

C**KIE-APP**

**Convergent Capstone Design 2
Final Progress Report**

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Motivation

Why Cookie?

- Problems with existing SNS
 - KaKaoTalk
 - Too many useless features
 - Used also for Public Purpose
 - Instagram
 - Photo Based
 - Time Spending
 - Ads

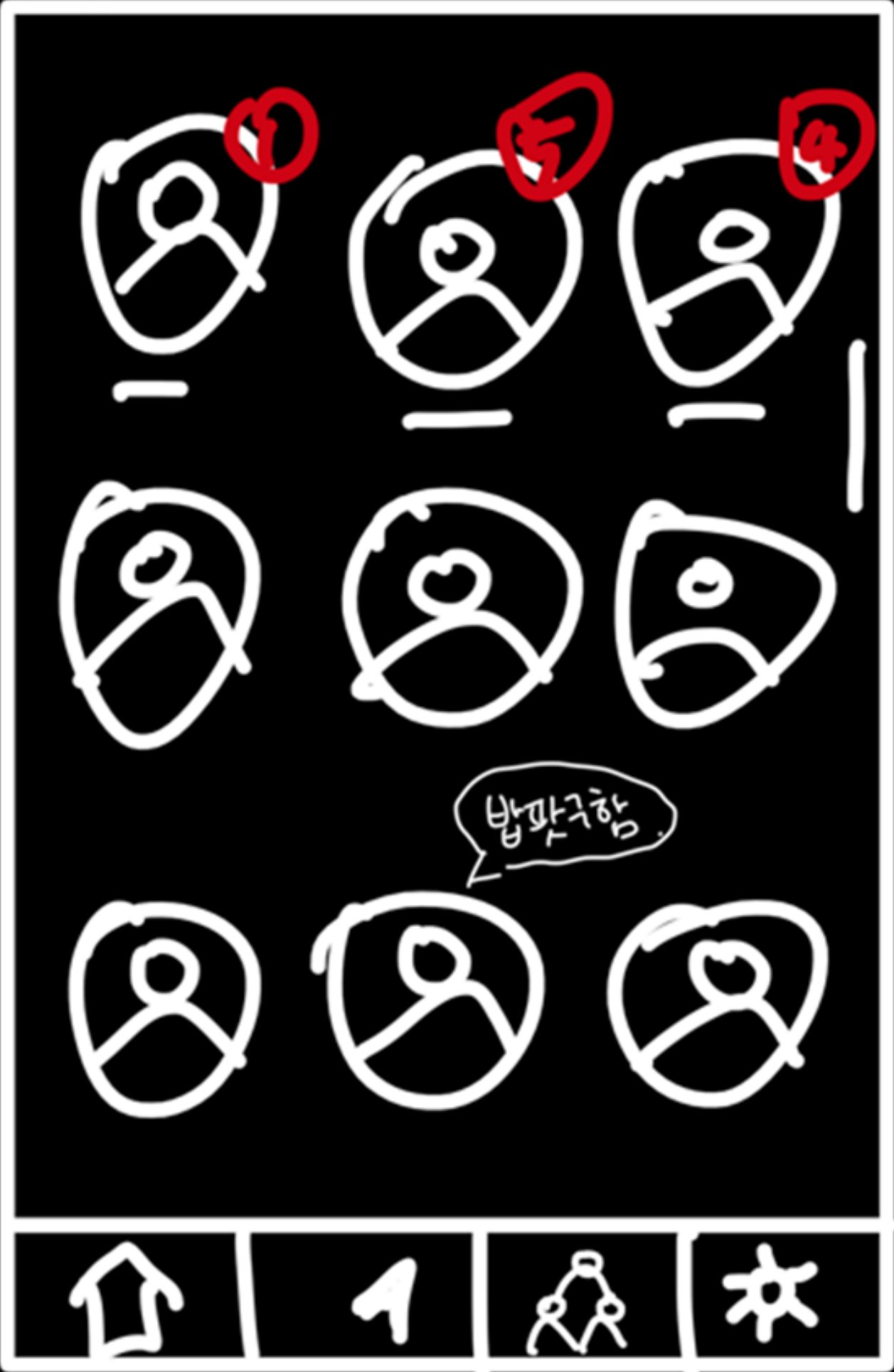
Our Goals

C🍪🍪KIE-APP

- Focus on the essence of SNS
- Real Connection between actual “Friends”
 - Less Online, More Offline
- What we wanted to develop
 - Account Management
 - Chatting Service
 - Location Share

Overall Progress

UI Design





name



name



name



name



name



name



name



name



name

AppBar

Body

**Navigation
Bar**

친구



test2



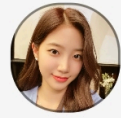
test3



친구



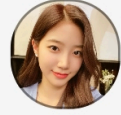
채팅



test333

까아아아애아아악

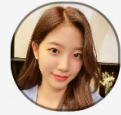
13시간 전



ㅋㅋ

영

21시간 전



ㅇㅇ

qqq

21시간 전



채팅



설정



프로필 관리



다크 모드



로그아웃



설정

Overall Theme Management

- Each widget has its own style such as font, color, etc.
 - If the theme changes or expands, it is difficult to manage it one by one
- Theme data needs to be changed so that it can be managed centrally
- Allows management by applying "ThemeData" object

Location Sharing

Google Maps

Location Sharing

Google Maps

- Lots of references and features in Flutter
- Google maps can be used through API key issuance
- Various widgets can be displayed inside the Google maps (markers, polygons, etc.)

