# React Native Interview Task

### **Task Overview**

Welcome to the React Native development challenge! This task is designed to evaluate your skills in building a functional, performant React Native application using Expo, the Ignite boilerplate, and MobX-State-Tree for state management. The app you will develop will involve interacting with external APIs, managing navigation, and implementing infinite scrolling.

**Project Title: User Explorer** 

#### **Objective:**

Develop a mobile application that fetches and displays a list of users from the DummyJson API. The app should allow users to view a list of posts by each user with infinite scrolling to load more content as needed.

# Technology Stack

#### Frontend:

• Framework: React Native with Expo

• Boilerplate: Ignite CLI ( oo Ignite - the battle-tested React Native boilerplate | Open Source at Infinite Red )

• Language: JavaScript or TypeScript (preferred)

• State Management: MobX-State-Tree (included with Ignite boilerplate)

Navigation: React Navigation
Data Fetching: Axios or Fetch API

## **Development Tools:**

• Code Editor: Visual Studio Code (recommended)

· Version Control: Git (submit via GitHub, GitLab, or Bitbucket)

• Build Tools: Expo CLI

### Task Requirements

### 1. User List Screen

. Objective: Display a list of users fetched from the DummyJson API.

• Details:

- $\circ$  Fetch the list of users from <code>https://dummyjson.com/users</code> .
- $\circ~$  Display each user's name and a brief detail (e.g., email, company) in a card or list item.
- o Optimize the list for rendering performance using FlatList, ensuring smooth scrolling and minimal re-renders.
- o Implement infinite scrolling to load more users as the user scrolls down the list.

o Include a loading indicator for fetching more users during scrolling.

#### 2. User Posts Screen

- Objective: Display the list of posts for a selected user.
- · Details:
  - When a user is clicked on the User List Screen, navigate to a new screen that shows the list of posts by that user.
  - Fetch the posts from https://dummyjson.com/users/{userId}/posts.
  - o Display the posts in a scrollable view, showing the title and body of each post.
  - o Implement infinite scrolling to load more posts as the user scrolls down the list.
  - o Include a loading indicator for fetching more posts during scrolling.

### **Deliverables**

- 1. **Source Code:** Provide the complete source code for the application, organized and well-documented in a github repo (Ignore gradle or large files)
- 2. Minimum APK: Generate a minimum APK file for Android that we can install and test on a physical device.

# **Estimated Development Timeline**

### Day 1: Setup and Initial Development

- · Set up the project using Expo and Ignite CLI.
- Implement the User List Screen with data fetching and rendering optimization.
- · Implement infinite scrolling for the User List Screen.

### **Day 2: User Posts Screen**

- Implement navigation to the User Posts Screen.
- Fetch and display the user's posts.
- Implement infinite scrolling for the User Posts Screen.

### Day 3: UI/UX Refinement and Testing

- Refine the UI/UX for a consistent and user-friendly experience.
- Perform testing to ensure all features work as expected.
- · Debug and fix any issues that arise during testing.
- · Generate the APK and prepare documentation.

### **Evaluation Criteria**

- Code Quality: Clean, maintainable code with proper use of React Native best practices.
- Performance: Efficient data handling and rendering, particularly for lists with infinite scrolling.
- Functionality: The app meets the requirements and handles navigation, data fetching, and infinite scrolling effectively.
- Completeness: The task is completed within the given timeframe, and all deliverables are submitted.

# **Submission Instructions**

- Deadline: 5 days from receiving this file.
- Submission: Please submit your APK, source code, and documentation via Github.
- Contact: If you have any questions or need clarification, feel free to reach out to work@lifology.com

We look forward to reviewing your submission. Good luck!