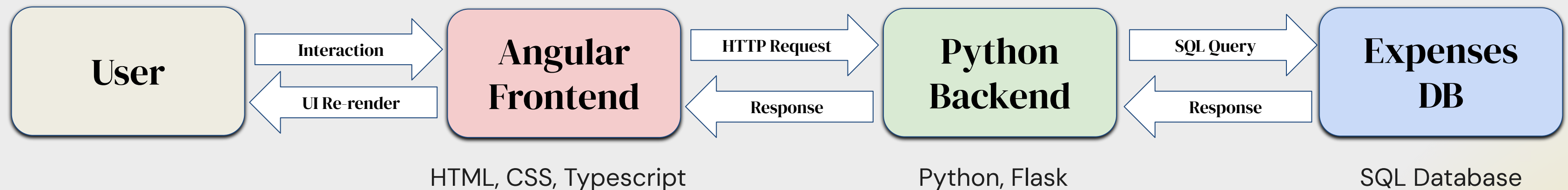


Expense Tracker

Sathvika Iyengar

Overview and Approach

- Goal: Create a simple Expense Tracker with an interactive UI and organized data management
- *For keeping track of expense data: SQL Database*
 - expenses.db (id, description, amount, category, date)
- *For managing queries between Frontend and Database: Python/Flask*
- *For a dynamic and scalable UI: Angular*



App Design

Expense Tracker

Total Expenses: \$1302.80

Category Expenses

Misc
\$120.00

Transport
\$662.50

Food
\$134.50

Utilities
\$220.25

Beauty
\$120.00

Entertainment
\$45.55

Transactions

Description	Category	Date	Amount
Stationary Haul	Misc	2025-06-30	\$15
Bus Ticket	Transport	2025-05-02	\$2.5
Groceries	Food	2025-05-13	\$50
Gas Bill	Utilities	2025-06-22	\$200
Groceries	Food	2025-05-20	\$30

Items per page:

