PROJECT DOCUMENTATION
Application Name: ExpenseBuddy Pro
Developer: Vishal Kumbhakar
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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