

Title: Personal Expense Tracker

Problem Statement:

A simple Python program designed to record, manage, and summarize daily expenses efficiently.

Objectives:

- Record expenses with date, amount, and category
- View all recorded expenses
- Calculate the total amount spent
- Display category-wise expense summary
- Save and load data using a CSV file
- Use Python lists, dictionaries, loops, and file handling

Design Overview:

Functions Used:

- `add_expense()` – Adds a new expense
- `view_expenses()` – Shows all expenses
- `total_spent()` – Calculates total spending
- `summary_by_category()` – Category-wise totals
- `save_to_file()` – Saves expenses to CSV
- `load_from_file()` – Loads expenses from CSV
- Main menu loop – Handles user choices

1. Add Expense
2. View Expenses
3. Total Spent
4. Category Summary
5. Save
6. Exit

Enter choice: 1

Enter date (DD-MM-YYYY): 25-9-2006

Enter amount: 150

Enter category: food, travel , shopping

Expense added!

1. Add Expense
2. View Expenses
3. Total Spent
4. Category Summary
5. Save
6. Exit

Enter choice: 2

{'date': '25-9-2006', 'amount': 150.0, 'category': 'food, travel , shopping'}

1. Add Expense
2. View Expenses
3. Total Spent
4. Category Summary
5. Save
6. Exit

Enter choice: 3

Total Spent = 150.0

```
1. Add Expense
2. View Expenses
3. Total Spent
4. Category Summary
5. Save
6. Exit
Enter choice: 4
{'food, travel , shopping': 150.0}
```

```
1. Add Expense
2. View Expenses
3. Total Spent
4. Category Summary
5. Save
6. Exit
Enter choice: 5
Saved!
```

```
1. Add Expense
2. View Expenses
3. Total Spent
4. Category Summary
5. Save
6. Exit
Enter choice: 6
```

Conclusion & Future Improvements:

This project demonstrates how Python can be used for real-life applications like expense tracking. It strengthens understanding of core Python concepts including lists, dictionaries, loops, and file handling.

Future enhancements may include adding a GUI, visual charts, monthly reports, or database integration.