
1-Month Dev Plan (4 Weeks)

Week 1: Android Core + Architecture

Goals: Advanced Native Android setup and MVVM architecture.

Tasks: - Set up Android project (Kotlin + MVVM). - Implement Room DB for offline storage. - Set up Navigation Component and basic UI screens (Login, Dashboard, Expense List). - Implement WorkManager for offline sync of data. - Create sample dummy data for testing UI.

Deliverable: Android app with local database + offline sync prototype.

Week 2: Backend Setup (Spring Boot)

Goals: Basic Spring Boot backend + REST APIs.

Tasks: - Set up Spring Boot project with Maven/Gradle. - Create database schema (Users, Expenses, Budgets). - Implement user signup/login API (JWT authentication). - Implement CRUD APIs for Expenses and Budgets. - Test APIs using Postman.

Deliverable: Functional backend ready for integration.

Week 3: Android + Backend Integration

Goals: Connect Android app to Spring Boot backend.

Tasks: - Add Retrofit / OkHttp for API calls. - Implement authentication flow with JWT tokens. - Sync CRUD operations (add/edit/delete expenses) with backend. - Fetch expense lists and budget data from server and display in UI. - Implement error handling & offline fallback.

Deliverable: Android app fully connected to backend with basic CRUD working online.

Week 4: Advanced Features & AI Prep

Goals: Add advanced Android features + prepare for AI integration.

Tasks: - Add budget notifications via WorkManager. - Add analytics summary UI (total expenses, category-wise charts). - Set up ChatGPT API integration structure in backend (just endpoints, no full AI yet). - Optional: Create basic AI query UI in Android.

Deliverable: Android app with backend connection, notifications, analytics, and AI-ready endpoints.

1-Month Outcome

- Full-stack prototype: Android app + Spring Boot backend.
- Offline-first + online sync + notifications implemented.
- Backend ready for AI integration.
- Foundation ready for Flutter cross-platform version and Kubernetes deployment later.