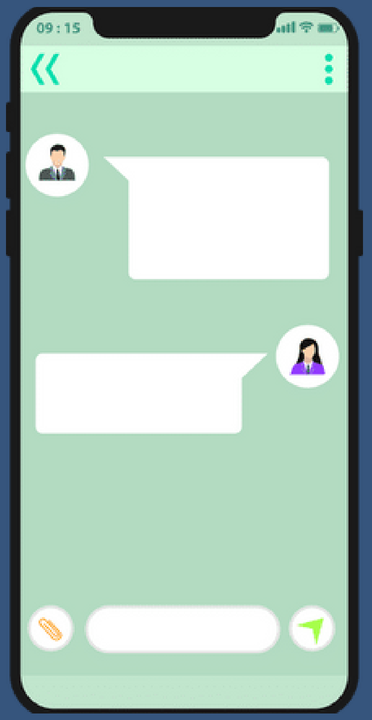
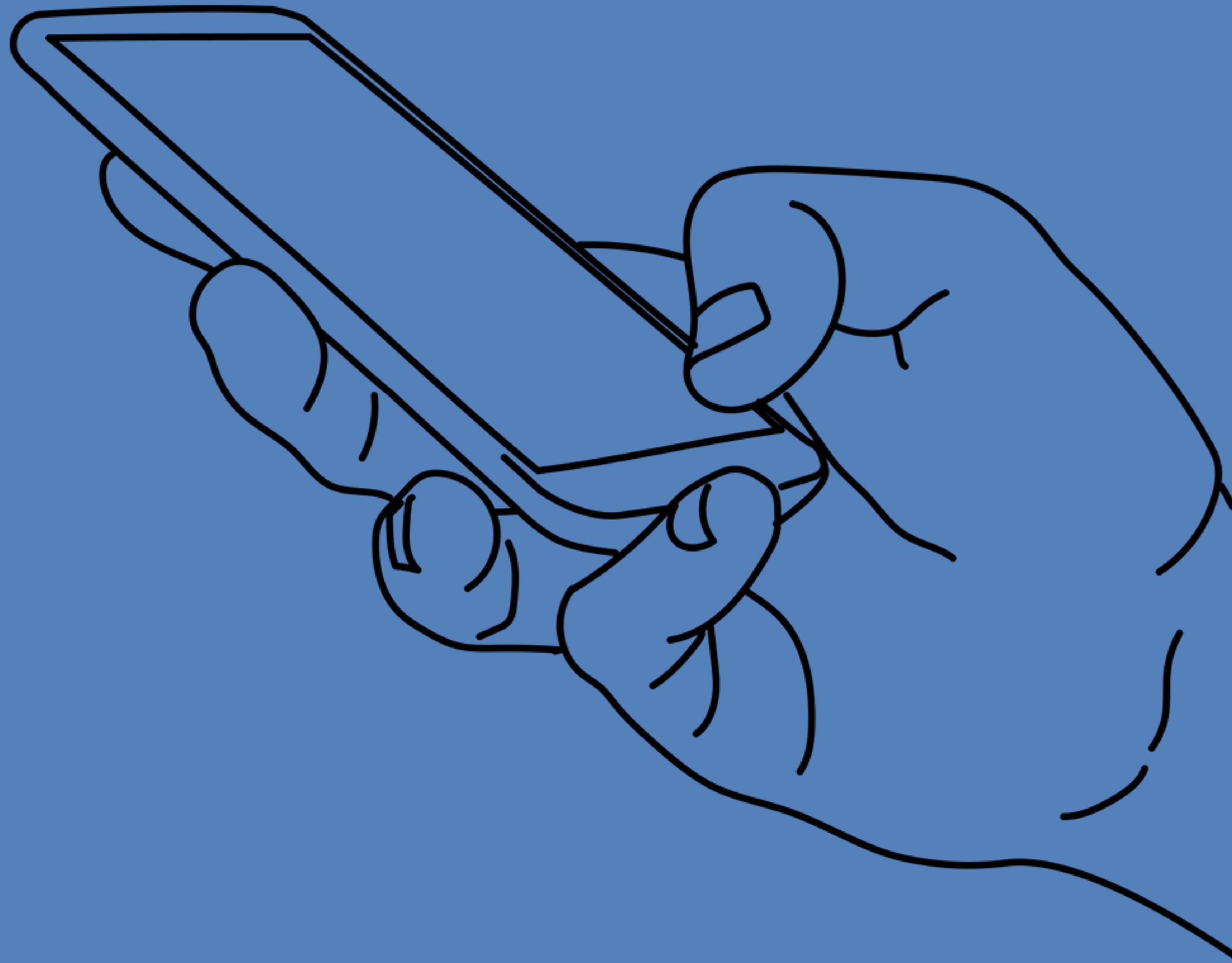
Full Stack Developer Case Study



