

iOS應用程式開發
iOS APP FINAL PROJECT PROPOSAL

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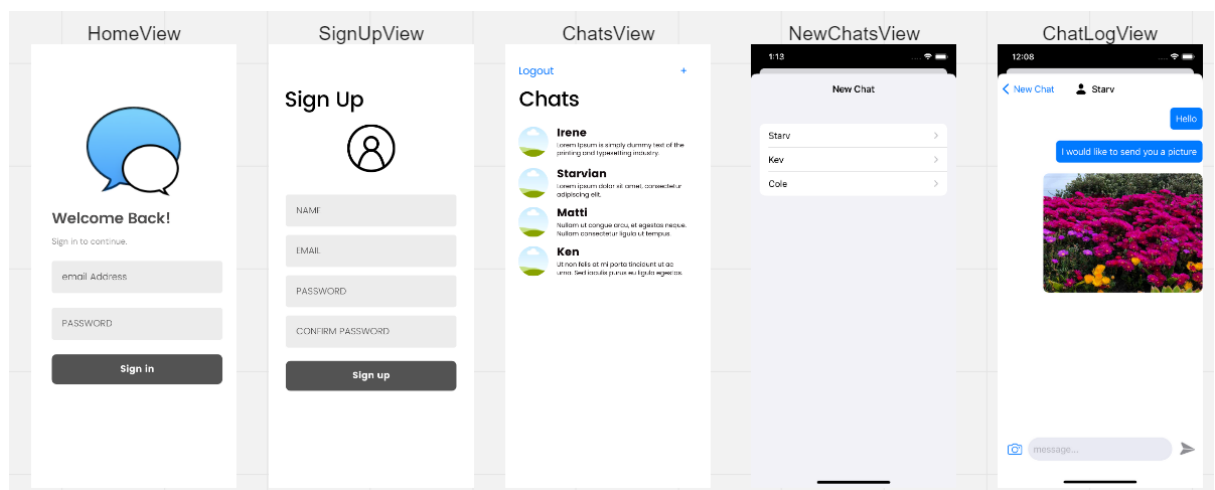
I. App功能介紹

- App Name: EaseChat
- Motivation: To help us develop the skills we've already learned and to give us the opportunity to master SwiftUI frameworks by creating a real-time Chat Application.
- Application features:
 - Simple log-in and sign-up
 - One-to-one chat
 - Real-time text transmission
 - Easy for multitasking
 - Operating at any time and from any location using WiFi or cellular networks

II. 相近App介紹

- Related App: WhatsApp
- The features that it offers:
 - Simple log-in and sign-up
 - Each user can create a profiles
 - The ability of real-time one-to-one chatting
- What do you like about it
 - Aesthetic and simple UI design
 - Sends messages smoothly in real-time
- Differences between your App and the aforementioned App
 - Our app has a more simple design and functionality
 - Our app is for people who aren't used to having a lot of features.

