PET – Personal Expense Tracker
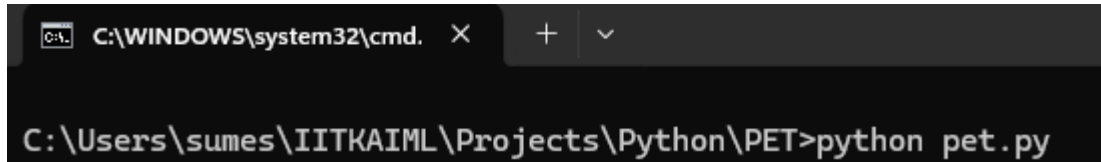
DEMO WITH SCREEN SHOTS

SUMESH GOPALAKRISHNAN

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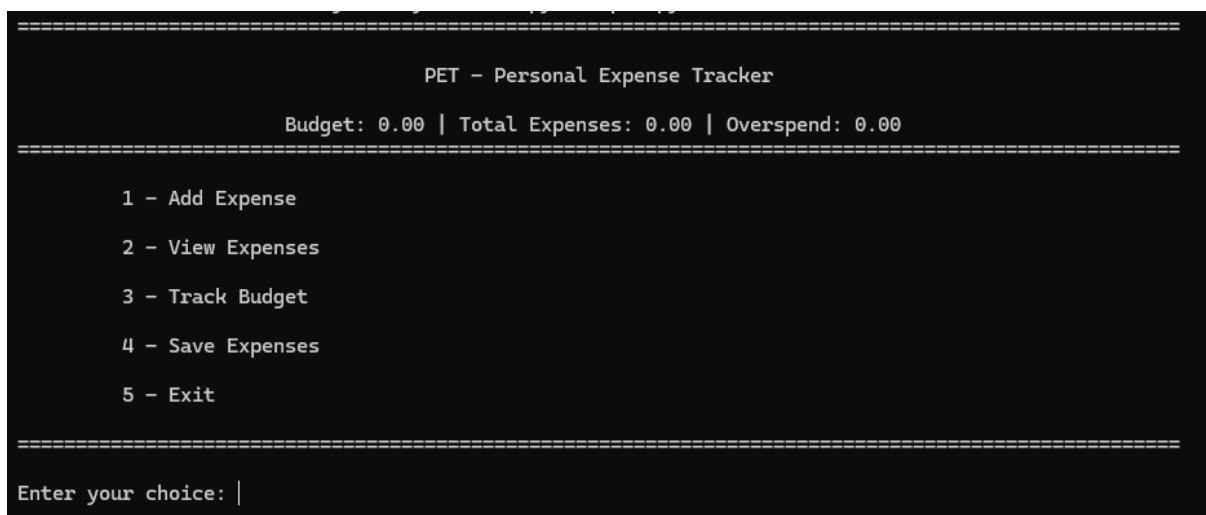
Launch the program

`C:\Users\sumes\IITKAIML\Projects\Python\PET>python pet.py`

- The menu launched
- Loads Budget data from a file. As the file is not present, defaults budget as 0.00
- Loads Expenses data from a file. As the file is not present, defaults expenses as 0.00
- If the total expenses is below budget, prints as "Remaining" else prints as "overspend"


```
================================================================================
                        PET - Personal Expense Tracker

            Budget: 0.00 | Total Expenses: 0.00 | Overspend: 0.00
================================================================================

        1 - Add Expense

        2 - View Expenses

        3 - Track Budget

        4 - Save Expenses

        5 - Exit

================================================================================
Enter your choice: |
```

Add Expense:

