

# ITCS-GP-GRAD 1

# FinFlow: Your Daily Financial Buddy

**Supervisors:**

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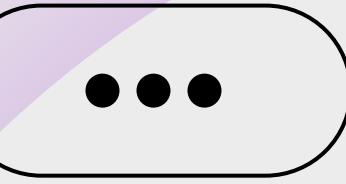
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# Agenda

- 01** Background/Problem
- 02** Scope
- 03** Related Work/Competition
- 04** Features & Functionality
- 05** Implementation
- 06** Future Work

# Problem



- GenZ and Millenials spend 30-40% of their monthly budget on entertainment, dining out, and technology upgrades
- They also spend between \$75-100 each month on subscription services (music, video streaming, etc..)
- Individuals experiencing financial stress were 2.5 times more likely to report symptoms of anxiety and depression compared to those without financial stress.



Deloitte. (2022). Deloitte Global Millennial and Gen Z Survey.  
<https://www2.deloitte.com/global/en/pages/about-deloitte/articles/millennialsurvey.html>

Volkos, P., & Symvoulakis, E. K. (2021). Impact of financial crisis on mental health: A literature review 'puzzling' findings from several countries. International Journal of Social Psychiatry, 67(7), 907-919. Chicago

Here Comes

**FinFlow:**  
**Your Daily Financial Buddy**

# Objectives and Goals

FinFlow is designed to address the growing need for effective personal finance management tools in today's fast-paced, digitally driven world



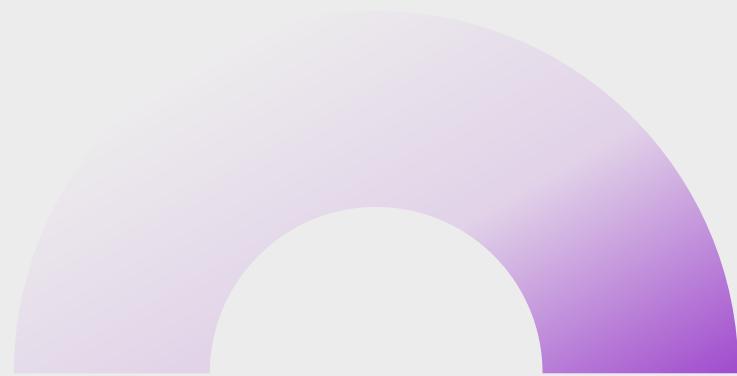
## Expense Tracking

Provide users with an intuitive platform to track daily expenses manually or through automated methods.



## Financial Insights

Offer detailed visualizations (pie charts, bar graphs) to help users understand their spending patterns.



