Kalmm Budgeting

An Android budgeting app built with Kotlin, Room, Coroutines, and MPAndroidChart. Track your income, expenses, and savings goals, earn achievements, and get alerts when you're about to overspend.

Features

Log Entries

 - Income or Expense

 - Amount, date, category, optional image

 - Persisted via Room

Reports

 - Expense and Income transactions list

 - Expense and Income overviews with grouped bar charts

 - Goals grouped bar charts to compare against expenses

 - Filter by category

Home Dashboard

 - Current balance, total income & expense

 - Quick "Log Income" / "Log Expense" buttons

 - Expense-cap goals with progress bars

Goals

 - Create expense-cap goals per category

- Visualize progress, edit/delete goals
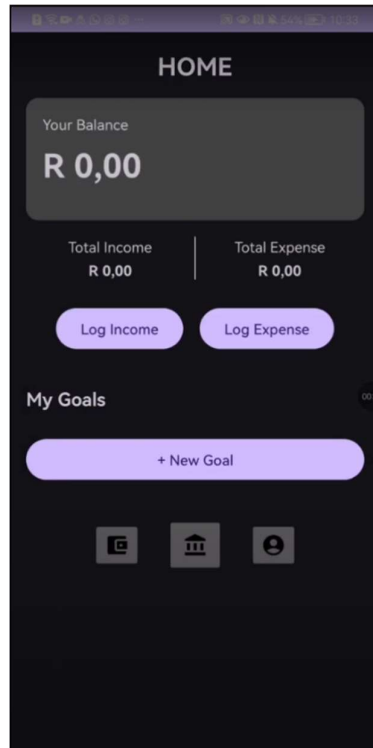
Achievements (Custom Feature 1)

- "First Timer" on first app launch

- "Smart Saver" on first goal creation

- "Diligent User" on third expense log

- View unlocked and all achievements on Profile

Dynamic Profile "Title" (Custom Feature 2)

- Ranks (e.g. Penny Pincher, Big Baller) based on net balance

Screens

1. **Main (Launcher)**

2. **Home**

3. **Log New Entry**

4. **Reports (Expense)**

5. **Reports (Income)**
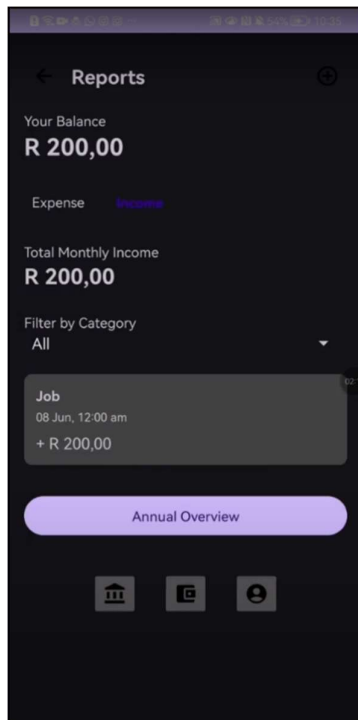
6. **Annual Overview**
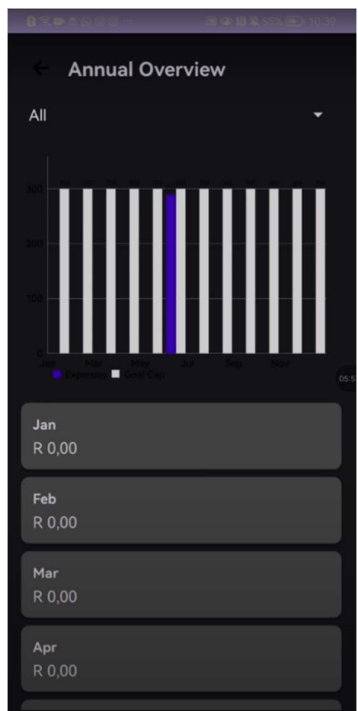
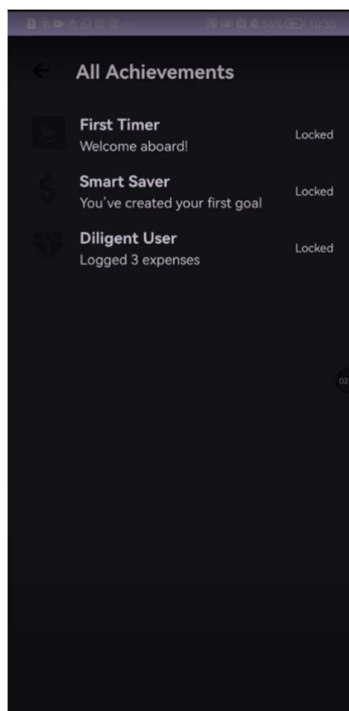7. **Create New Goal**

8. **Profile**
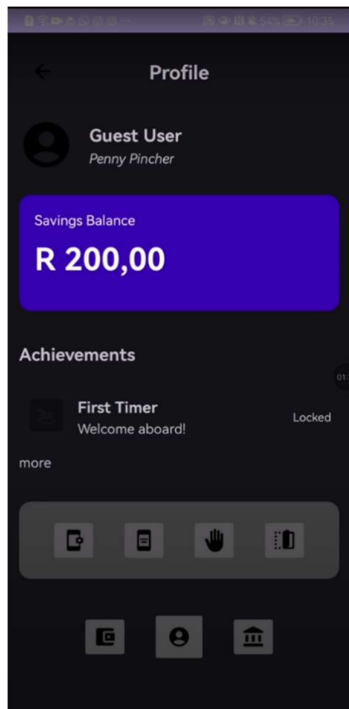
9. **Achievements Detail**

Architecture & Libraries

- **MVVM-lite** with Activities + Room + Coroutines

- **Room** for local persistence

- **Kotlin Coroutines** (`Dispatchers.IO` for DB, `Main` for UI)

- **MPAndroidChart** for bar charts

- **AlarmManager** + `BroadcastReceiver` for daily overspend checks

- **ViewBinding** for strongly-typed XML binding

Setup & Build

1. **Clone** the repo

2. Open in **Android Studio Arctic Fox** or later

3. Ensure `minSdk 24`, `targetSdk 35`

4. **Sync Gradle** (includes Room, Coroutines, Chart, CardView)

5. **Run** on emulator or device

 Note: On schema changes, the app uses `fallbackToDestructiveMigration()`, so uninstall/reinstall to avoid migration errors.

Usage

- **First Launch**: Grants "First Timer" achievement

- **Add a Goal**: Tap "+ New Goal" on Home → enter name, amount, category → "Smart Saver" unlocks

- **Log Expenses**: Tap "Log Expense" → fill form → on 3rd expense, "Diligent User" unlocks

- **View Reports**: Navigate to Reports → filter by category → check totals

- **Annual Chart**: See grouped bars for monthly expenses vs. total goal cap

- **Profile**: View balance, dynamic title, and achievements

Demo video: https://youtu.be/GHxsbj_zKgs?si=eorzjaZap4NunxDb

Localization & Assets

- All labels in `res/values/strings.xml`

- Icons in `res/drawable/` (e.g. `ic_firsttimer`, `ic_smartsaver`, `ic_diligentuser`)

- Styles in `res/values/themes.xml`

Future Improvements

- Proper Room migrations instead of destructive fallback

- User authentication & cloud sync

- More achievements & badges

- Dark mode styling