- Validates all input values given for expense
- Adds expense when valid values are given
- Checks against budget and informs if you have overspent.
- As the budget is still not set, it consider any expense as overspent.

```
Enter your choice: 1
================================================================================
                              PET – Add Expense
================================================================================

Enter date (YYYY-MM-DD): abcd
Invalid date format. Please try again.
Enter date (YYYY-MM-DD): 2025-15-20
Invalid date format. Please try again.
Enter date (YYYY-MM-DD): 12-05-2025
Invalid date format. Please try again.
Enter date (YYYY-MM-DD): 05-12-2025
Invalid date format. Please try again.
Enter date (YYYY-MM-DD): 2025-03-01
Enter category (e.g., Food, Travel – max 25 characters) :
Category cannot be empty. Please try again.
Enter category (e.g., Food, Travel – max 25 characters) : Food
Enter amount: xyz
Invalid amount. Please try again.
Enter amount: 125.01.12
Invalid amount. Please try again.
Enter amount: 1,253.12
Invalid amount. Please try again.
Enter amount: 1200.15
Enter description:
Description cannot be empty. Please try again.
Enter description: Burger from KFC

Expense added successfully. {'Date': '2025-03-01', 'Category': 'Food', 'Amount': '1200.15', 'Description': 'Burger from KFC'}

You have overspent your budget by 1200.15
Press Enter to continue.....
```

```
Enter your choice: 1
================================================================================
                              PET – Add Expense
================================================================================

Enter date (YYYY-MM-DD): 2025-02-28
Enter category (e.g., Food, Travel – max 25 characters) : Travel
Enter amount: 3000.00
Enter description: Filled petrol in the car

Expense added successfully. {'Date': '2025-02-28', 'Category': 'Travel', 'Amount': '3000.00', 'Description': 'Filled petrol in the car'}

You have overspent your budget by 4200.15
Press Enter to continue.....
```

```
Enter your choice: 1
================================================================================
                              PET – Add Expense
================================================================================

Enter date (YYYY-MM-DD): 2025-02-01
Enter category (e.g., Food, Travel – max 25 characters) : Maintenance
Enter amount: 5000.00
Enter description: Monthly Association maintenance charge

Expense added successfully. {'Date': '2025-02-01', 'Category': 'Maintenance', 'Amount': '5000.00', 'Description': 'Monthly Association maintenance charge'}

You have overspent your budget by 9200.15
Press Enter to continue.....
```

```
Enter your choice: 1
================================================================================
                              PET – Add Expense
================================================================================

Enter date (YYYY-MM-DD): 2025-02-01
Enter category (e.g., Food, Travel – max 25 characters) : Utility bills
Enter amount: 2000.00
Enter description: Broadband charges

Expense added successfully. {'Date': '2025-02-01', 'Category': 'Utility bills', 'Amount': '2000.00', 'Description': 'Broadband charges'}

You have overspent your budget by 11200.15
Press Enter to continue.....
```

```
Enter your choice: 1
================================================================================
                              PET - Add Expense
================================================================================

Enter date (YYYY-MM-DD): 2025-02-01
Enter category (e.g., Food, Travel - max 25 characters) : Utility bills
Enter amount: 9000.00
Enter description: Electricity bill

Expense added successfully. {'Date': '2025-02-01', 'Category': 'Utility bills', 'Amount': '9000.00', 'Description': 'Electricity bill'}

You have overspent your budget by 20200.15
Press Enter to continue.....
```

```
Enter your choice: 1
================================================================================
                              PET - Add Expense
================================================================================

Enter date (YYYY-MM-DD): 2025-02-05
Enter category (e.g., Food, Travel - max 25 characters) : Groceries
Enter amount: 4500.00
Enter description: All groceries for the month

Expense added successfully. {'Date': '2025-02-05', 'Category': 'Groceries', 'Amount': '4500.00', 'Description': 'All groceries for the month'}

You have overspent your budget by 24700.15
Press Enter to continue.....
```

```
Enter your choice: 1
================================================================================
                              PET - Add Expense
================================================================================

Enter date (YYYY-MM-DD): 2025-02-07
Enter category (e.g., Food, Travel - max 25 characters) : Vegetables
Enter amount: 1250
Enter description: Vegetables for a week

Expense added successfully. {'Date': '2025-02-07', 'Category': 'Vegetables', 'Amount': '1250', 'Description': 'Vegetables for a week'}

You have overspent your budget by 25950.15
Press Enter to continue.....
```

