

PROJECT DOCUMENTATION

Application Name: ExpenseBuddy Pro

Developer: Vishal Kumbhakar

Date: January 2026

Technology Stack: Python, Streamlit, Pandas, Plotly

1. Project Overview and Objectives

ExpenseBuddy Pro is an interactive, web-based Personal Finance Dashboard designed to help users track their daily spending and visualize financial habits effectively.

Key Objectives:

Data Persistence: To allow users to add expense records that are saved permanently to a local CSV file, ensuring no data is lost between sessions.

Visual Analytics: To transform raw transactional data into meaningful insights using interactive charts (Spline trends, Donut charts).

User Experience (UX): To provide a modern, "Fintech-style" interface using custom CSS for cards, shadows, and hover effects, distinct from standard data tables.

Modularity: To demonstrate clean software architecture by separating logic (Data), presentation (Reports), and control (Main) into different modules.

2. Code Structure Explanation

The application follows a Modular Architecture, separating concerns to ensure the code is clean, maintainable, and scalable.

main.py (The Controller): The entry point of the application. It connects the data layer to the presentation layer. It calls `menu.draw_sidebar()` to handle user inputs and `reports.render_dashboard()` to display the visual output.

reports.py (The View / UI): Handles all visual elements. This file contains the CSS injection logic for the custom "Fintrack" design (cards, colors, shadows), as well as the Plotly chart configurations.

menu.py (Input Handling): Manages the Sidebar components. It renders the form for adding new expenses (Date, Category, Amount) and validates user input before passing it to the backend.

file_manager.py (The Model / Data): Handles the Backend logic. It performs CRUD operations on the `expenses.csv` file using Pandas, ensuring data is safely stored, retrieved, and updated.

3. Setup and Installation Instructions

Prerequisites:

Python 3.8 or higher

pip (Python Package Installer)

Step 1: Install Dependencies Open the terminal and run the following command to install the required libraries:

Bash

```
pip install streamlit pandas plotly
```

Step 2: Project Setup Ensure the project directory contains the source files (`main.py`, `reports.py`, etc.).

Step 3: Running the Application Navigate to the project directory in the terminal and execute:

Bash

```
streamlit run main.py
```

The application will launch automatically in the default web browser at `http://localhost:8501`.

4. Application Walkthrough & Screenshots



Financial Overview



REMAINING BALANCE

\$-8,229.36



TOTAL EXPENSES

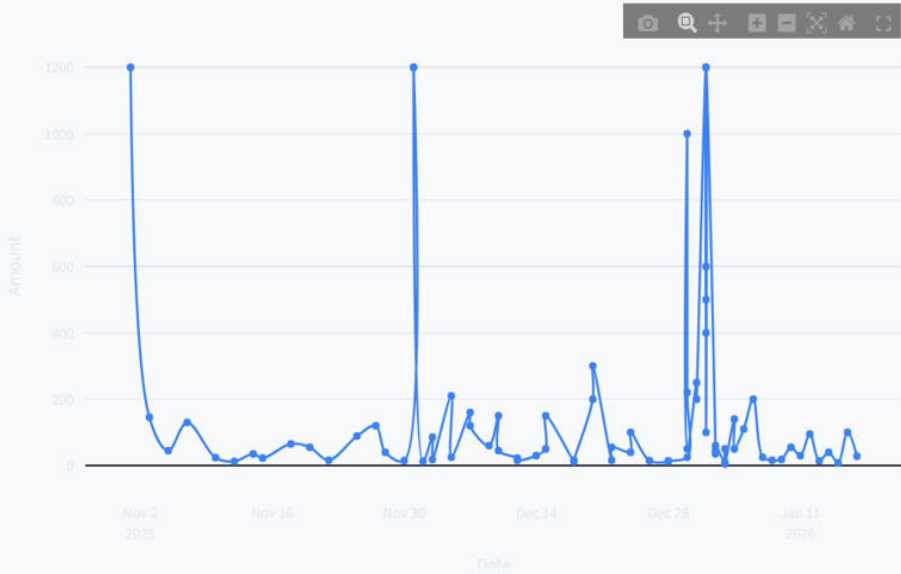
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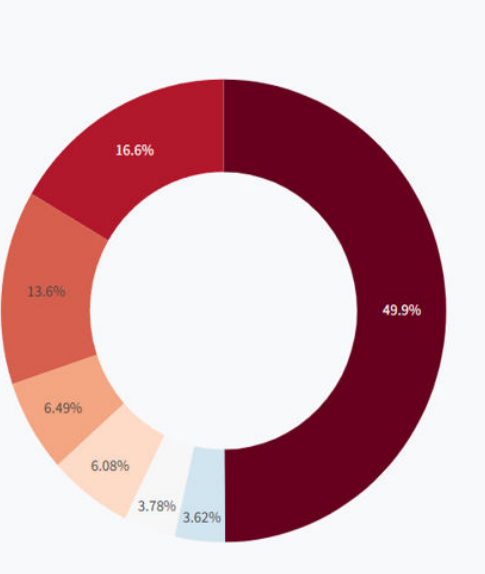
TRANSACTIONS

76

Spending Trend



Categories



Recent History

Date	Category	Amount	Description
2026-01-17	Transport	28	Gas Refill
2026-01-16	Other	100	Dental Checkup
2026-01-15	Food	8	Coffee
2026-01-14	Entertainment	40	Bowling Night
2026-01-13	Transport	14	Uber