

LOST & FOUND

@CAMPUS



PROJECT OVERVIEW

LOST & FOUND @CAMPUS SOLVING LOST ITEM PROBLEMS IN UNIVERSITIES

PROBLEM

- Students and staff frequently lose items such as student ID cards, laptops, iPads, AirPods, umbrellas, and water bottles.
- People rely on informal channels (friends, LINE groups, Facebook posts). These methods are fragmented, hard to search, and often ineffective.

SOLUTION

- Lost & Found @Campus: a mobile app built with Flutter and Firebase. Centralized platform to post lost/found items.

GOAL

- Make returning lost items fast, safe, and convenient.
- Practice building a real-world mobile application using Flutter + Firebase.



PROJECT OVERVIEW

TARGET USERS AND USE CASES

- Target Users: Students, teachers, and staff in the university.
- Main Use Cases:
 - Post a “Lost” or “Found” item with image and details.
 - Search items by keyword or category.
 - Contact the post owner

MOTIVATION FOR BUILDING THE APP

- Real problem happening in universities
- Need for a centralized tool
- Opportunity to practice Flutter + Firebase skills

RELEVANCE OF THE PROJECT

- Users share the same campus
- Higher chance of successfully returning items
- University community is a controlled, trusted environment



TECHNOLOGIES & TOOLS USED IN THE PROJECT

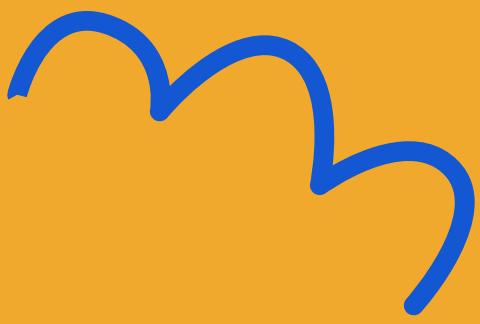
Framework & Language

- Flutter (UI toolkit for building cross-platform apps)
- Dart (Programming language)

Firebase Services

- Firebase Core – Initialize Firebase in the app
- Firebase Authentication – Email/Password, Google Sign-In
- Cloud Firestore – NoSQL database for storing items, users, chat
- Firebase Storage – Upload and store images

TECHNOLOGIES & TOOLS USED IN THE PROJECT



UI & Design Libraries

- Cupertino Icons – iOS-style icons
- Google Fonts – Custom typography
- Font Awesome Flutter – Additional icon pack

Device & Media Tools

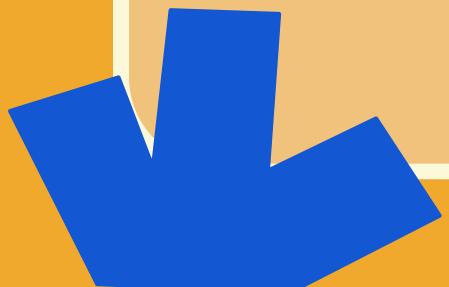
- Image Picker – Select images from camera/gallery

Development Tools

- Flutter Test – Unit & widget testing
- flutter_lints – Code quality and lint rules

