

L7 Informatics Internship Program

Assignment

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This python application includes all the necessary functions and requirements which satisfies the given problem statement.

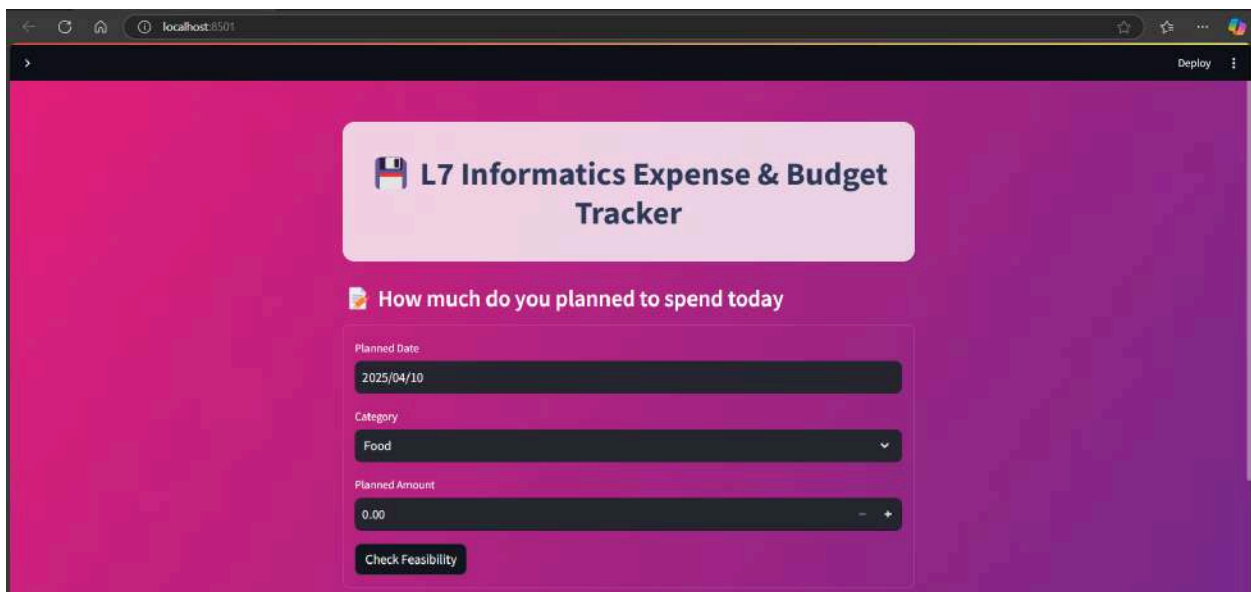
PROBLEM STATEMENT:

Manual managing of monthly expenditure creates errors in budgeting and overspends without visibility on finances. There exists a requirement for an easy, interactive, and automated system for individuals to help with planning, tracking, and controlling their finances. The application helps users manage expenses and budgets, receive alerts, and summaries-in one user-friendly Python interface powered by Streamlit and SQLite.

APPLICATION MODULES EXPLAINED:

MODULE 1 (PLAN EXPENSE):

It allows a user to enter a planned expense for a specific day and checks if, within a selected category, that expense is allowable by the monthly budget set. Immediate toast alerts for exceeding the planned limit of remaining budget.



The screenshot shows a web browser window displaying the 'L7 Informatics Expense & Budget Tracker' application. The interface has a dark purple background. At the top, there's a title bar with 'localhost:8501' and a 'Deploy' button. Below the title bar, a light purple box contains the app's name and a floppy disk icon. The main section is titled 'How much do you planned to spend today' with a calendar icon. It features three input fields: 'Planned Date' (showing '2025/04/10'), 'Category' (a dropdown menu showing 'Food'), and 'Planned Amount' (showing '0.00' with minus and plus buttons). A 'Check Feasibility' button is at the bottom of the form.

This is the first interface for planning what are the expenses that you are going to do on a day of the month. This is a plan expense module. It will allow users to enter the plan of their expenses and this application will check whether the user's plan will be feasible or not according to the budget.

