

SwiftChat

Project Synopsis Report

Major Project (IMW651)

Degree

BACHELOR OF COMPUTER APPLICATION

(Mobile Application and Web Technology)

PROJECT GUIDE:

Mr. Aditya Tripathi

(Senior IT Faculty)

iNurture

SUBMITTED BY:

Enrollment No: TCA2055007

Name: Shaurya Singh

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FACULTY OF ENGINEERING & COMPUTING SCIENCES

TEERTHANKER MAHAVEER UNIVERSITY, MORADABAD

DECLARATION

I hereby declare that this Project Report titled **SwiftChat** submitted by me and approved by my project guide, Mr. Aditya Tripathi, is a bonafide work undertaken by me and it is not submitted to any other University or Institution for the award of any degree diploma / certificate or published any time before.

Project Name : SwiftChat

Student Name: Shaurya Singh

Signature

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1. Project Title

SwiftChat - A Basic Chat App for iOS

2. Problem Statement

In today's world, communication is a critical aspect of our lives, and messaging apps have become an essential part of our daily routine. However, not everyone has access to the same messaging apps, and some may be difficult to use for certain individuals. To address this issue, we developed SwiftChat, a basic chat app that is user-friendly and easy to use for everyone.

3. Project Description

SwiftChat is a messaging app that allows users to send and receive text messages on their iOS devices. Users can register and login to the app, which utilizes Firebase authentication for security. The chat module allows users to send and receive messages with other registered users, with the ability to view their conversation history. The app uses Firebase Firestore as a cloud-based database to store messages, ensuring that they are stored securely and can be accessed from any device.

The UI/UX module of the project focuses on providing an intuitive and user-friendly interface. Custom UI elements have been created using .xib files, allowing for a more unique and visually appealing design. The app also utilizes iOS table views, providing a smooth scrolling experience and allowing for easy navigation.

3.1. Scope of the Work

The scope of this project includes developing a functional and user-friendly chat app for iOS devices. The app will allow users to send and receive text messages, and store them in a cloud-based database. The app will be developed using various technologies and frameworks, and custom UI will be created to enhance the user experience.

3.2. Project Modules

1. User Registration and Login Module: This module will allow users to register and login to the app using their email and password or social media accounts. The Firebase Authentication service will be used to ensure secure and reliable authentication.

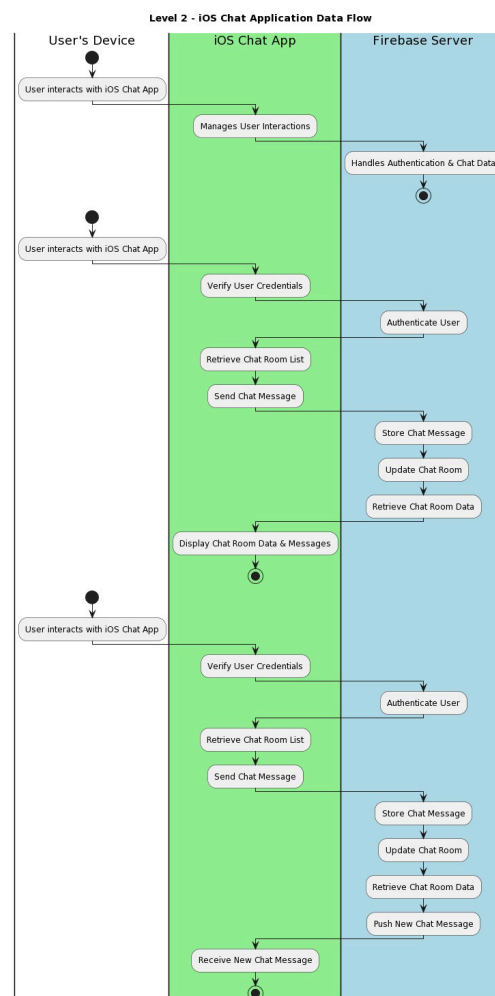
2. Chat Module: This module will allow users to send and receive text messages in real-time. The Firebase Firestore cloud database will be used to store and retrieve messages. The chat module will also include features such as message history, read receipts, and typing indicators.

3. Firebase Firestore Database Module: This module will handle the storage and retrieval of messages and user data. It will be used to store and retrieve messages, user profiles, and chat data.

4. UI/UX Module: This module will be responsible for creating a user-friendly and visually appealing interface. It will include custom UI elements such as chat bubbles, user avatars, and message animations.

4. Implementation Methodology

The project will be implemented using an Agile methodology, with frequent feedback and testing to ensure that the app is functional and user-friendly. The Agile methodology will allow for the project to be completed in a timely manner while ensuring that all features and requirements are met.



