

# Monthly Expense Tracker - Project Documentation

## Introduction

The **Monthly Expense Tracker** is a Python-based application designed to help users manage their monthly income, budget, and expenses efficiently. The program allows users to input their income, set a budget, and track their expenditures in different categories.

## Features

- **Set Monthly Income & Budget:** Users can define their total monthly income and allocate a budget for expenses.
- **Add Expenses:** The application allows users to categorize and input expenses with a description.
- **Track Spending:** Users can view a summary of their expenses, including total spent, remaining budget, and percentage utilization.
- **Reset Functionality:** Users can reset their income, budget, and expenses for a new month.
- **Data Persistence:** Expense records and budget information are stored in external files (income\_and\_budget.py and record.py).

## Technologies Used

- **Python:** The primary programming language.
- **JSON:** Used for storing expense records.
- **File Handling:** Reads and writes data to files for persistent storage.
- **Datetime Module:** Captures the date of expense entries.

## File Structure

- **main.py:** Contains the main logic of the expense tracker.

- record.py: Stores the expense records.
- income\_and\_budget.py: Stores the user's income, budget, and utilized amount.

# How It Works

## 1. Initialize the Tracker

- The user is prompted to enter their monthly income and budget.

## 2. Choose an Action

- Add a new expense
- View previous expenses
- Reset the tracker
- Check the budget summary

## 3. Adding an Expense

- The user selects a category (e.g., Food, Rent, Medical, etc.).
- Enters the expense amount and a brief description.
- The program updates the budget and stores the record.

## 4. Viewing Summary

- Displays total income, budget, spent amount, and remaining balance.
- Lists all expense entries with date, category, amount, and description.

## 5. Reset Functionality

- Clears all stored data and allows the user to start fresh for a new month.

## Example Usage

Enter your monthly income: 50000

Enter your monthly expense budget: 30000

What do you want to do?

1 - Add Expense

2 - View Previous Expenditures

3 - Reset Tracker

4 - View Budget Summary

## Future Enhancements

- Implement a graphical user interface (GUI).
- Add data visualization for spending trends.
- Integrate database storage for better data management.
- Include notifications for budget limits.

## Conclusion

The **Monthly Expense Tracker** is a simple yet effective tool for managing personal finances. With its easy-to-use interface and persistent data storage, users can track their spending habits and make informed financial decisions.