

Project Title: Smart Expense Tracker using Python

Project Overview

This project is a Python-based expense tracker designed to record daily expenses, store data permanently in a CSV file, analyze spending patterns, and visualize category-wise expenses using bar charts.

Problem Statement

Managing daily expenses manually is time-consuming and error-prone. This project helps users track expenses digitally and understand spending behavior through analysis and visualization.

Tools and Technologies Used

Python, Pandas, Matplotlib, CSV File Handling

Key Features

- Add daily expenses
- Automatic CSV file creation
- Permanent data storage
- Category-wise expense summary
- Bar chart visualization

Working of the Project

The user enters expense details such as category and amount. The data is saved in a CSV file. Pandas is used to read and analyze the data, and matplotlib generates bar charts to visualize expenses.

Learning Outcomes

This project improved my understanding of Python programming, file handling, data analysis using pandas, and data visualization using matplotlib.

Future Enhancements

Monthly expense reports, budget alerts, expense update and deletion features.