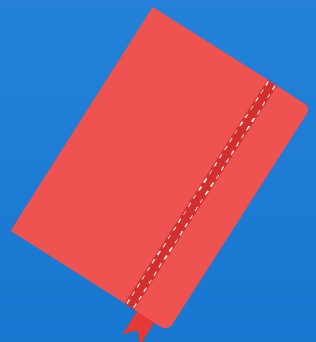
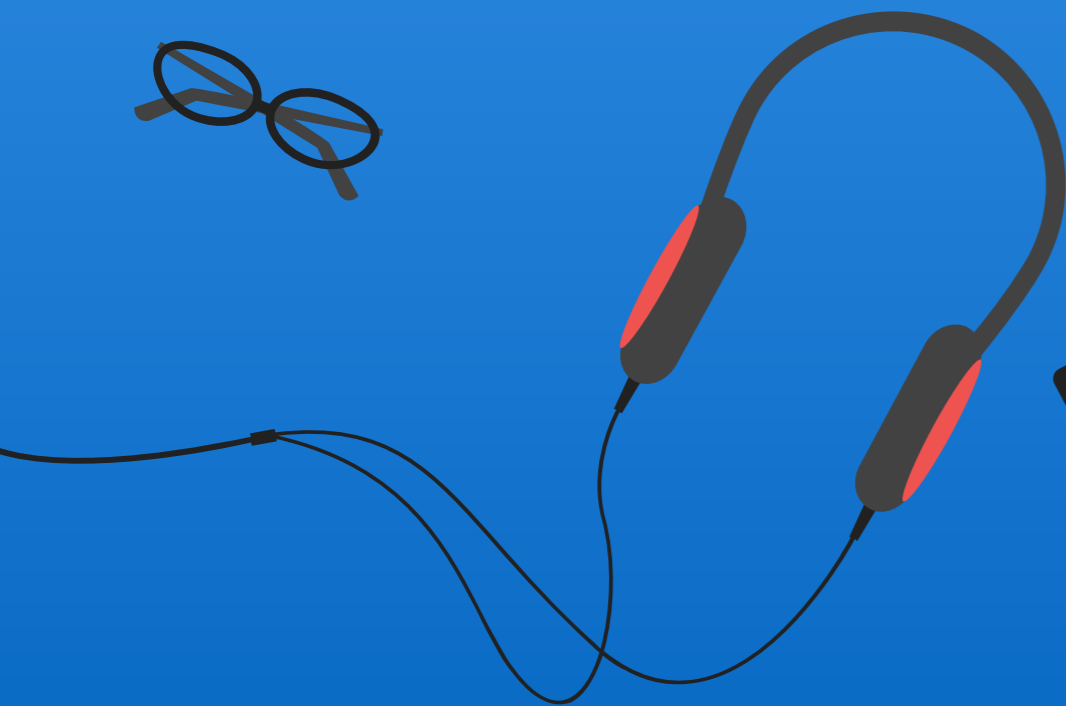
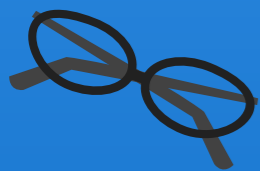


Eksibition

Virtual Exhibition Guide on Smart Phone



Outline

1. Term 1 Recap
2. Term 2 Objectives
3. Google Maps Integration
4. News System
5. Account Management
6. Multiple Language Support
7. Web Admin Panel
8. Back-end Code Revision
9. Video Demonstration
10. Summary



Term 1 Recap

Features Developed in term 1:

- Showing information for closest item automatically
- Ticketing System supporting Apple Pay and Apple Wallet
- In-door navigation indicating user's location
- Counting the number of like and share of each item
- Force Touch shortcut