## Investment Recommendation

Provide AI-driven suggestions for investments based on user financial data

# Target Market



**GenZ**

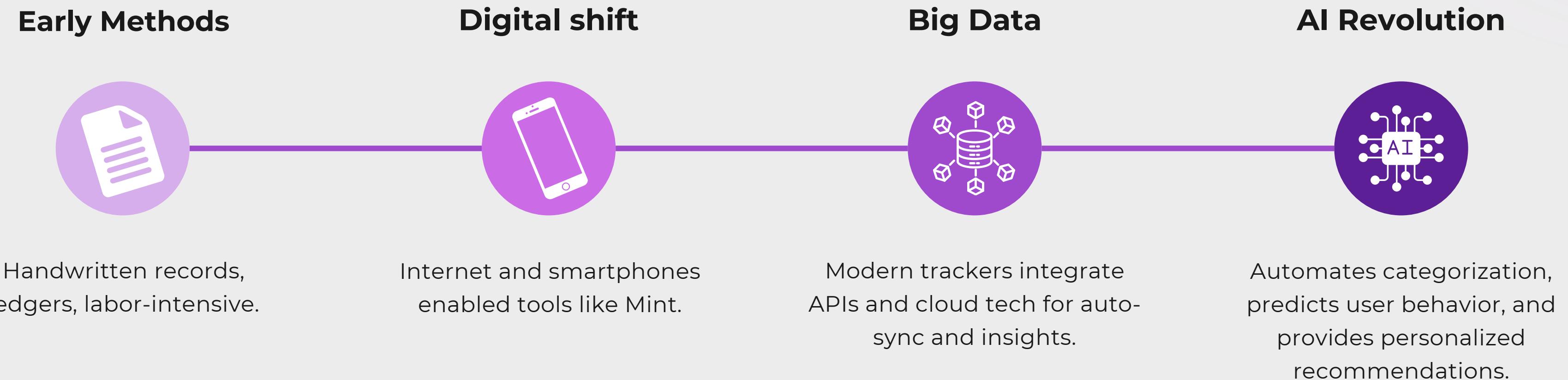
Unaware Spending on  
unnecessary stuff



**Millenials**

Eager to save more money  
in a capitalist world

# Historical Perspective



# Competition

- **Telda (Very Popular)**

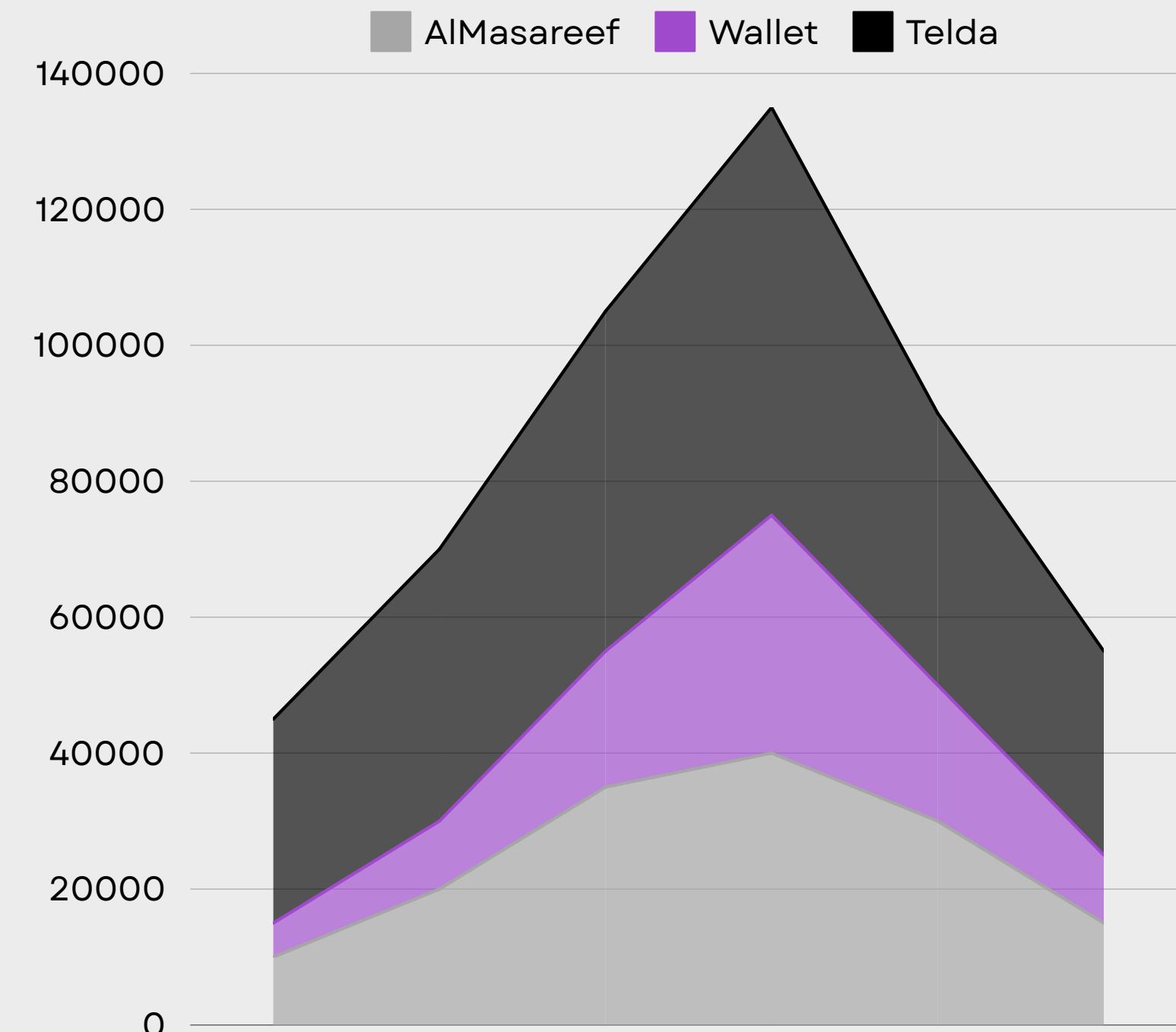
Has the ability to transfer money between contacts

- **Al Masareef**

Has analytics tools to evaluate spending habits, monthly reminders, and the ability to export financial data.

- **Wallet (Very Popular)**

Categorization of expenses, bank synchronization, and visual analytics like pie charts for financial insights.



# Stakeholders

**Customers (Individuals):** Track daily expenses, view and analyze personal financial summary, receive investment or saving recommendations.

**Small Business:** Monitor operational expenses and revenues, generate basic financial statements and reports, avoid high costs of enterprise-level financial tools.

**Financial Advisors:** Track and review client expenses to provide better advice, recommend the tool as a supplementary method for clients to manage their personal or small business finances.

**Educational Institutions:** Use the app as a teaching tool in finance, business, or computer science courses, illustrate practical application of data management, AI (for recommendations), and user experience design.

# Scope: Features & Functionality

**Expense Tracking:** Provide users with an intuitive platform to track daily expenses manually or through automated methods.

**Category Management:** Enable users to set and monitor monthly or weekly budgets for specific categories.

**Frequent Notifications:** Alert users when their expenses exceed budget limits or when unusual spending patterns are detected.

**Investment Recommendation:** Provide AI-driven suggestions for investments based on user financial data.

# Scope: User Modes

**Individual Mode:** Designed for personal use, focusing on daily expense tracking and budget management.

**Small Business Mode:** Enables small businesses to track operational expenses and optimize budgets.

**Financial Advisor Mode:** Provides tools for financial advisors to monitor client expenses and offer personalized recommendations.

# FinFlow External Interaction



**Investment Market Data**  
For providing real-time data and updates on investment opportunities and market changes.



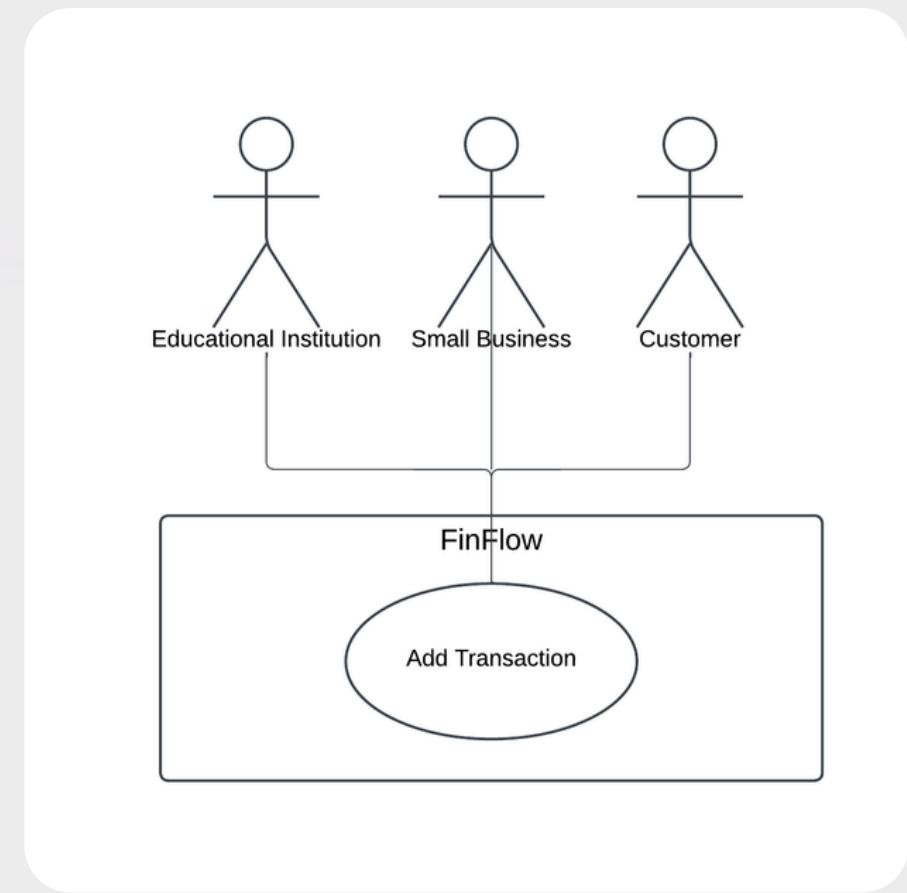
**Authentication Services**  
For external login or social login using Google, Apple, etc.