Map Events

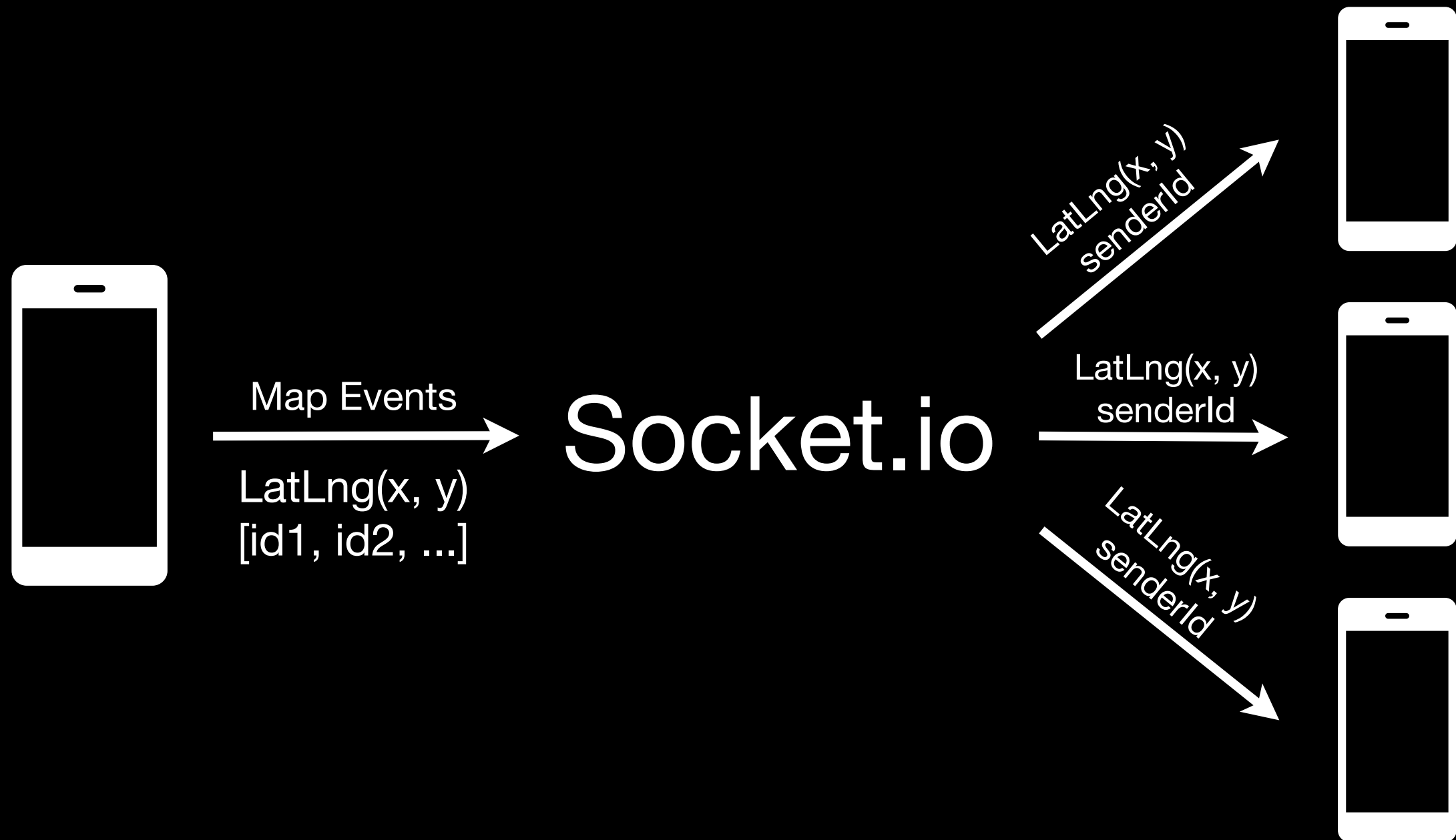
Location Sharing

Map Events

- Implement to enable various interactions on the map
 - Location Share
 - Find Users
 - Call Users
- Handle these events through the Dial widget
- Location information is sent/received through Socket.io

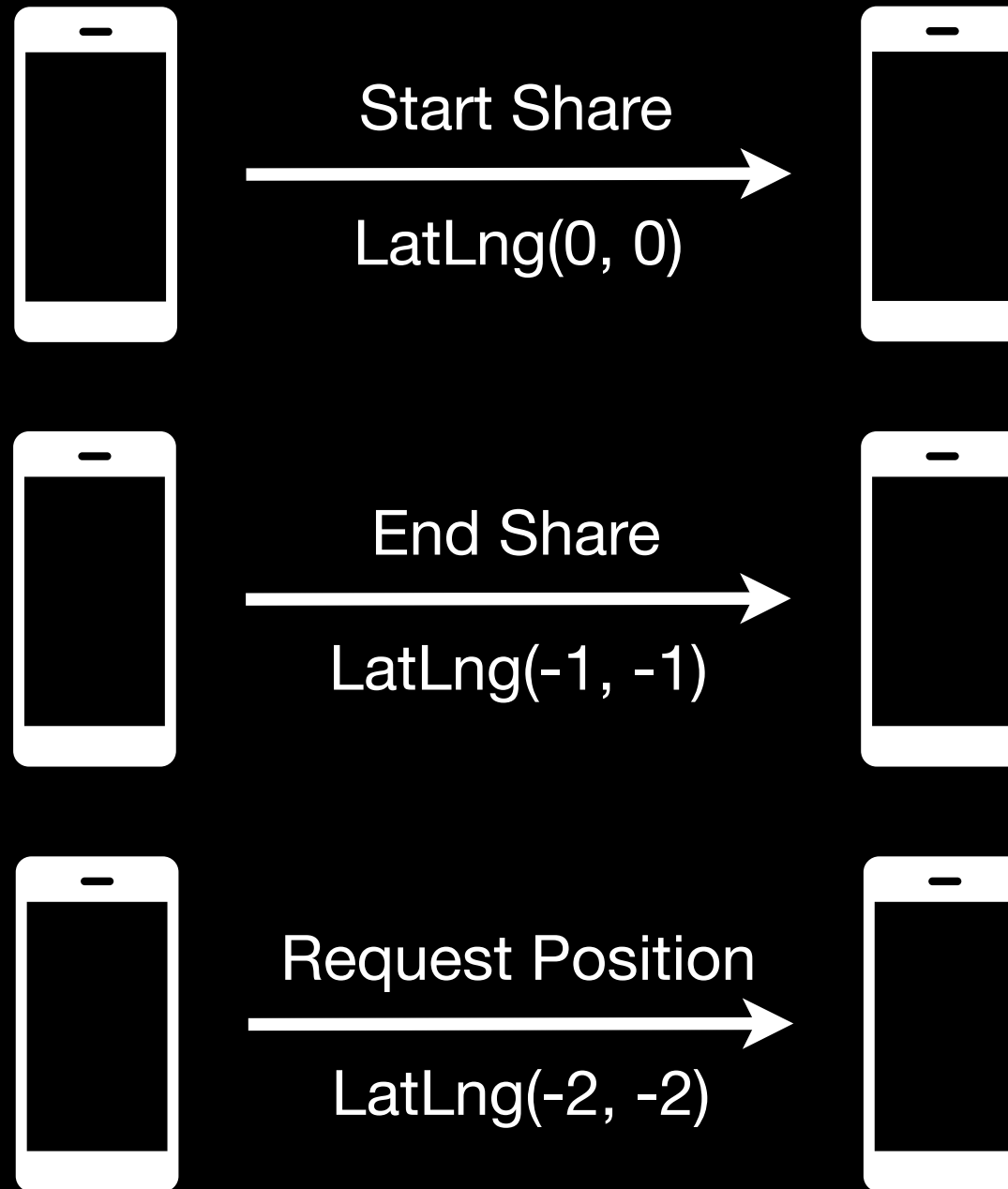
Location Sharing

Map Events : Socket.io



Location Sharing

Map Events : Socket.io

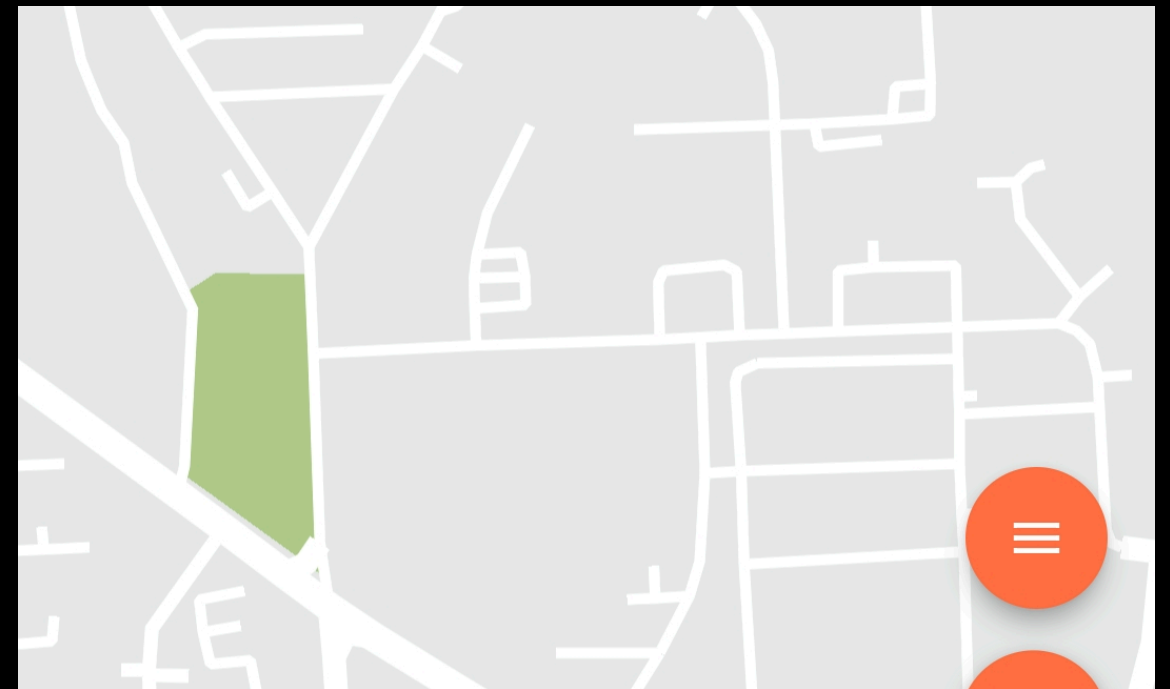
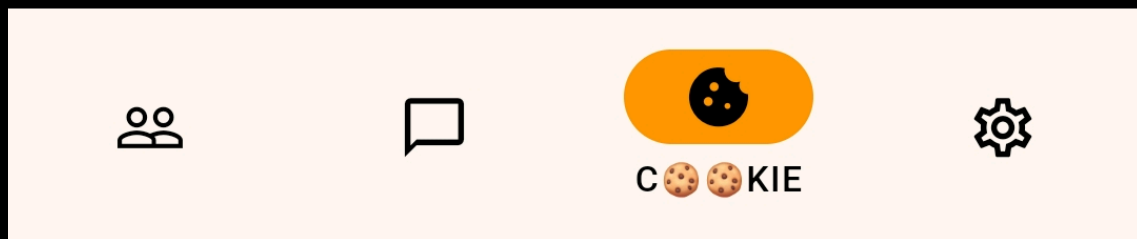