by Giancarlo Boas

Overview

ChattMe is a native mobile application developed using React Native as part of my full-stack web development journey at CareerFoundry. The primary objective of this project was to design and build a fully functional chat app from scratch, offering a seamless user experience on mobile devices.



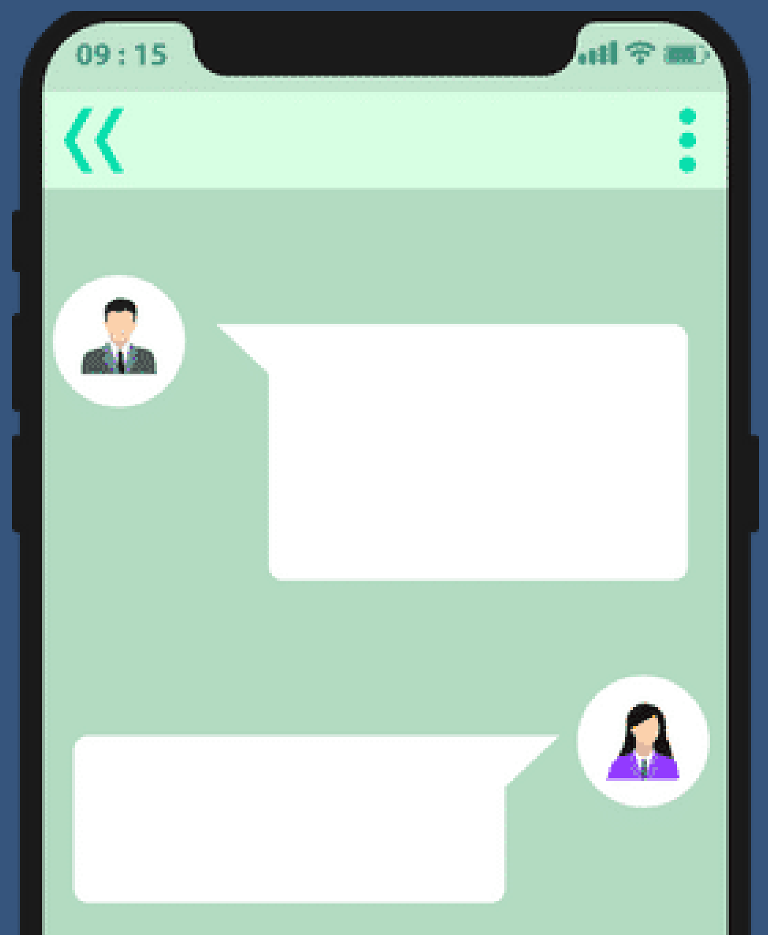
Check the Repository

Objective

This project served as a practical exercise in building mobile apps with React Native, allowing me to explore native functionalities, user experience design, and asynchronous communication between users. It provided hands-on experience with developing for mobile platforms using modern JavaScript tools.

Context

The app was designed with simplicity and accessibility in mind. Once downloaded, users only need to enter a username to join the chat—no login or sign-up required. Inside the chat, users can send text messages, share images, and even broadcast their current location, enabling real-time, interactive conversations.



Hard Work, Great environment and the right tools

Duration

The project took around 4 to 5 weeks to complete, including planning, development, and testing.