Term 2 Objectives



News System



Multiple Language



Account Management



User Behavior Analytics



Map Integration

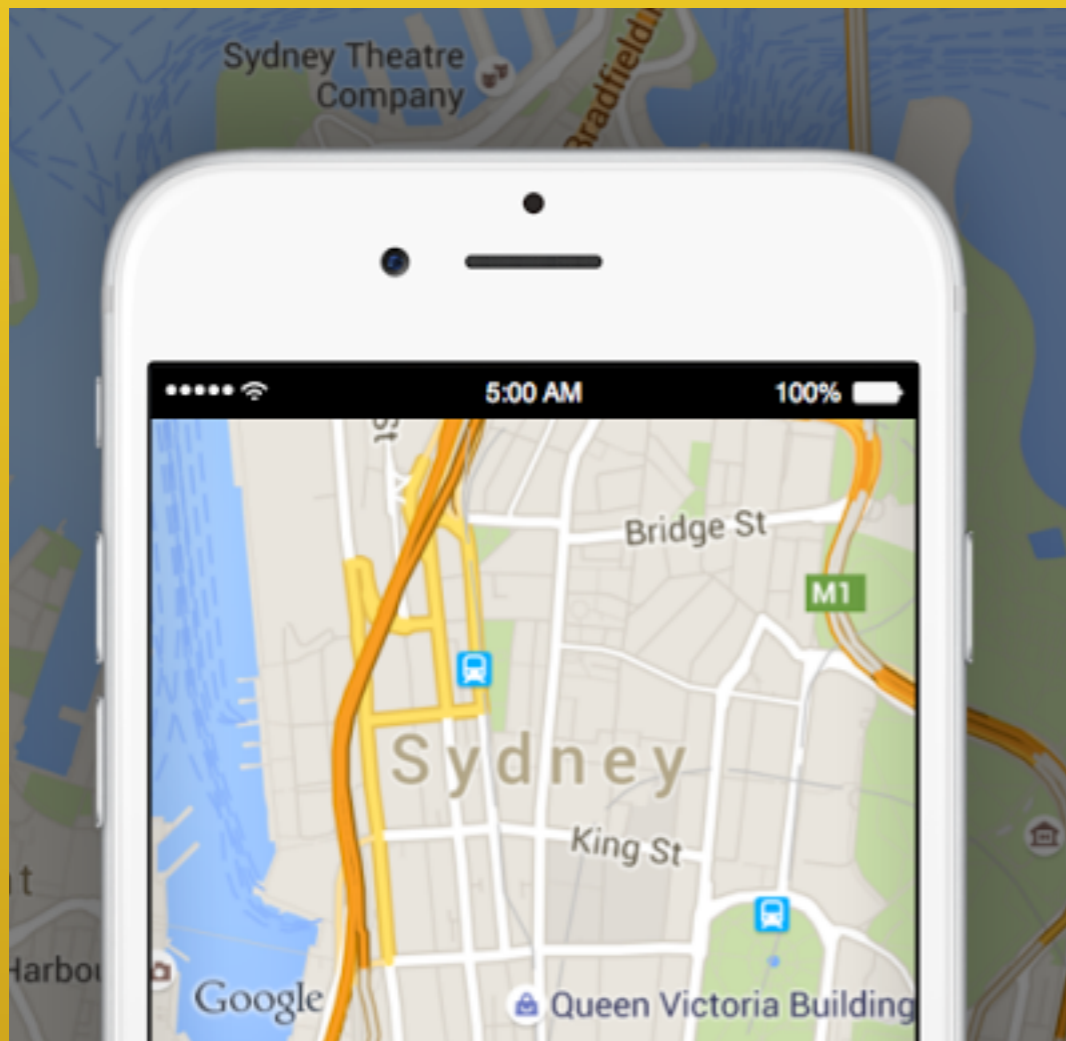


Web Admin Panel

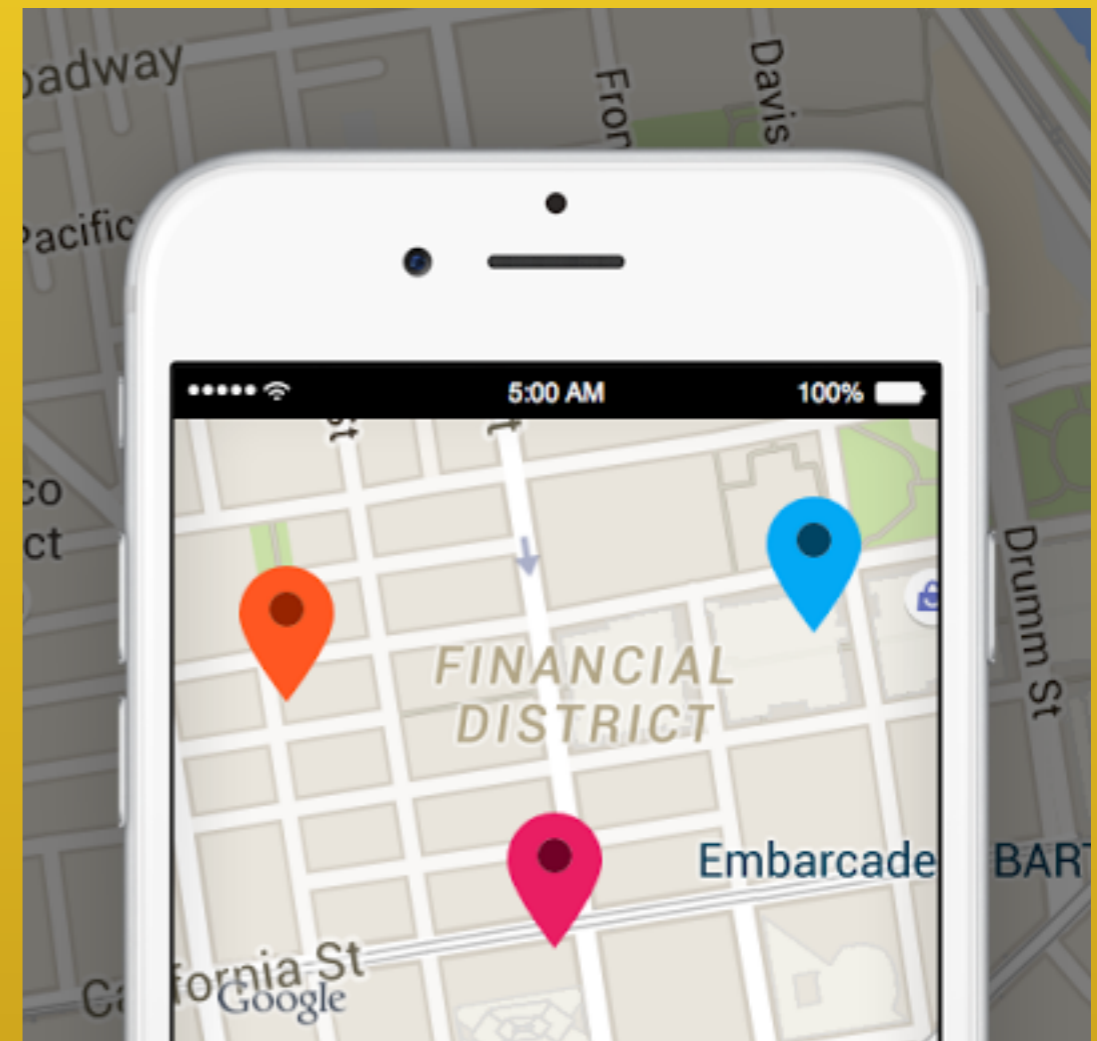
Maps



Google Maps SDK for iOS

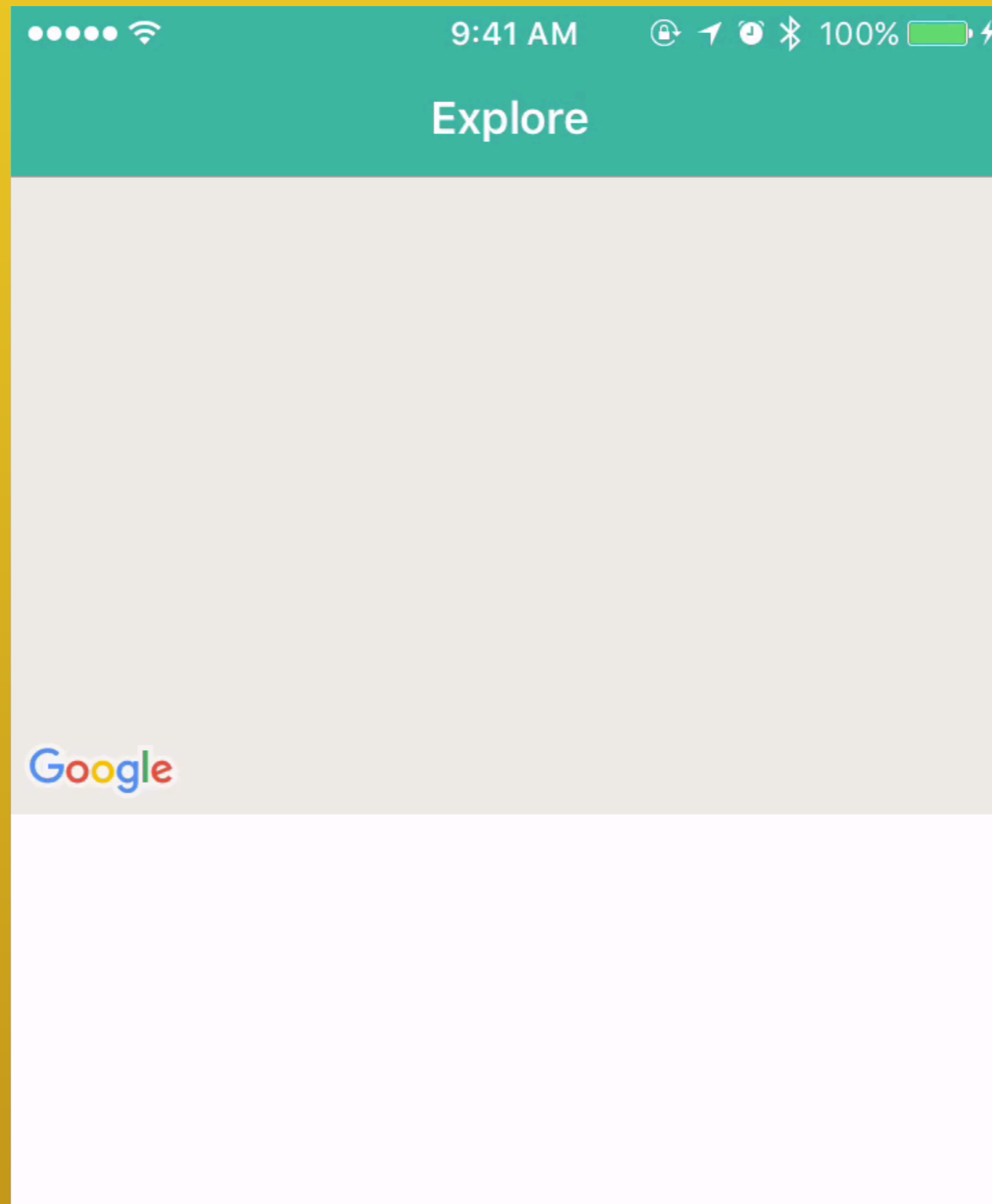