Location Sharing

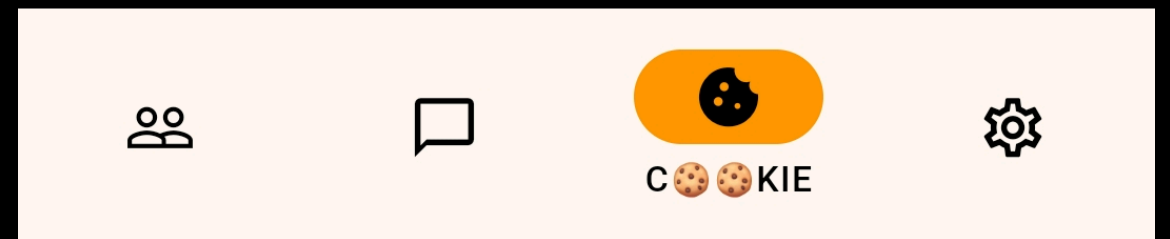
Map Events : Start Share



 위치 공유를 시작합니다.



 test3님이 위치공유를 시작했습니다.

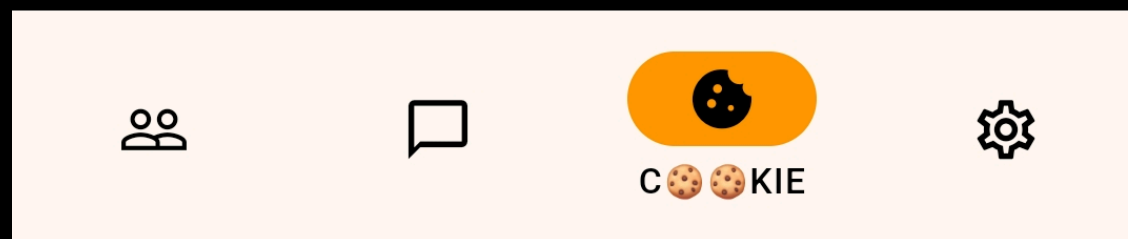


Location Sharing

Map Events : End Share



 위치 공유를 종료합니다.

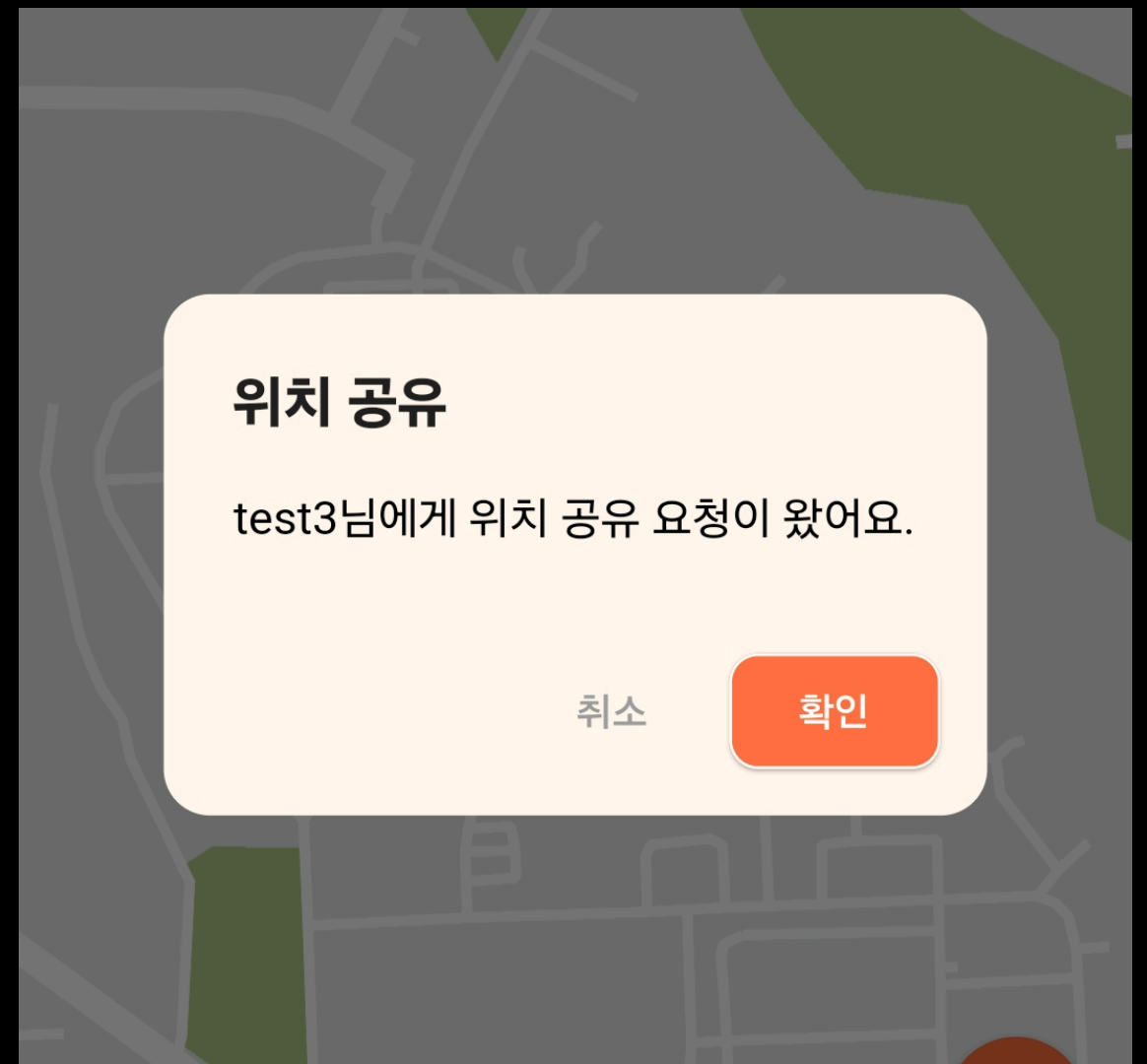


Location Sharing

Map Events : Request Position



test2님에게 위치 공유를 요청했어요!