KEY FEATURES

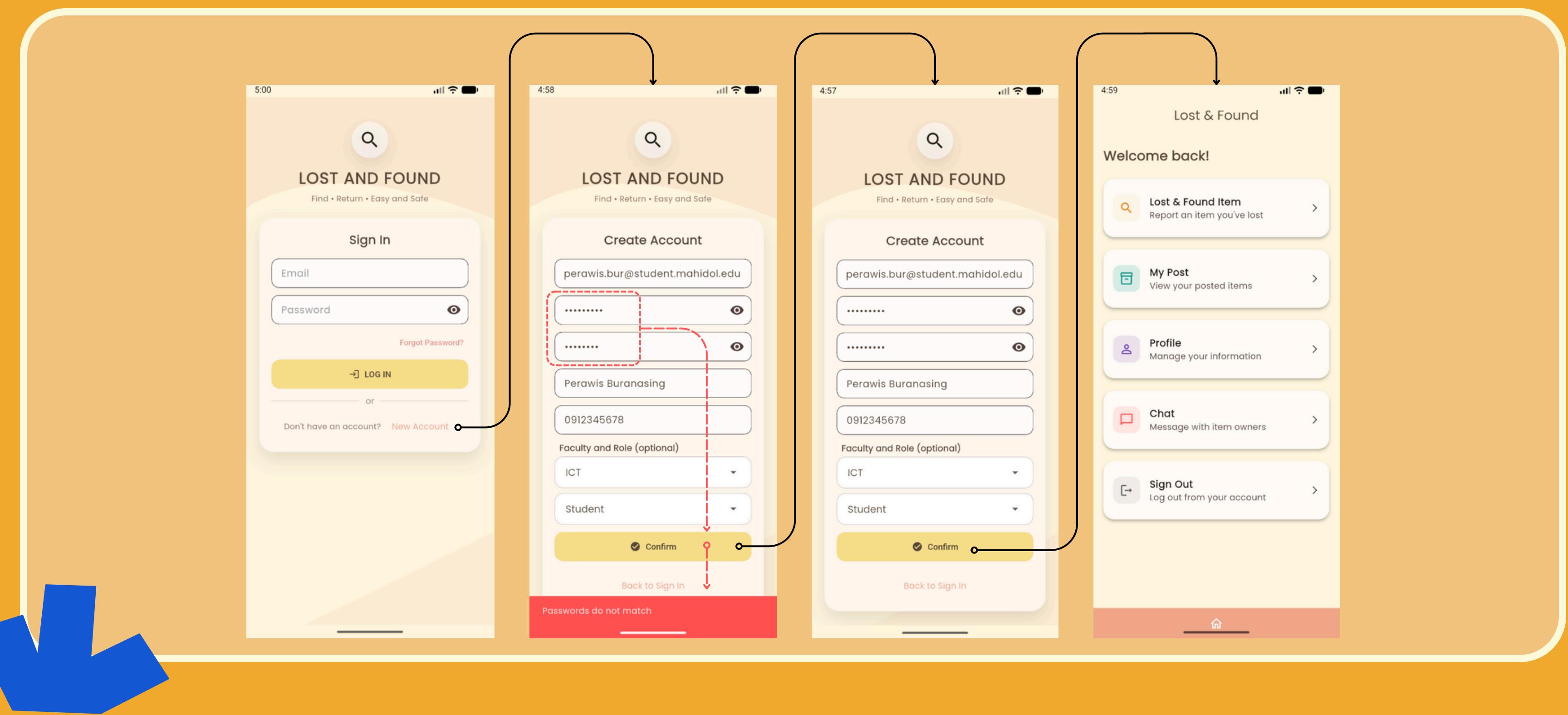
- Login & Register (Firebase Authentication)
- Create and view lost/found posts (with image)
- Search and filter by category, name and place
- Update post status (LOSS/FOUND)
- Edit post detail
- Live chat with owner post (one:one)