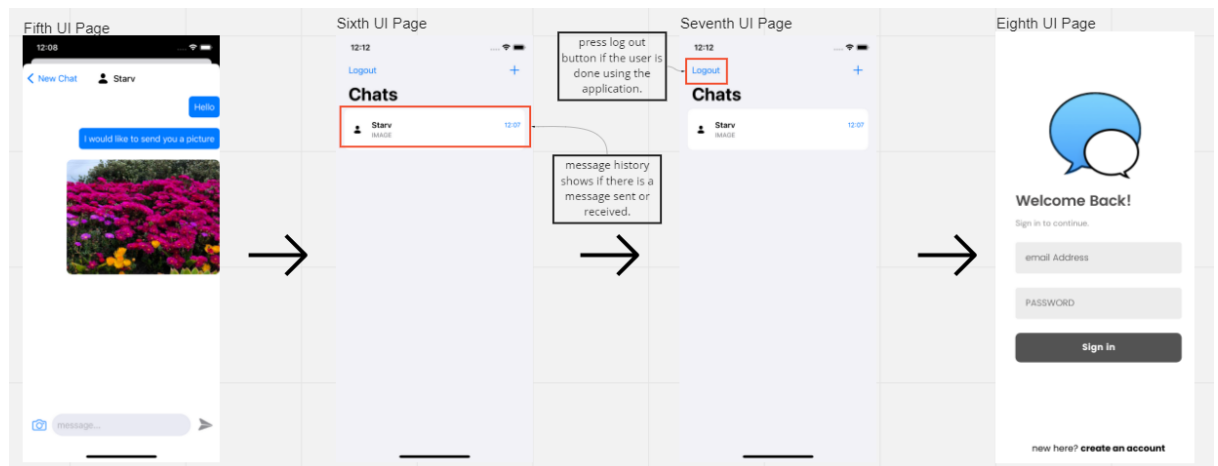
III. Views Introduction & App Flowchart



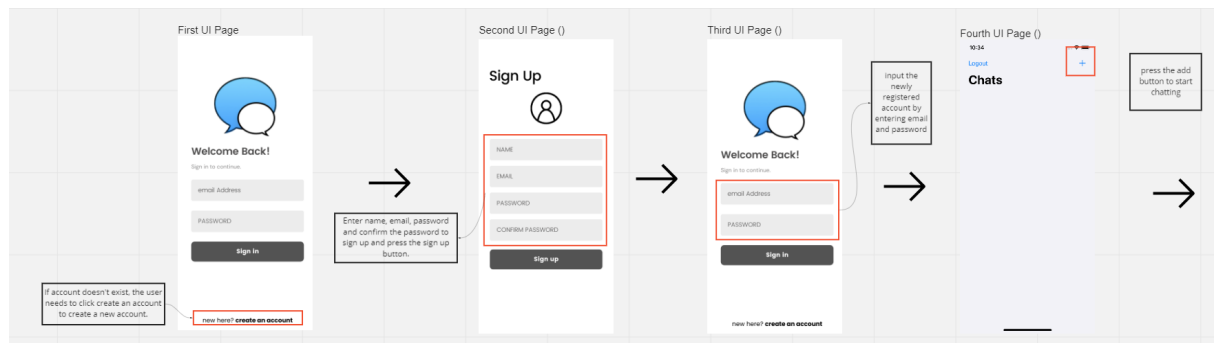
User exists Prototype Flowchart (1/2)



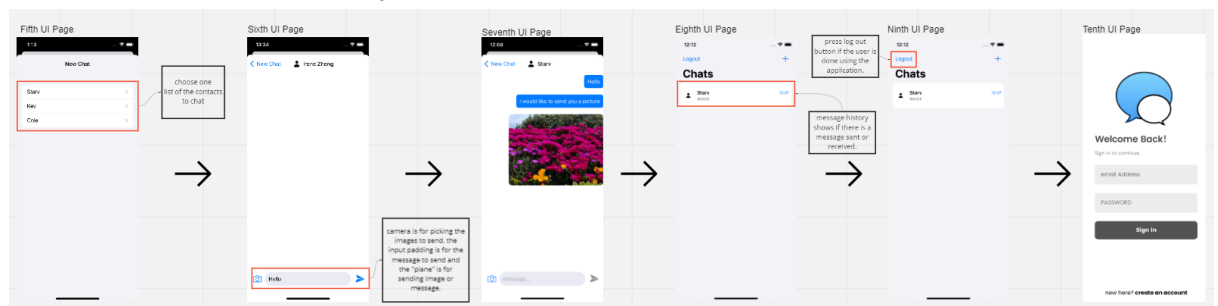
User exists Prototype Flowchart (2/2)

