Exercise 2 – CS5450 Mobile Programming

React Native Messages Directory App

📱 Overview

A fully functional and aesthetic mobile app developed using **React Native with Expo**. This project serves as **Exercise 2** for the CS5450 Mobile Programming course, demonstrating a categorized message management system.

The app features:

- A grid of circular category buttons (e.g., Personal, Work, School, etc.)
- Unique preloaded messages per category
- Full CRUD (Create, Read, Update, Delete) for message management
- A modal-based interface for adding messages and directories
- All logic implemented in a **single App.js file**

✅ Key Features

1. **Home Screen (Category Grid)**
    - Circular UI cards with emojis and background colors
    - 8 pre-defined categories with different messages
    - Dynamic addition of new categories
2. **Message View & Edit**
    - View messages under each selected directory
    - Edit or delete individual messages
    - Add new messages using a modal input form
3. **Add Category Feature**
    - Dedicated button to add a new directory
    - Prevents blank entries
    - Appends to existing directory list with a new ID
4. **Responsive UI Design**
    - ScrollView layout for directories and messages
    - Bottom-aligned Add Category button

- Light theme with visually clean layout

📁 Project Structure

```
YourMessagesApp/
├── App.js              # Entire app in one file
├── package.json        # Expo project metadata
├── node_modules/       # Auto-generated dependencies
├── assets/             # Optional: for emojis/images
└── README_MessagesApp.txt # This file
```

🛠️ Setup Instructions

Prerequisites:

- Node.js
- Expo CLI (`npm install -g expo-cli`)

Steps to Run:

1. Navigate to project directory

   cd YourMessagesApp

2. Start the app

   npx expo start --localhost

Test:

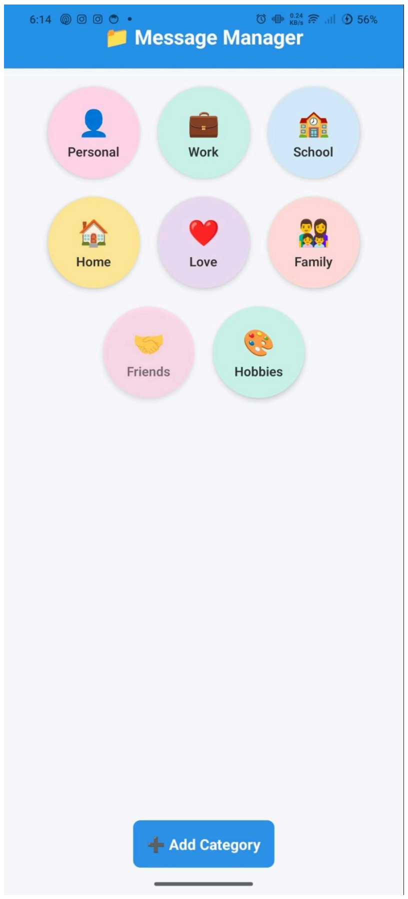
- Scan QR using Expo Go app on your mobile
- Or press `a` in terminal to open in Android emulator

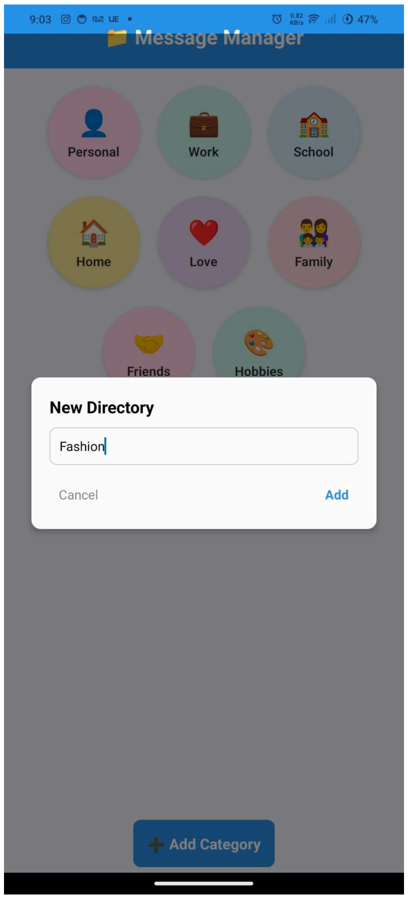
💡 Implementation Highlights

- **Modal Forms**: Used for adding/editing messages and creating categories
- **State Management**: React `useState` for storing messages and category data
- **StyleSheet**: Custom visual style for each component
- **Dynamic UI**: Loop-rendered components using `.map()` and `FlatList`

