



# Mobile Application Development

TOPIC: Moodle Client

GROUP 7

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## **I. Introduction**

### **1. Group 7**

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### **2. What is Moodle Client?**

- Moodle is the open-source learning management system that enables you to create online courses, add assignments, and keep an eye on your students' progress. It also allows you to communicate with the students and encourage communication between them in forums and discussions. Otherwise, students can manage their progresses of study and get up-to-date the newest information of courses, grades and scoreboard on Moodle. Therefore, we try to create a Moodle client on mobile platform that not only helps you easier to access Moodle through a smartphone but also provides the convenience and flexible UI.

### **3. What does it use for?**

- Our Moodle client helps teachers to manage their lectures, courses and their students at anytime and anywhere just by a smartphone. On the other hand, students can easily access their courses, information, and scoreboard and remotely communicate with their lecturers or discuss with their mates.

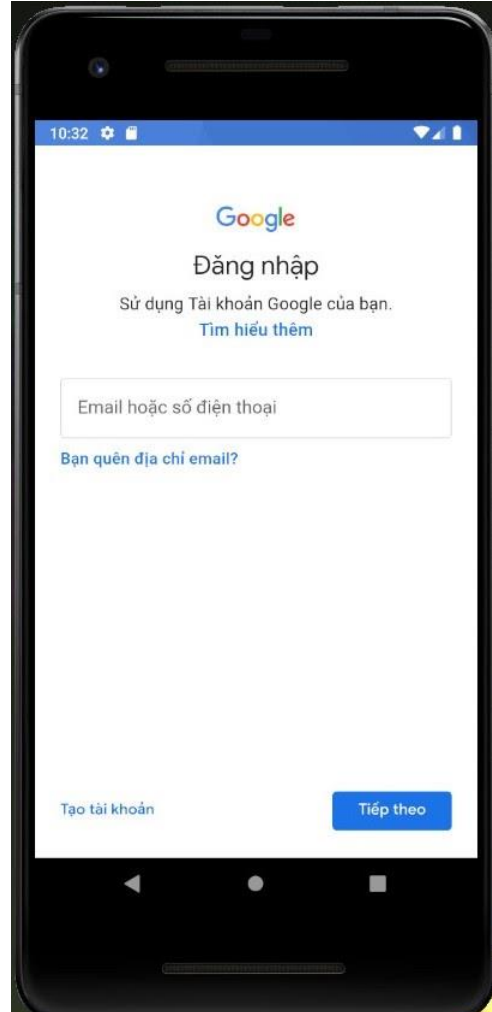
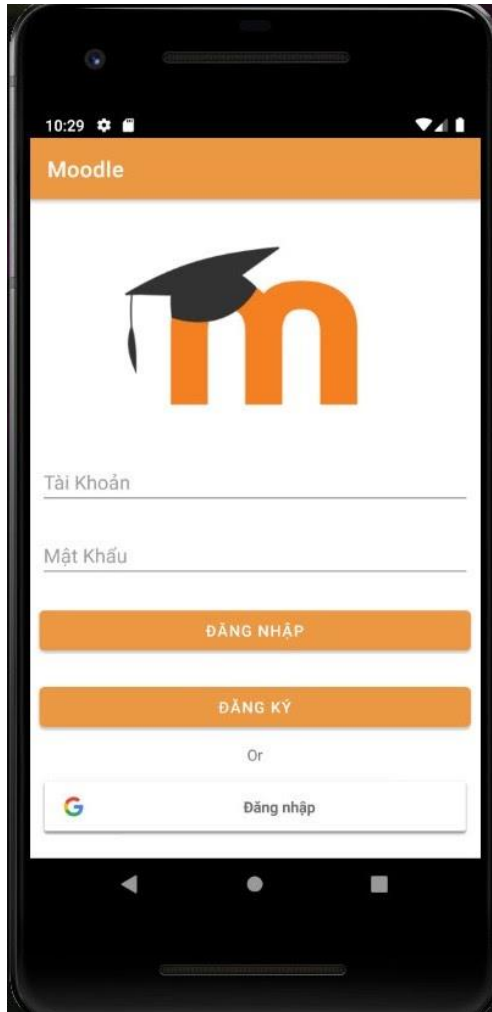
## **II. Methods**