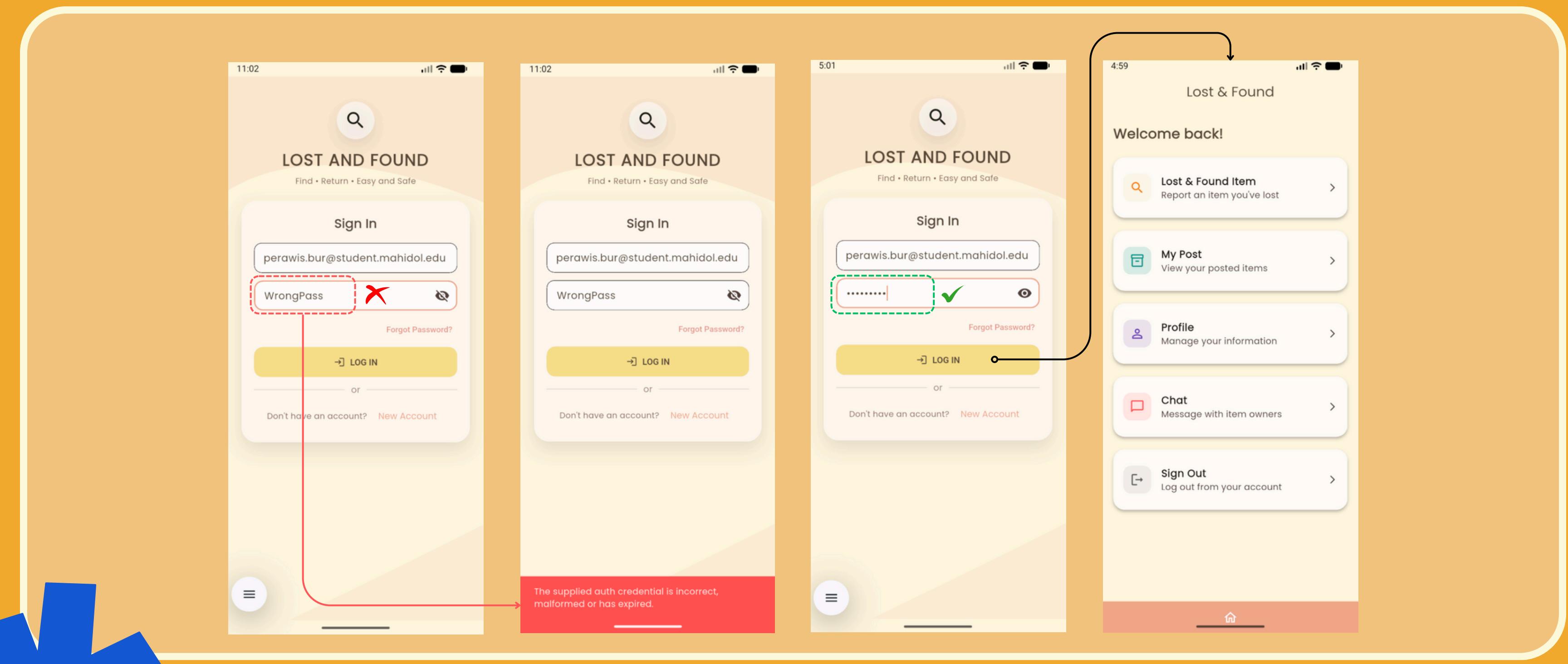
DEMO WORKFLOWS



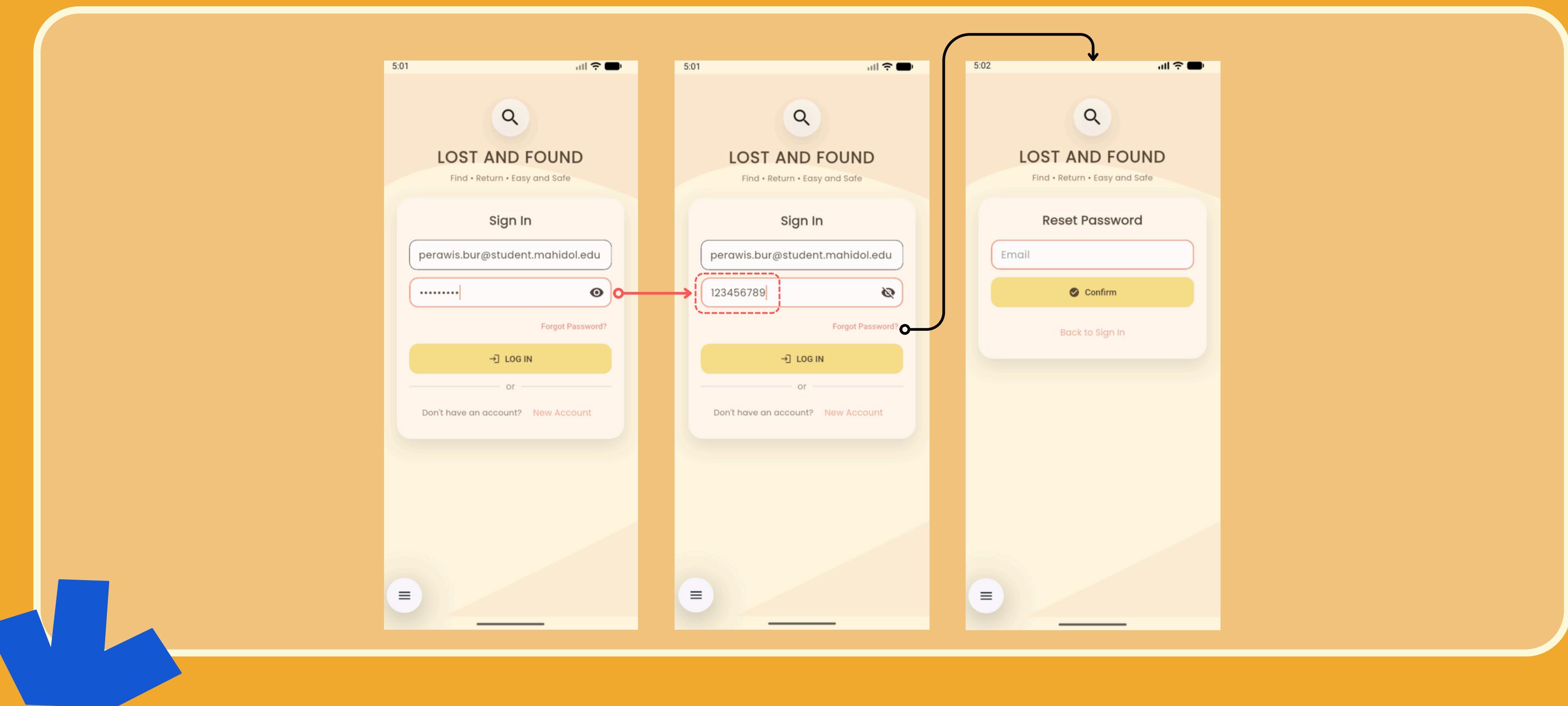