Integrate base maps, 3D buildings and indoor floor plans



Add custom markers, info windows and polylines

Custom Markers & Info Windows



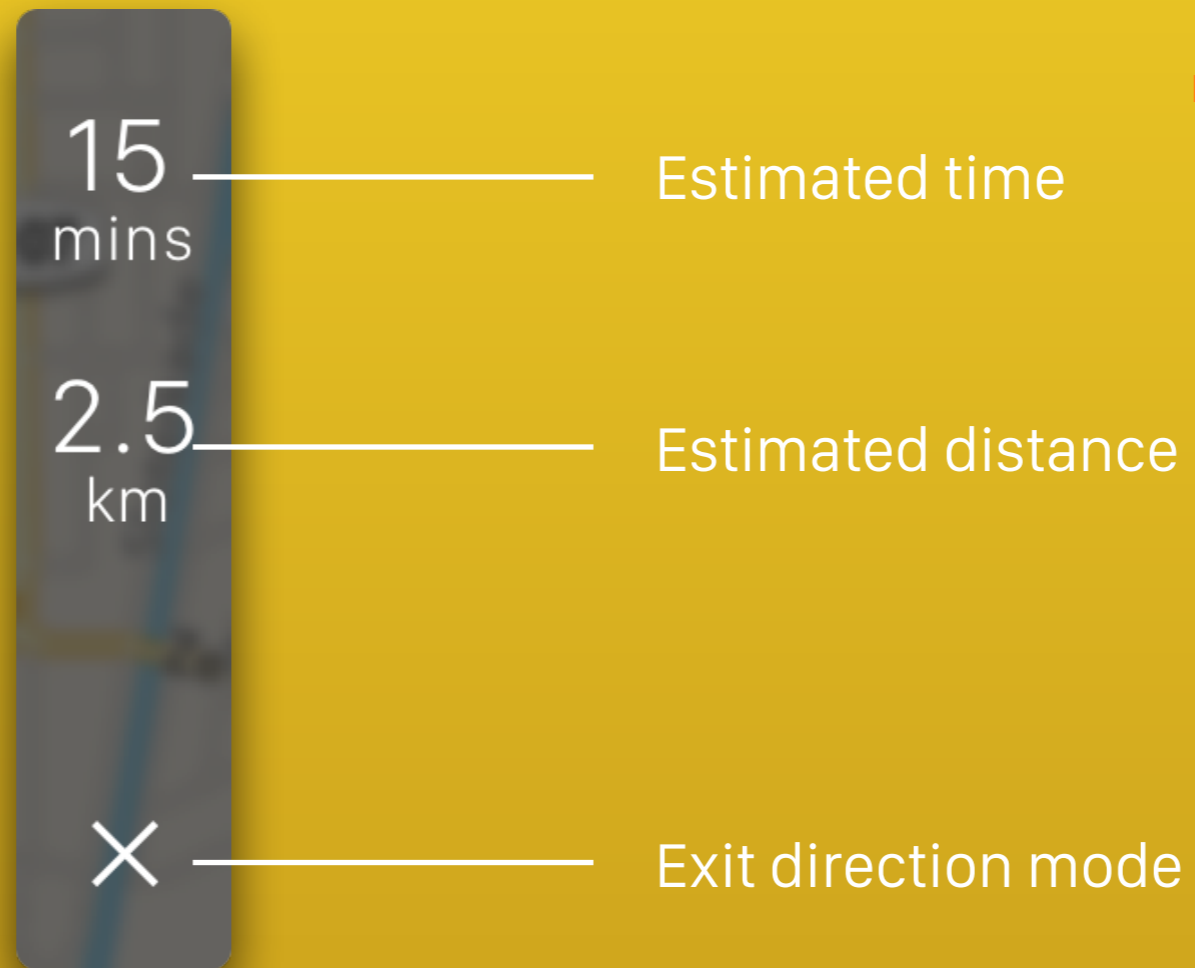
Custom Markers & Info Windows



Direction Mode



Info Panel



News



News List Design



News Detail Design