View the list of existing expenses

```
================================================================================
                         PET - Personal Expense Tracker

                 Budget: 0.00 | Total Expenses: 25950.15 | Overspend: 25950.15
================================================================================

           1 - Add Expense

           2 - View Expenses

           3 - Track Budget

           4 - Save Expenses

           5 - Exit


================================================================================
Enter your choice: 2
================================================================================

DATE       ,CATEGORY             ,AMOUNT         ,DESCRIPTION
================================================================================

2025-03-01,Food                  ,1200.15        ,Burger from KFC
2025-02-28,Travel                ,3000.00        ,Filled petrol in the car
2025-02-01,Maintenance           ,5000.00        ,Monthly Association maintenance charge
2025-02-01,Utility bills         ,2000.00        ,Broadband charges
2025-02-01,Utility bills         ,9000.00        ,Electricity bill
2025-02-05,Groceries             ,4500.00        ,All groceries for the month
2025-02-07,Vegetables            ,1250           ,Vegetables for a week
================================================================================

Total Expenses: 7 items
================================================================================

Press Enter to continue.....
```

Track Budget

- Shows what the current budget is. As no budget is set so far, it shows as 0
- Accepts new budget amount – Provide an amount less that the total expenses
- Validate the budget input is a valid amount
- Updates new Budget
- Displays the new budget
- As the budget is less that the total expenses, it states that you have exceeded your budget
- Saves the budget to a file

```
==============================================================================
                         PET - Personal Expense Tracker

               Budget: 0.00 | Total Expenses: 25950.15 | Overspend: 25950.15
==============================================================================

         1 - Add Expense

         2 - View Expenses

         3 - Track Budget

         4 - Save Expenses

         5 - Exit

==============================================================================
Enter your choice: 3

Current budget amount is : 0.00
Enter new budget: mno

Invalid Budget amount. Please try again
Enter new budget: 20000

New budget is : 20000.00

You have exceeded your budget by 5950.15
Press Enter to continue.....
```
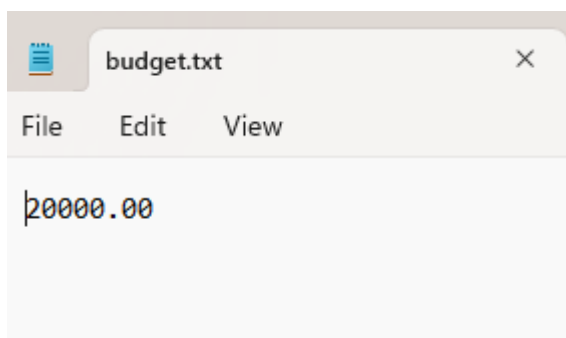
- Text file to which budget is stored

```
budget.txt                          ×

File    Edit    View

20000.00
```

- Set the Budget again such that the budget is more than the expenses
- It shows the amount left in your budget still for expense

```
================================================================================
                        PET - Personal Expense Tracker

            Budget: 20000.00 | Total Expenses: 25950.15 | Overspend: 5950.15
================================================================================

        1 - Add Expense

        2 - View Expenses

        3 - Track Budget

        4 - Save Expenses

        5 - Exit

================================================================================
Enter your choice: 3

Current budget amount is : 20000.00
Enter new budget: 30000

New budget is : 30000.00

You have 4049.85 left in your budget
Press Enter to continue.....
```

- The title also shows Remaining amount instead of overspend now

```
================================================================================
                        PET - Personal Expense Tracker

            Budget: 30000.00 | Total Expenses: 25950.15 | Remaining: 4049.85
================================================================================

        1 - Add Expense

        2 - View Expenses

        3 - Track Budget

        4 - Save Expenses

        5 - Exit

================================================================================
Enter your choice:
```