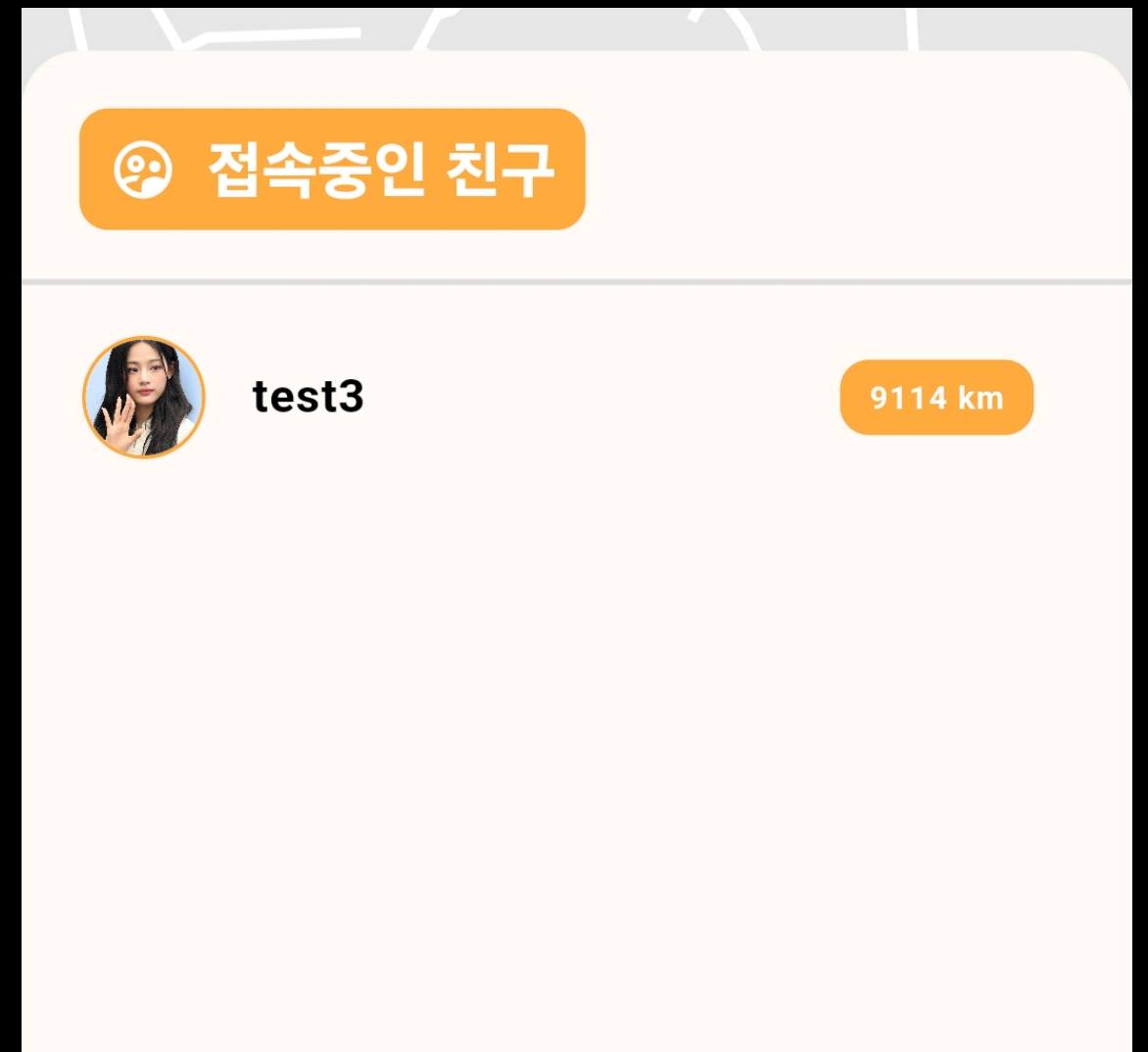
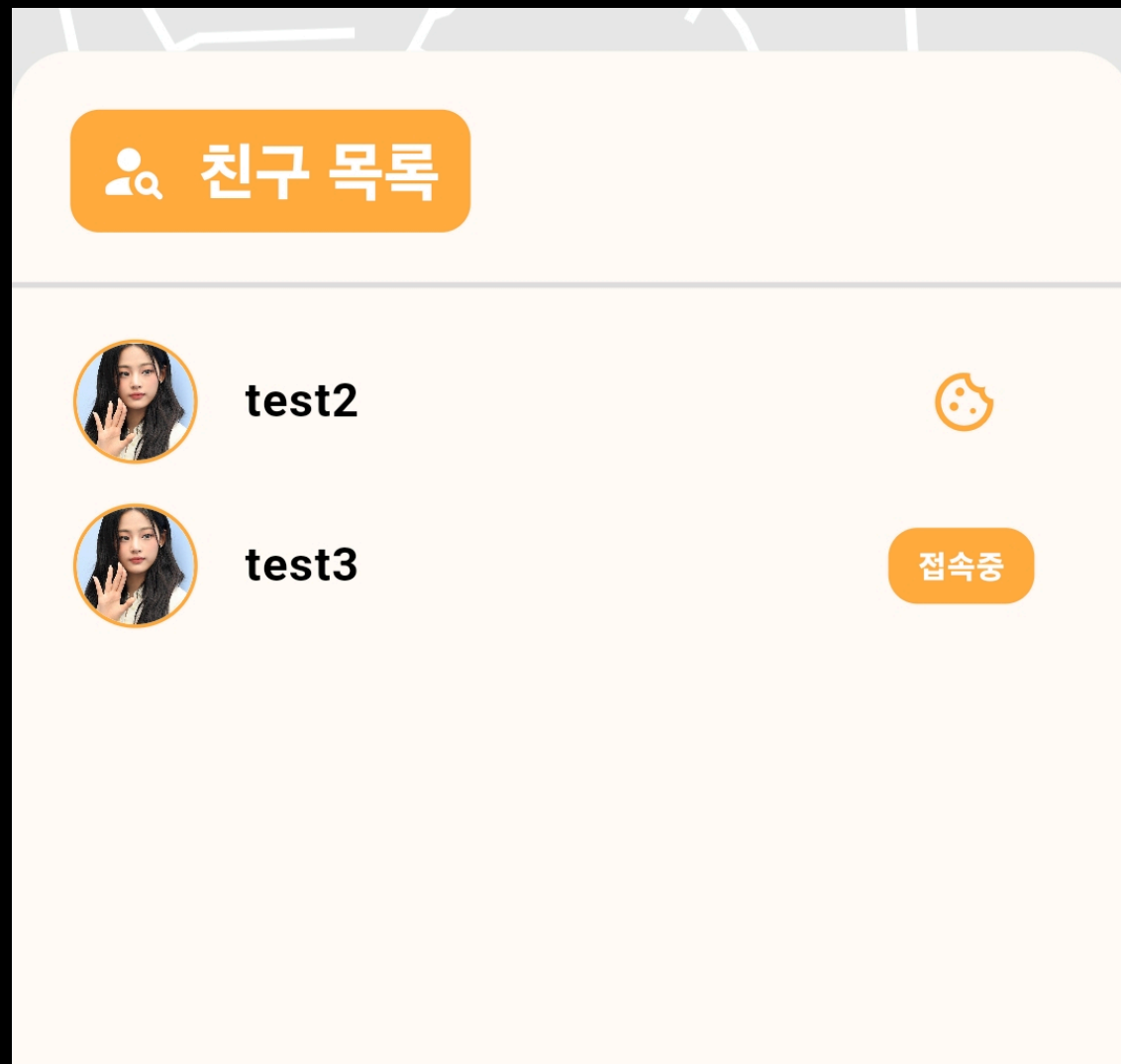
위치 공유

test3님에게 위치 공유 요청이 왔어요.