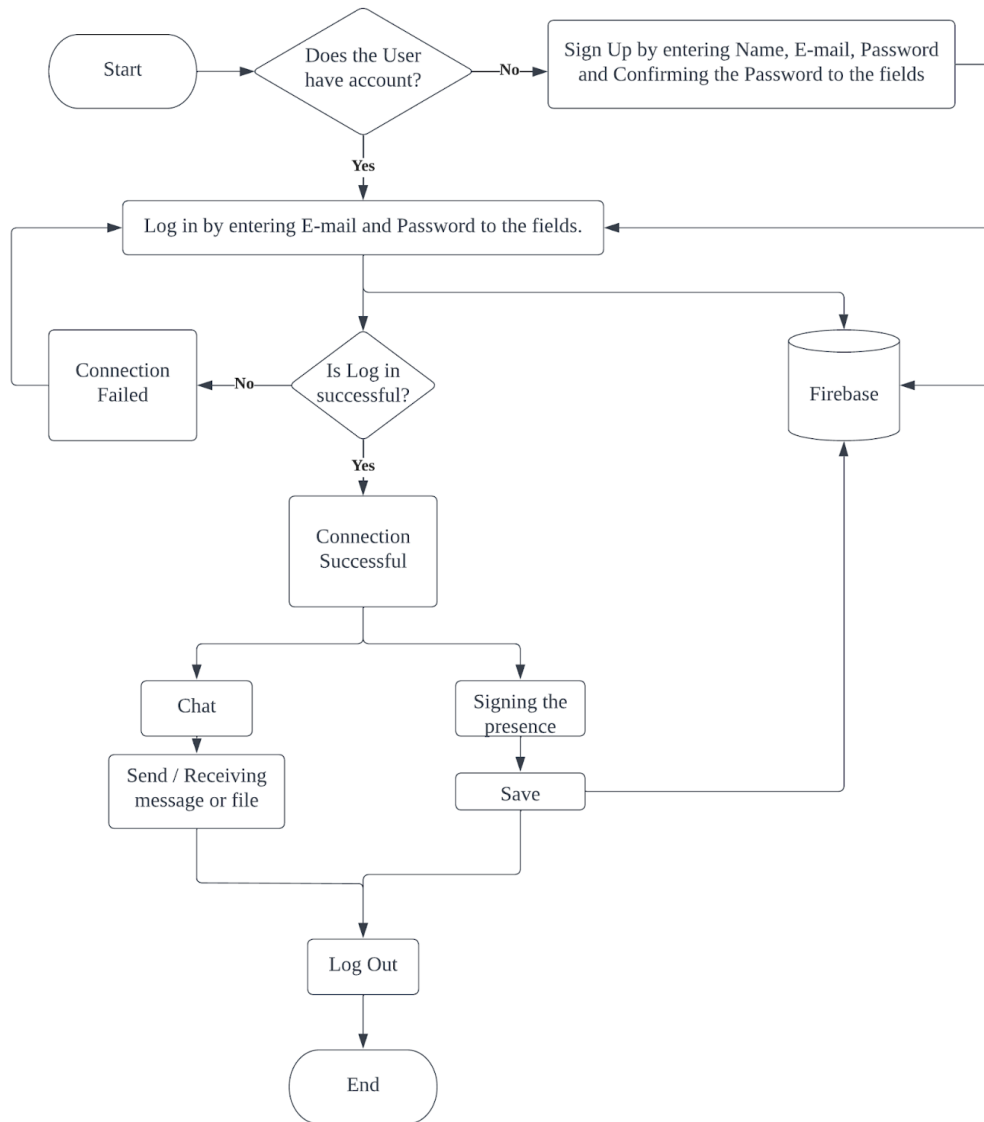


The user doesn't exist Prototype Flowchart (1/2)



The user doesn't exist Prototype Flowchart (2/2)