### **1. Software:**

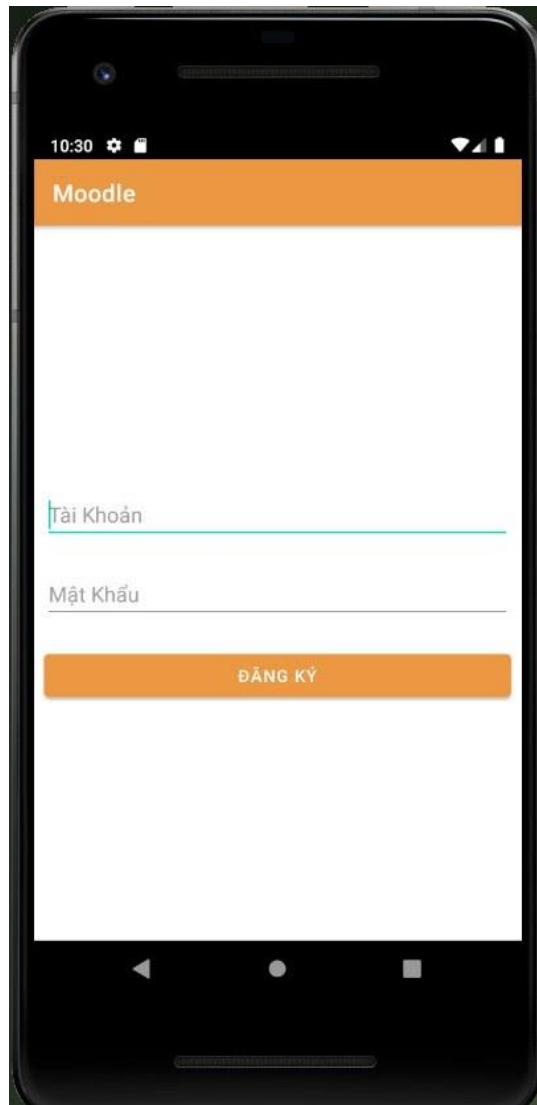
- Android studio, Android emulator
- User Interface: TextView, ImageView, RecyclerView, LinearLayout, RelativeLayout....
- Libraries: Moshi, Picasso, OkHTTP, Firebase
- Class:
  - User: title, artwork (image) for Courses in Mobile App Screen
  - Major: title for major in Bachelor Screen
- JSON Document Database:
  - Google Firebase
  - MockAPI
- Google Firebase: Using Firebase Authentication to connect to database, it provided by 2 method sign-in: Email Account (Create new Account and push it to database) and Google Account (Using available information from Google to Sign Up in own Database)
- MockAPI: 2 tables are courses and majors, get the information from Mockapi and response back by OkHTTP, Moshi and Picasso library. There are title and image.

## 2. Feature:

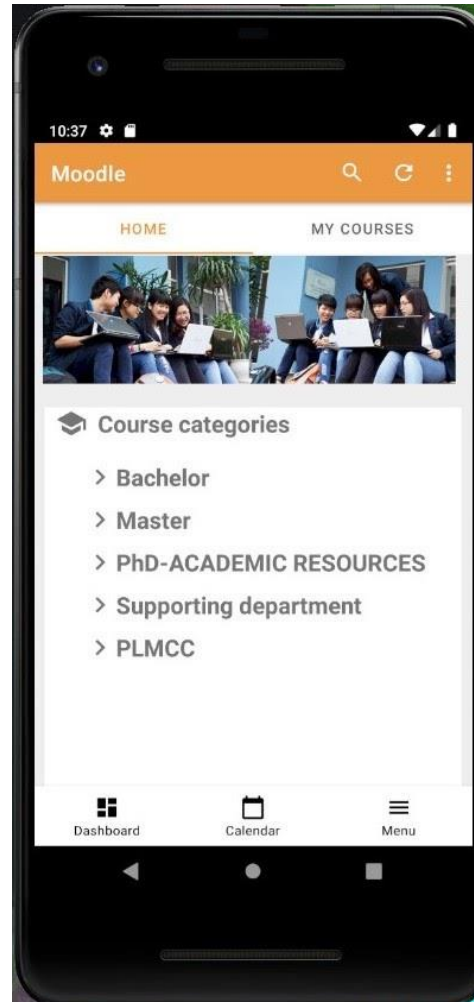
- Use your email account or Google account to login. It will request the database and respond back to the client about the information of the user.