The interface shows a form titled "How much do you planned to spend today". The form includes fields for "Planned Date" (2025/04/10), "Category" (Entertainment), and "Planned Amount" (100.00). A "Check Feasibility" button is present. Below the form, a message states: "Planned expense of 100.00 is within the remaining budget of 490.00 in Entertainment category." A green checkmark icon is next to the heading "Feasible Planned Expenses for Today". Below this heading is a table with the following data:

	Date	Category	Amount
0	2025-04-10	Food	50
1	2025-04-10	Shopping	100
2	2025-04-10	Entertainm	100

If the plan is feasible according to the monthly budget then it will create it as list for the users .

The interface shows a form titled "How much do you planned to spend today". The form includes fields for "Planned Date" (2025/04/10), "Category" (Transportation), and "Planned Amount" (600.00). A "Check Feasibility" button is present. Below the form, a message states: "Planned expense of 600.00 exceeds remaining budget of 500.00 in Transportation category." A green checkmark icon is next to the heading "Feasible Planned Expenses for Today". Below this heading is a table with the following data:

	Date	Category	Amount
0	2025-04-10	Food	50
1	2025-04-10	Shopping	100
2	2025-04-10	Entertainm	100

A red alert notification box is visible in the bottom right corner with the text: "Planned expense of 600.00 exceeds remaining budget of 500.00 in Transportation category."

If the plan is not feasible then a popup alert notification will appear on the right bottom as the planning amount exceeds your monthly budget.

MODULE 2 (ADD EXPENSE):

It allows the user to introduce actual expenses on the date, category, and amount in question. Immediate budget check with notification for the user in case of any exceeded/approached monthly budget regarding the new expense entry.

L7 Informatics Expense & Budget Tracker

How much do you spend ?

Date: 2025/04/10

Category: Food

Amount: 50.00

Add

Expense added successfully!

After spending the money, users can add their expense and it will get stored in a database which will contain all the history of the users.

MODULE 3 (SET BUDGET)

Provides an easy-to-use list of common categories (Food, Shopping, Transportation, etc.) where users can enter monthly budgets. When saved, the application value updates and displays it in a table below.

Set Monthly Budget

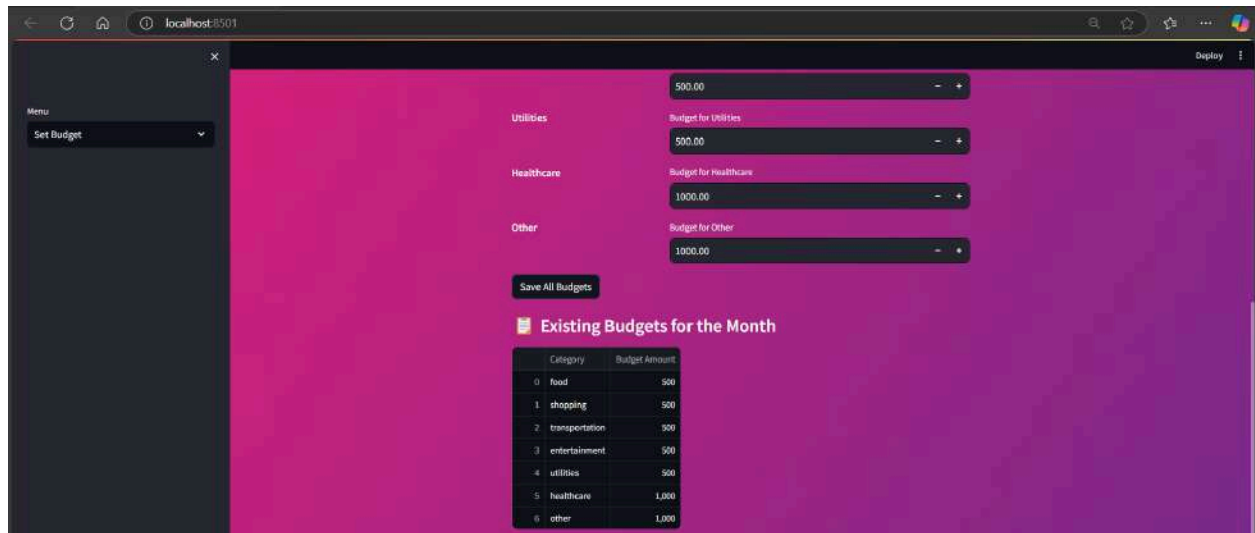
Month (YYYY-MM): 2025-04

Enter Budgets for Each Category

Food	Budget for Food	500.00	- +
Shopping	Budget for Shopping	500.00	- +
Transportation	Budget for Transportation	500.00	- +
Entertainment	Budget for Entertainment	500.00	- +
Utilities	Budget for Utilities	500.00	- +
Healthcare	Budget for Healthcare	1000.00	- +
Other	Budget for Other	1000	- +

