

## PYTHON PROGRAMMING INTERNSHIP PROJECT 3

### Project Title: Expense Tracker

**Objective:** The goal of the given Python project is developing an Expense Tracker application that allows users to manage their expenses efficiently. This real-world application will involve handling data, user input, and implementing key functionalities.

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**Batch:** 5th February 2025

**Duration:** 3months

### Code:

```
import csv

import datetime

import os

import tkinter as tk

from tkinter import ttk, messagebox


EXPENSE_FILE = "expenses.csv"


def initialize_file():

    if not os.path.exists(EXPENSE_FILE):

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

            writer = csv.writer(file)

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


def add_expense():

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

    amount = amount_entry.get()
```

```
category = category_entry.get()
description = description_entry.get()
```

```
try:
```

```
    amount = float(amount)
```

```
except ValueError:
```

```
    messagebox.showerror("Input Error", "Invalid amount. Please enter a number.")
```

```
    return
```

```
with open(EXPENSE_FILE, mode='a', newline='') as file:
```

```
    writer = csv.writer(file)
```

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

```
messagebox.showinfo("Success", "Expense added successfully!")
```

```
amount_entry.delete(0, tk.END)
```

```
category_entry.delete(0, tk.END)
```

```
description_entry.delete(0, tk.END)
```

```
view_expenses()
```

```
def view_expenses():
```

```
    for row in expense_tree.get_children():
```

```
        expense_tree.delete(row)
```

```
try:
```

```
    with open(EXPENSE_FILE, mode='r') as file:
```

```
        reader = csv.reader(file)
```

```
        next(reader)
```

```

        for row in reader:

            expense_tree.insert("", tk.END, values=row)
    except FileNotFoundError:

        messagebox.showinfo("Info", "No expenses recorded yet.")


root = tk.Tk()
root.title("Expense Tracker")
root.geometry("700x500")
root.configure(bg="#FFB6C1")


style = ttk.Style()
style.configure("TFrame", background="#FFC0CB")
style.configure("TLabel", background="#FFC0CB", foreground="black", font=("Arial", 12))
style.configure("TButton", background="#FF69B4", foreground="white", font=("Arial", 12,
"bold"))
style.configure("Treeview", background="FFFFFF", foreground="black", rowheight=25)
style.configure("Treeview.Hheading", font=("Arial", 12, "bold"))


frame = ttk.Frame(root, padding="10")
frame.pack(fill=tk.X)


sticker = tk.PhotoImage(file="sticker2.png")
sticker_label = tk.Label(frame, image=sticker, bg="#FFC0CB")
sticker_label.grid(row=0, column=2, rowspan=3, padx=10)


ttk.Label(frame, text="Amount: ").grid(row=0, column=0, padx=5, pady=5, sticky="w")
amount_entry = ttk.Entry(frame)

```

```
amount_entry.grid(row=0, column=1, padx=5, pady=5)
```

```
ttk.Label(frame, text="Category: ").grid(row=1, column=0, padx=5, pady=5, sticky="w")
```

```
category_entry = ttk.Entry(frame)
```

```
category_entry.grid(row=1, column=1, padx=5, pady=5)
```

```
ttk.Label(frame, text="Description: ").grid(row=2, column=0, padx=5, pady=5, sticky="w")
```

```
description_entry = ttk.Entry(frame)
```

```
description_entry.grid(row=2, column=1, padx=5, pady=5)
```

```
add_button = ttk.Button(frame, text="Add Expense", command=add_expense)
```

```
add_button.grid(row=3, column=0, columnspan=2, pady=10)
```

```
columns = ("Date", "Amount", "Category", "Description")
```

```
expense_tree = ttk.Treeview(root, columns=columns, show="headings", style="Treeview")
```

```
for col in columns:
```

```
    expense_tree.heading(col, text=col)
```

```
    expense_tree.column(col, width=150)
```

```
expense_tree.pack(fill=tk.BOTH, expand=True, padx=10, pady=10)
```

```
initialize_file()
```

```
view_expenses()
```

```
root.mainloop()
```

Output:

Expense Tracker

Amount:

Category:

Description:

SATURDAY

EXPENSE TRACKER

Date	Amount	Category	Description
2025-03-03	21000.0	Studies	School Fees
2025-03-03	500.0	studies	stationary
2025-03-03	6000.0	Rent	House Rent

Expense Tracker

Amount:

Category:

Description:

Date	Amount	Category	Description
2025-03-03	21000.0	Studies	School Fees
2025-03-03	500.0	studies	stationary
2025-03-03	6000.0	Rent	House Rent

Expense Tracker

Amount:

Category:

Description:

Success

Expense added successfully!

OK

Date	Amount	Category	Description
2025-03-03	21000.0	Studies	School Fees
2025-03-03	500.0	studies	stationary
2025-03-03	6000.0	Rent	House Rent

Python

sktop/Motioncut/expense\_tracker.py

PS C:\Users\AARYA\OneDrive\desktop\Motioncut> & C:/Users/AARYA/AppData/Local/Microsoft/WindowsApps/python3.12.exe c:/Users/AARYA/OneDrive/de

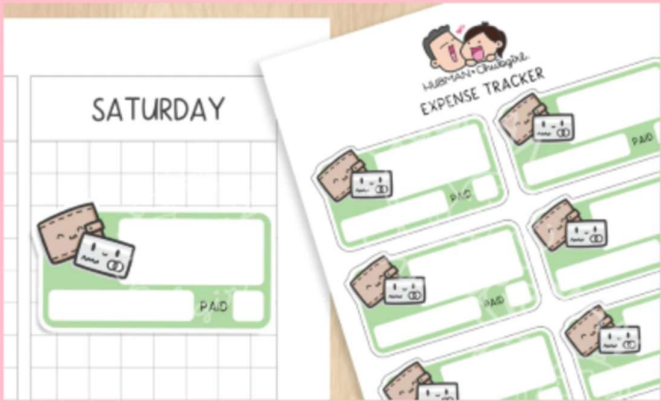
sktop/Motioncut/expense\_tracker.py

Expense Tracker

Amount:

Category:

Description:



Date	Amount	Category	Description
2025-03-03	21000.0	Studies	School Fees
2025-03-03	500.0	studies	stationary
2025-03-03	6000.0	Rent	House Rent
2025-03-06	1000.0	Groceries	Food