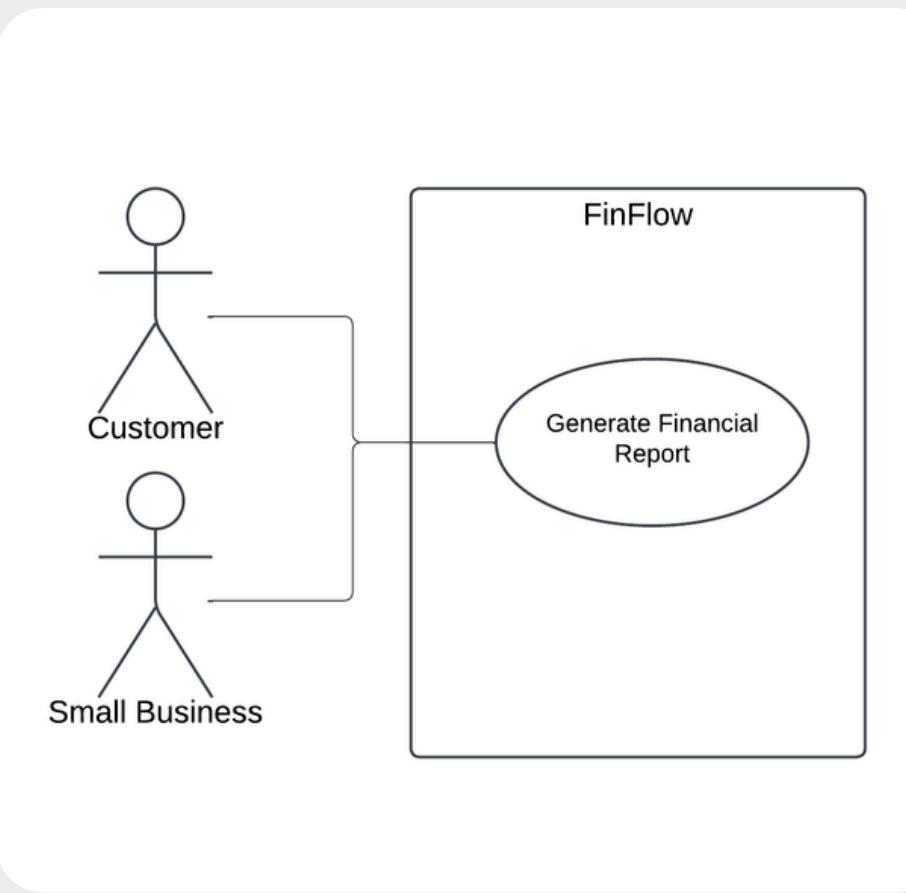
**Notification Services**  
Used to send alerts, reminders, and confirmations to users.

<b>Functional Requirements</b>	<b>Non-Functional Requirements</b>
The user should be able to create an account and authenticate with secure credentials	Security: All data must be encrypted at the database level and in transferring the data using HTTPS
The user should be able to add financial data using multiple methods	Performance: Key dashboard pages should load within 2 seconds under normal usage.
The system shall display a dashboard with up-to-date summaries of expenses, income, and savings goals	Portability: The system shall run on major operating systems like Android and IOS
The system shall integrate with external market data APIs to offer basic investment or savings recommendations.	
The system shall send notifications for nearing budget limits, bill reminders, etc.. via email, SMS, or push notifications	

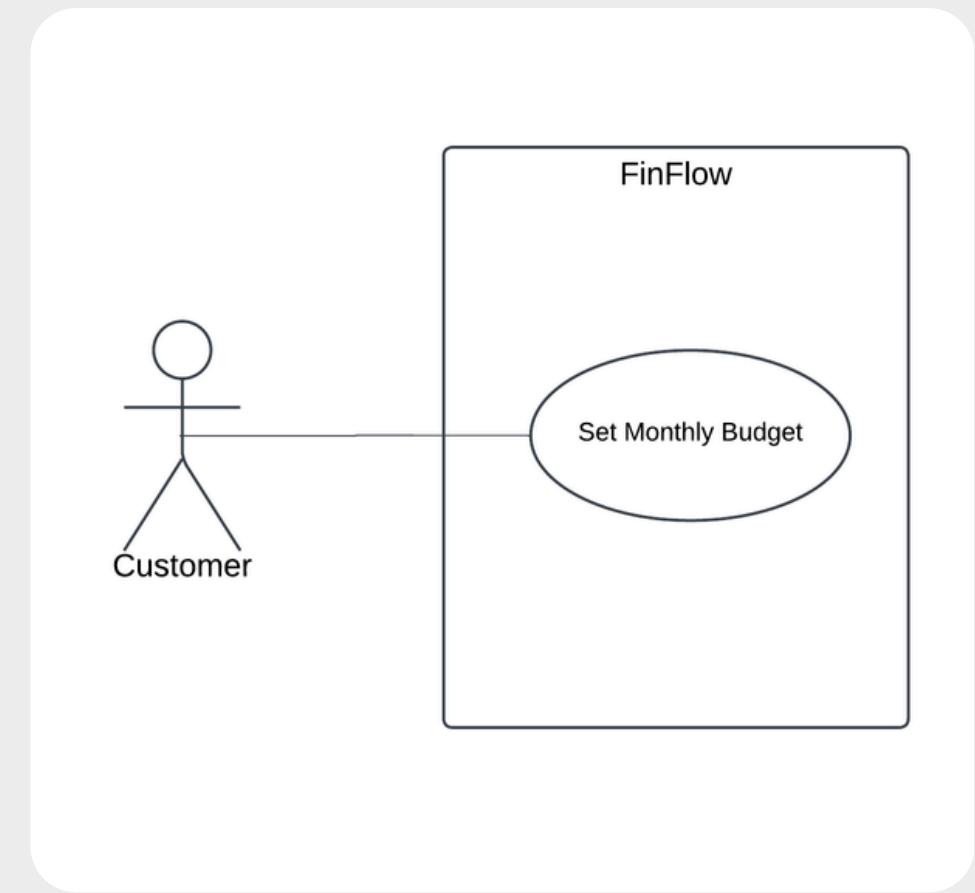
# Some Use Cases



UC1: Individuals, Small Businesses, Educational Institutions can add transactions



UC2: Individuals, Small Businesses can generate Financial Reports



UC3: Only Customers can set Monthly Budgets

# Implementation: Languages & Frameworks



## Flutter

Selected for frontend development due to its rich widget library and ability to deliver a native-like experience on both IOS and Android.



## Dart

The primary language for the frontend development using the Flutter framework.



