

Title: Daily Tracking App - Libraries and Dependencies

Summary: This document outlines all libraries and dependencies required to develop the MVP version of the Daily Tracking App. These tools support navigation, local storage, charting, forms, AI integration, and state management in a lightweight and scalable way.

Core Libraries

Purpose	Library	Notes
App Navigation	@react-navigation/native, @react-navigation/native-stack	Screen transitions and stack navigation
Core Native Modules	react-native-screens, react-native-safe-area-context	Required by React Navigation
Gesture Handling	react-native-gesture-handler, react-native-reanimated	Smooth swiping and transitions
Local Database	expo-sqlite	Offline-first SQLite data storage
Charting	victory-native, react-native-svg	Render mood and habit graphs
State Management	React Context API (built-in) or zustand (optional)	Global app state
Forms Handling	react-hook-form or formik (plus yup for validation if needed)	Building forms like Trackable creation, SubPages
AI Integration	No client library needed; use native fetch to call OpenAI API	Structured prompt + POST request

Dev/Utility Dependencies

Purpose	Library	Notes
UUID Generation	<code>uuid</code>	Safe ID generation for offline database writes
Environment Variables	<code>expo-constants</code> (for API keys)	Secure management of OpenAI API keys in Expo apps

Future / Planned (v2)

Purpose	Library	Notes
Cloud Backup	<code>firebase</code> (<code>firebase/auth</code> , <code>firebase/firestore</code>)	Account login and cloud syncing
Notifications	<code>expo-notifications</code>	Reminders to complete daily tracking
File Storage (optional)	<code>expo-file-system</code>	Exporting/importing user backup files

Installation Command Examples

Core Setup (after initializing Expo project)

```
npm install @react-navigation/native @react-navigation/native-stack
npm install react-native-screens react-native-safe-area-context
expo install react-native-gesture-handler react-native-reanimated
expo install expo-sqlite
npm install victory-native react-native-svg
expo install react-native-svg
npm install react-hook-form # or formik if preferred
npm install uuid
```

Zustand (Optional Light State Management)

npm install zustand

Special Notes

- **Victory Native** requires installing `react-native-svg` separately.
- **React Navigation** must wrap the app inside a `NavigationContainer`.
- **Expo-sqlite** works seamlessly inside Expo without needing native linking.
- **react-hook-form** is lighter and faster than Formik for mobile (preferred).
- **No OpenAI SDK needed:** use `fetch` with API Key header for simplicity.