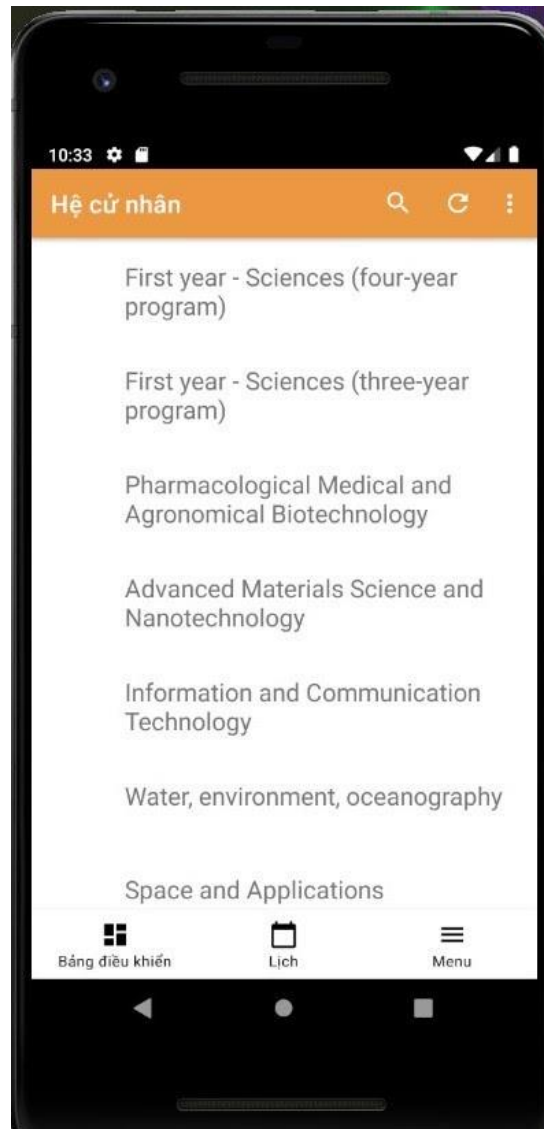
- If you don't have an account, you can sign up for a new one. The new account will be created and upload to the database (Google Firebase)



- Home page, our app has an ENGLISH version and a Vietnamese version.



- List of course: Get the course information from MockAPI and response back by OkHTTP, Moshi and Picasso library.

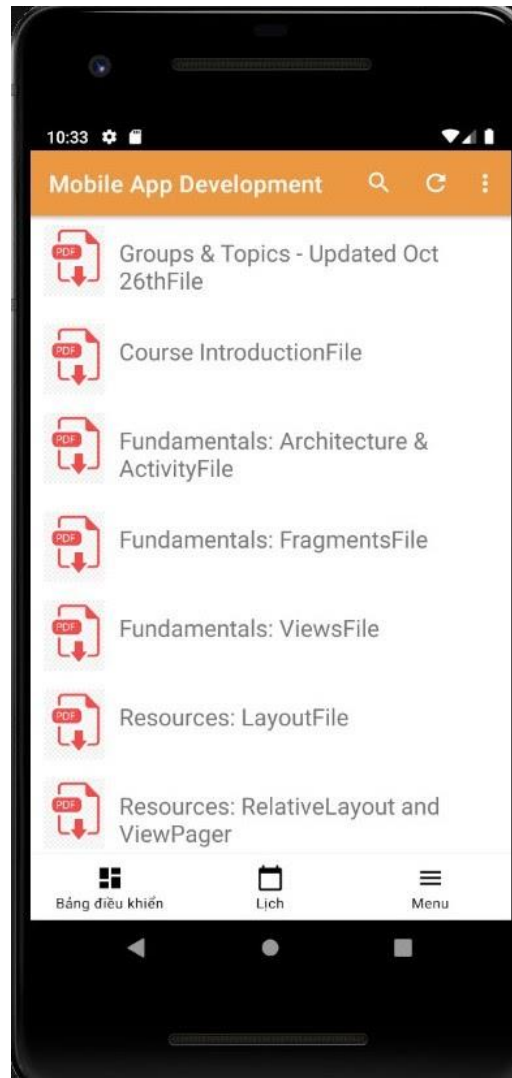


- My course: show what subjects you're studying.