5. Technologies to be used

The technologies to be used in this project include iOS navigation controller, Swift loops, CocoaPods, Swift Package Manager, Firebase Firestore as cloud database, Firebase authentication, and iOS table views.

5.1. Software Platform

The app will be developed on Xcode, the official IDE for iOS development.

5.2. Hardware Platform

The app will be developed for iOS devices, including iPhone and iPad.

6. Advantages of this Project

The advantages of this project include a user-friendly and easy-to-use messaging app for iOS devices. The app utilizes cloud-based storage, which ensures that messages are stored securely and can be accessed from any device. Additionally, the app is developed using various technologies and frameworks, which enhances the user experience. Future Scope and further enhancement of the Project

In the future, the **SwiftChat** iOS App could be expanded to include additional features such as voice recognition, improved natural language processing, and integration with other conversational AI platforms.

7. Team Details

Project Name & ID	Course Name	Student ID	Student Name	Role	Signature
SwiftChat	Major Project	TCA2055007	Shaurya Singh	Designer	
SwiftChat	Major Project	TCA2055003	Divyansh Pratap	Tester	

8. Conclusion

SwiftChat is a basic chat app developed for iOS devices, utilizing various technologies and frameworks to provide a simple and user-friendly interface. The app allows users to send and receive text messages securely, with cloud-based storage ensuring messages can be accessed from any device. The use of Firebase authentication adds an extra layer of security for user registration and login. The project has been implemented using an Agile methodology, emphasizing flexibility and frequent feedback to ensure that the app meets all requirements.

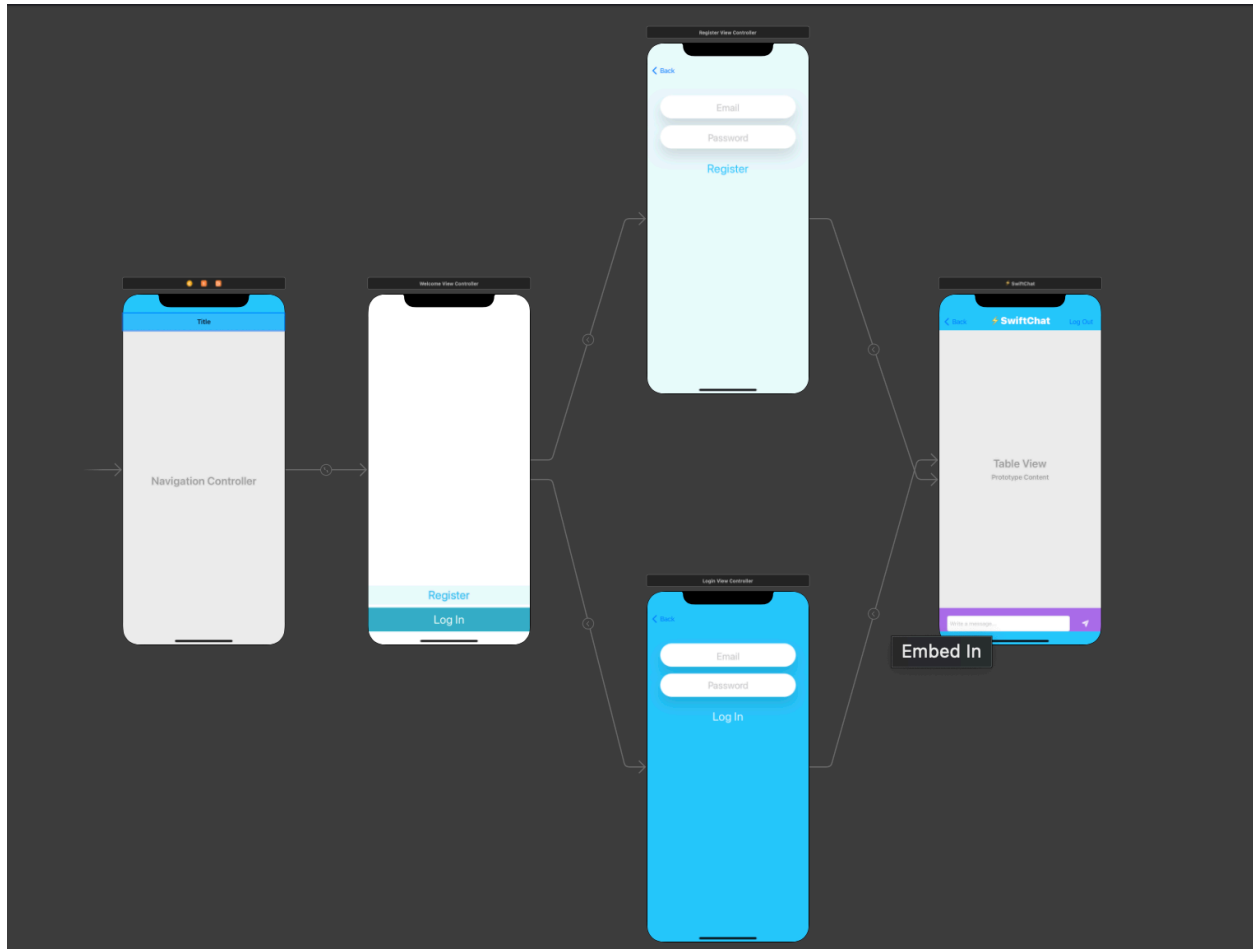
With the app's future scope, including the addition of multimedia messaging, group chat, and voice messaging, SwiftChat has the potential to become a popular messaging app. The project has been a great learning experience, showcasing the developer's skills in iOS development, cloud-based databases, and UI/UX design. Overall, SwiftChat provides a great solution to the need for a simple and secure chat app for iOS devices.