## FireBase

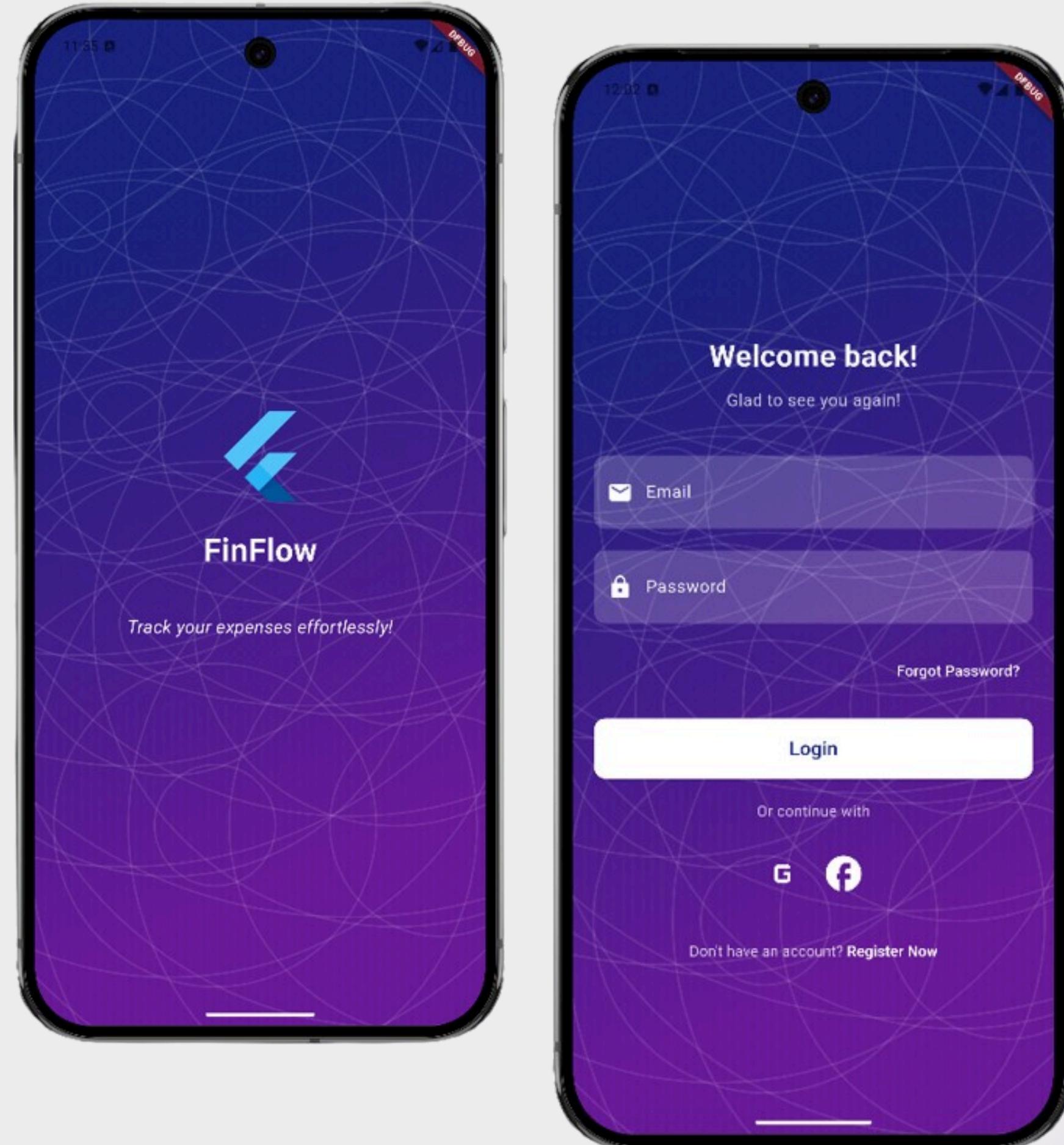
Used for real-time database management, authentication, and push notifications. Firebase was selected for its scalability and free service.