📷 Screenshots

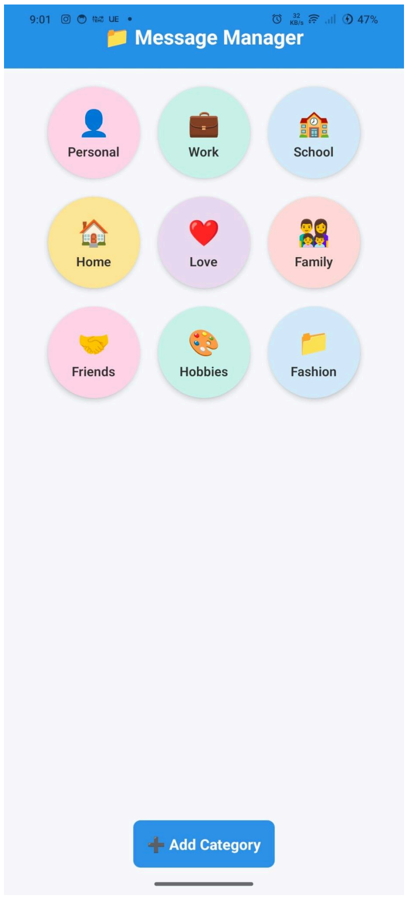
Please refer to the attached screenshots included in your submission on D2L or GitHub for:

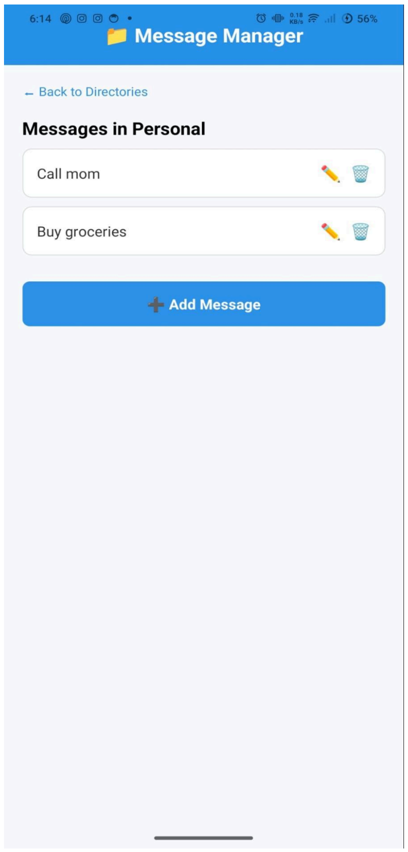




New Directory

Fashion




📁 Message Manager

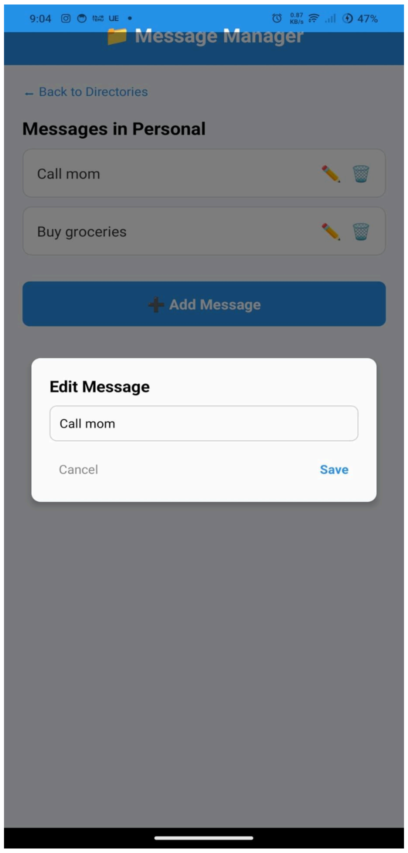
← Back to Directories

Messages in Personal

Call mom ✏️ 🗑️

Buy groceries ✏️ 🗑️

➕ Add Message


📁 Message Manager

← Back to Directories

Messages in Personal

Call mom ✏️ 🗑️

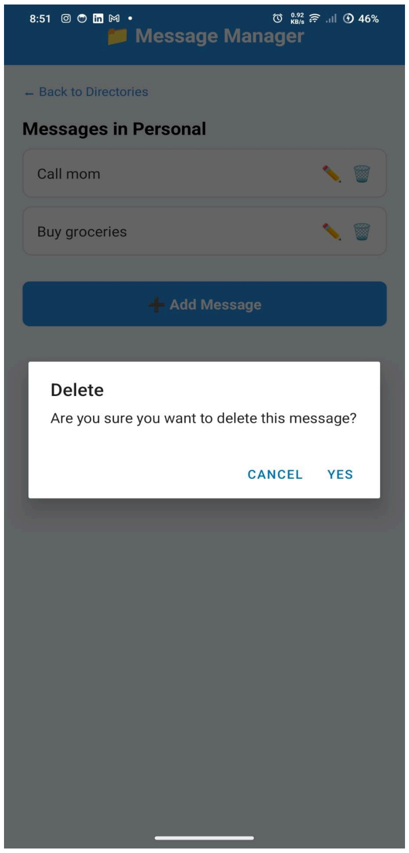
Buy groceries ✏️ 🗑️

➕ Add Message

Edit Message

Call mom

Cancel Save


📁 Message Manager

← Back to Directories

Messages in Personal

Call mom ✏️ 🗑️

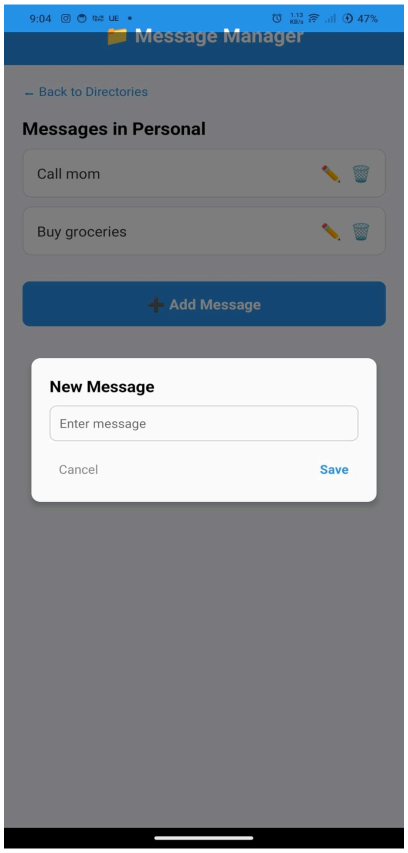
Buy groceries ✏️ 🗑️

➕ Add Message

Delete

Are you sure you want to delete this message?

CANCEL YES


📁 Message Manager

← Back to Directories

Messages in Personal

Call mom ✏️ 🗑️

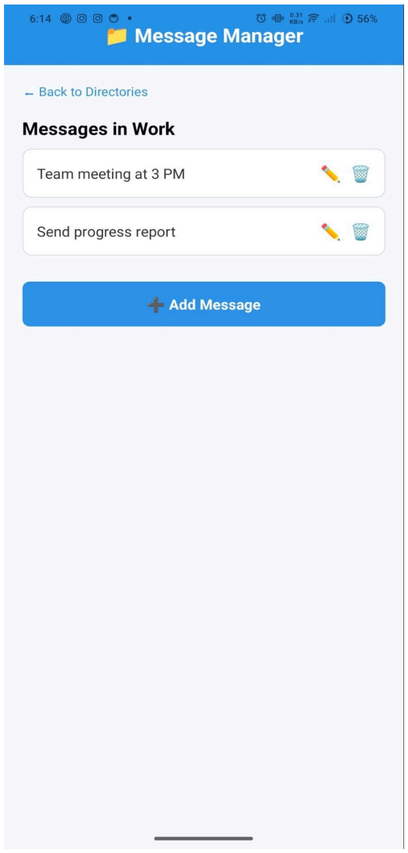
Buy groceries ✏️ 🗑️

➕ Add Message

New Message

Enter message

Cancel Save


📁 Message Manager

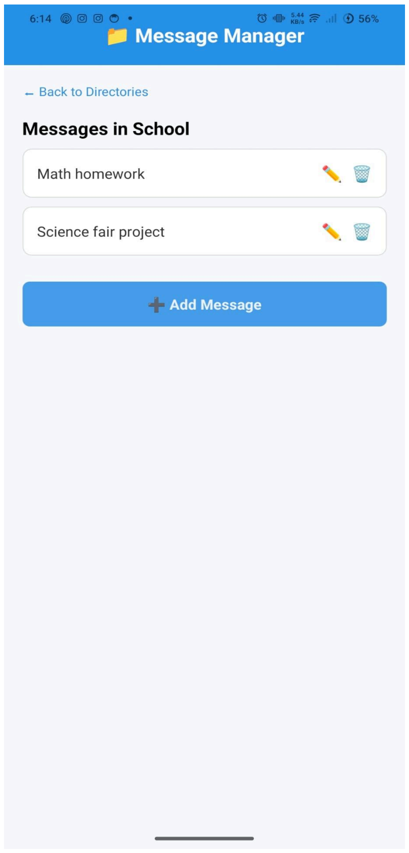
← Back to Directories

Messages in Work

Team meeting at 3 PM ✏️ 🗑️

Send progress report ✏️ 🗑️

➕ Add Message


📁 Message Manager

← Back to Directories

Messages in School

Math homework ✏️ 🗑️

Science fair project ✏️ 🗑️

➕ Add Message