Methodologies

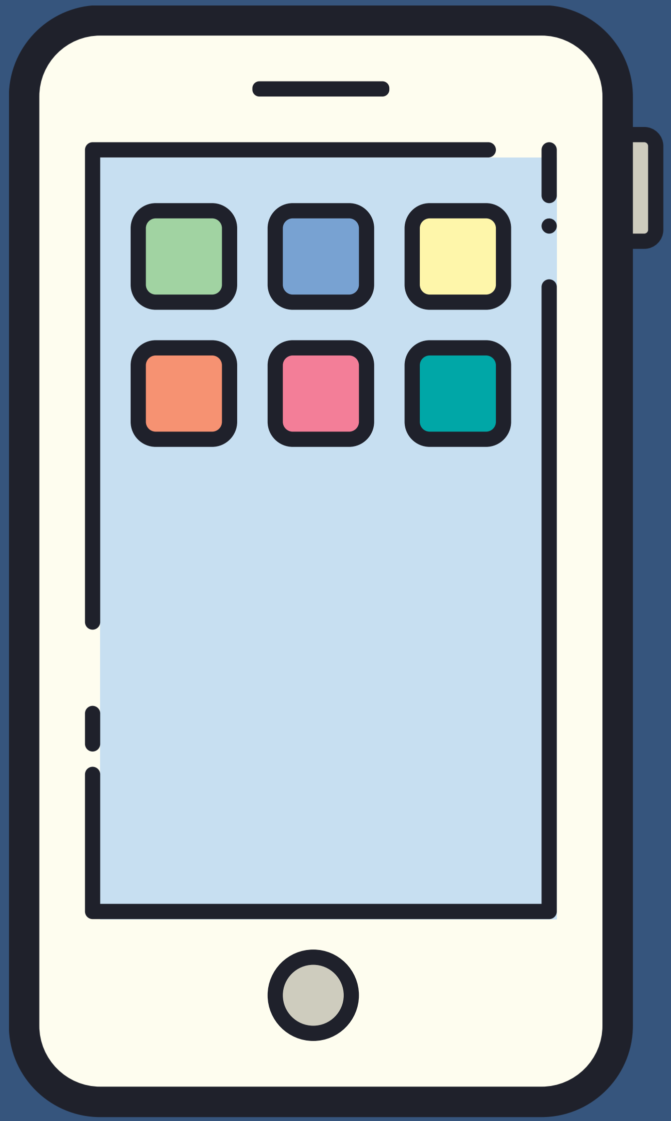
- User-Centered Design (UCD)
- Agile & Iterative Development
- Component-Based Architecture
- Modular Code Structure
- Manual Testing
- Backend-as-a-Service (BaaS)
- Cross-Platform Development