5

1 – 5 of 17

|<

<

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>|

Stacked percentage bar to show highest and lowest Category spend

Transport: 50.9%

View trends in Expenses via line charts

View Trends

+ Add Expense

Add an Expense

Interactable table displaying all Expenses

Instantaneous updates to the Expense Total

View total Expenses by Category

Feature Popups

Add an Expense by providing a description, amount, category, and date

Description*

Amount*

0

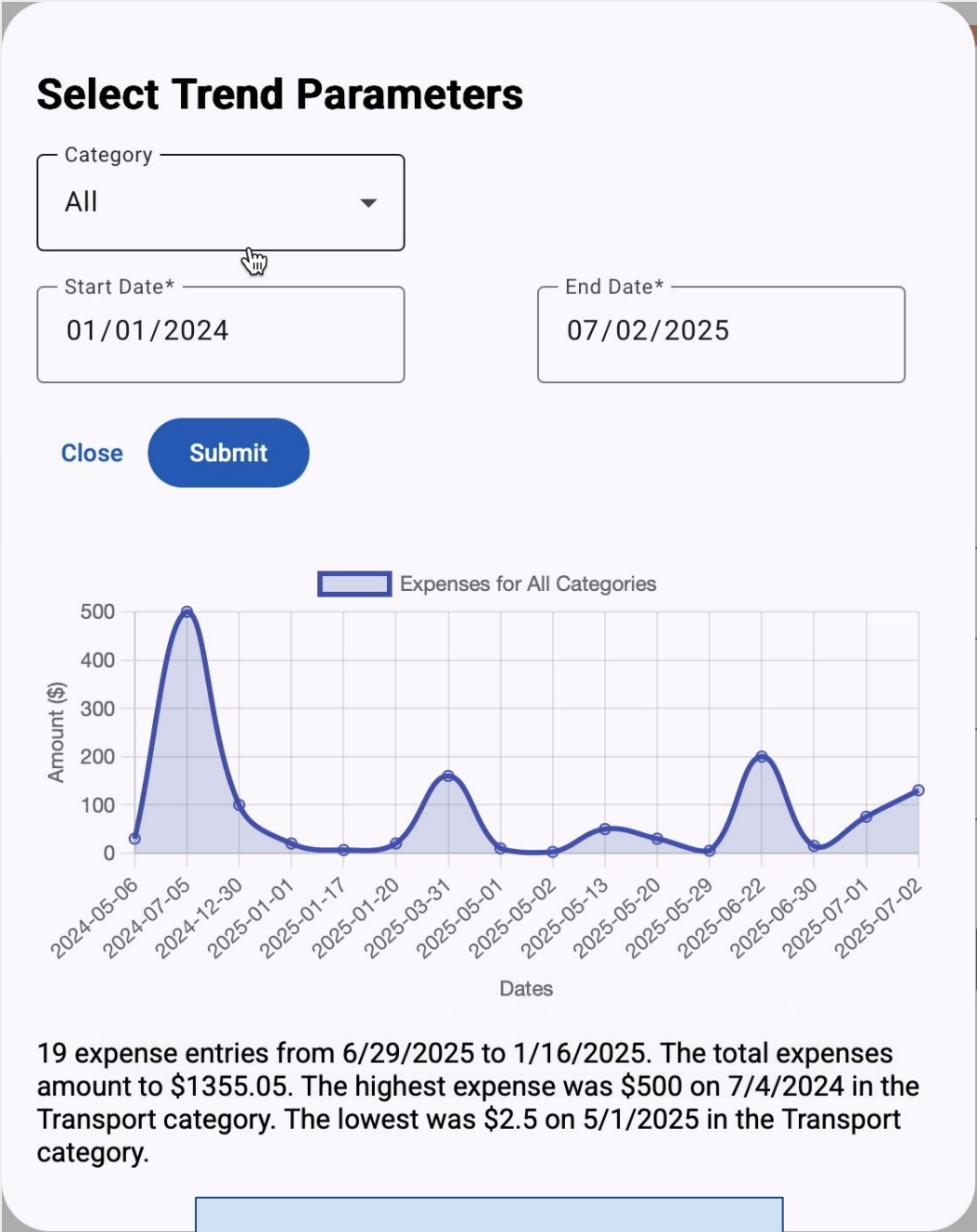
Category*

Date*

07/02/2025

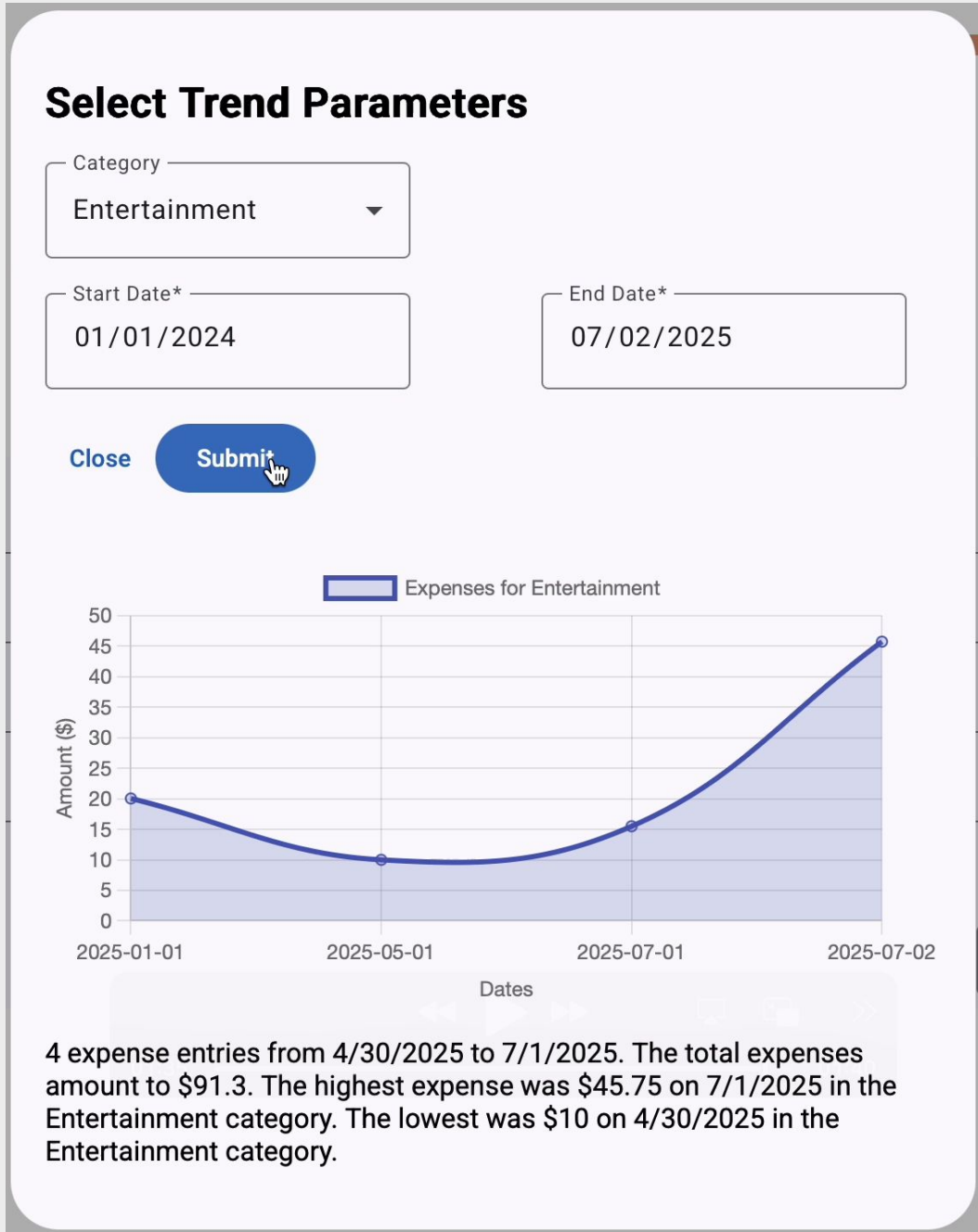
Add Expense

View trends for all Expenses over a specific time range



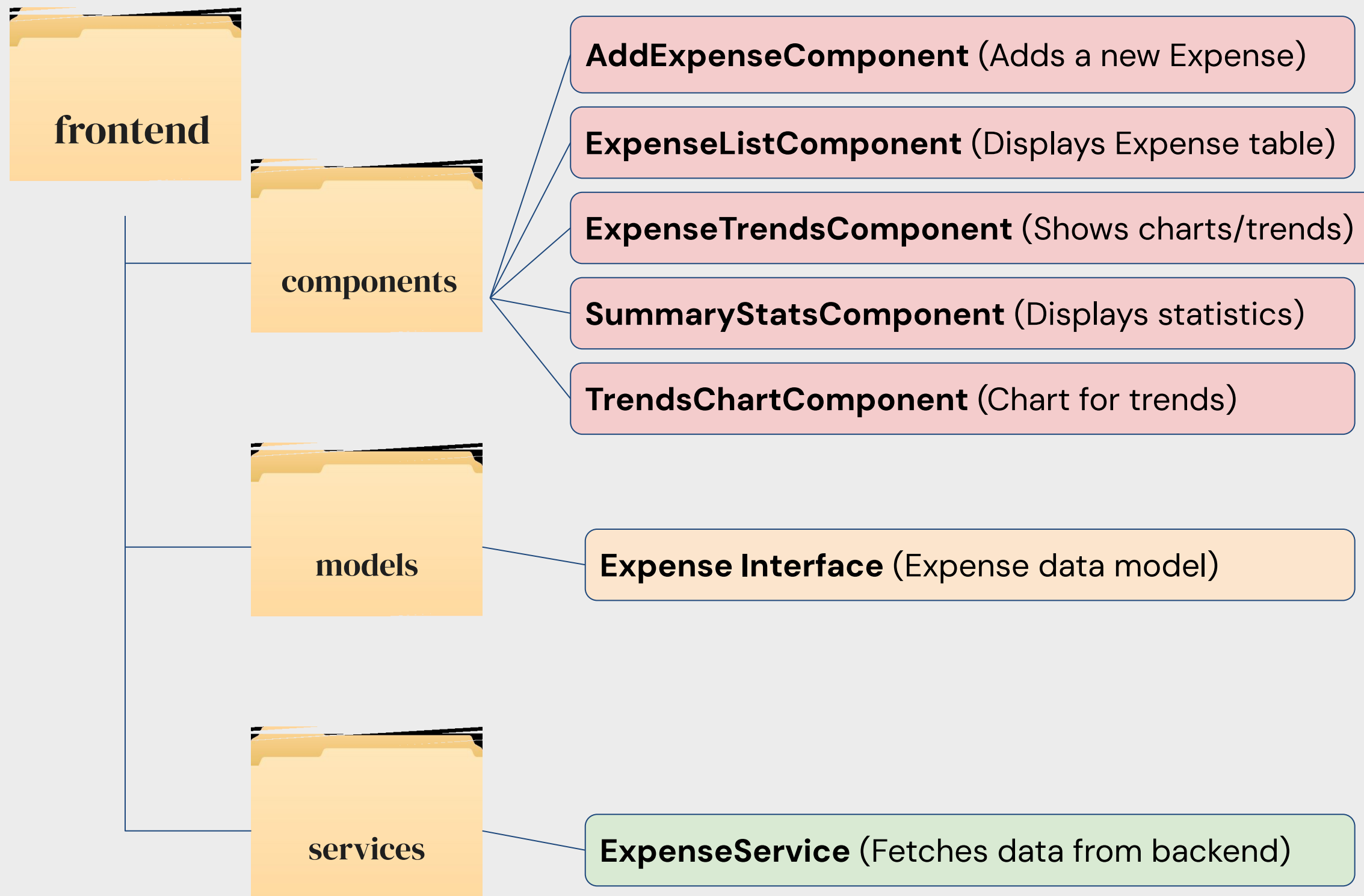
Short summaries provide about selected data

