Smart Personal Finance Tracker with AI Insights and Voice Input – HopSaver

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INTRODUCTION

Content:

- Many users struggle with managing daily expenses
- Existing apps often lack personalized insights or offline functionality
- Users want quick, intuitive tools to track and control spending

Goal: Build a simple, smart, and secure finance app

TECHNOLOGY STACK

- **LANGUAGES:** SWIFT, SWIFTUI

- **TOOLS:** XCODE, CORE DATA, CORE ML, CHARTS FRAMEWORK

- **ARCHITECTURE:**

  - CORE DATA FOR PERSISTENCE

  - MLMODEL FOR PREDICTIONS

  - SWIFTUI FOR DYNAMIC UI
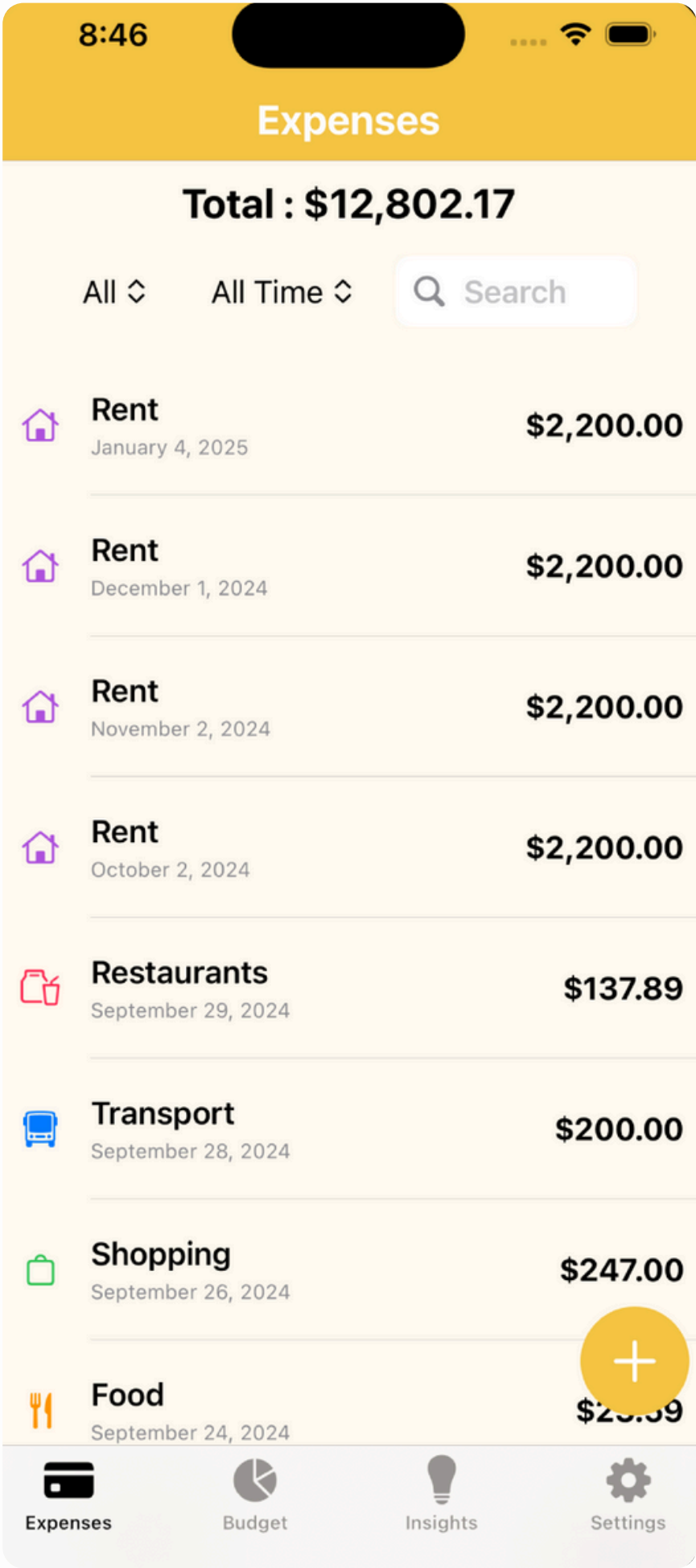
PROJECT OVERVIEW

Key Features:

- Expense Tracking (Manual + Voice Input)
- Budget Management (Monthly Budgets)
- AI-Based Spending Predictions
- Visual Insights: Graphs, Trends, Breakdowns
- Offline Storage via Core Data

DETAILED SPECIFICATIONS

Data Flow

- User logs expenses → Stored in Core Data
- Budgets set monthly → Linked to expenses
- AI model fetches month, predicts expense

UI Workflows

- Tabs: Expenses | Budget | Insights | Settings
- Each tab for core functionality

ML Model

- Input: Month
- Output: Predicted TotalSpent

DEMO SCREENSHOTS

Expenses

Total : $20,676.57

All ⇕   All Time ⇕   🔍 Search

🏠 Rent
April 2, 2025 $2,200.00

🏠 Rent
March 1, 2025 $2,200.00

🏠 Rent
February 4, 2025 $2,200.00

🏠 Rent
January 4, 2025 $2,200.00

🏠 Rent
December 1, 2024 $2,200.00

🏠 Rent
November 2, 2024 $2,200.00

🍴 Food
October 22, 2024 $239.11

🛒 Grocery
October 17, 2024 $45~.~4

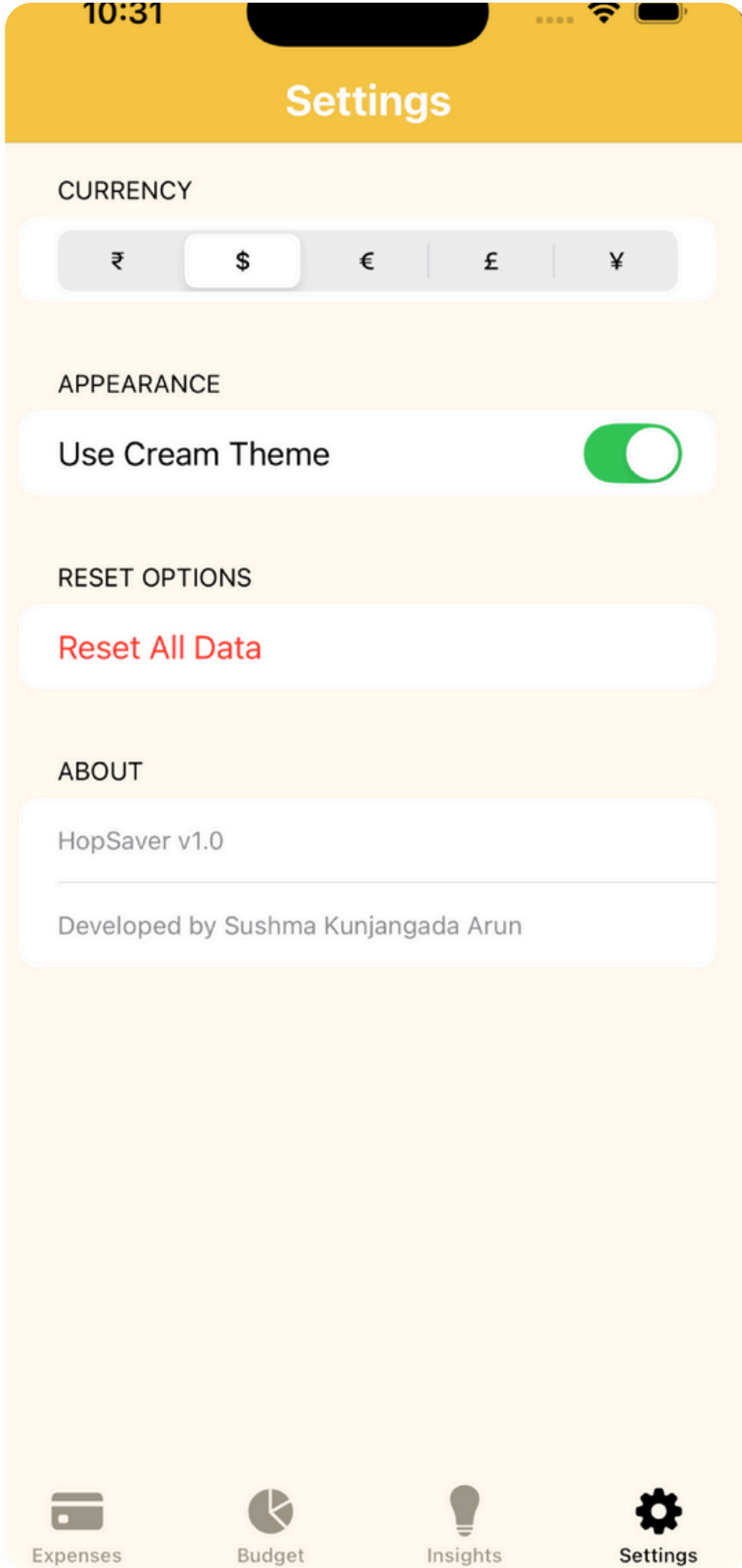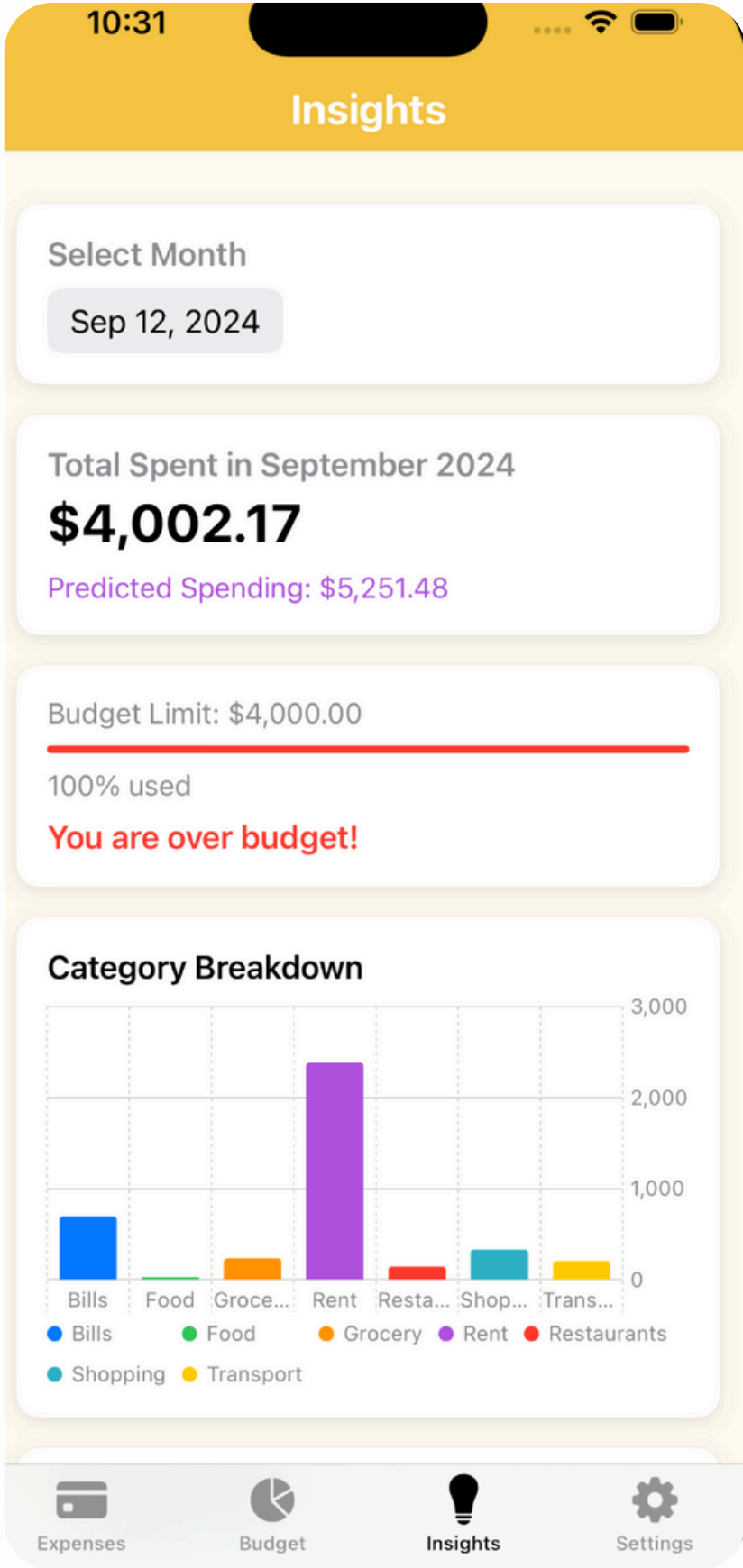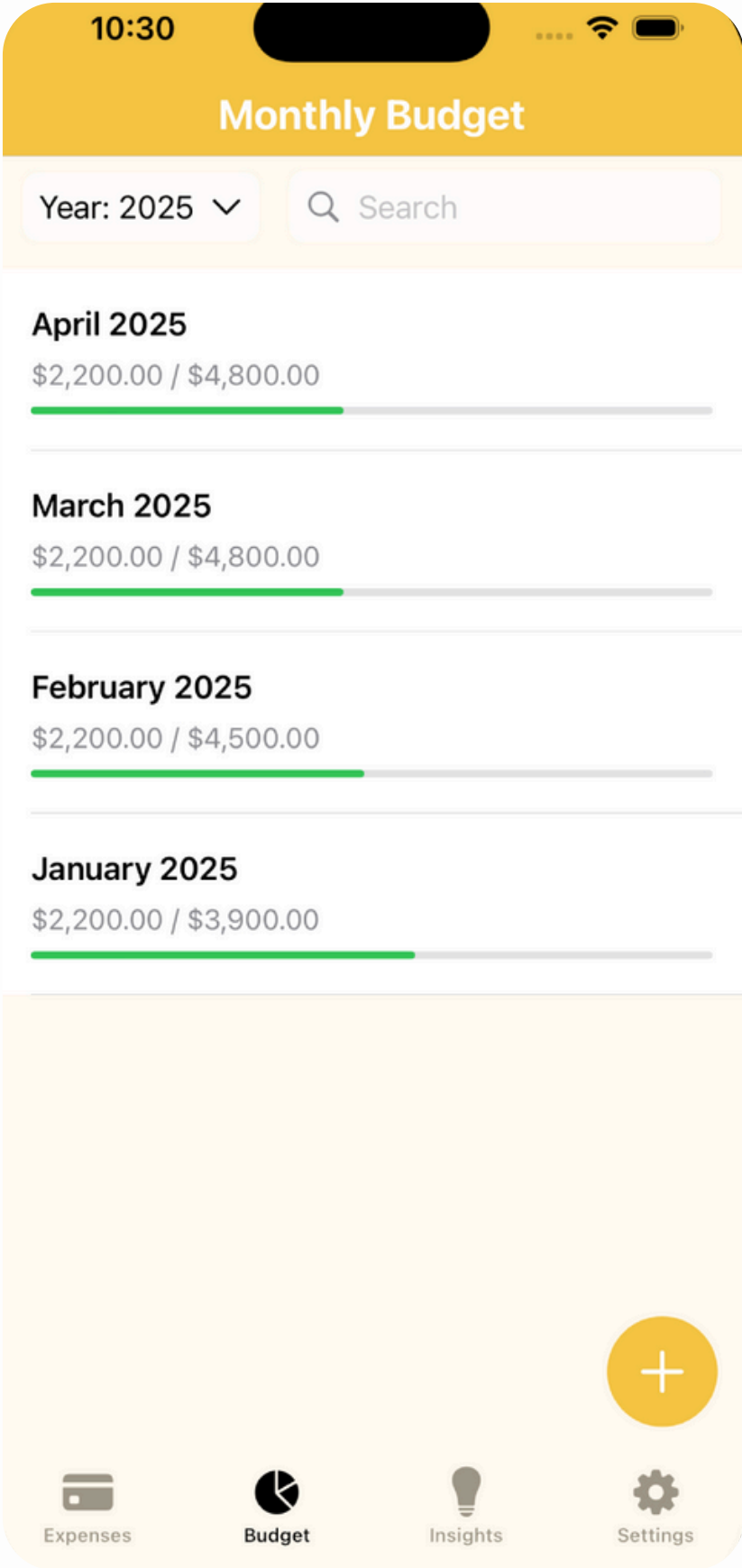Expenses   Budget   Insights   Settings