Credits

Lead Dev: Giancarlo Boas
Tutor: Marwa Jawad
Mentor: Renish Bhaskaran

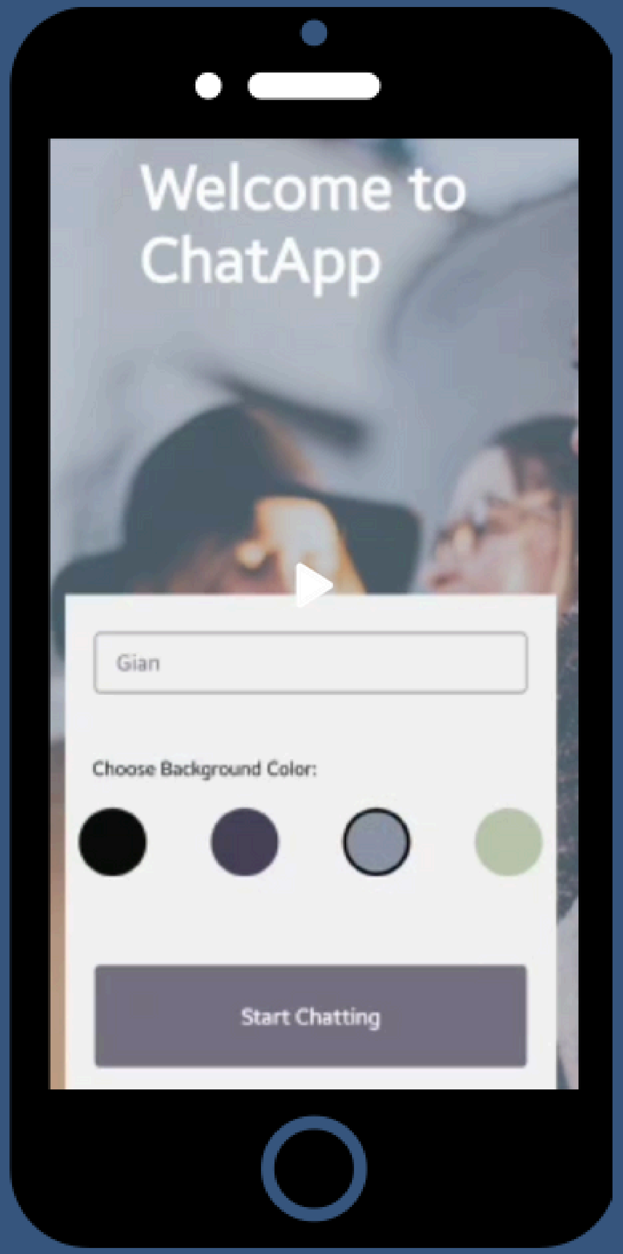
Technical Approach

The process began by designing a user persona and defining a user flow to understand who would benefit from the app and how they would interact with it. This helped shape key features and prioritize usability and simplicity from the beginning of development.



Key Technologies

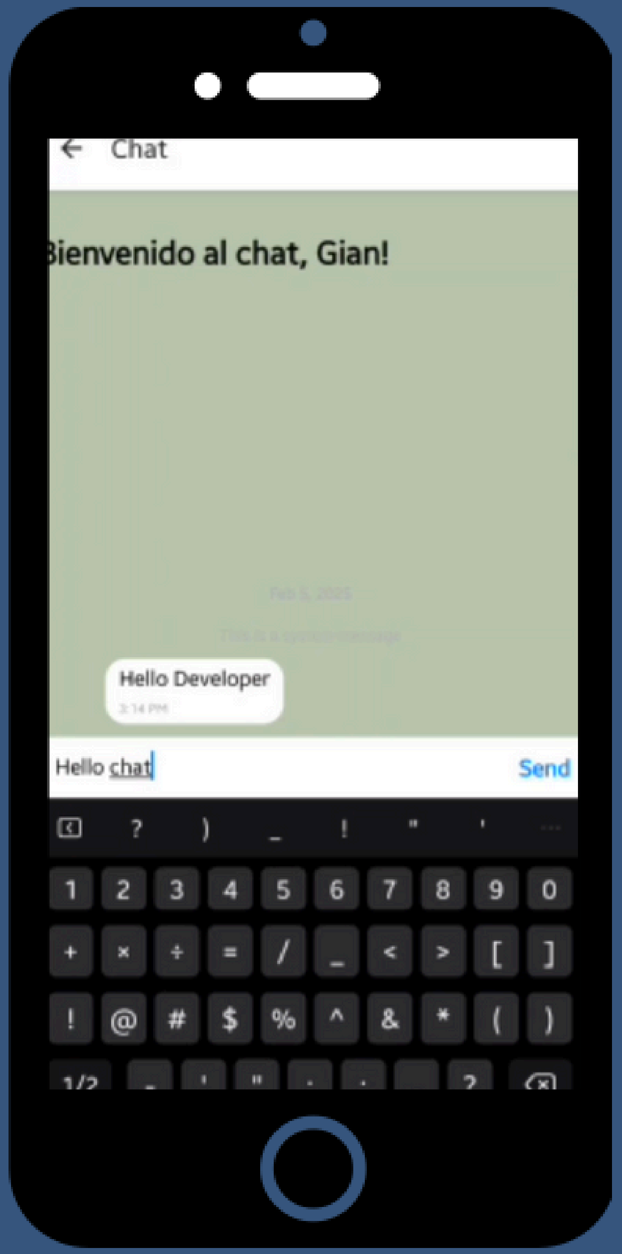
- The app is powered by Firebase for real-time data storage and authentication. UI components are handled with the Gifted Chat library. Other key React Native dependencies include:
- react-native-maps for location sharing
- react-native-image-picker for uploading images
- react-navigation for screen management
- react-native-gesture-handler for smoother interactions



