ReadMe

1. how to configure and run the project:

Github link: https://github.com/wsfs666/MP_exercise2

Snack link: https://snack.expo.dev/@sfu13/exercise

Configure package.json

```
"dependencies": {
    "react-native-paper": "4.9.2",
    "@expo/vector-icons": "^14.0.2",
    "@react-navigation/native": "*",
    "@react-navigation/native-stack": "*",
    "react-native-safe-area-context": "4.12.0",
    "react-native-screens": "~4.4.0"
}
```

I run the project in the online expo snack playground. So I just click on "Launch snack" to run ths project in IOS simulator.

2. Project structure:

```
exercise (i)
All changes saved 27 minutes ago. See previous saves.
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→ Open files

                                                                                                                                                              My Device Android iOS Web
                                  // You can import supported modules from npm
import { Card } from 'react-native-paper';
import { InboxProvider } from './components/InboxContext';
△ Project
                 l6 ≡8 ÷
  assets
   snack-icon.png
                                   // or any files within the Snack
  components
   ■ InboxContext.js
   HomeScreen.js
    MessageScreen.js
                                    & App.js
  a package.ison
  README.md
```

In this project, I designed a two-page navigation structure. The first page is the Home screen, which displays different message categories. The second page is the Messages screen, showing all messages under a selected category. This app supports full CRUD functionality for both message categories (inboxes) and individual messages.

To manage shared state, I created an InboxContext.js file. The InboxContext is implemented using the React Context API and useState. It acts as a global state manager, allowing different components to access and update inbox and message data without manually

passing props. All CRUD operations for both inboxes and messages are handled through context methods, ensuring that changes are reflected across the entire app in real time.

The HomeScreen displays a list of message categories (inboxes), allowing users to add, edit, delete, or tap a category to view its messages. The MessagesScreen shows all messages under the selected inbox, where users can create, edit, and delete individual messages. Both screens use shared state from InboxContext to keep inbox and message data synchronized across the app.

3. Screenshots:



The above 5 screenshots show the feature of deleting a category, updating a category and adding a category in HomeScreen.js. The HomeScreen displays all inbox categories using a FlatList. Users can add a new category through a TextInput and a "Send" button. Each category can be edited inline by toggling to an input field with a "Save" button, or deleted using a "Delete" button. When a category is tapped, it navigates to the Messages screen with the corresponding inbox ID and title. All operations (add, edit, delete) update the global inbox state via methods provided by InboxContext.



The above 5 screenshots show the feature of deleting a message, updating a message and adding a message in MessageScreen.js. The MessagesScreen shows all messages under the selected inbox, also using a FlatList. Users can add a new message at the bottom using an input field and "Send" button. Each message can be edited inline or removed. Editing toggles a TextInput with "Save" and "Cancel" buttons. All message updates are scoped to the current inbox and handled by methods in InboxContext, keeping data consistent across screens.