# **FinFlow**

# **App Overview!**

# User Login

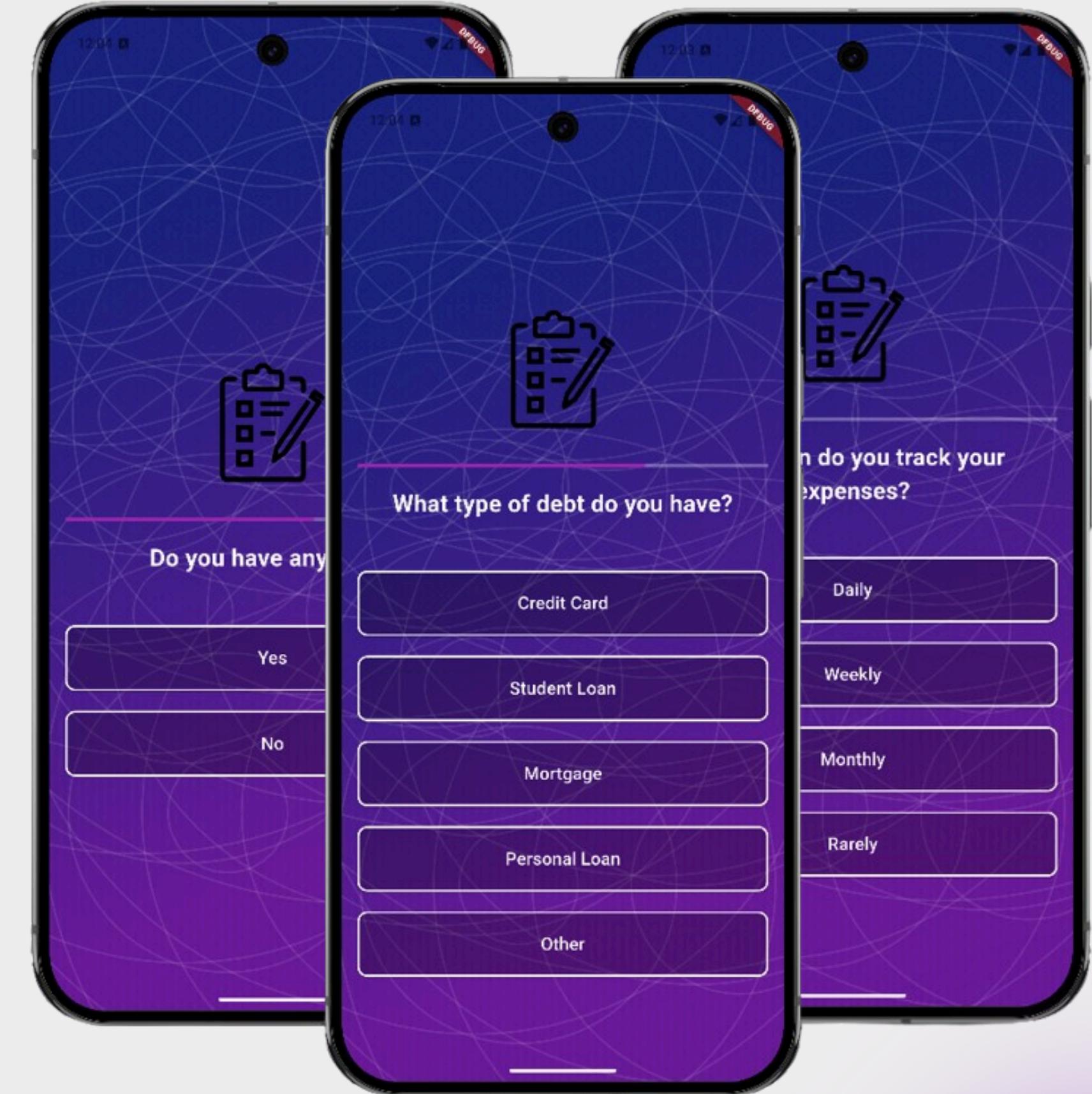
- Splash Screen



- Log In Screen

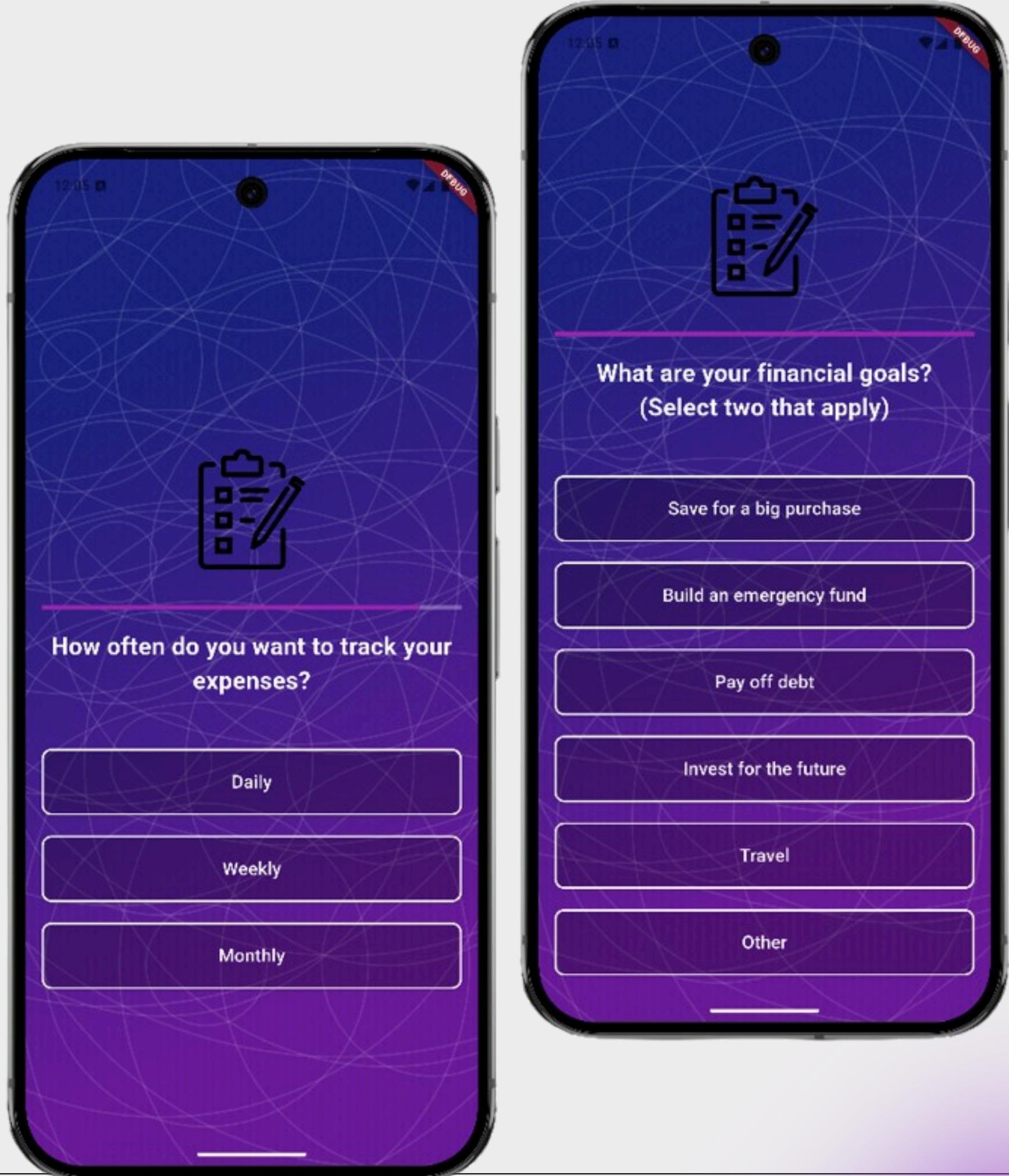
# User Survey

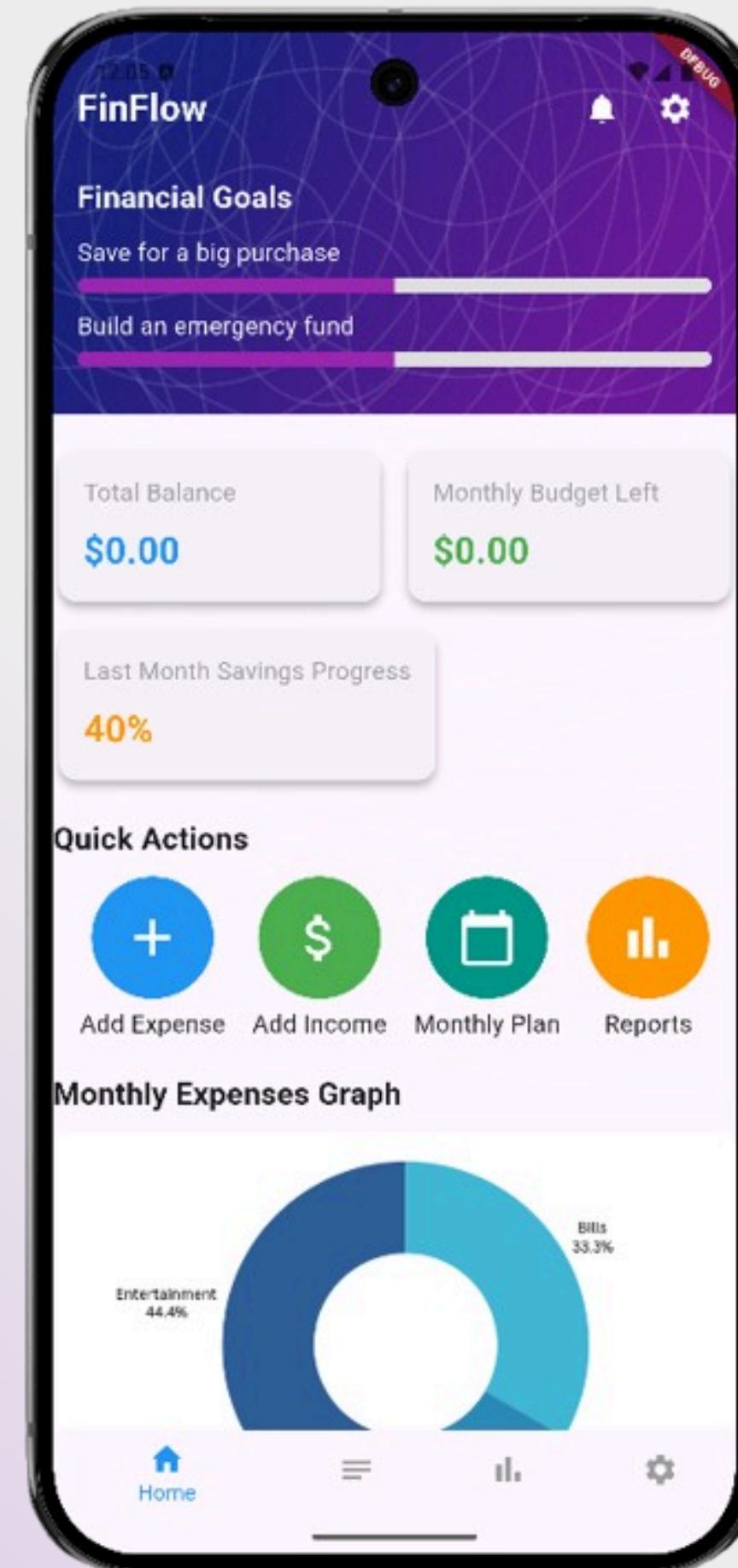