●●●○ CMHK WiFi Call 6:45 PM 100%

< News

The 7th Anniversary of Professor Charles K. Kao 's Nobel Prize

News title

Post time

2016-04-23

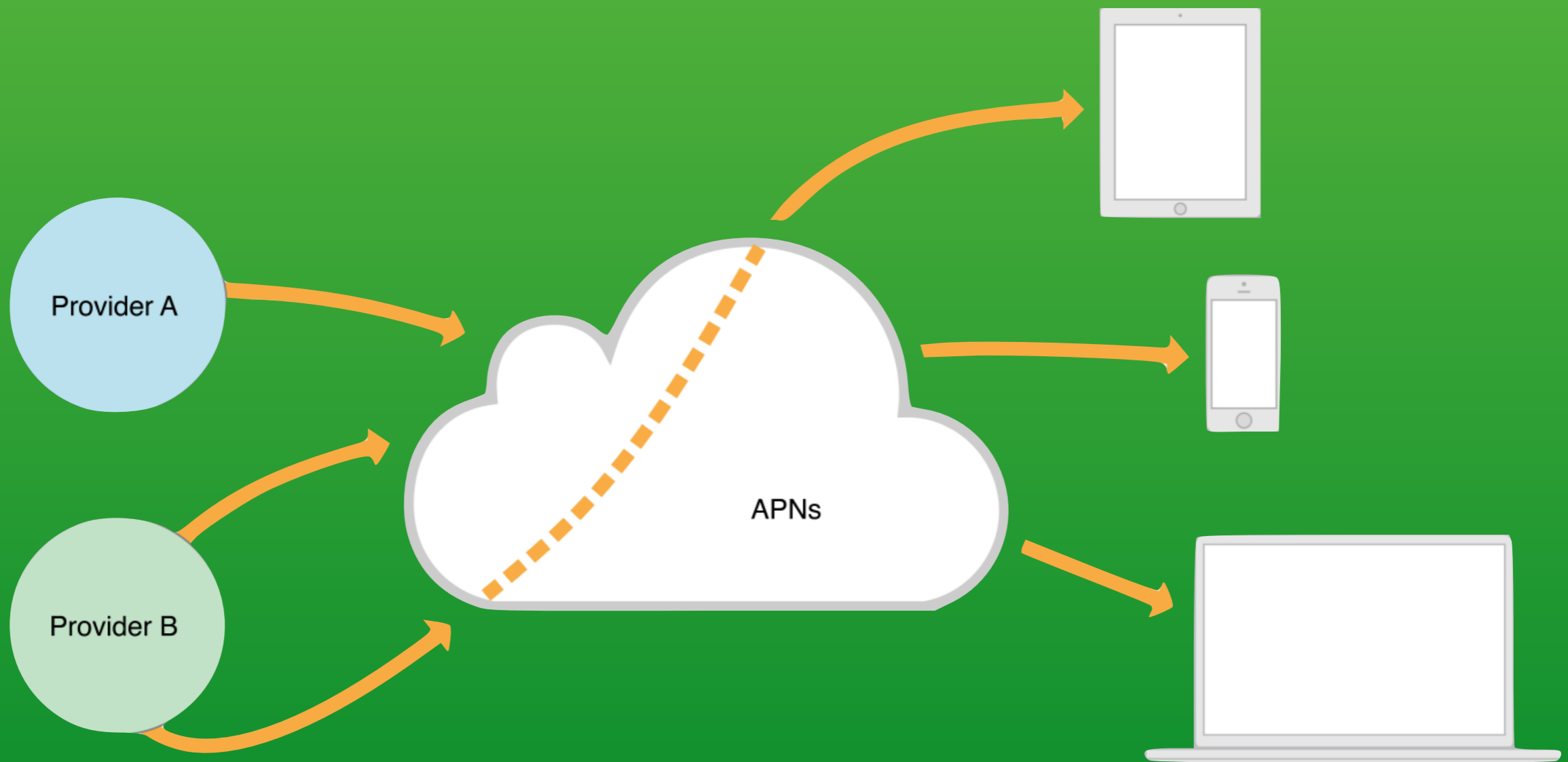


Head image

Content

In 2009, Professor Charles K. Kao, former Vice-Chancellor of CUHK (1987-1996) and 'Father