Or view trends for a specific category and time range

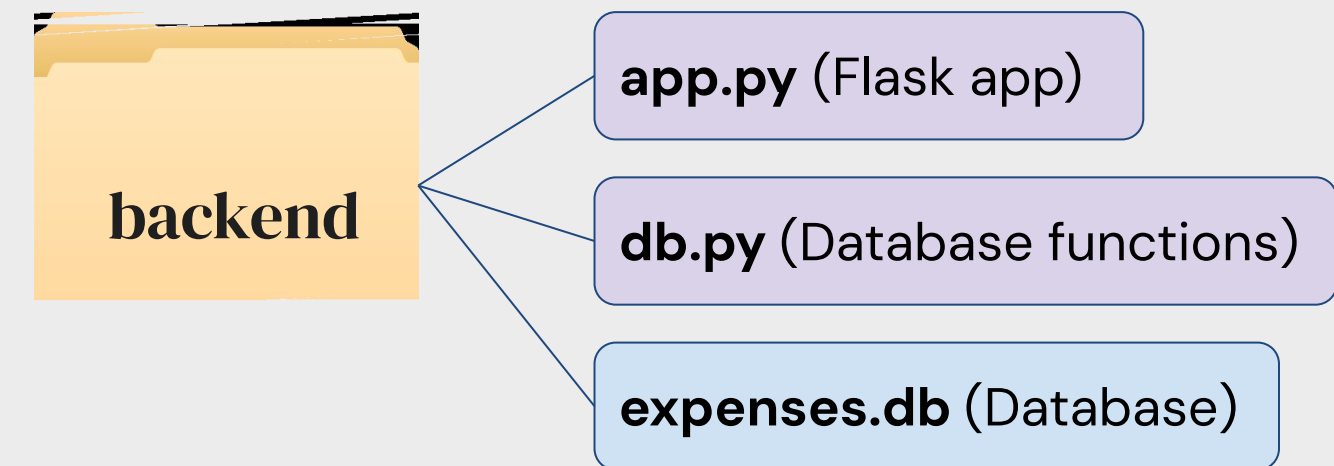


Key Folders and Files

Frontend



Backend



Installation/Run Directions

This application consists of an Angular frontend a Python/Flask backend to be run in separate terminals.

To run the ***Angular front end***:

- > cd frontend/expense-tracker
- > npm install
- > cd src/app
- > ng serve

To run the ***Python backend***:

- > cd backend
- > python app.py

Some package installations may be required via >
pip install -r requirements.txt

For virtual environment:

- > python3 -m venv env
- > source env/bin/activate
- > python app.py

6

This information is also available in the project's README.

Demo of Expense Tracker



[GitHub Repository](#)

Next Steps

- Advanced table operations (Delete, Update, Sort, Filter)
- NGRX state management (Actions, Reducers, Effects)
- Natural Language querying of data
- Custom data upload