GarLik-KnotS :: Erica Li , Shafiul Haque, Aaron Gershkovich, Kosta Dubovskiy
SoftDev Pd.2
P05
2022-06-05
time spent: 03 hrs
Target ship date: 2022-06-13

DESIGN FOR EXPENSE TRACKER

Goal:

Our primary goal is to create a dynamic and intuitive website that empowers individuals to take control of their personal finances. With our proposed website, users will be able to effortlessly track their expenses across various locations and gain valuable insights into their spending habits. By providing a comprehensive overview of where their money is being spent, we aim to promote financial literacy and responsible spending. Through customizable features such as categorization, budget setting, and detailed reports, users will have a clear understanding of their financial health and be able to make informed decisions about their future expenditures.

Program Components:

- Database
    - Stores necessary information regarding fast food locations & nutrition, to be represented graphically.
- Frontend
    - Displays our website and the map visualization of data to our users
- Python + Flask + Javascript
    - Renders website pages
        - Home, Tracker, Reports, Expenses, Budgets, etc.
    - Database setup
    - API requests to populate database
- Bootstrap Framework

    - Creates cool visualizations of data
    - Makes our website look more pretty
- APIs
    - Provides information for our database tables

JS Libraries:

- Leaflet
- D3.js
- Chart.js

Frontend Framework Chosen: Bootstrap (+ TailwindCSS)

Why: We aim to prioritize ease of use, aesthetics, and leverage our team's previous experience to create an exceptional website for expense tracking.

How: To achieve this, we plan to import Bootstrap CSS and JS via link tags, as it provides a solid foundation for responsive design and user interface components. Additionally, we will explore the option of installing TailwindCSS if it proves to be beneficial for our specific purposes, allowing us to further enhance the visual appeal and functionality of the website.

Backend:

Flask/Python: required to create website framework

D3.js: https://observablehq.com/@d3/gallery

Flask App:

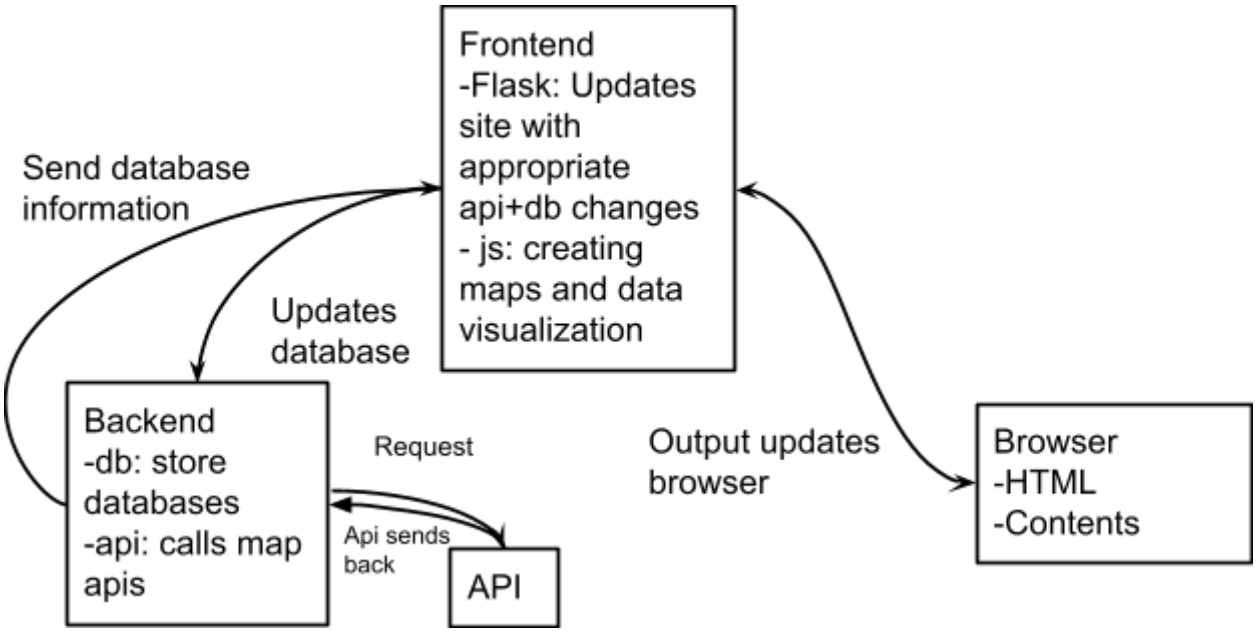
- Helps display the html files through paths for certain linkages
- __init__.py: routes to connect to HTML files

