## ARIBO IFEOLUWA – 300389564 PROJECT PROGRESS REPORT 3 SUMMARY (19<sup>th</sup> OCTOBER – 25<sup>th</sup> OCTOBER)

Over the last week, I worked on integrating backend services into the app, transitioning from Firebase to Supabase, and improving frontend screens for Health Monitoring, Activity, Medication, Sleep Tracking, and Admin Dashboard. I focused on backend connectivity, data flow, state management, and user interface responsiveness, while ensuring all new functionality preserved existing designs.

Date	Number of Hours	Description of Work Done
19 <sup>th</sup> October 2025	1.5 hours	<ul> <li>Prepared React Native project environment, verified dependencies, Node version, and emulator setup.</li> </ul>
20 <sup>th</sup> October 2025	2.5 hours	<ul> <li>Debugged Firebase integration issues: Firestore, Auth, Storage connections; checked emulator URLs and network access.</li> <li>Had a group meeting with a group tunde about the difficulties I had in setting up the Firebase integration.</li> </ul>

21 <sup>st</sup> October 2025	1.5 hours	
		<ul> <li>Continued Firebase debugging; ensured mobile app could connect to backend, tested registration and login flows.</li> </ul>
22 <sup>nd</sup> October 2025	11.5 hours	- Debugged React Native development server connection issues; verified frontend loaded on device.
		- Integrated Firebase backend: initialized Auth, Firestore, Storage, Functions; configured persistence with AsyncStorage.
		- Configured Firebase emulators for local development; connected Firestore, Storage, and Functions to localhost.
		<ul> <li>Updated AuthScreen: added Firebase login/registration, Firestore setDoc for profiles, validation for required fields and passwords.</li> </ul>
		- Added console logs for backend debugging; checked emulator URLs, ports, and firewall settings.
		- Adjusted import paths for firebase.ts; resolved component registration runtime errors.
		- Planned next steps: update emulator IP, review Firestore security rules, confirm backend calls succeed.
		<ul> <li>Pushed Firebase config to GitHub repository and branch called Initial_Backend</li> </ul>
23 <sup>rd</sup> October 2025	8.5 hours	
		- Switched from Firebase to Supabase due to firebase complexity; created supabase.ts, implemented auth helper functions (signup, signin, signout, get current user, auth listener).
		- Installed react-native-dotenv for environment variable management.

		<ul> <li>Debugged Git issues: initialized repo, resolved branch conflicts, performed force push, verified remote sync.</li> <li>Created new branch supabase and pushed to GitHub.</li> </ul>
		- Optimized Health Monitoring screen prompts: keyboard behavior, popup input, button layout.
		- Designed dynamic Health Summary logic based on vital signs input; removed reminders section.
		<ul> <li>Optimized Schedule Check screen: scheduling logic,</li> <li>24-hour auto-remove of completed checks,</li> <li>keyboard dismissal, input validation, date/time</li> <li>pickers.</li> </ul>
24 <sup>th</sup> October 2025	7 hours	<ul> <li>Activity screen: designed Supabase table schema, implemented logging activities (walk, exercise, stairs), timers, calories tracking, progress tracking, keyboard dismissal.</li> </ul>
		<ul> <li>Medication screen: modified Supabase schema, added dosage type, frequency, instructions, doctor, pharmacy, refill date, and side effects.</li> </ul>
		<ul> <li>-Improved Medication UI: professional layout, keyboard dismissal, overview section for total/active drugs, reminders, and today's schedule.</li> <li>- Fixed time/date picker issues: removed autoselection of 8 AM, allowed multiple times, implemented scrollable pickers</li> </ul>
		selection of 8 AM, allowed multiple times, implemented scrollable pickers.

		<ul> <li>Adjusted Add Medication popup: fixed layout distortions, Types section alignment, Back button position, background color, keyboard interaction.</li> <li>Optimized overall form behavior: popup slides from bottom, responsive layout, maintained Supabase functionality.</li> </ul>
25 <sup>th</sup> October 2025	7 hours	<ul> <li>Added Sleep Activity to Add Activity screen; ensured sleep duration recorded when timer starts.</li> <li>Implemented sleep quality prompt only when timer ends; stored duration and quality in Supabase.</li> </ul>
		<ul> <li>Updated Admin Dashboard: dynamically fetched and displayed users' sleep data, showing average sleep metrics in real time.</li> <li>Verified no UI changes; confirmed data flow and backend logic integration worked as intended.</li> </ul>

## Description

During this period, I focused on connecting the frontend to backend services, transitioning from Firebase to Supabase. I integrated authentication, data storage, and real-time updates while maintaining responsive and user-friendly UI. Major frontend improvements were implemented for Activity, Medication, Sleep Tracking, Health Monitoring, and Admin Dashboard screens. I ensured smooth state management, dynamic content rendering, keyboard behavior, and popups worked correctly. Backend research included Supabase schema design, API integration, and environment variable management. Git workflow was maintained with proper branching and repository synchronization.

## **Repository Check-in**

I Worked and pushed only to initial\_backend and supabase branches.

I also Created supabase branch for new backend integration and bug fixes; merged changes into main functionality in initial\_backend.

Pushed updated frontend screens, backend configs, and UI documentation.

Supabase authentication and data tables were pushed to GitHub.