Personal Expense Tracker - Project Summary

Overview

In today's fast-paced life, it's important to stay on top of daily spending. This project is a simple, menu-driven personal expense tracker built using Python. It lets users add expenses, assign categories, set a monthly budget, and save data for future reference. Everything is stored locally using CSV and text files, and the interface runs fully in the terminal — no GUI needed.

Features Implemented (from problem statement)

- **Add Expense:** Users can enter the date, category, amount, and a brief description. Each entry is stored as a dictionary and saved for future use.

- **View Expenses:** Lists all recorded expenses. Invalid or incomplete entries are skipped automatically.

- **Track Budget:** Users can input a monthly budget and see how their spending compares. It warns when the budget is exceeded and shows how much is left otherwise.

- **Save/Load Expenses:** Expenses are saved in a CSV file and reloaded at startup so users don't lose their data.

- **Interactive Menu:** A simple numeric menu guides the user through available options.

Additional Enhancements

These features go beyond what was specifically mentioned in the original task:

- **Enum for Categories**

Expense categories are implemented using Enum, each with a numeric code (for user input) and a string label (for saving and display). This keeps things structured and makes future updates easier.

- **Monthly Budget per Month**

Budget is now stored per month (e.g., June 2025 vs July 2025). Each month can have its own budget and the tracker checks expenses only for the selected month.

- **Edit Budget Anytime**

While tracking, users can view and optionally update the budget for that month — helpful when financial plans change mid-month.

- **Budget Persistence**

All monthly budgets are saved to a file (budget.txt) and automatically reloaded when the program starts. No need to re-enter them every time.

- **Date-wise Sorting**

Expenses are always sorted by date: In descending order when displayed (latest first). In ascending order when saved (for clean historical logs).

Assumptions

- The application uses fixed file names (expenses.csv and budget.txt) in the current directory for saving and loading data. There is no user input to customize file paths or filenames.
- All expenses are assumed to be in Indian Rupees (₹). No currency conversion or multi-currency support is included.
- Date input validation only checks the format (YYYY-MM-DD), not the logical correctness in terms of future/past limits. Users can enter dates in the future, or backdate entries to any point in time.
- All data is stored locally. There is no user authentication, cloud sync, or multi-user handling.
- Budgets are maintained per calendar month (e.g., "2025-06"). Each month's budget is tracked independently.
- Categories are limited to a fixed, pre-defined list using Python Enum. The list is intentionally broad to cover common Indian expense scenarios, and cannot be extended dynamically during runtime.
- The interface is purely command-line driven and does not use any GUI or web interface.
- The CSV file stores category labels only (not internal codes), so files remain human-readable.

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