LOGIN & REGISTER



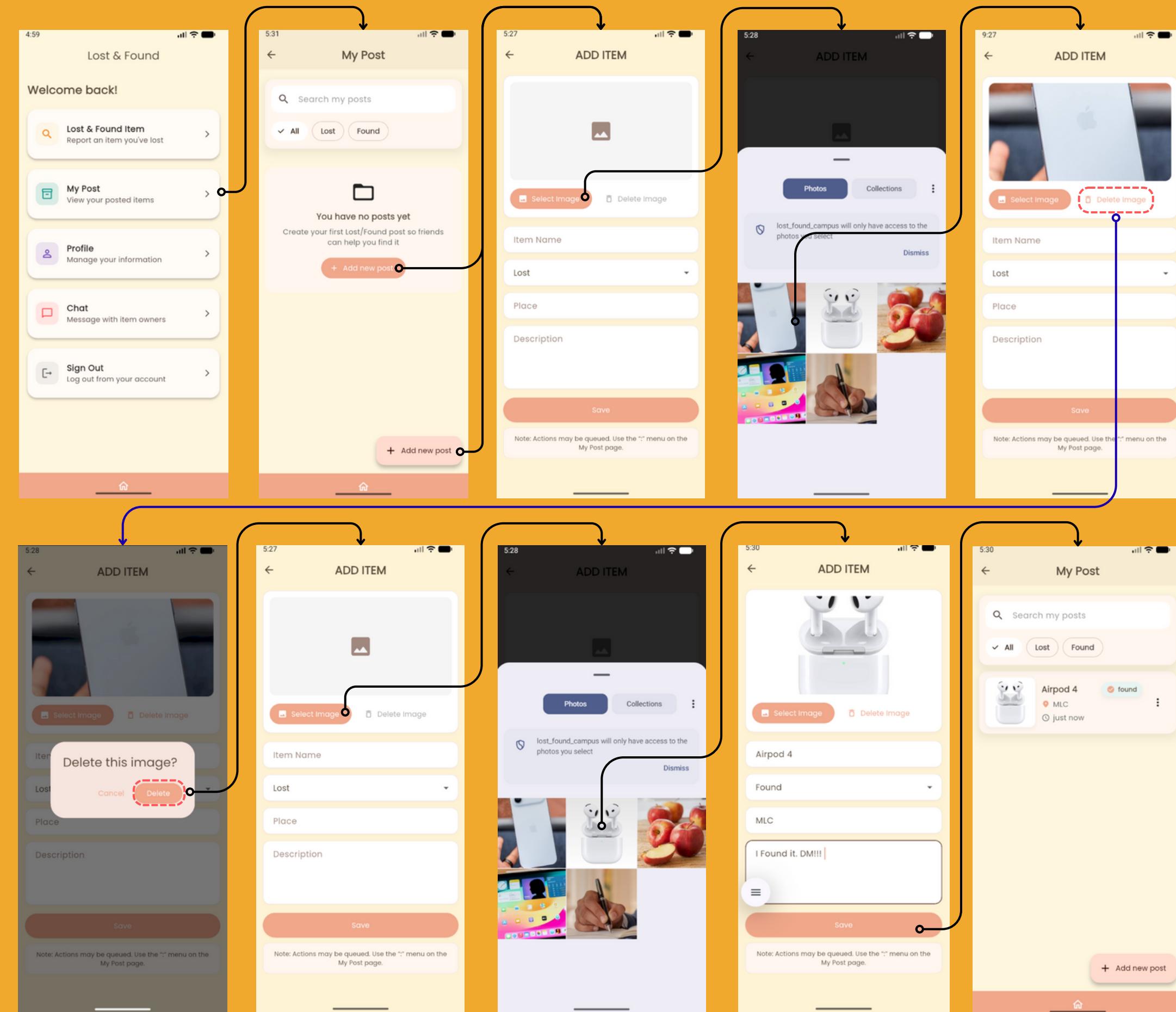
LOGIN & REGISTER



LOGIN & REGISTER ↗



