Mini Project Report

Project Title: Personal Expense Tracker

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Abstract

This project 'Personal Expense Tracker' is a Python-based mini project that allows users to manage and analyze their personal expenses. It uses SQLite as the backend database for storing expenses permanently. The system enables adding new expenses, viewing all expenses, and analyzing the total expenses by category. The project demonstrates the practical application of Python, SQLite, and simple user interface design in solving a real-life problem.

Problem Statement

Managing personal expenses manually is time-consuming and often leads to errors. There is a need for a simple and reliable system that helps users record their daily expenditures and analyze them efficiently.

Objectives

• To provide a simple expense tracking system using Python.
• To store expenses in a reliable database (SQLite).
• To categorize expenses for better financial management.
• To generate useful reports such as total by category.

Tools and Technologies

• Python Programming Language
• SQLite Database
• ReportLab Library for Documentation

Methodology

The system is implemented in Python with SQLite as the backend. Users interact with the system via a command-line interface. The program provides options to add expenses, view them, and calculate total expenses per category.

Database Schema

Field	Type	Description
id	INTEGER (Primary Key)	Unique identifier for each expense

amount	REAL	Expense amount
category	TEXT	Expense category
date	TEXT	Date of expense

Conclusion

The 'Personal Expense Tracker' provides a convenient solution for individuals to monitor their daily expenses effectively. It is simple, reliable, and extensible for future enhancements such as graphical reports, monthly summaries, and mobile integration.

Future Scope

- Integration with mobile apps for on-the-go expense tracking.
- Graphical analysis of expenses using data visualization tools.
- Support for exporting reports in Excel and PDF formats.
- Adding authentication for multiple users.

References

- Python Documentation: https://docs.python.org/
- SQLite Documentation: https://www.sqlite.org/docs.html
- ReportLab Documentation: https://www.reportlab.com/docs/