Save All Budgets

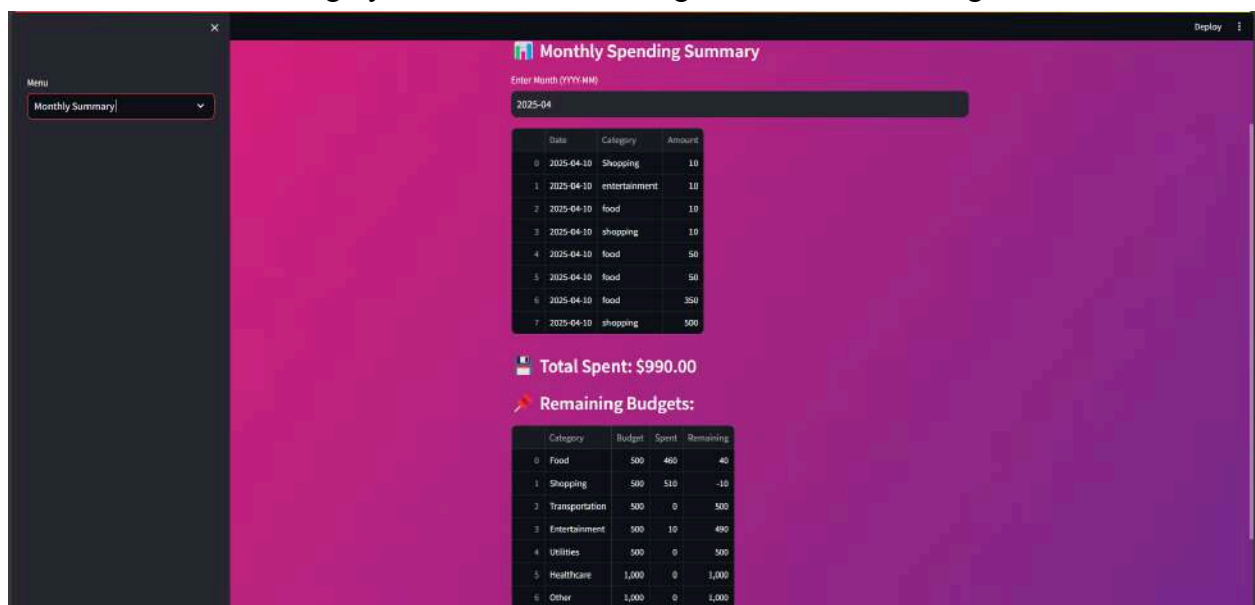
It will provide a list of categories and ask user to enter the budget for each category for a month and it will display as a table as shown below and save the budget for the month.



The monthly budget is saved as a table

MODULE 4 (MONTHLY SUMMARY)

Shows the total monthly expenses with costs in the selected month and calculates how much is left in each category based on the remaining amount from the budget.



This module provides the overall summary of monthly expenses of the users. Also it will show the remaining budgets that users can spend. The table remaining budget will tell the user how much they have spent till now and how much they have remaining to spend in the particular month. To show the alert I have provided expenses that are exceeding the budget.

MODULE 5 (BUDGET ALERTS)

Allows the user to check for alerts when they exceed or are close to exceeding their budgets. Toast notifications are the chosen method for delivering clear visual feedback.

The screenshot shows the 'L7 Informatics Expense & Budget Tracker' application. On the left, a dark sidebar contains a 'Menu' with 'Budget Alerts' selected. The main area has a pink-to-purple gradient background. At the top center, a white box contains the app title and a folder icon. Below it, a 'Budget Alerts' section features a yellow warning icon, the title, and a form with 'Enter Month (YYYY-MM)' set to '2025-04' and a 'Check Alerts' button. In the bottom right corner, two toast notifications are visible: 'Almost Over Budget in food: Spent 400.00 / Budget 500.00' and 'Over Budget in shopping: Spent 510.00 / Budget 500.00', each with a close button.