CREATE AND VIEW LOST/FOUND POSTS



SEARCH AND FILTER BY CATEGORY

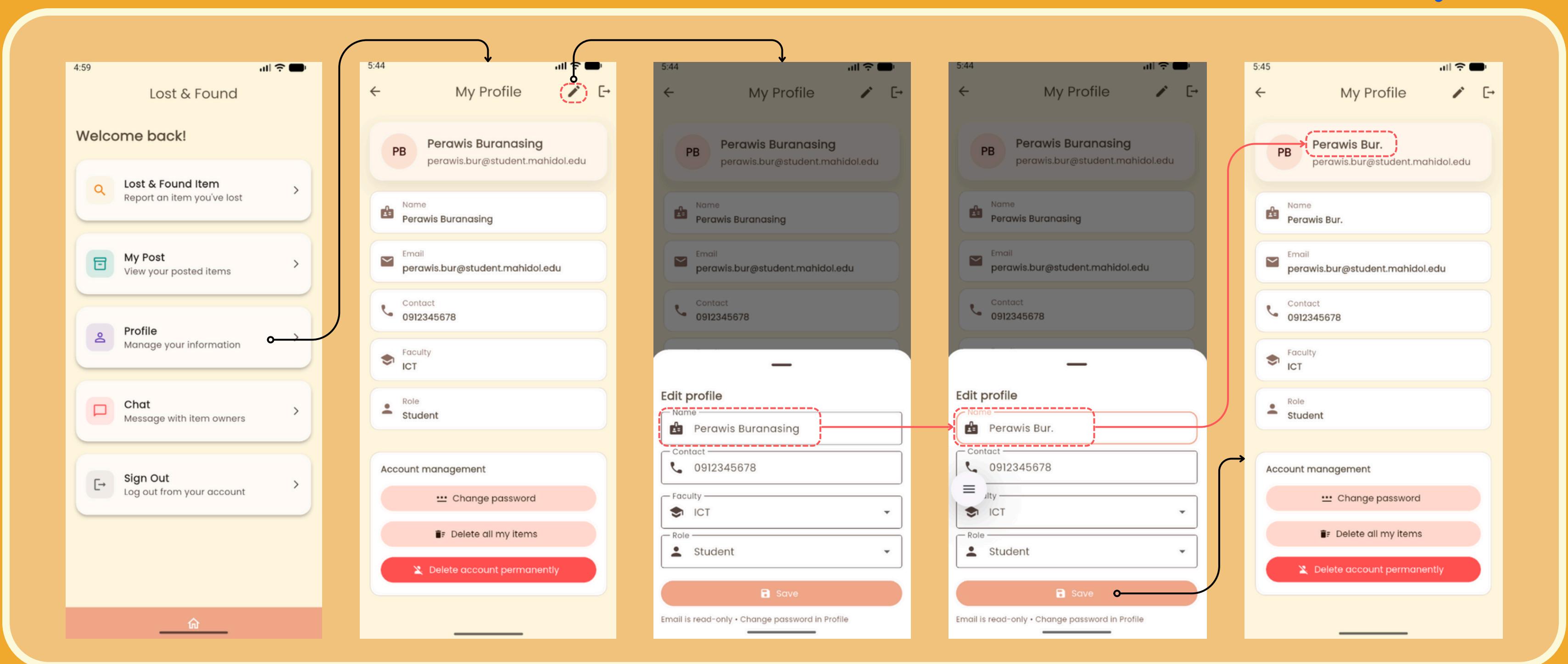
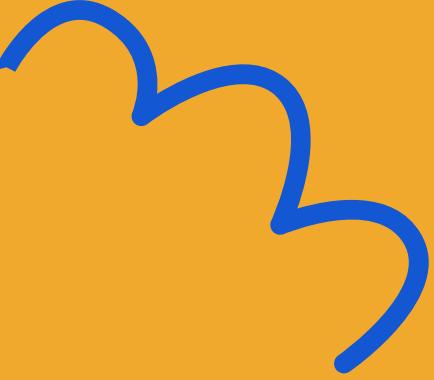


The screenshots illustrate a user flow for searching and filtering lost items:

