**ADD EXPENSE:**

import csv

def add\_expense(expenses):

    date = input("Enter the date (YYYY-MM-DD): ")

    category = input("Enter the category (e.g., Food, Travel): ")

    amount = float(input("Enter the amount: "))

    description = input("Enter a brief description: ")

    expenses.append({

        "date": date,

        "category": category,

        "amount": amount,

        "description": description

    })

    print("Expense added successfully.")

**2.VIEW EXPENSE:**

def view\_expenses(expenses):

if not expenses:

        print("No expenses recorded.")

    else:

        for expense in expenses:

            # Check if the keys exist before accessing them

            if all(key in expense for key in ['date', 'category', 'amount', 'description']):

                print(f"Date: {expense['date']}, Category: {expense['category']}, Amount: {expense['amount']}, Description: {expense['description']}")

            else:

                print(f"Invalid expense record: {expense}")

**3. SET BUDGET:**

def set\_budget():

    budget = float(input("Enter your monthly budget: "))

    return budget

**4.TRACK BUDGET:**

def track\_budget(expenses, budget):

    """Function to track expenses and alert if budget is exceeded."""

    total\_expenses = sum(expense['amount'] for expense in expenses)

    print(f"Total expenses: {total\_expenses}")

    if total\_expenses > budget:

        print("Warning: You have exceeded your budget!")

    else:

        print(f"You are within your budget. You have {budget - total\_expenses} remaining.")

**5.SAVE AND LOAD BUDGET:**

def save\_expenses(expenses, filename='expenses.csv'):

    with open(filename, 'w', newline='') as file:

        writer = csv.writer(file)

        writer.writerow(["Date", "Category", "Amount", "Description"])

        for expense in expenses:

            writer.writerow([expense['date'], expense['category'], expense['amount'], expense['description']])

    print("Expenses saved successfully.")

def load\_expenses(filename='expenses.csv'):

    """Function to load expenses from a file."""

    expenses = []

    try:

        with open(filename, 'r') as file:

            reader = csv.DictReader(file)

            for row in reader:

                # Check if all required keys exist before accessing them

                if all(key in row for key in ['Date', 'Category', 'Amount', 'Description']):

                    # Convert amount to float

                    row['amount'] = float(row['amount'])

                    # Rename keys to match the format used in other functions

                    expense = {

                        'date': row['Date'],

                        'category': row['Category'],

                        'amount': row['amount'],

                        'description': row['Description']

 }

                    expenses.append(expense)

                else:

                    print(f"Skipping invalid expense record: {row}")

    except FileNotFoundError:

        print("No existing expenses found. Starting fresh.")

    return expenses

**6.INTERACTIVE MENU:**

def main():

    expenses = load\_expenses()

    budget = set\_budget()

    while True:

        print("\nPersonal Expense Tracker")

        print("1. Add Expense")

        print("2. View Expenses")

        print("3. Track Budget")

        print("4. Save Expenses")

        print("5. Exit")

        choice = input("Enter your choice: ")

        if choice == '1':

            add\_expense(expenses)

        elif choice == '2':

            view\_expenses(expenses)

        elif choice == '3':

            track\_budget(expenses, budget)

        elif choice == '4':

            save\_expenses(expenses)

 elif choice == '5':

            save\_expenses(expenses)

            print("Exiting...")

            break

        else:

            print("Invalid choice, please select a valid option.")

if \_\_name\_\_ == "\_\_main\_\_":

    main()