- What are your Financial Goals?
- How often do you track your expenses?
- What type of debt do you have?



# User Survey

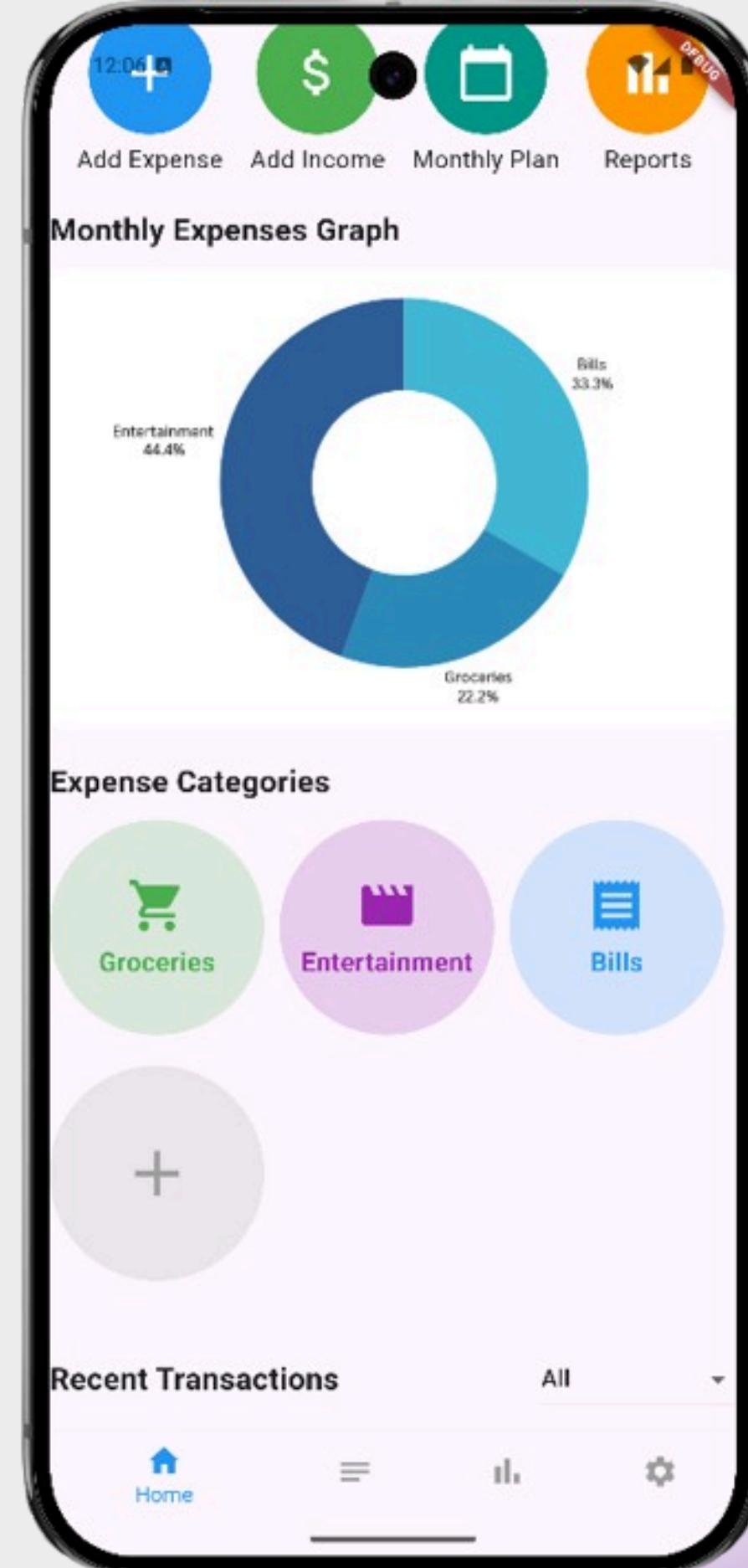
**Questions that decides  
the User's Monthly Plan!**





