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Momentum – Final Project Proposal

App Concept & Purpose

Momentum is a productivity-focused Android application that helps users build and maintain healthy habits through consistent daily tracking. The app supports four core habits: exercise, reading, water intake, and studying. Users can log daily progress, receive motivational quotes, and visualize their habit-building journey. The purpose of Momentum is to empower users to stay consistent, develop positive routines, and maintain momentum in their personal growth.

Core features will include habit creation and tracking, progress visualization, motivational quote integration, and sensor-based monitoring for physical activity. Users can set reminders, view historical data, and sync their usage across smartphones and smartwatches for seamless daily engagement.

Selected Technologies

Database: We will use the **Room Database** for local data storage. Room offers a strong, structured, scalable solution for storing habit logs and user data. It supports full CRUD operations and integrates smoothly with Kotlin and Android Studio, making it ideal for our app architecture.

API: To enhance user motivation, Momentum will integrate the [ZenQuotes API](#), a free service that provides a new motivational quote on each app launch. This feature adds a positive, inspiring touch to the daily habit-tracking experience.

Sensor: For exercise/activity tracking, we'll use the Step Counter Sensor (TYPE_STEP_COUNTER). This allows users to automatically track steps taken, enabling effortless logging of movement-based habits such as walking or running.

Multi-Device Compatibility

Momentum will support Android smartphones and Wear OS smartwatches, ensuring users can log habits and receive reminders on the device that best fits their routine. Smartwatch functionality will offer quick-access check-ins to cater to users with an active lifestyle.

Initial Wireframes / Sketches

Initial wireframes and sketches for Momentum will be included in the final project proposal [slides](#) as well as in the docs section of the [github repository](#).

Conclusion

With a clean interface, motivational features, and multi-device compatibility, Momentum aims to make habit-tracking simple, inspiring, and sustainable. Leveraging Room Database, the ZenQuotes API, and step sensor technology, Momentum will serve as a smart, encouraging tool to help users stay on track and keep moving forward—one habit at a time.