of Fibre Optics', received the 2009 Nobel Prize in Physics from Swedish King Carl XVI Gustaf at the Concert Hall in Stockholm, Sweden on 10 December 2009 amid warm applause.

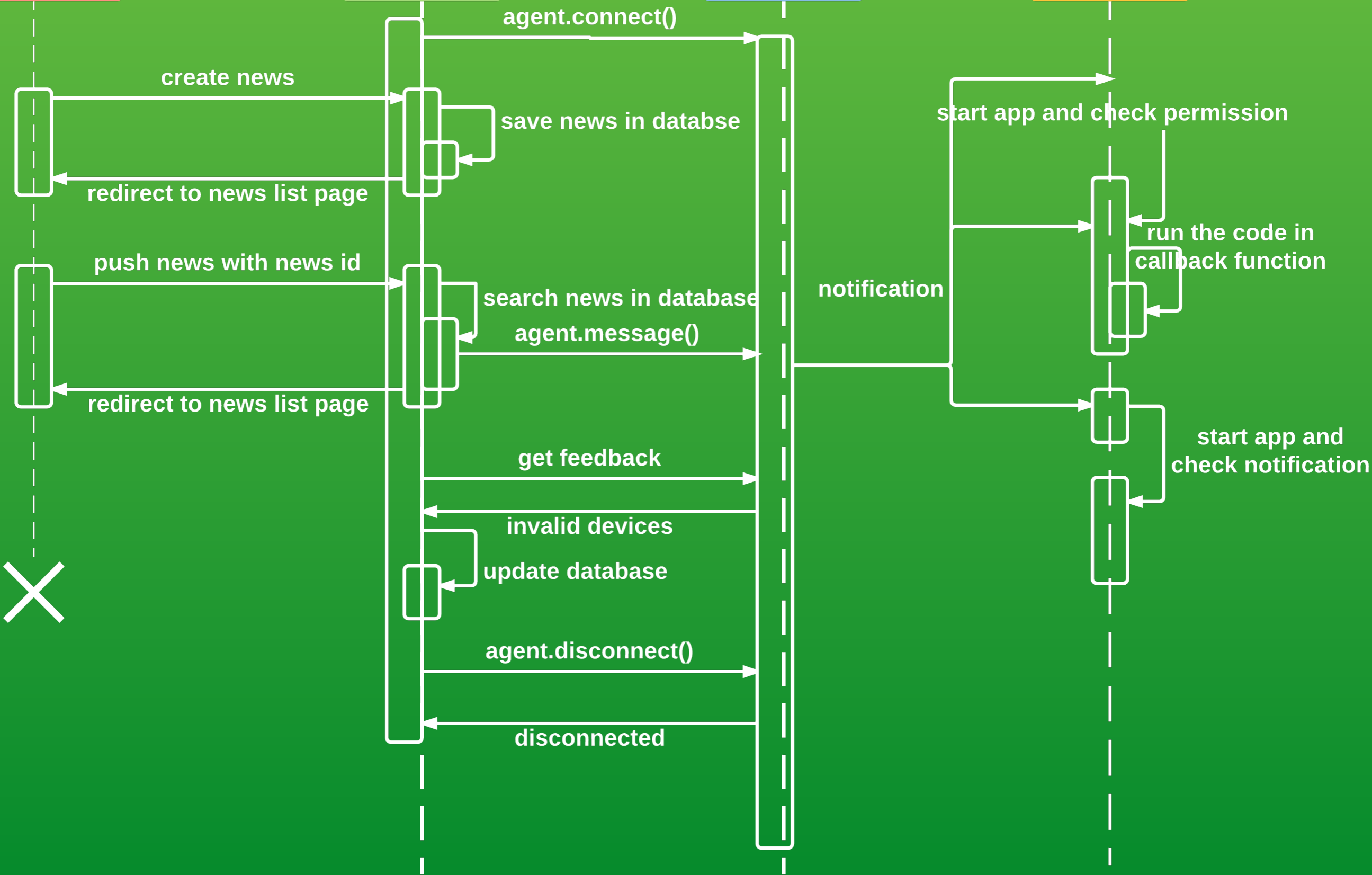
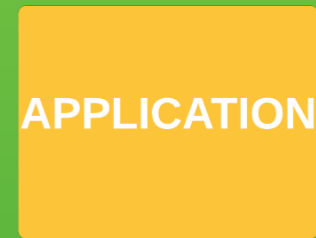
Apple Push Notification Services



