**📱 Connect App – Secure Swift-Based Communication & Utility Platform**

A multi-functional iOS app built using **Swift** and **SwiftUI**, combining secure messaging, live maps, dining recommendations, delivery simulation, and an integrated personal AI assistant. Connect bridges **communication**, **location services**, and **personal productivity** into a clean, modern mobile experience.

A screen shot of a phone

Description automatically generated**Video Attached below**

**🚀 Features Overview**

| **Module** | **Summary** |
| --- | --- |
| 💬 Chat | A secure and responsive in-app messaging interface |
| 🗺️ Map | Live user location map with custom pins and usernames |
| 🍽️ Dining | Browse local restaurants and get curated recommendations |
| 🏍️ Dasher | Simulated food delivery dashboard for couriers |
| 🤖 Personal AI | AI assistant with chat-like support and task replies |

**💬 Messaging System**

**Key Functions:**

* Username login
* Chat interface with scrollable message history
* Custom message bubbles with sender alignment
* Message entry via TextField and send button

**Skills Used:**

* SwiftUI layout (HStack, VStack, ScrollView)
* State binding via @State
* Chat UI logic with custom models (Message.swift)

**🗺️ Map Module**

**Key Functions:**

* Map view with user pins (username + coordinates)
* Zoom/center control via MKCoordinateRegion
* Dynamic annotations using UserLocation struct

**Skills Used:**

* MapKit integration in SwiftUI
* Custom map annotations
* Location-based UI logic

**Real-World Use:**

* Foundation for geosocial apps, delivery tracking, or incident monitoring

**🍽️ Dining Feature**

**Key Functions:**

* Scrollable list of restaurants
* Card UI showing name, distance, details
* Data structure to simulate or load restaurant data

**Skills Used:**

* Custom Restaurant struct
* List views with ForEach
* SwiftUI Navigation for detail views

**Real-World Use:**

* Core for food discovery platforms or local event apps

**🏍️ Dasher Module**

**Key Functions:**

* Order queue for available delivery jobs
* Accept/decline UI
* Task status management (Pending → Active)
* Basic route tracking concept (via MapKit)

**Skills Used:**

* State-based logic for delivery flows
* Order and Dasher models
* Task filtering and queue simulation

**Real-World Use:**

* Foundations for building logistics, courier, and marketplace apps

**🤖 Personal AI Assistant**

**Key Functions:**

* Chat interface to interact with a simulated AI
* Predefined prompt handling
* Potential to integrate OpenAI/GPT APIs

**Skills Used:**

* Conversation modeling with sender/receiver roles
* Modular chat logic with bot/user differentiation
* Reusable SwiftUI views for message rendering

**Real-World Use:**

* Usable for productivity bots, mental health apps, or support agents

**🔧 Technologies**

| **Tech** | **Purpose** |
| --- | --- |
| **SwiftUI** | Modern, declarative UI for iOS |
| **MapKit** | Interactive geolocation and pins |
| **Xcode** | App development & testing |
| **GitHub** | Version control & portfolio hosting |
| *(Planned)* Firebase | Auth & chat backend |
| *(Planned)* GPT API | AI assistant upgrade |

**🧠 Skills Used Across the Project**

* View composition (VStack, HStack, ZStack, LazyVStack)
* SwiftUI navigation, state, and data flow
* @State, @Binding, @ObservedObject, NavigationLink
* Struct-based data modeling
* Real-time user interaction handling
* UIKit interoperability (via MapKit)
* Git for code versioning

**💡 What I Learned**

| **Area** | **Takeaway** |
| --- | --- |
| SwiftUI | Built complex, responsive UIs with less code |
| Mobile App Flow | Structured views across login, chat, map, etc. |
| Maps & Location | Learned how to visualize, annotate, and track users |
| Logistics Simulation | Created job queues, delivery task flows |
| AI Integration | Built a working model for chatbot UX |
| GitHub Workflow | Managed commits, branches, and README presentation |

**🎯 Real-World Benefit**

1. **Industry-Ready Mobile UX Skills**
2. **Experience Building Real App Modules (chat, map, dining)**
3. **Prepared for Junior iOS Dev or Security-Oriented App Roles**
4. **Great Base for Adding Firebase, API Backends, and AI Tools**