- Since the budget is now more than expense, when you add expense, it does not state you have overspent

```
Enter your choice: 1
================================================================================
                        PET - Add Expense
================================================================================

Enter date (YYYY-MM-DD): 2025-02-15
Enter category (e.g., Food, Travel - max 25 characters) : Investment
Enter amount: 1000.00
Enter description: Mutual Funds

Expense added successfully. {'Date': '2025-02-15', 'Category': 'Investment', 'Amount': '1000.00', 'Description': 'Mutual Funds'}
Press Enter to continue.....
================================================================================
```

Save Expenses

- Saves the expense to a text file as csv
- Gives a message that expenses are saved.
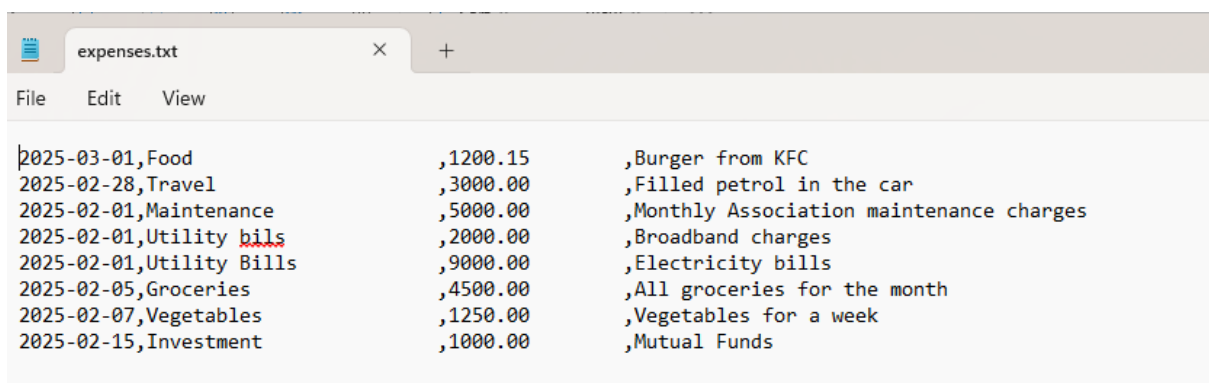
```
================================================================================
                        PET - Personal Expense Tracker

              Budget: 30000.00 | Total Expenses: 26950.15 | Remaining: 3049.85
================================================================================

      1 - Add Expense

      2 - View Expenses

      3 - Track Budget

      4 - Save Expenses

      5 - Exit


================================================================================

Enter your choice: 4
Expenses saved.
Press Enter to continue.....
```

- The text file content will be as below

```
expenses.txt                    ×      +

File    Edit    View

2025-03-01,Food              ,1200.15        ,Burger from KFC
2025-02-28,Travel            ,3000.00        ,Filled petrol in the car
2025-02-01,Maintenance       ,5000.00        ,Monthly Association maintenance charges
2025-02-01,Utility bils      ,2000.00        ,Broadband charges
2025-02-01,Utility Bills     ,9000.00        ,Electricity bills
2025-02-05,Groceries         ,4500.00        ,All groceries for the month
2025-02-07,Vegetables        ,1250.00        ,Vegetables for a week
2025-02-15,Investment        ,1000.00        ,Mutual Funds
```

Exit

- Prints a thank you message
- Exits the application

```
================================================================================
                        PET - Personal Expense Tracker

            Budget: 30000.00 | Total Expenses: 26950.15 | Remaining: 3049.85
================================================================================

        1 - Add Expense

        2 - View Expenses

        3 - Track Budget

        4 - Save Expenses

        5 - Exit

================================================================================

Enter your choice: 5
Thank you for using PET!!!

C:\Users\sumes\IITKAIML\Projects\Python\PET>
```