The popup notification says that the user had overspent by 10 rupees from the planned budget for a month for shopping and the expenses for food is almost closer to the budget for the user.

MODULE 6 (SPLIT EXPENSES)

They can enter a shared expense and give the number of people it will be split among. The result will show how much each needs to pay.

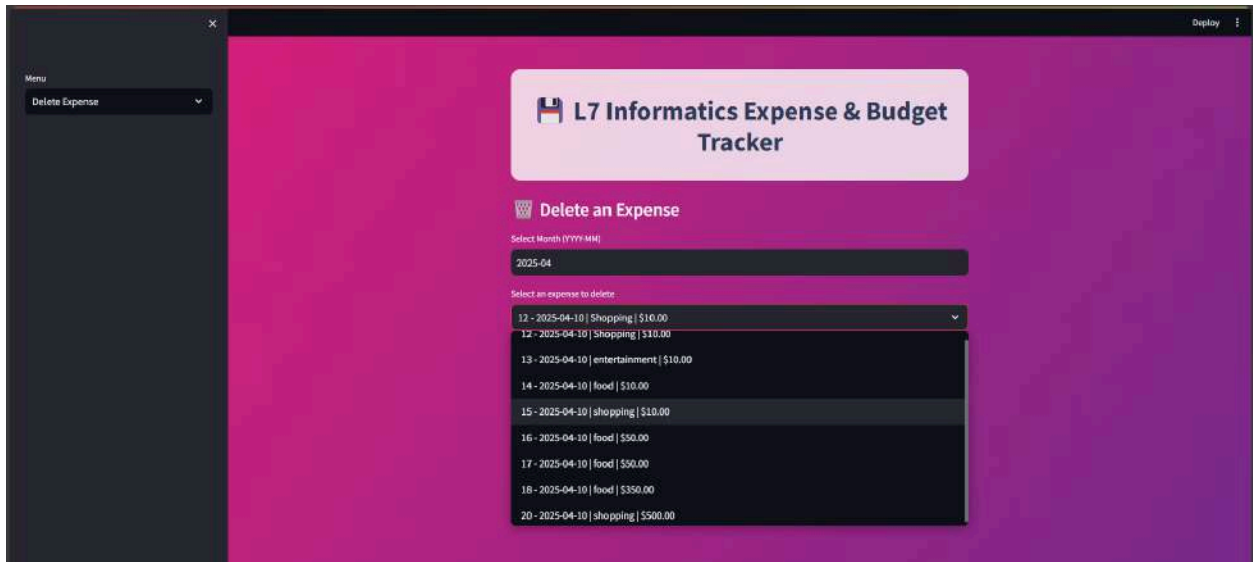
The screenshot shows the 'L7 Informatics Expense & Budget Tracker' application. On the left, a dark sidebar contains a 'Menu' with 'Split Expense' selected. The main area has a pink-to-purple gradient background. At the top center, a white box contains the app title and a folder icon. Below it, a 'Split an Expense Among People' section features a blue icon, the title, and a form. The form includes 'Description of the shared expense' with the text 'MOVIE TICKET BOOKING', 'Total Expense Amount' with the value '500.00', and 'Number of People' with the value '5'. There are minus and plus icons for the amount and number fields. A 'Calculate Split' button is at the bottom of the form. Below the button, a light blue box displays the result: 'Each person should pay: \$100.00'.

This module is used for calculating how much each person should pay according to the amount spent. It will ask the description of what this split is for, then the total amount he spent, and the

number of people to split the bill. The output will provide an amount of how much each individual should pay.