# Home Screen

**Organized UI for  
friendly and simple use!**

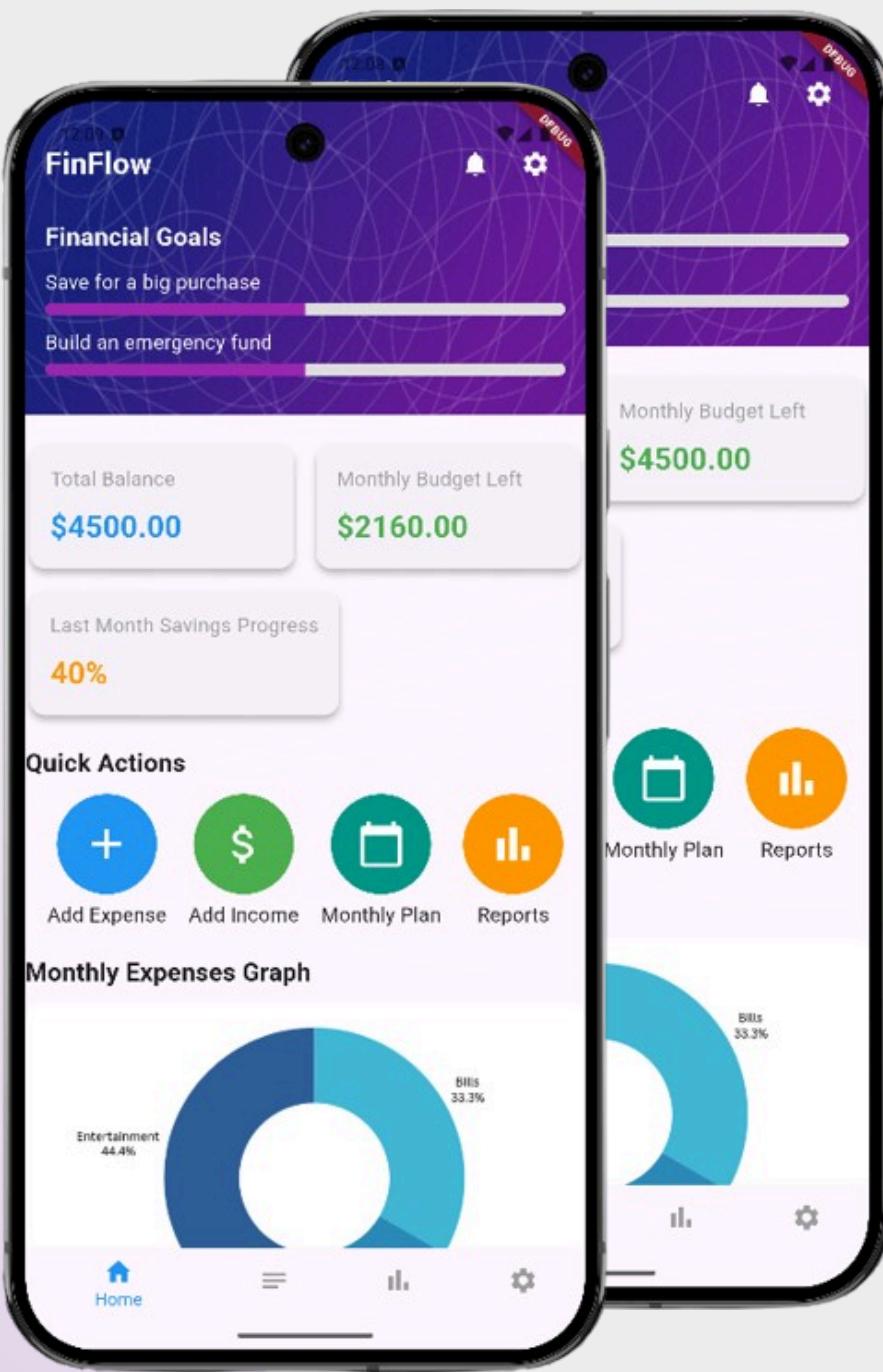


# Categories

**Categories make the app more intuitive and organized..**

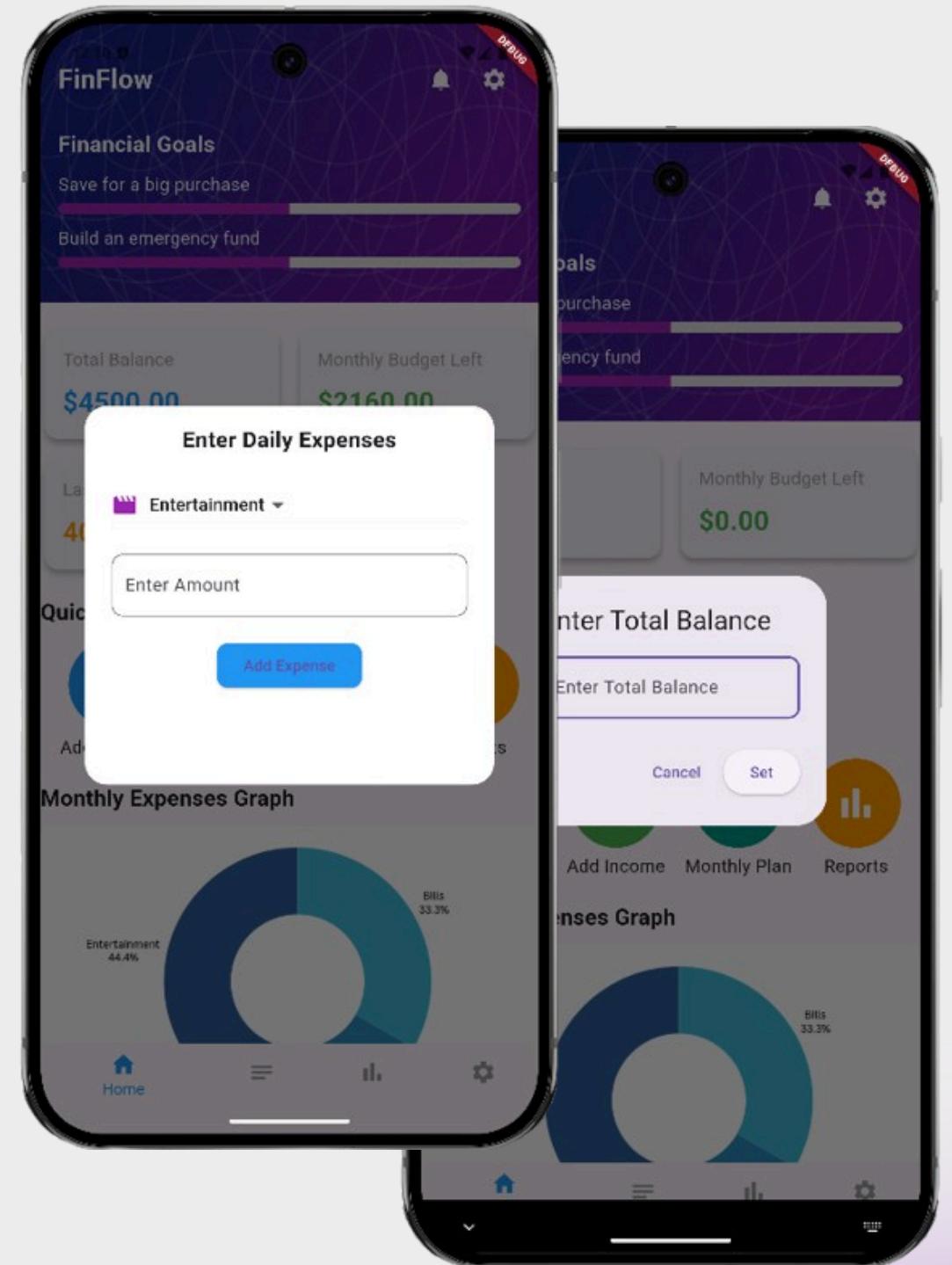


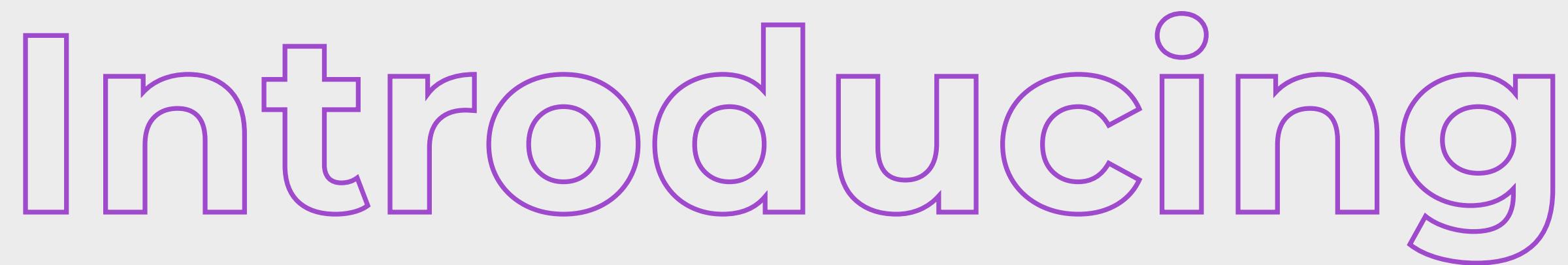
# Daily/Monthly Budget/Expenses



- Enter your total Monthly Budget

Enter your Daily Expenses



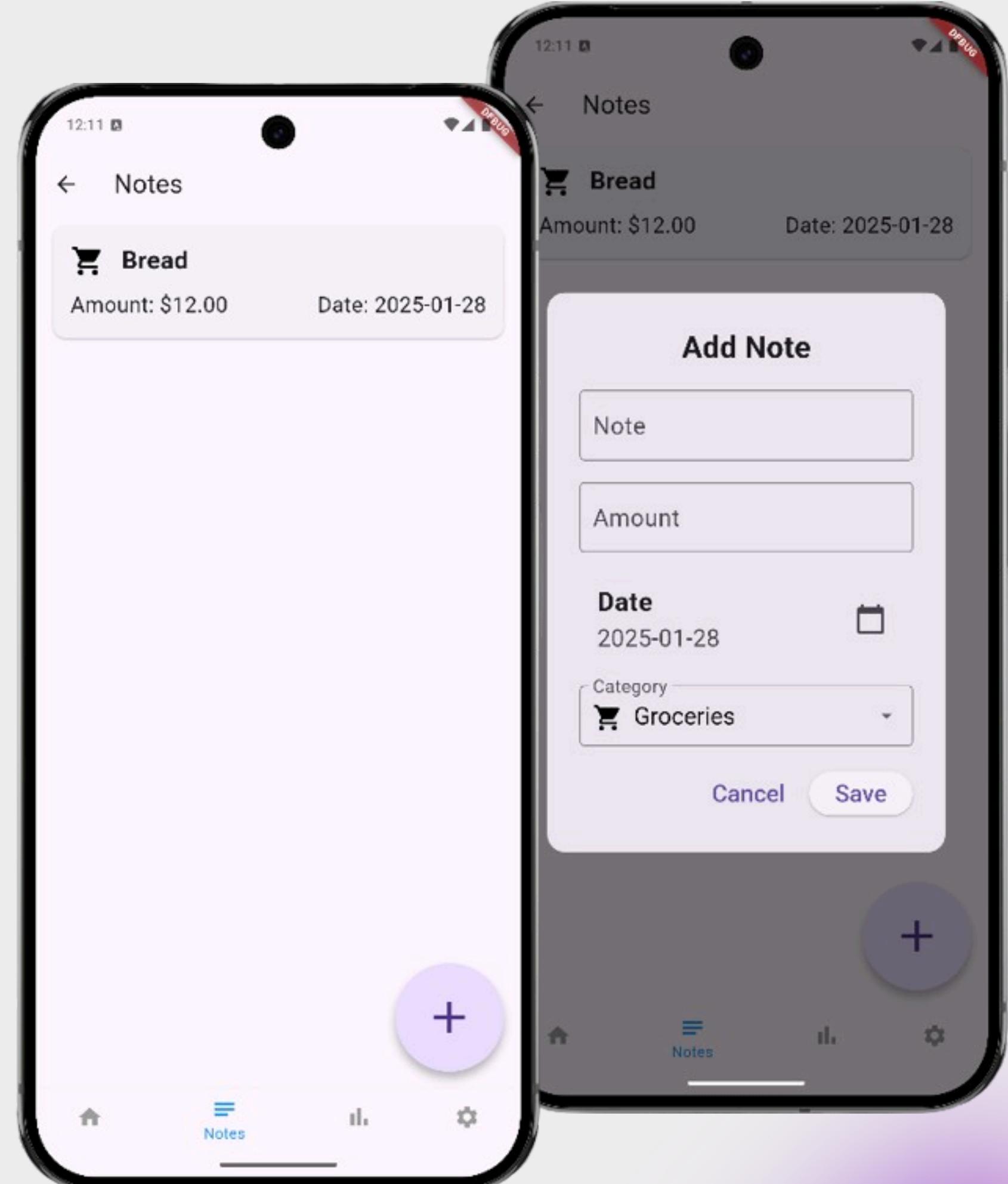


Introducing

# Notes!

- Built-in Notes system to remind you of your planned purchases!

**No Need to use a separate notes App!**



# Future Work

**Make predictions:** based on the financial activity of the month  
(time span: 1,3,6 month)

**User budget:** analysis over the last 6 months and graphs show monthly expenses analyzing expenses over the last 6 months and display them in a pie chart or graph

**Business or personal:** for user's need and Business Needs, targeting start ups, to mange their budgets.

**Investments:** give suggestions for the user to invest in profitable business

# Live Demo!