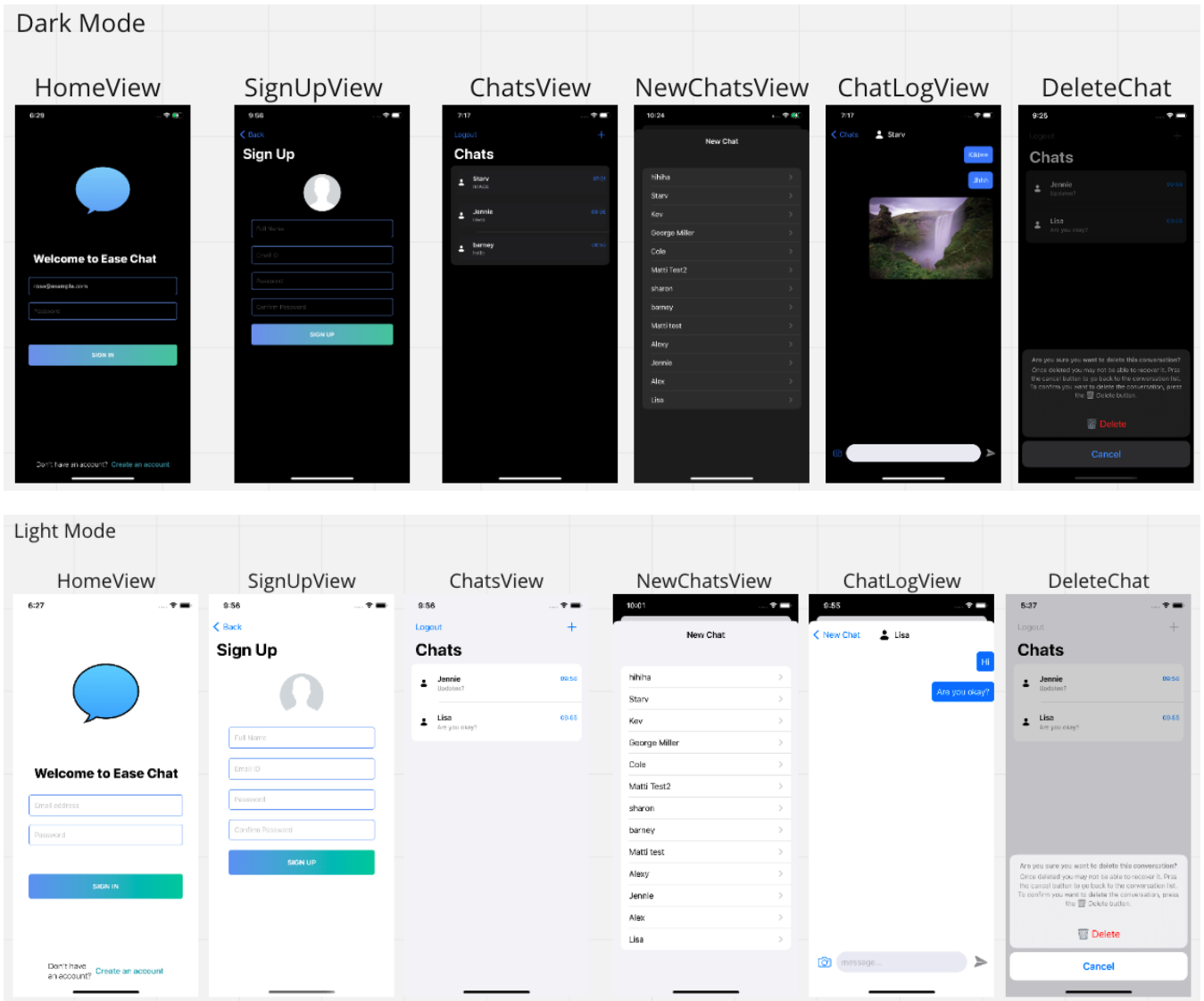
IV. What parts of iOS will it use?

- **UIViewControllerRepresentable**
 - Since the application is based on user interactions, the UIKit app's interface is managed by the user's view controller, which coordinates with other app objects.
- **UINavigationController**
 - A container view controller in a navigation interface that manages one or more child view controllers.
- **UIImagePickerControllerDelegate**
 - Manages the system interfaces for selecting items from the user's media library.

- CocoaPods
 - A package dependency manager for Objective-C and Swift projects with XCode that includes Firebase packages and for adding Firebase or installation of Firebase to the iOS project.
- Combine frameworks
 - A declarative Swift API for processing values over time is provided.
- ObservableObject
 - An object with a publisher that emits before the object has changed. ObservableObject is a protocol that's part of the Combine framework.
- View
 - A type that represents a portion of the app's user interface and provides modifiers for configuring views.
- ViewModifier
 - A view or another view modifier that produces a different version of the original value.
- withAnimation
 - Executes the code in its closure, and displays the results of that execution according to the provided animation.

FINAL RESULT

App 各頁面畫面：



Cocoapods installation:

\$ sudo gem install cocoapods or \$ brew install cocoapods

If Firebase not found, etc :

- Close Xcode
- Delete \${FILE_NAME}.xworkspace, podfile.lock, and 'Pods' folder
- go to terminal and cd to the folder and reinstall pods by inputting :
"pod install" in the terminal
- Open \${FILE_NAME}.xworkspace then build

References:

<https://iosapptemplates.com/blog/swiftui/swiftui-chat>

<https://www.raywenderlich.com/22067733-firebase-tutorial-real-time-chat>

<https://www.youtube.com/watch?v=Zz9XQy8PRpQ>

<https://softauthor.com/add-firebase-sdk-to-your-ios-app-using-cocoapods/>