(GCM) is a free service for android which is provided by Google. GCM helps developers to send data from server to their Android applications on Android devices, and also to receive messages from devices on the same connection.

## Conclusion

The application consists of the major function of a schedule application, and has a user-friendly layout. The special feature of this application is that the application is customize to the HKUST students. HKUST students can easily select the course and sections they need from a few spinner.

Also, we have a chat room for user to chat with each other. The social media is getting more and more important nowadays. The chat room inside the schedule application can increase the interaction between the users.