**Python Programming Internship – Task 3**

**Project Title:** you createdan **Expense Tracker CLI** where you stored expenses in a CSV file.

Now, let’s **enhance it with search and categories.**

**You will allow users to:**

**•** Add expenses with a **category (**like Food, Travel, Shopping**).**

**• Search expenses by category.**

**• View monthly total spending.**

This will give youexperience **in data handling, filtering, and calculations.**

**CODE :-**

**import csv**

**from datetime import datetime**

**FILE\_NAME = "expenses.csv"**

**# --- Helper Functions ---**

**def load\_expenses():**

**expenses = []**

**try:**

**with open(FILE\_NAME, mode="r", newline="") as file:**

**reader = csv.DictReader(file)**

**expenses = list(reader)**

**except FileNotFoundError:**

**with open(FILE\_NAME, mode="w", newline="") as file:**

**writer = csv.writer(file)**

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

**return expenses**

**def save\_expense(date, description, amount, category):**

**with open(FILE\_NAME, mode="a", newline="") as file:**

**writer = csv.writer(file)**

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

**print("✅ Expense added successfully!\n")**

**def display\_expenses(expenses):**

**if not expenses:**

**print("No expenses found.")**

**return**

**print("\nDate\t\tDescription\tAmount\tCategory")**

**print("-" \* 50)**

**for exp in expenses:**

**print(f"{exp['Date']}\t{exp['Description']}\t{exp['Amount']}\t{exp['Category']}")**

**print()**

**def search\_by\_category(category):**

**expenses = load\_expenses()**

**filtered = [e for e in expenses if e["Category"].lower() == category.lower()]**

**display\_expenses(filtered)**

**def total\_by\_category():**

**expenses = load\_expenses()**

**totals = {}**

**for e in expenses:**

**cat = e["Category"]**

**totals[cat] = totals.get(cat, 0) + float(e["Amount"])**

**print("\n--- Total Spending by Category ---")**

**for cat, total in totals.items():**

**print(f"{cat}: ₹{total:.2f}")**

**print()**

**def monthly\_total():**

**expenses = load\_expenses()**

**totals = {}**

**for e in expenses:**

**date = datetime.strptime(e["Date"], "%Y-%m-%d")**

**month\_key = date.strftime("%Y-%m")**

**totals[month\_key] = totals.get(month\_key, 0) + float(e["Amount"])**

**print("\n--- Monthly Total Spending ---")**

**for month, total in totals.items():**

**print(f"{month}: ₹{total:.2f}")**

**print()**

**# --- Main Menu ---**

**def main():**

**while True:**

**print("\n=== Expense Tracker 2.0 ===")**

**print("1. Add Expense")**

**print("2. View All Expenses")**

**print("3. Search by Category")**

**print("4. Total by Category")**

**print("5. Monthly Total Spending")**

**print("6. Exit")**

**choice = input("Enter your choice: ")**

**if choice == "1":**

**date = datetime.now().strftime("%Y-%m-%d")**

**desc = input("Enter description: ")**

**amount = input("Enter amount: ")**

**category = input("Enter category (Food/Travel/Shopping etc): ")**

**save\_expense(date, desc, amount, category)**

**elif choice == "2":**

**display\_expenses(load\_expenses())**

**elif choice == "3":**

**cat = input("Enter category to search: ")**

**search\_by\_category(cat)**

**elif choice == "4":**

**total\_by\_category()**

**elif choice == "5":**

**monthly\_total()**

**elif choice == "6":**

**print("Goodbye! 👋")**

**break**

**else:**

**print("Invalid choice, please try again!")**

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

**main()**

**OUTPUT :-**

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