9. References

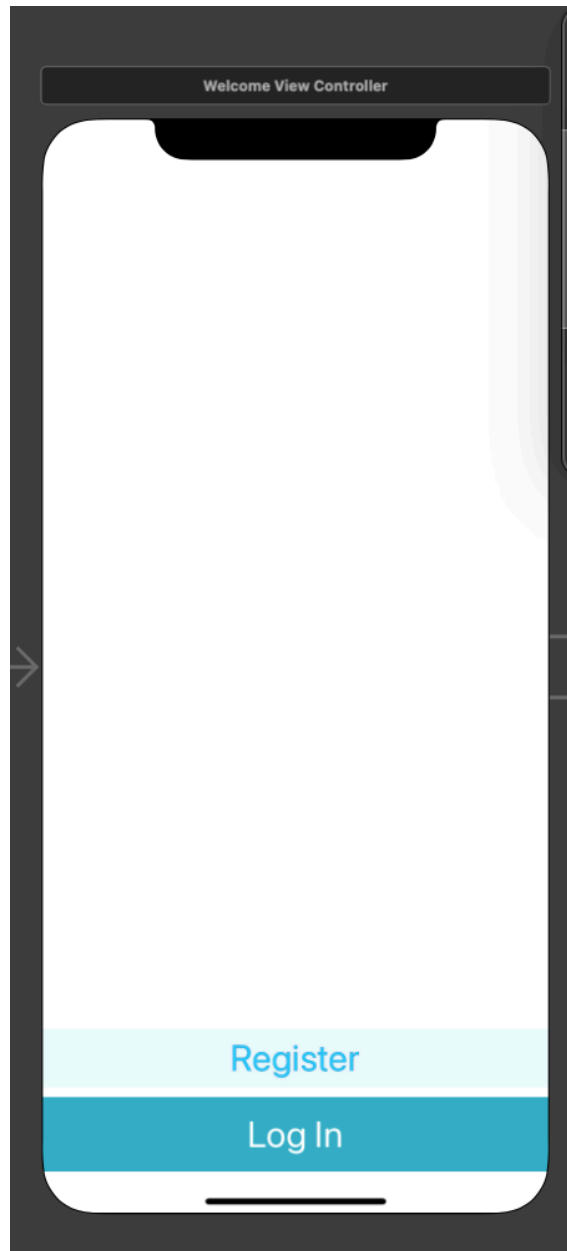
1. <https://firebase.google.com/>
2. <https://cocoapods.org/>
3. <https://www.hackingwithswift.com/>
4. <https://github.com/hackiftekhar/IQKeyboardManager>
5. <https://firebase.google.com/docs>