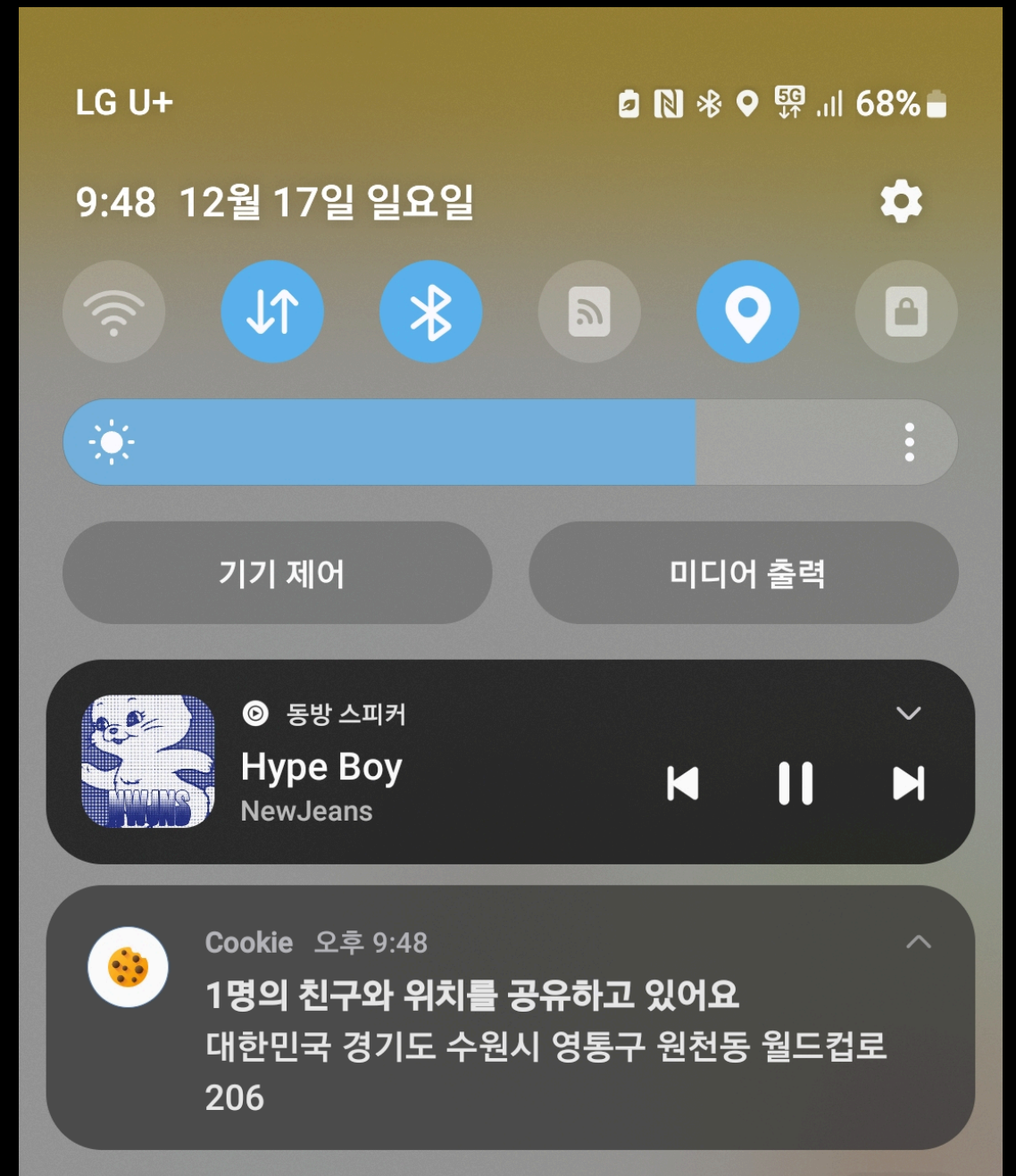
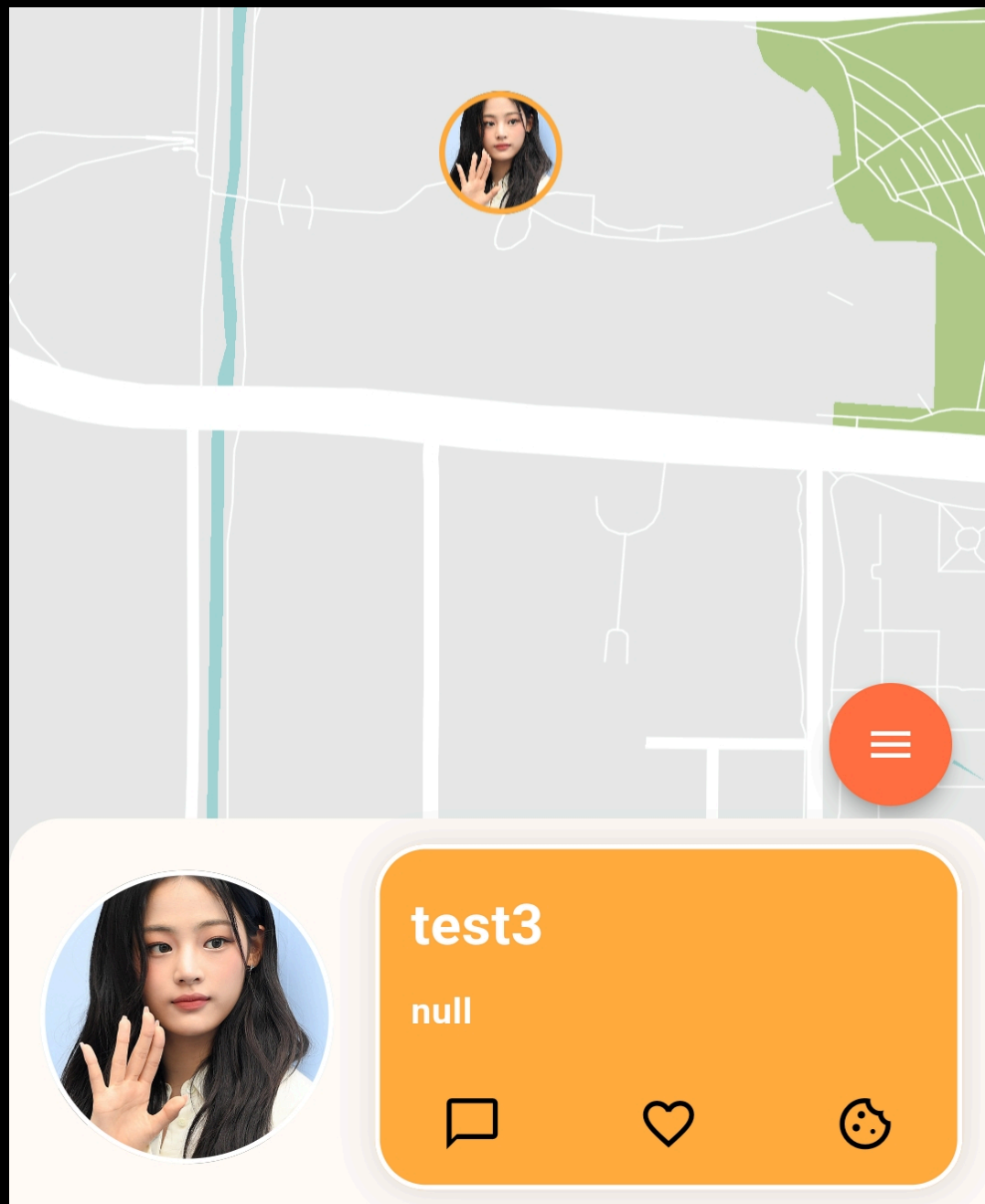
취소