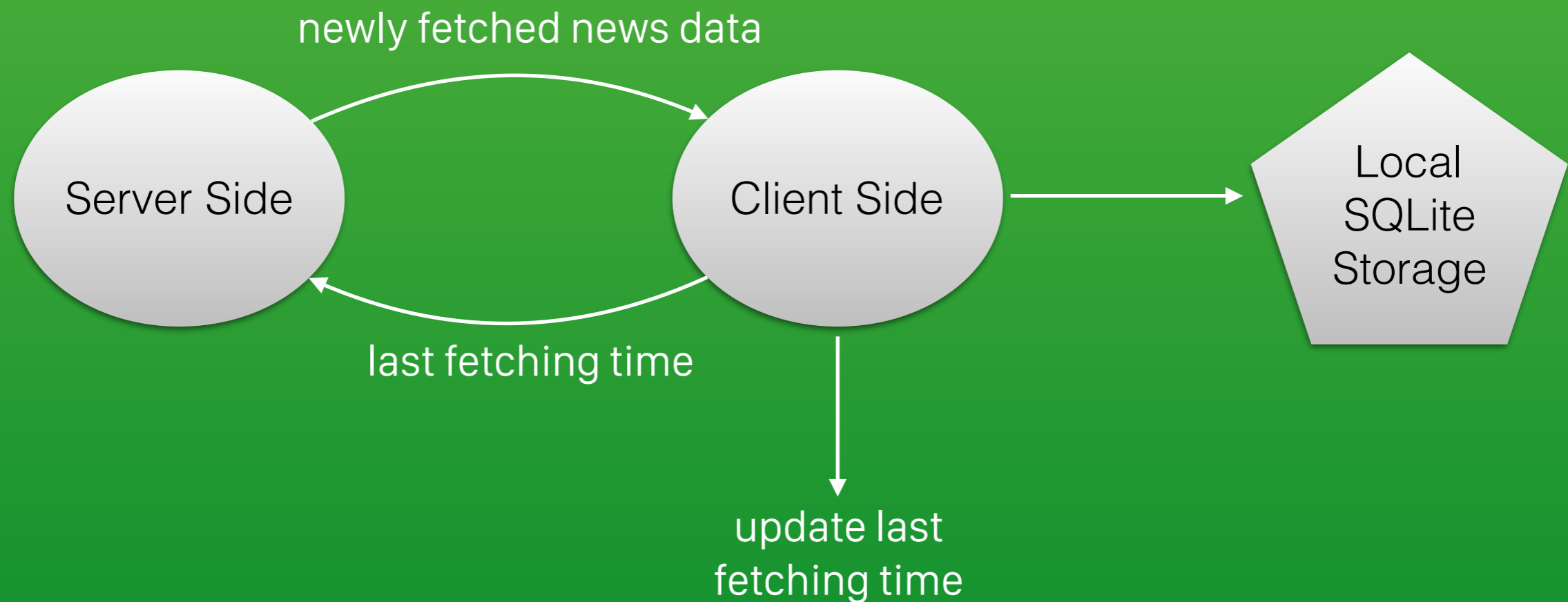
Pushing Notification With Node.js

- Node.js Module: APN Agent
 - Permanent Connection
 - Device Token
- Notification Payload: JSON object