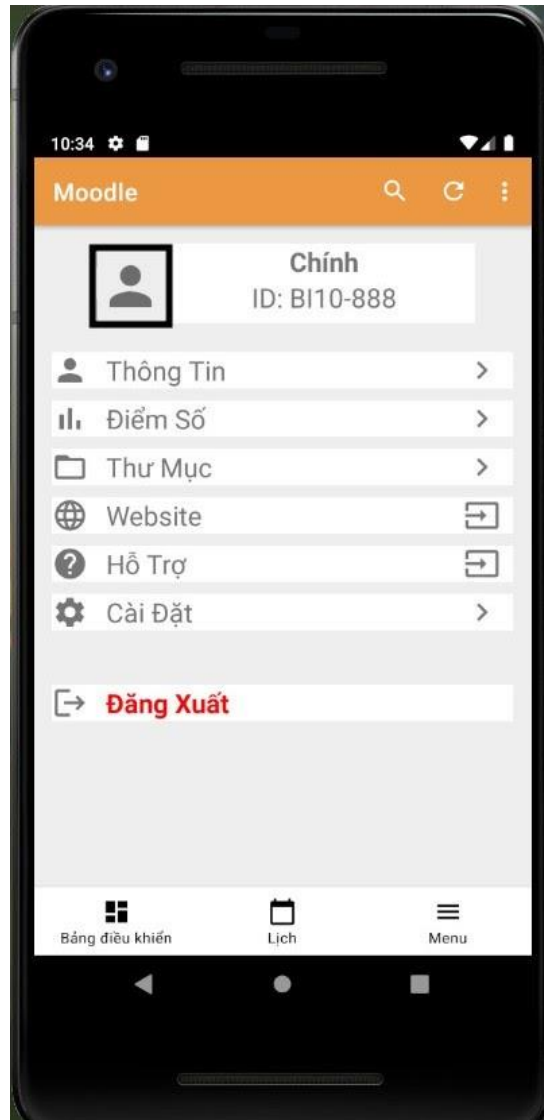
- Lectures of the subject



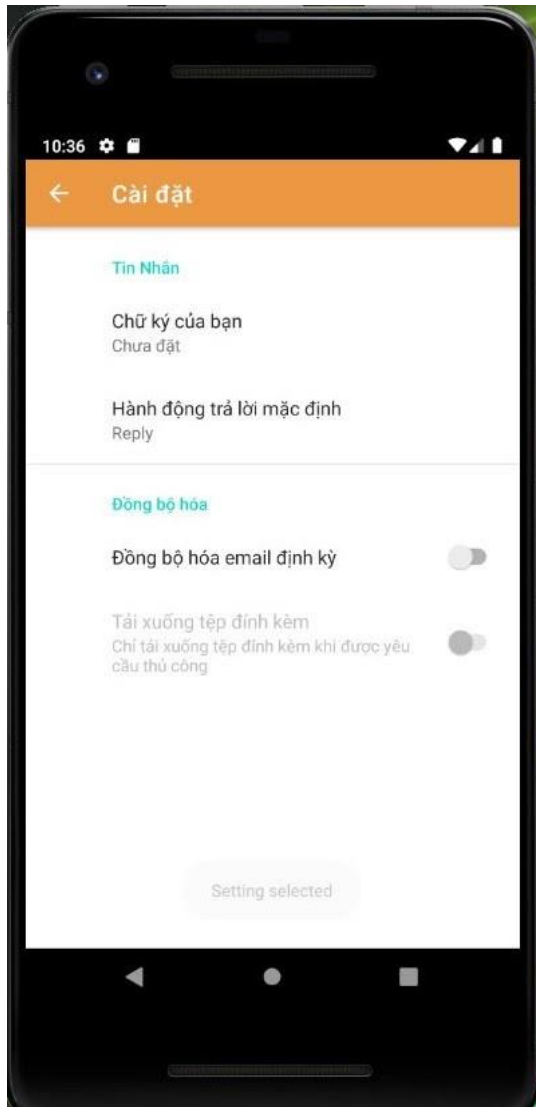
- Calendar



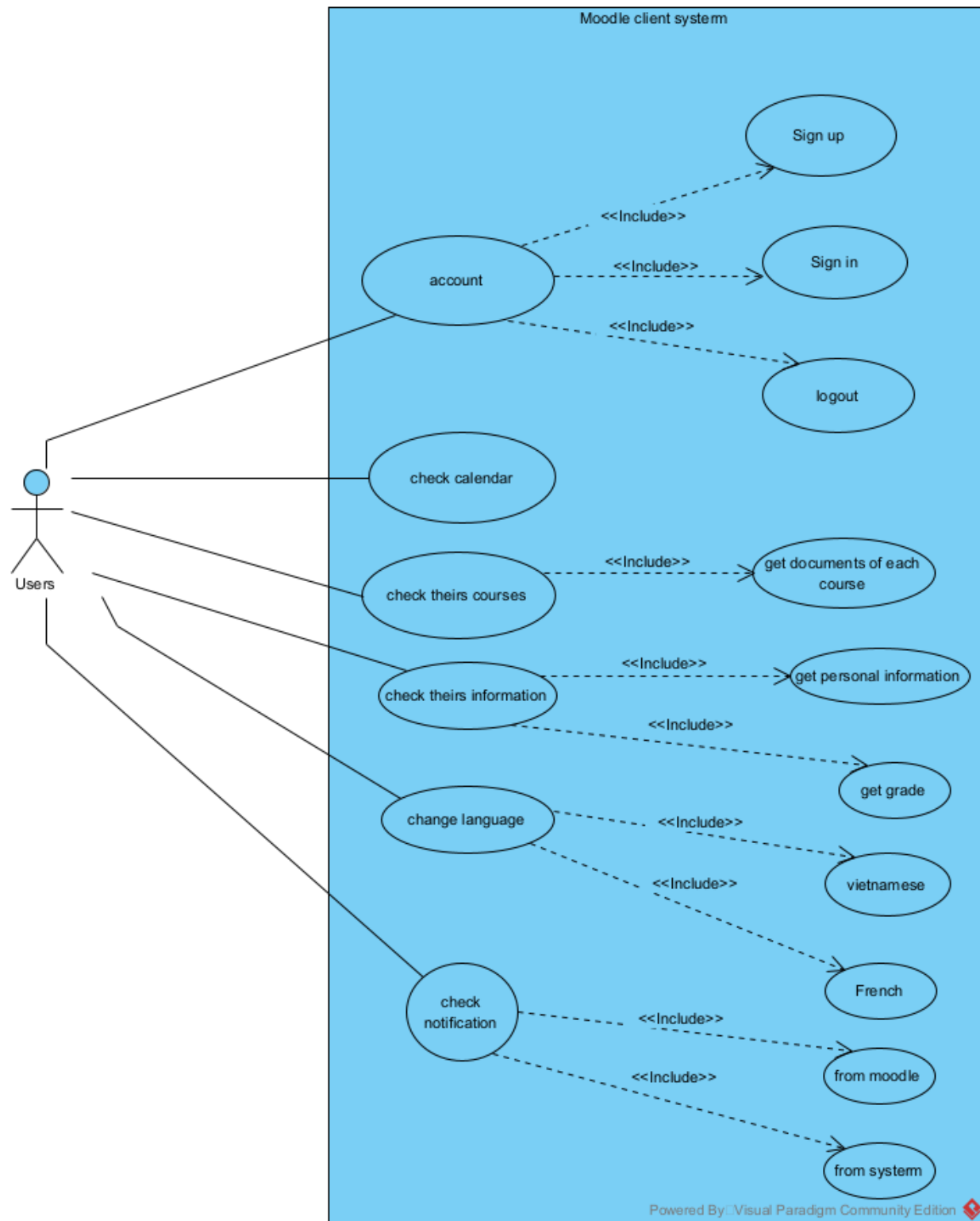
- Menu to see information, grade...
- Return the personal information and learning information. The Sign-out button will call back to the login screen and log-out the account.



## - Setting and Notification



### 3. UML Diagrams --- Use case:



### **III. Conclusion**

- The idea and demo of project are completed clearly but the project is not cconnec.
- After that, we have plans to complete and improve our software:
  - Complete all of clickable for GUI.
  - Use connect API to get, openable and push data (files, video...) for all of feature (user information, grade, notification...).
  - Update calendar feature with api: able to see the class schedule in calendar.
  - Update search, refresh... function.
  - Use Moodle api instead of firebase and mockAPI.
  - Make a complete app and Push to CH Play.
  - .....