Annexure B Screen Shots

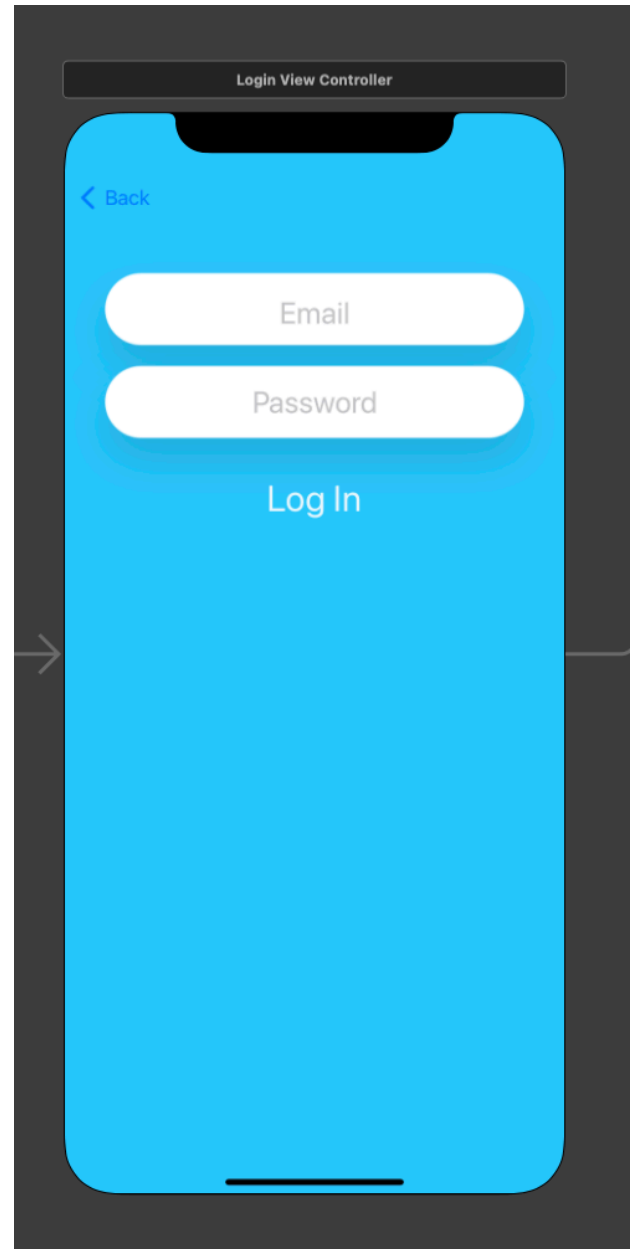
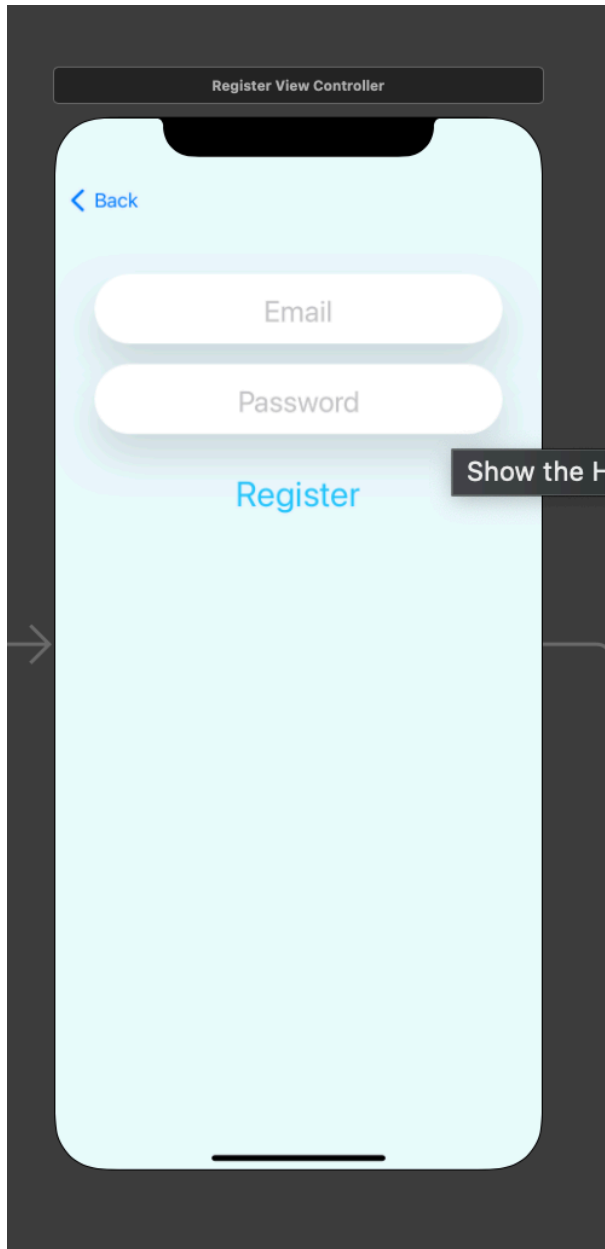
All screens



Home Page



Signup Page & Login Page



All the code of this app is available in our github repo

<https://github.com/shawryasingh/swiftchat>