Core Data for Offline Mode



Account Management



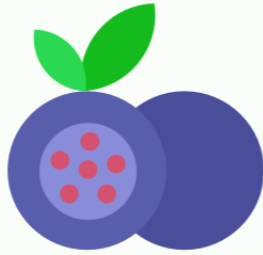
Account Types

- Register with email address
- Register with Facebook account

Client Side Design

Carrier 8:20 PM

Cancel Account Sign Up




Email

Password

Sign In

or

 Log in with Facebook

Carrier 8:20 PM

< Account Sign Up with Email

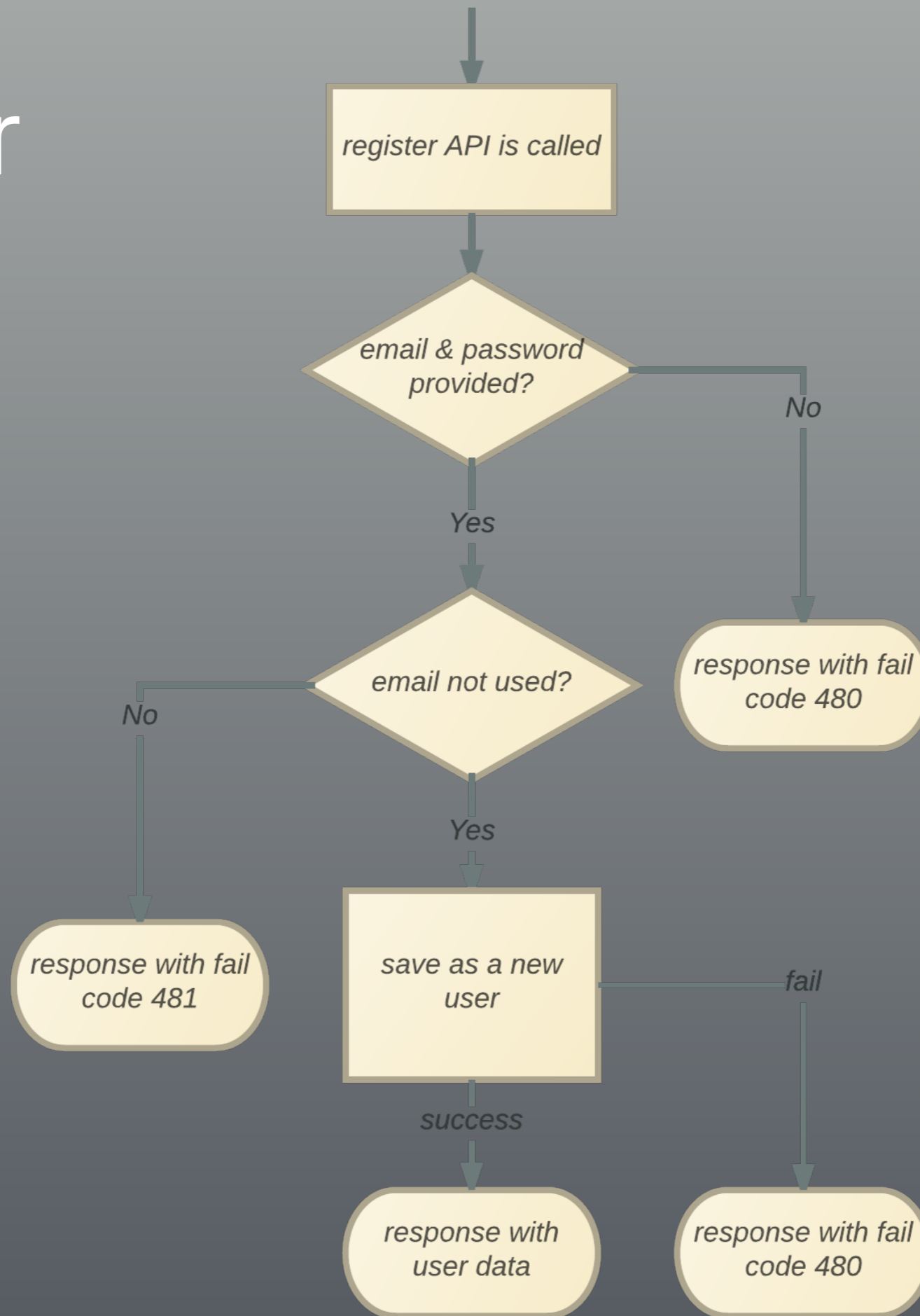
Email

Password

Nickname (Optional)

Sign Up

Register



Login

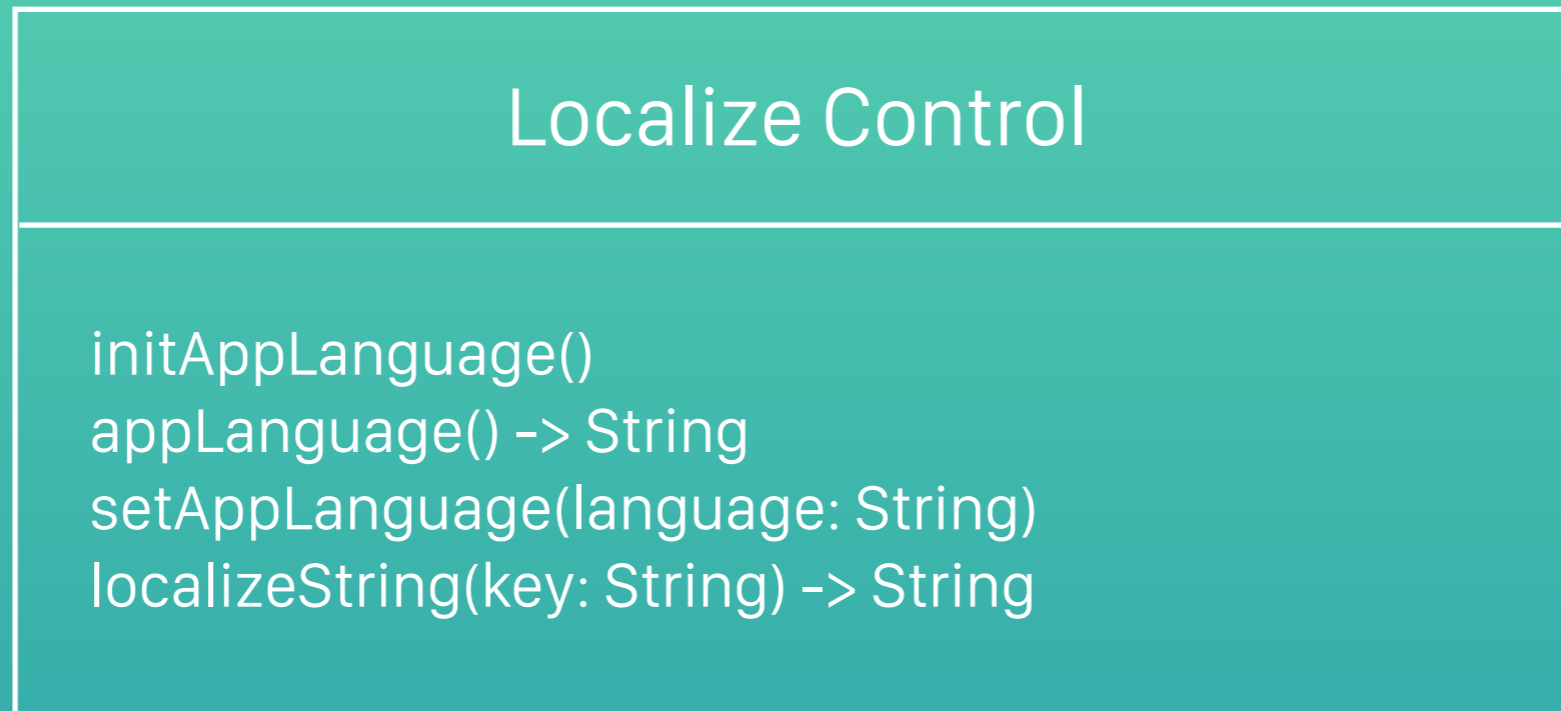


Multiple Language Support



Local Text

- Language Control Singleton



en-US: English

zh-hant: Traditional Chinese

zh-hans: Simplified Chinese

Text from Server

- Language dictionary in returned JSON object

```
"title": {  
  "languages": {  
    "zh-Hans": 2,  
    "zh-Hant": 1,  
    "en-US": 0  
  },  
  "content": [  
    "University Station Exit A",  
    "地鐵大學站A出口",  
    "地铁大学站A出口"  
  ]  
}
```