확인

Location Sharing Features



Location Sharing Features



Map Styling

Location Sharing

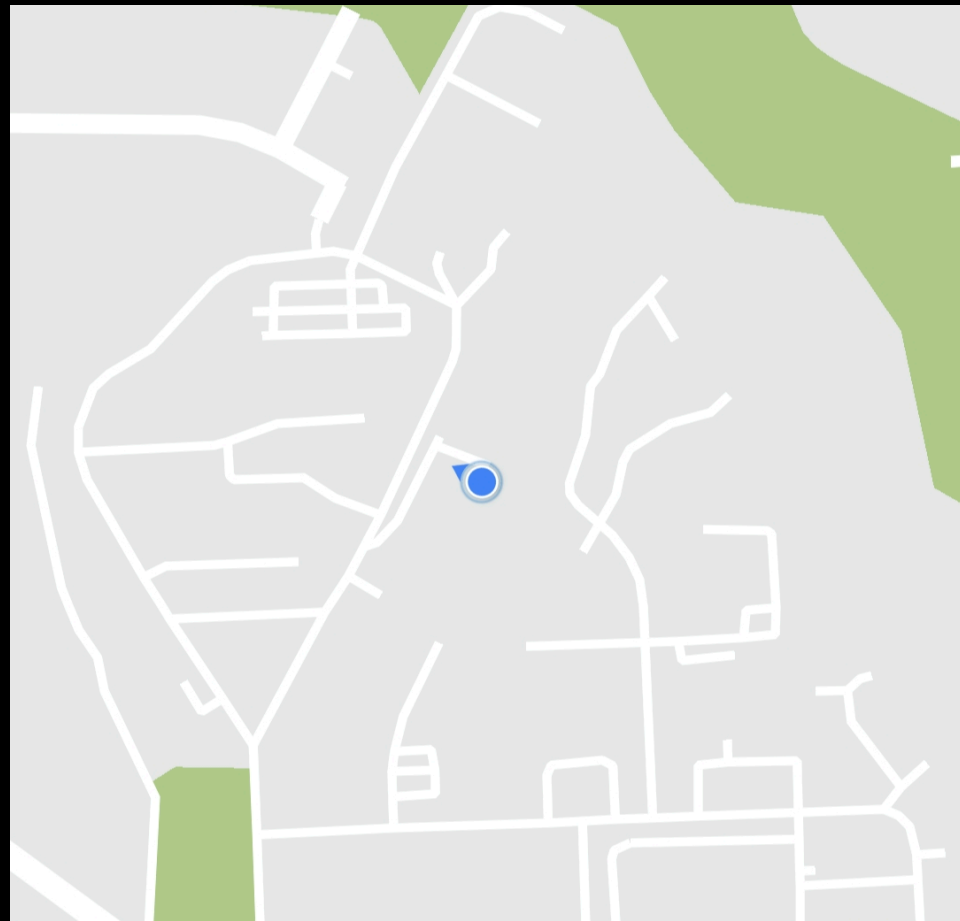
Map Styles

The image shows the 'Create map style' interface in Google Maps. At the top, there's a header with the Google logo, the text 'Try out the next generation of map customization with Cloud-based Maps Styling', and two buttons: 'Learn More' and 'Go to Cloud Console'. Below this is a search bar containing 'ajou university'. The main area is a map of a city with various landmarks and buildings. On the left side, there's a sidebar with the title 'Create map style'. It has a 'Adjust density of features' section with sliders for 'Roads', 'Landmarks', and 'Labels'. Below that is a 'Select theme' section with six theme options: 'Standard', 'Silver', 'Retro', 'Dark', 'Night', and 'Aubergine'. The 'Retro' theme is selected, indicated by a blue checkmark. At the bottom of the sidebar, there are 'MORE OPTIONS' and 'FINISH' buttons. The map itself shows a grid of streets, green spaces, and various icons representing different types of locations like schools, hospitals, and businesses. The map is rendered in the 'Retro' style, which has a muted, vintage-like color palette.

