

My Expenses Tracker

- **The goals**

- To keep track of my daily expenses
- To analyze the expenses by category and month/year
- To manage multi projects/users expenses

- **Tools and techniques**

- [Python](#)
- [Jupyter notebook](#)
- [pandas](#)
- [JSON](#)
- [matplotlib](#)
- [ipywidget](#)
- [qgrid](#)

- **What was learned**

- Decomposing the problem/project. After dividing my project into 3 modules and dividing each module into separate functions, everything became straightforward.
- GUI can be defensive because the operation was limited (eg: the input widget with min and max bound).
- Reading the documentation and googling the error message can get rid of 99% of bugs.

- **Future extensions**

- Create a web application instead of using the Jupyter notebook to improve interaction.
- Use database instead of JSON to store the data to improve security and performance.
- Improve the analysis function.
- Add the feature of budget management.
- Add the feature of user management.