Monthly Budget

Year: 2025 ⌄   🔍 Search

April 2025
$2,200.00 / $4,800.00

March 2025
$2,200.00 / $4,800.00

February 2025
$2,200.00 / $4,500.00

January 2025
$2,200.00 / $3,900.00

Expenses   Budget   Insights   Settings

Insights

Select Month
Sep 12, 2024

Total Spent in September 2024
$4,002.17
Predicted Spending: $5,251.48

Budget Limit: $4,000.00

100% used
You are over budget!

Category Breakdown

● Bills   ● Food   ● Grocery   ● Rent   ● Restaurants
● Shopping   ● Transport

Expenses   Budget   Insights   Settings

Settings

CURRENCY
₹ $ €   £   ¥

APPEARANCE
Use Cream Theme   ⬤

RESET OPTIONS
Reset All Data

ABOUT

HopSaver v1.0

Developed by Sushma Kunjangada Arun

Expenses   Budget   Insights   Settings

CHALLENGES & LEARNINGS

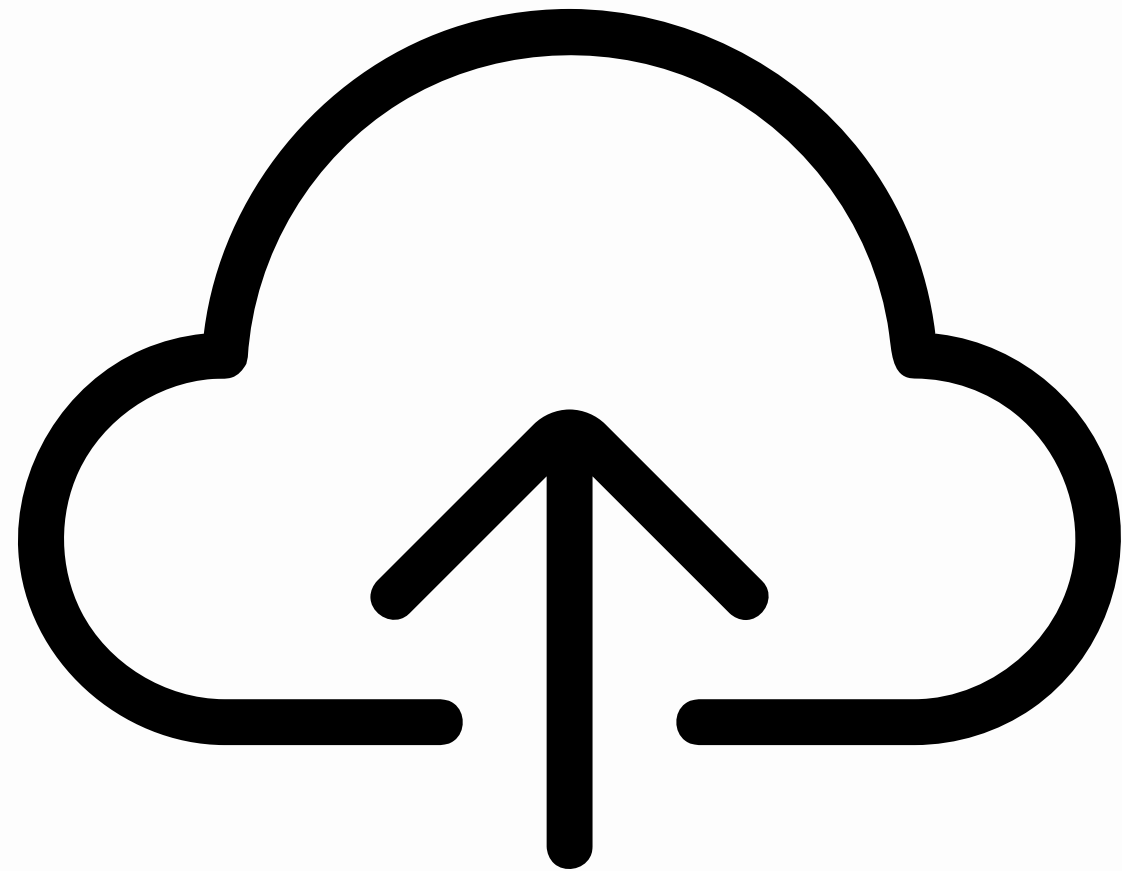**AI Integration Complexity:** Model setup, data formatting.

Offline-first architecture: Core Data syncing.

Voice Input Handling: Using Apple Speech Framework.

FUTURE UPGRADES

- Full AI prediction refinement
- User accounts & multi-device sync
- More analytics: Savings goals, smart alerts
- Export/Import data options

CONCLUSION

- HopSaver simplifies personal finance
- Focused on usability, offline-first design, and smart insights
- Ready for further innovation based on feedback