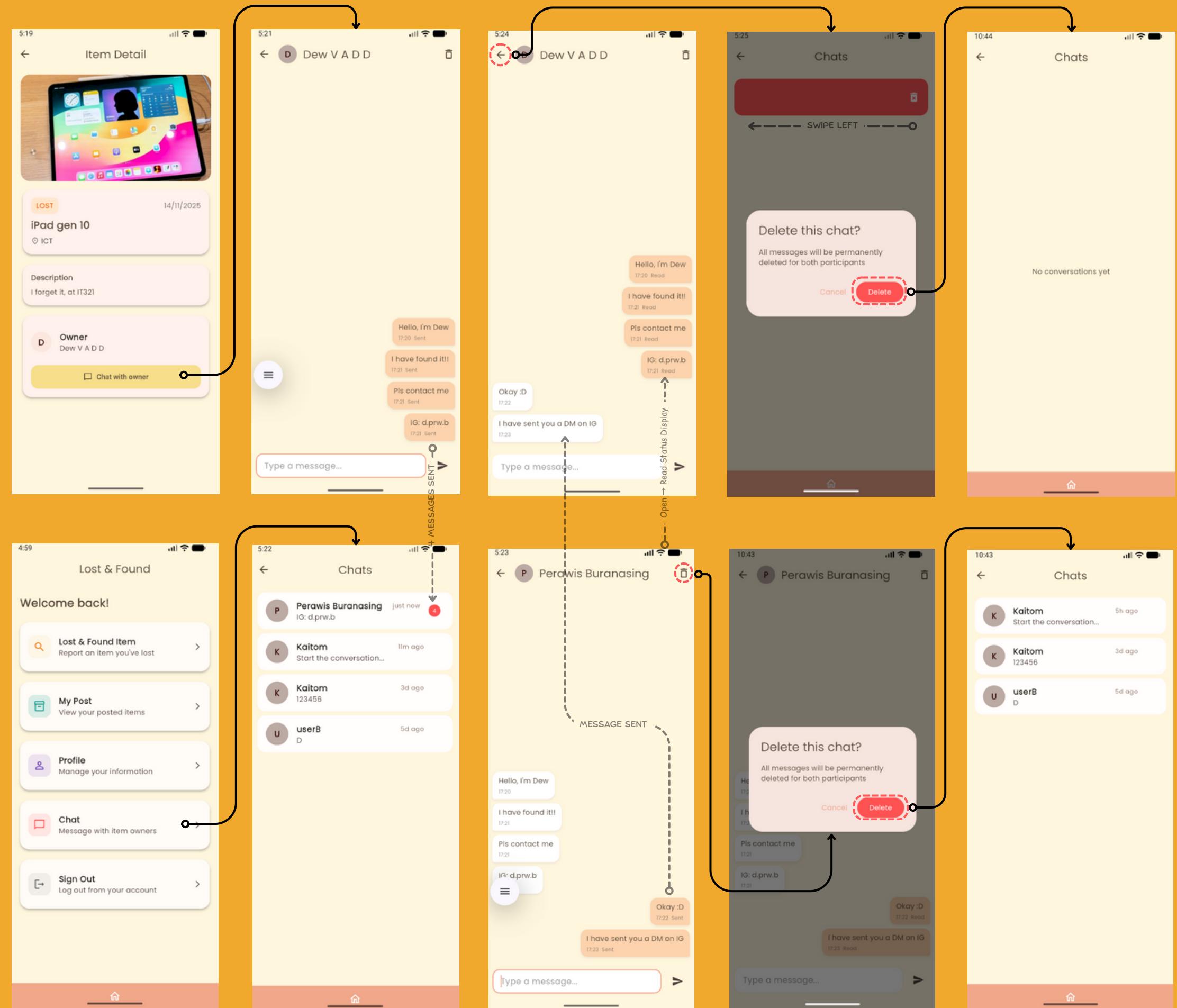
- Initial Screen (4:59):** Shows the main "Lost & Found" screen with a "Welcome back!" message. It includes a "Lost & Found Item" button, "My Post" link, "Profile" link, "Chat" link, and "Sign Out" button.
- Search Step (5:18):** The user taps the search bar and selects the "Found" filter. The search results show items like "iPad gen 10", "Apple pencil", "Ipad Air 5", and "Apples".
- No Results Step (5:25):** The user removes the "Found" filter. A message states "No items match your criteria. Try adjusting your search or switching filters." A "Add your items" button is visible.
- Refined Search Step (5:26):** The user performs a search for "ipad". The results show "iPad gen 10" and "Ipad Air 5".
- Final Step (5:26):** The user refines the search to "La". The results show "Apples".

Annotations highlight the search bar, filter buttons, and search results throughout the sequence.

PROFILE PAGE



LIVE CHAT



REFEREENCES

- [1] Google. (2025). Firebase Authentication documentation. Firebase.google.com.
<https://firebase.google.com/docs/auth>
- [2] Google. (2025). Cloud Firestore documentation. Firebase.google.com.
<https://firebase.google.com/docs/firestore>
- [3] Google. (2025). Firebase Storage documentation. Firebase.google.com.
<https://firebase.google.com/docs/storage>
- [4] Reso Coder. (2020). Flutter & Firebase tutorial series (Firestore CRUD) [Video].
<https://www.youtube.com/watch?v=8pG8CheUZOw>
- [5] Flutter Community. (2024). Flutter state management, UI design, and Firebase guides. Medium.com. <https://medium.com/flutter>
- [6] Fireship. (2023). Minimal chat app · Flutter x Firebase tutorial [Video]. YouTube. <https://www.youtube.com/watch?v=5xU5WH2kEc0>
- [7] The Net Ninja. (2020). Getting started with Firebase [YouTube Playlist]. YouTube. <https://www.youtube.com/watch?v=-zHAVEoLkG0&list=PL4cUxeGkcC9jERUGvbudErNCeS2HWUVIb>

THANK YOU