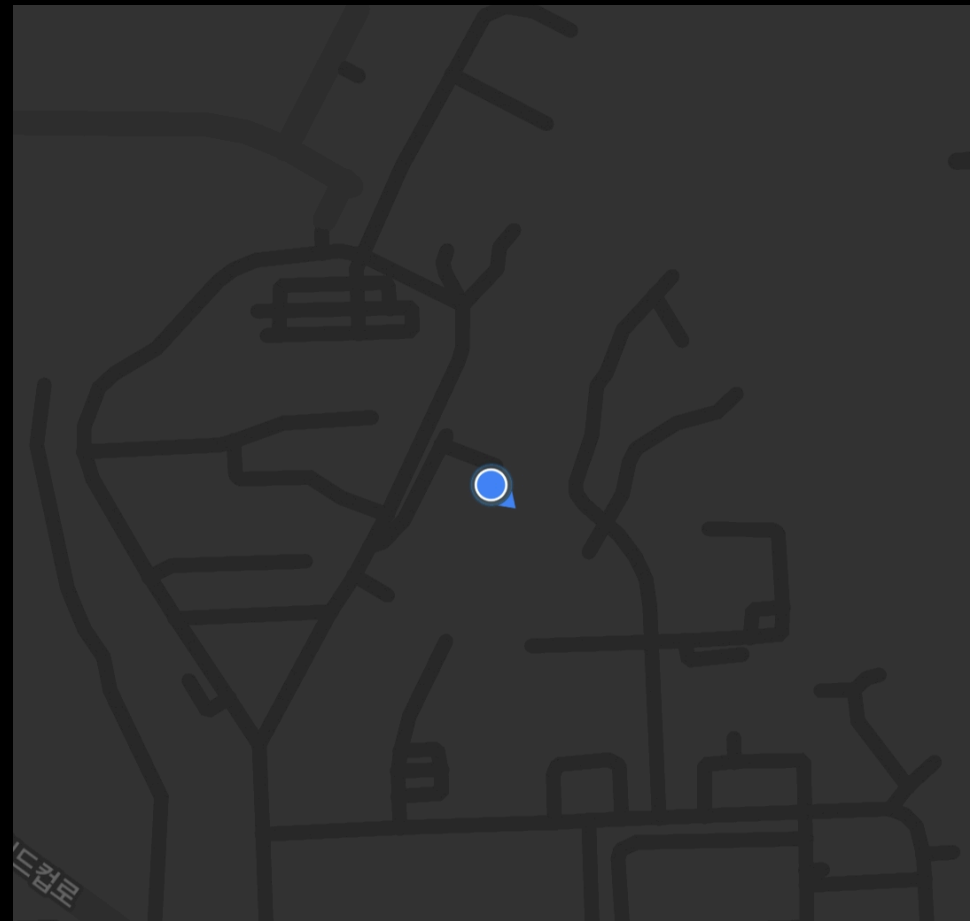
Location Sharing

Map Styles

Default



Dark



Auth

Authorization

JWT

- Access Token
 - As Header of HTTP Request
 - As Auth Header of socket.io



Chatting

9:41

DEBUG

COOKIE

Connected
Hello World

Message ➤

12:51



< COOKIE KIE >

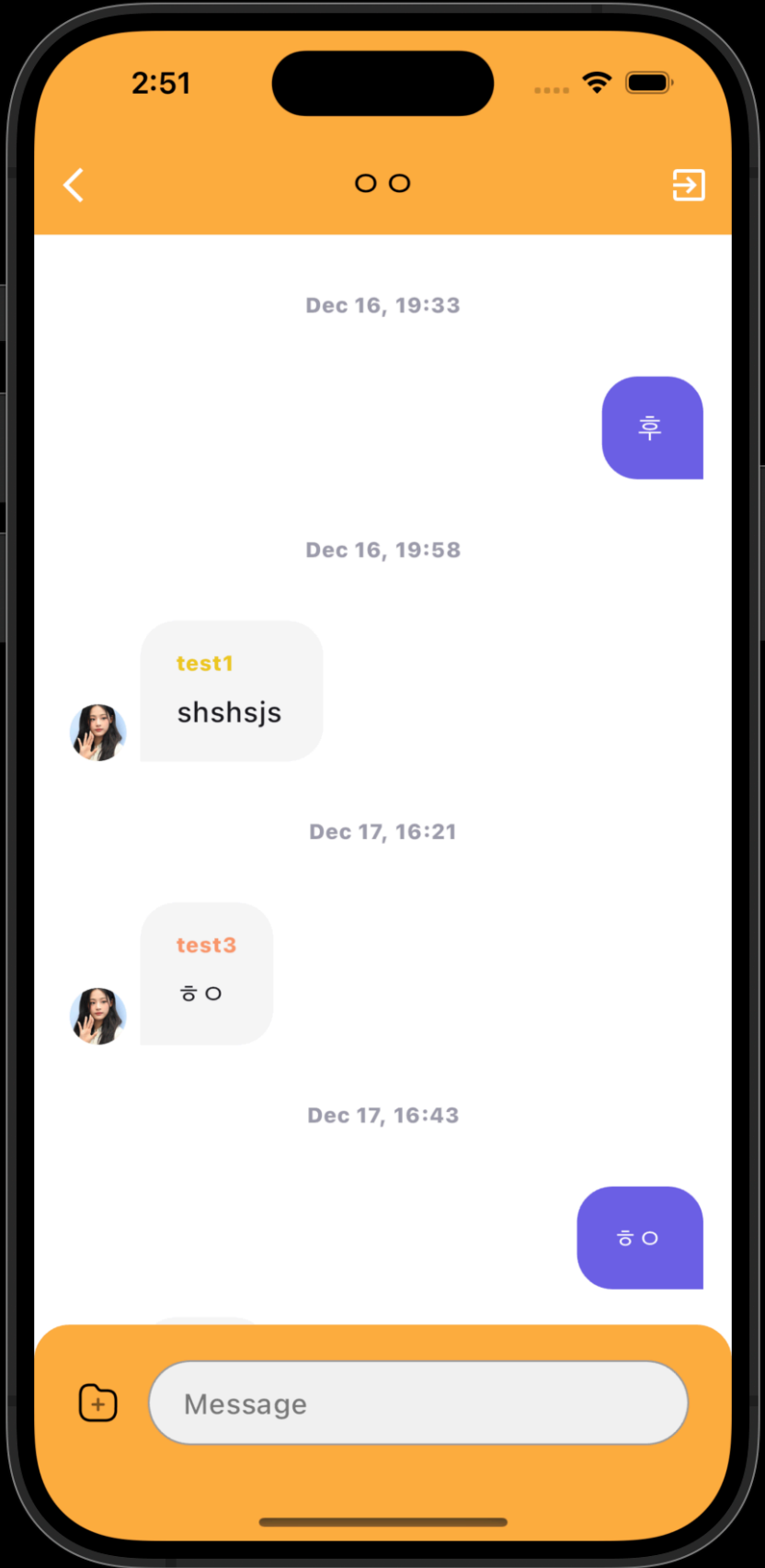
✔ Connected

- 김채원
안녕
- 김채원
ㅎㅎ
- 김채원
ㅎㅎㅎㅎ
- 김채원
ㅋㅋㅋㅋ
- 김채원
😊😊😊😊😊😊😊😊😊😊
- 김채원
🍪🍪🍪🍪🍪

Type your message...

QWERTY keyboard with predictive text suggestions: 'I', 'The', 'I'm'.





Chatting

Implementation History

- March
 - No Concept of Room
- April, May
 - Implementations on Authorization
 - including Account
- September, October
 - Define & Implement socket.io chatting events
- November, December
 - Focused on Firebase Cloud Messaging

FCM Schema Updates

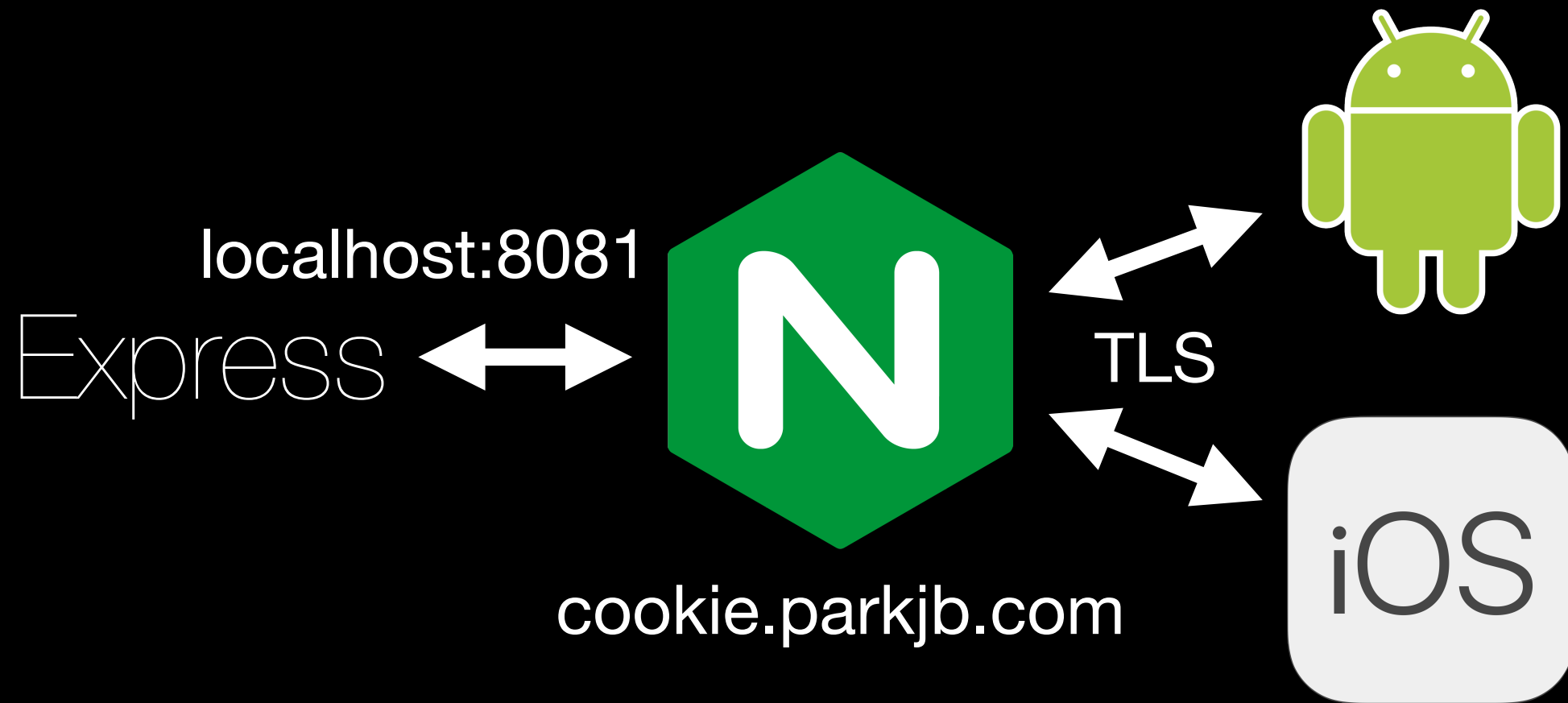
Chatting FCM

- Had to Identify Devices
 - Since FCM refreshes its device token
 - Cannot identify which device's token has been updated

```
_id: ObjectId('657fed69655a85b7f657e0cf')  
udid: SM-S908N:UP1A.231005.007"  
__v: 0  
createdAt: 2023-12-18T06:57:39.835+00:00  
token: "dsYX21TfRpWfk32BHUMtwa:APA91bGGEsN9cSoFn5x0rdhtKxX_823FyQfiu4Hf3uyA_Kv..."  
updatedAt: 2023-12-18T06:57:39.835+00:00
```

```
_id: ObjectId('657fed6c655a85b7f657e24c')  
udid: 1E1E19EE-EAF3-4759-86CF-BBBDA2D3787B"  
__v: 0  
createdAt: 2023-12-18T06:57:42.894+00:00  
token: "d1btCw0310RHjY0Fd0-L_I:APA91bGvIvllSSXYL6ch806bFGbh4kySIhe1GhRDS_joaLs..."  
updatedAt: 2023-12-18T06:57:42.894+00:00
```