SQLITE DB:

- SQLite database (db.py): large and efficient data storage
- Has functions that can be used to add/delete information in the database tables

Dataset:

Component Map:



Database Organization:

- A table for usernames and passwords, with the option to change a password or username associated with an account
- A table for a specific users finances, including information about where they spent their money and how much money they spent (creating individual tables for a single user)
- Users provide the data by linking their account

Breakdown of Tasks:

PM: Erica

Frontend (FLASK, JS, CSS):

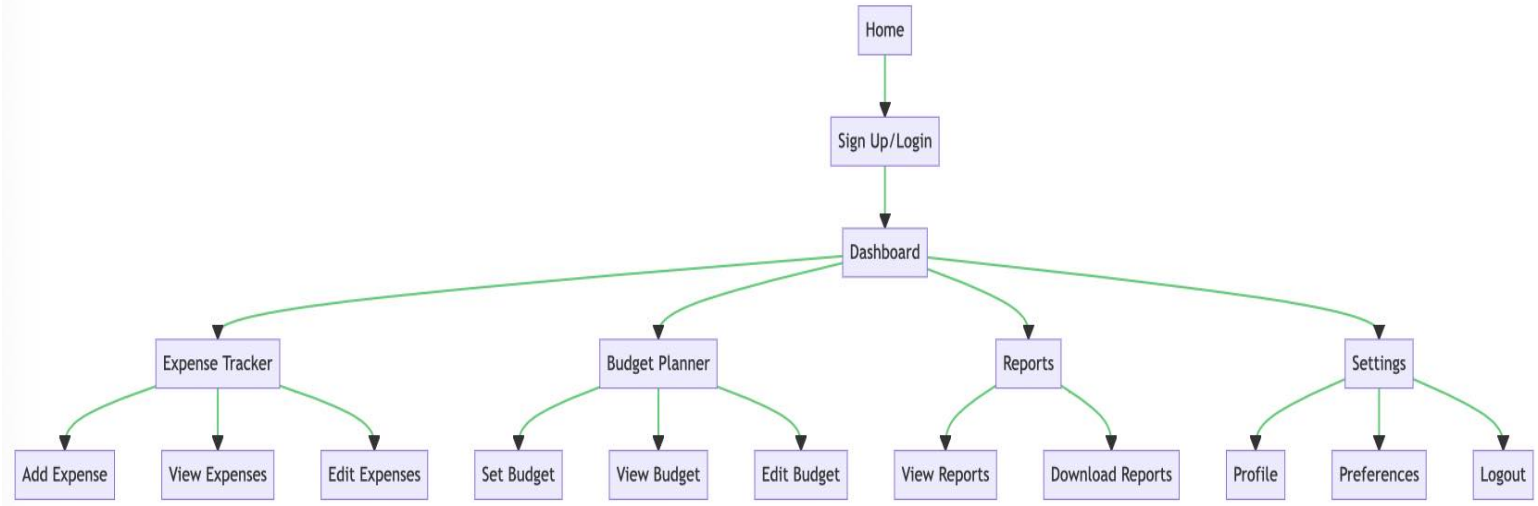
Flask: Kosta

Js: Shafiel & Kosta

Html & Css: Erica & Aaron

Db: Shafiel & Aaron

Site Map: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Budget Planner
Reports
Settings
Add Expense
View Expenses
Edit Expenses
Set Budget
View Budget
Edit Budget
View Reports
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Profile
Preferences
Logout