language dictionary

content array

Text from Server

- Refined database schema

```
Item:{  
  ...  
  title: String,  
  description: String,  
  ...  
}
```



```
Item:{  
  ...  
  title: String,  
  description: String,  
  ...  
  title_zh_t: String,  
  title_zh_s: String,  
  description_zh_t: String,  
  description_zh_s: String,  
  ...  
}
```


Admin Panel

elvinjin.com

Sign in

YOUR USERNAME OR EMAIL

PASSWORD

LOGIN

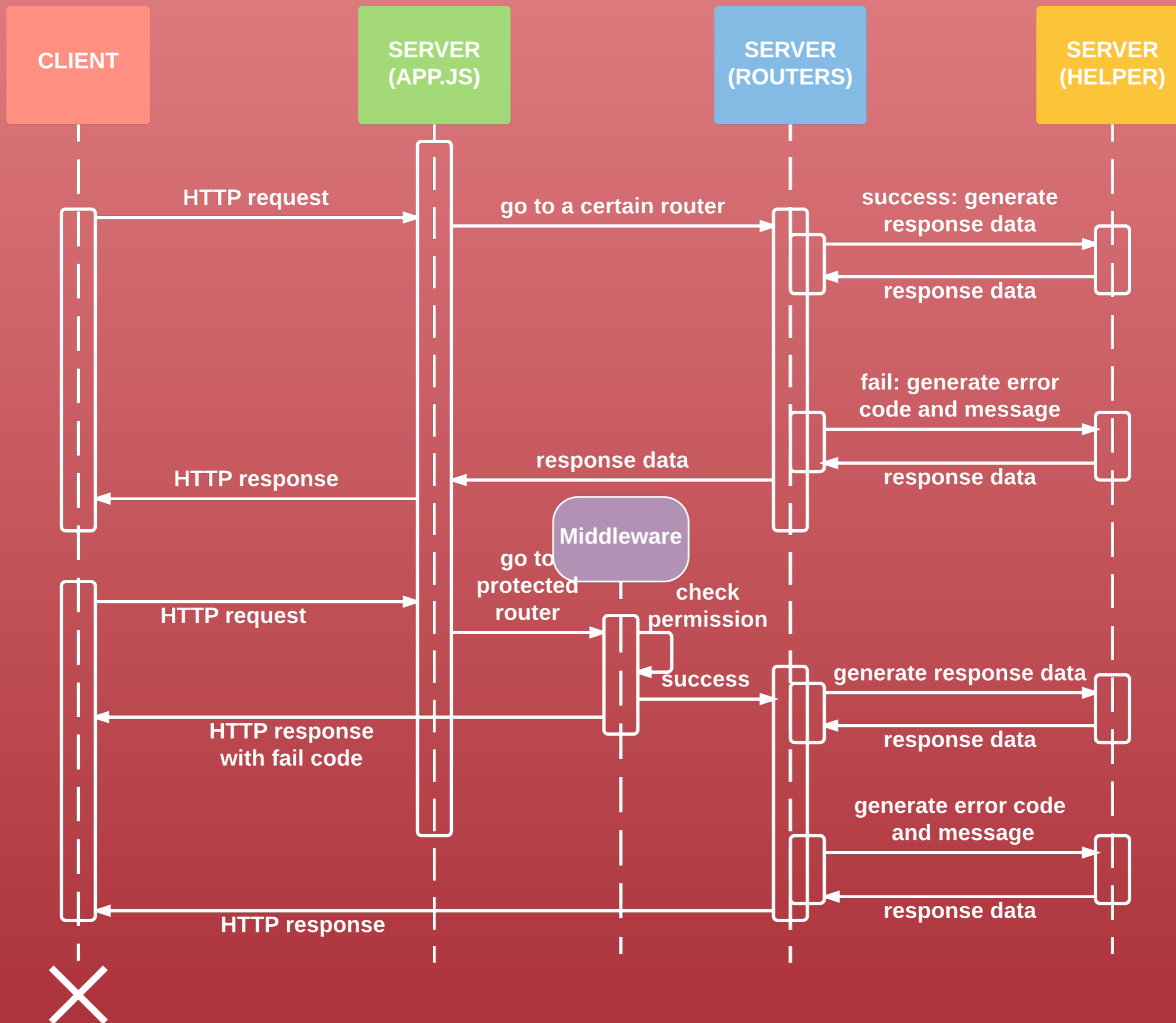
SIGNUP

[Forgot password?](#)

Backend Code Revision

- Standardize HTTP Response
 - New Module: AppHelper
- Protecting APIs with Middleware





Video Demonstration



Summary

- All features listed in term 1 report are developed:
 - Maps & News
 - Account Management & Multiple Language Support
 - User Behavior Analytics
- We also make some other optimizations:
 - Integrated Soundtrack Player
 - Web Admin Panel
 - Backend Code Revision
- Possible future development:
 - Multiple languages support in push notifications and soundtrack
 - Support more complex news format
 - Bind Facebook account with email account

Thank You