Deployment





TestFlight

Challenges

Dart Language

Dart Language

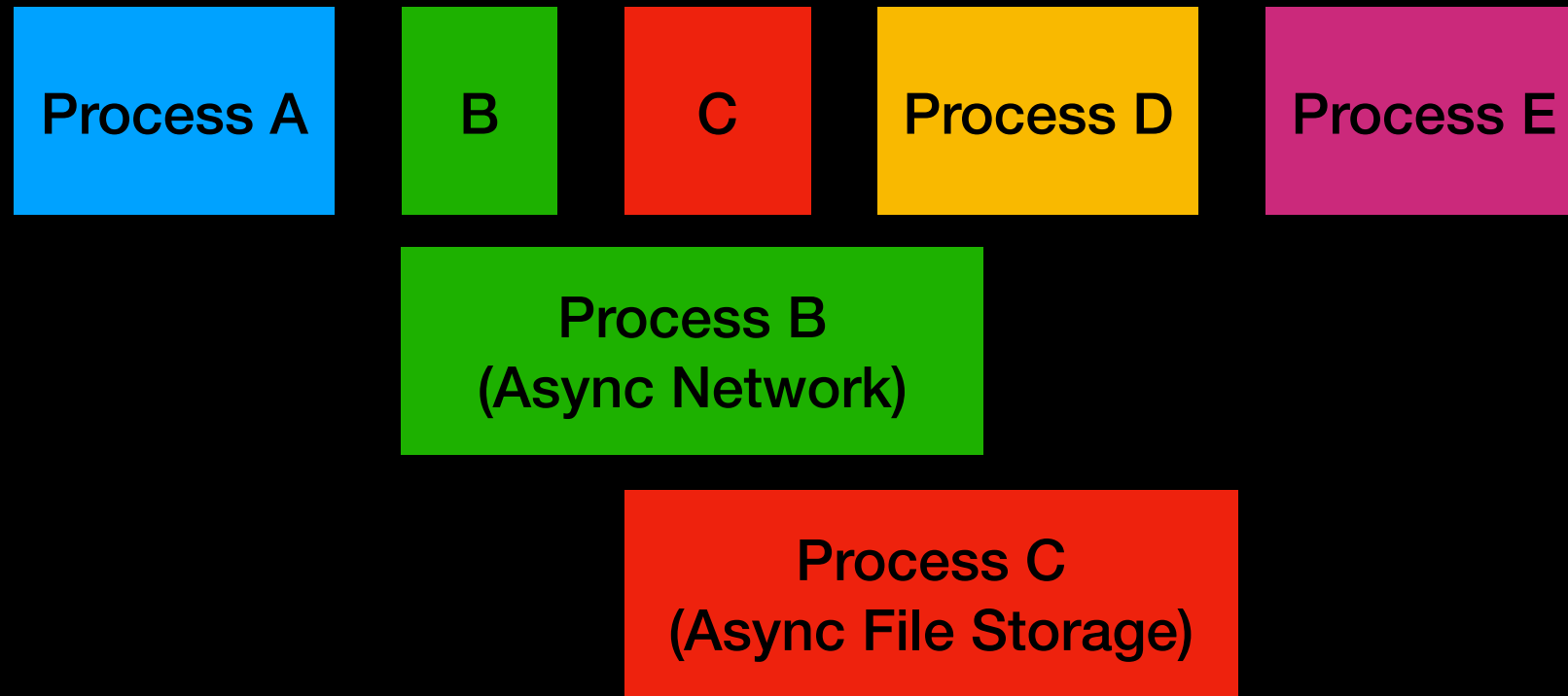
- A mix of features from different language
- C-like
 - Static Typing
- JS-like
 - Dynamic typing
 - Asynchronous Programming
 - Future
 - `async / await`

Version Control

Git & GitHub

- Use to archive and maintain code
- At the beginning, only the "main" branch is used
 - As the project expands, managing it in a single branch becomes challenging
 - To cope, we split tasks into distinct branches
 - feature/chat, feature/map, feature/friend, ect.

async & await



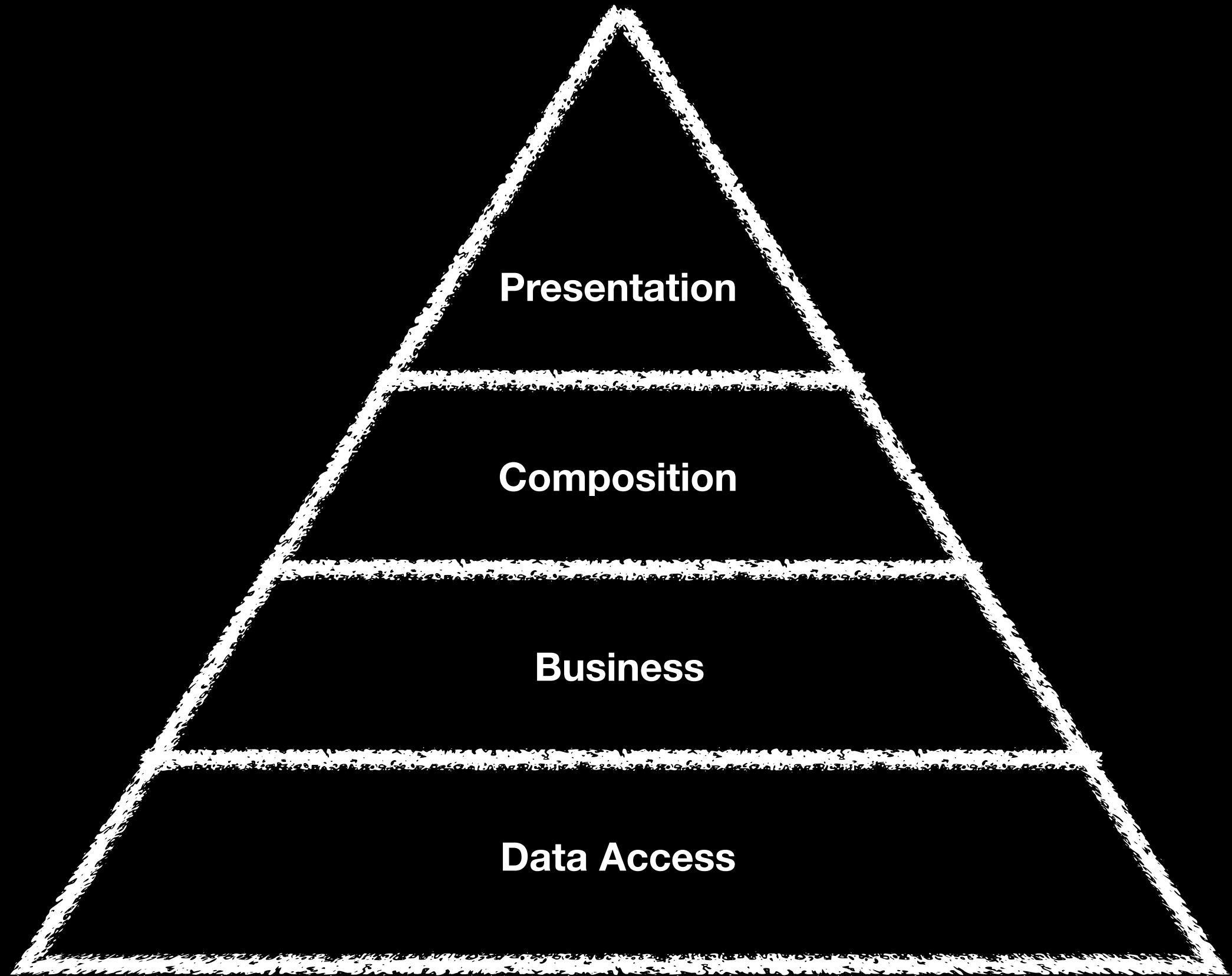
Asynchronous Processing

Software Architecture

MVVM

Model View ViewModel

- Separating the Interest
 - View Logic should only include logics about view
 - Business Logic should include logics behind the view
- MVVM Architecture
 - Model
 - View
 - ViewModel
- Observer Pattern



Todos

Todos

Caching & Chatting

- Caching
 - Local Database (such as Hive or sqlite)
 - API
 - Send Request with Last Updated Time
 - If not changed, 304 Response
- Chatting
 - View for 'Who' is in the chatting room
 - Indication for who read the chats
 - Reliability & Stabilizations
- Code Review & Refactoring

Result & Demo

Thank You

Questions are welcome