MODULE 7 (DELETE EXPENSE)

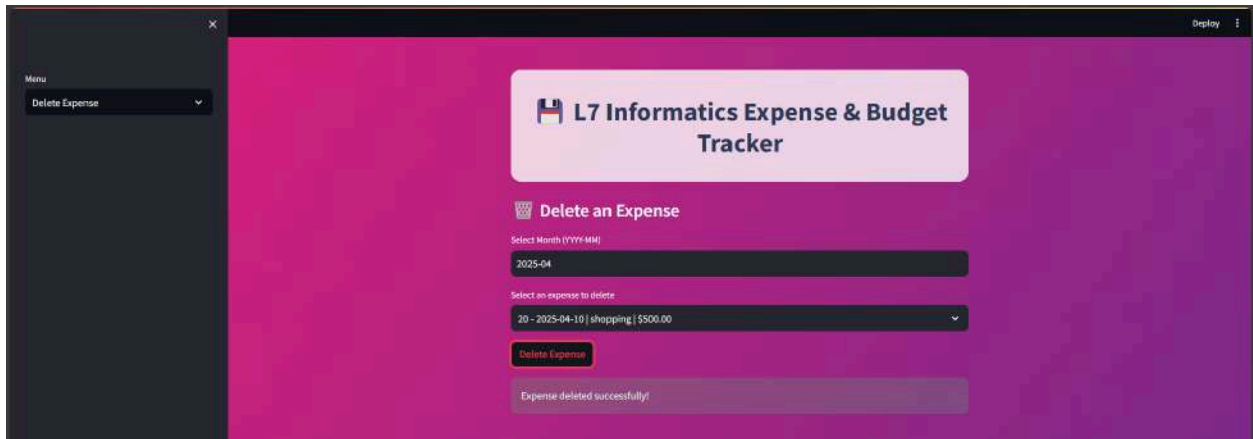
It allows a user to view a month in total with all its expenses, select one item out of it, and remove it. This is very useful for correcting wrongly entered or duplicated expenses.



The screenshot shows the 'Delete an Expense' form in the L7 Informatics Expense & Budget Tracker application. The form is set against a purple gradient background. On the left, a dark sidebar contains a 'Menu' with 'Delete Expense' selected. The main content area features the application title, a 'Delete an Expense' heading, and two input fields. The first field, 'Select Month (YYYY-MM)', is set to '2025-04'. The second field, 'Select an expense to delete', is a dropdown menu showing a list of expenses for the selected month. The list includes dates, categories, and amounts, with the last entry, '20 - 2025-04-10 | shopping | \$500.00', highlighted.

Date	Category	Amount
12 - 2025-04-10	Shopping	\$10.00
12 - 2025-04-10	Shopping	\$10.00
13 - 2025-04-10	entertainment	\$10.00
14 - 2025-04-10	food	\$10.00
15 - 2025-04-10	shopping	\$10.00
16 - 2025-04-10	food	\$50.00
17 - 2025-04-10	food	\$50.00
18 - 2025-04-10	food	\$350.00
20 - 2025-04-10	shopping	\$500.00

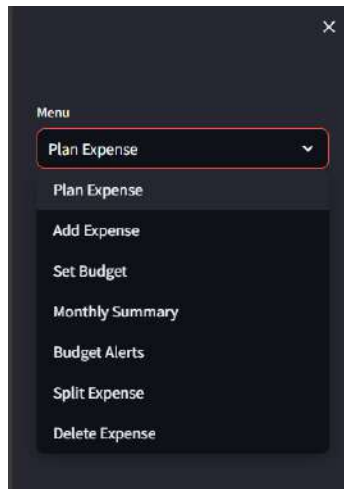
This box will show all the previously entered expenses of the user. And ask which expense to be deleted. This module is particularly built to recover the wrongly entered values .



The screenshot shows the 'Delete an Expense' form after a successful deletion. The dropdown menu now only shows the entry '20 - 2025-04-10 | shopping | \$500.00'. Below the dropdown, a red 'Delete Expense' button is visible, and a light purple message box at the bottom states 'Expense deleted successfully!'. The sidebar and application title remain the same.

Once the expense gets deleted it will automatically reflect in all the other modules also. That entry is completely deleted for all the modules of this application.

Finally the Scroll box contains all these seven modules



GITHUB LINK :

<https://github.com/varshinibalamurugan/L7-Informatics-Internship-Program-Assignment.git>

HOW TO RUN IT?

1. Download the python file and open it in your system (i.e VSC)
2. In the terminal install necessary packages (pip install streamlit pandas)
3. Run the file using the command (streamlit run app.py)

CONCLUSION

This Python-based expense tracker simplifies budgeting by enabling users to plan, record, and monitor their expenses in a clear and interactive way. With real-time alerts, budget summaries, and features like split and delete expense, it provides all essential tools for better financial management in a single, user-friendly application.