

# Expense Tracker app

## Project: Expense Tracker App (Jetpack Compose Edition)

### Core Features

- **Track Expenses:** Users can add expenses with details like amount, category, date, and notes.
  - **Dashboard Screen:** Displays total spending, recent expenses, and optionally a summary chart.
  - **Add Expense Screen:** Allows users to input and save new expense entries.
  - **History Screen:** Lists past transactions with filtering by date, category, or amount.
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### Tech Stack & Components

- **Room Database (Local Storage):**
  - Stores expense records with fields like `amount`, `category`, `description`, and `date`.
  - Supports full **CRUD**: create, read, update, and delete expenses.
  - Enables queries for filtering and sorting (e.g., by date range or category).
- **Jetpack Compose UI:**
  - **Composable functions** to build a clean and dynamic UI.
  - **LazyColumn** for rendering the list of transactions.
  - **TextFields**, **DropdownMenus**, and **DatePickers** for form input.
- **Navigation Compose:**
  - Manages navigation between:
    - **Dashboard**
    - **Add Expense**
    - **Expense History**
- **ViewModel + LiveData / StateFlow:**
  - Handles business logic and keeps UI in sync with database changes.
  - Supports filtering, aggregation, and dynamic updates.
- **Bonus: Charts/Graphs:**
  - Integrate a simple chart library like:
    - [MPAndroidChart](#) (Compose wrappers available)

- **Compose-based chart libraries** (e.g., Charts for Compose )
  - Use for visualizing spending by category or over time.
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## Why It's a Great Project

- Offers full CRUD practice with a realistic use case.
- Encourages **data visualization**, which adds extra value to the user experience.
- Teaches essential UI skills: dynamic forms, date input, and responsive layout.
- Easily extendable with features like:
  - Budget goals
  - Monthly summaries
  - CSV export or cloud backup