Specification Document — *Budget Tracker App*
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1. Overview

Project name: Budget Tracker
 Goal: Allow users to record their incomes and expenses, and display a monthly financial summary using a local SQLite database.
 Architecture: MVVM (Model – View – ViewModel)
 Technologies: Kotlin, Jetpack Compose, SQLite

Repository github : [Repository link](), Copy the work on your space and complete [BudgetDatabaseHelper.kt]() only

2. Functional Specifications

2.1 Core Features

- Add Expense:
   User can enter title, amount, category, and date.

- Add Income:
   User can enter monthly income and amount.

- Monthly Summary:
   The app displays total income, total expenses, and remaining balance..

- Suppress/modify:
   User can change or delete actual incomes / expenses

- Monthly Summary:
   The app displays total income, total expenses, and remaining balance..

3. Technical Specifications

3.1 Database Schema

Tables:

- expenses(id, title, amount, category, date)

- incomes(id, month, amount)

3.2 Data Flow

1. User Input → Composables (ExpenseScreen, IncomeScreen)

2. ViewModel → Handles logic, calls Repository

3. Repository → Manages data access using BudgetDatabaseHelper

4. SQLite Database → Stores persistent data locally

3.3 Example Interactions

- Adding an expense calls insertExpense()

- Summary screen uses getMonthlyTotal() and getMonthlyIncome()

- Data displayed dynamically via Compose UI

4. Architecture Overview

- Model: Data classes (Expense, Income)

- ViewModel: BudgetViewModel → manages state and logic

- Repository: BudgetRepository → abstracts database access

- View (UI): ExpenseScreen, IncomeScreen, SummaryScreen

5. Unfinished Project (UP) Tasks

Students must implement the following:

- Complete CRUD functions in BudgetDatabaseHelper (currently commented).

- Add UI validation (e.g. empty fields).

- Add monthly filtering or chart visualization.

● Connect summary calculations to real data.

6. Documents available on the repository

● Project Folder + Graddle

● PDF presentation

● PDF Spec documents