Welcome to ChatApp

Gian

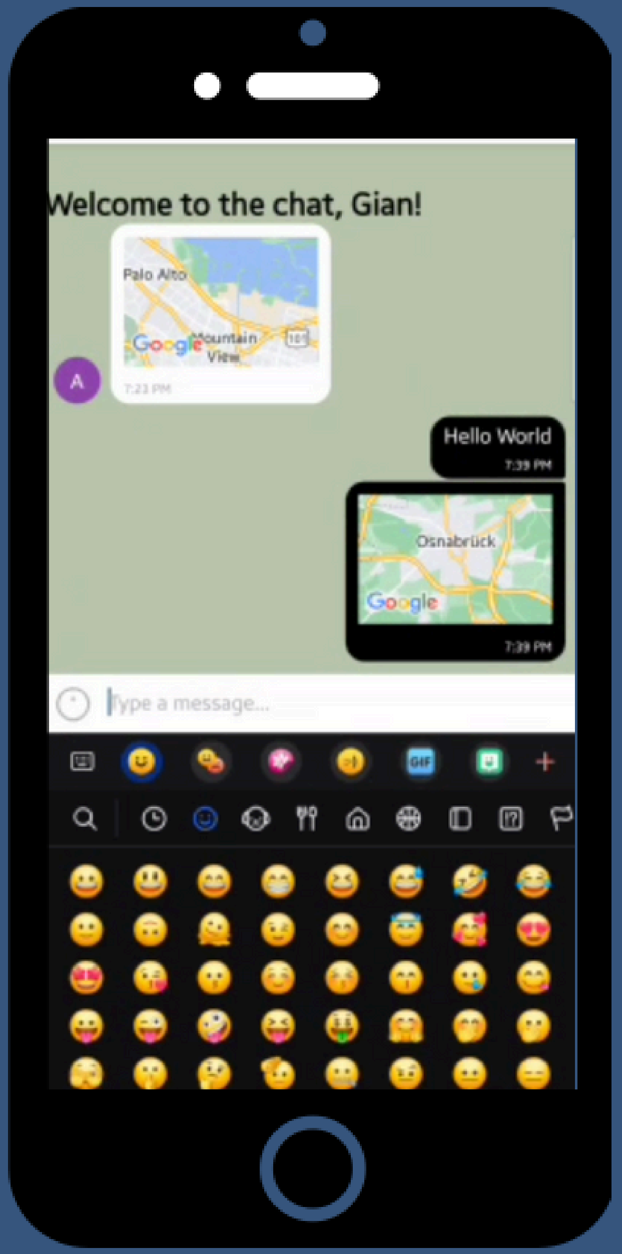
Choose Background Color:



Bienvenido al chat, Gian!

Hello Developer
3:14 PM

Hello chat



Welcome to the chat, Gian!

Hello World
7:39 PM

Users can securely log in to the application and manage their profiles. In the main view, they can browse the full movie catalog or search for specific titles. By clicking on "More Info," they can access detailed information about each film.

App Views

Retrospective

What went well?

I successfully built a functional cross-platform chat app with key features like real-time messaging, image sharing, and location sharing, while strengthening my skills in React Native and Firebase integration.

What didn’t go well?

I faced some challenges with setting up permissions for media and location access, and had to troubleshoot syncing issues between users in real time.

Future Steps

1. Improve the app’s visual design for a more modern and consistent look across platforms.
2. Add a voice message feature to expand communication options.
3. Implement push notifications to alert users of new messages.

Final Thoughts

This project was a great opportunity to learn React Native and Firebase, and it boosted my confidence in building cross-platform apps. I’m excited to continue exploring mobile development.