TNPG: GoofyFruityKissableMonkeys
Roster: Marc Jiang (PM), Kevin Wang, Faiza Huda, Gordon Mo
Soft Dev
2023-5-03
Target ship date: 2023-5-24

Our Project: The Guac Fund

- data:
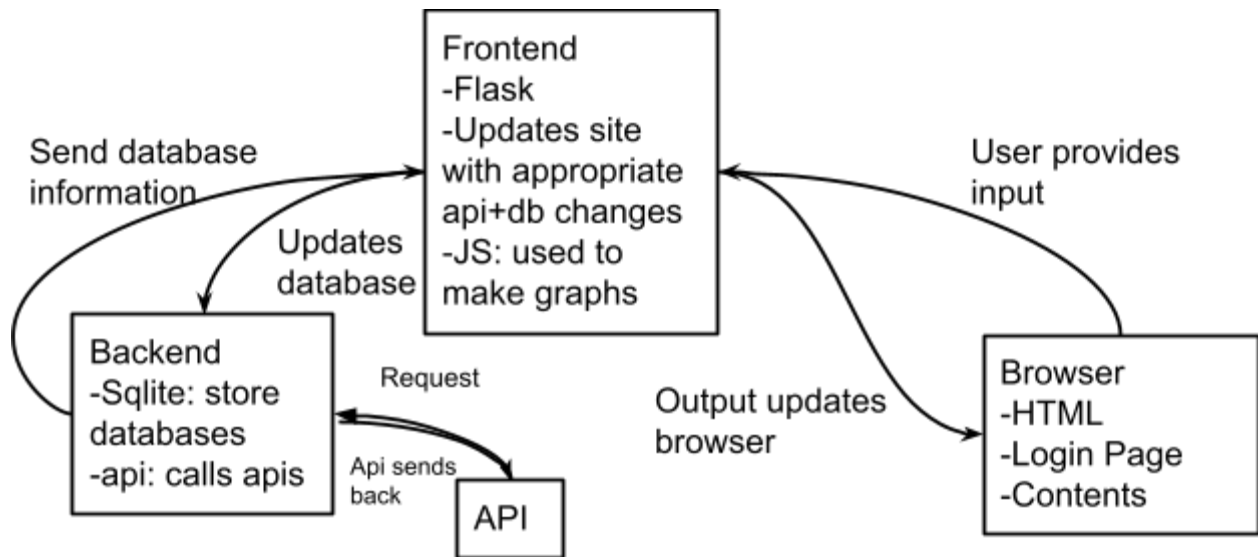https://www.kaggle.com/datasets/timmate/avocado-prices-2020

Our website will compare the prices of avocados to the prices of stocks. It will be like a higher or lower game for the user to guess. One tab will have a "higher or lower" game with a random stock for each guess. On another tab, you can pick any stock (using API) and compare it to the price of avocados. The last tab will be a leaderboard of accounts with the highest win percentage.

Each user will have to create their own account to use the website. The account will track their win/loss record and the most recent stock lookups.

Program List

1. **__init__.py** - Basic driver with Flask

2. static/css/ - Basic formatting that FEF doesn't take care of

3. static/js/ - Create line graphs that have modularity and simplicity in mind

4. templates/ - our HTML files for the respective pages we need
   a. login.html
   b. home.html
   c. results.html

Component Map

<u>Database Organization</u>

The database will include a user table with user credentials, win/loss ratio, and their (5) most recent stock price searches. With this information we can present a leaderboard as well as streamline their stock lookups by having the cached stocks preloaded.
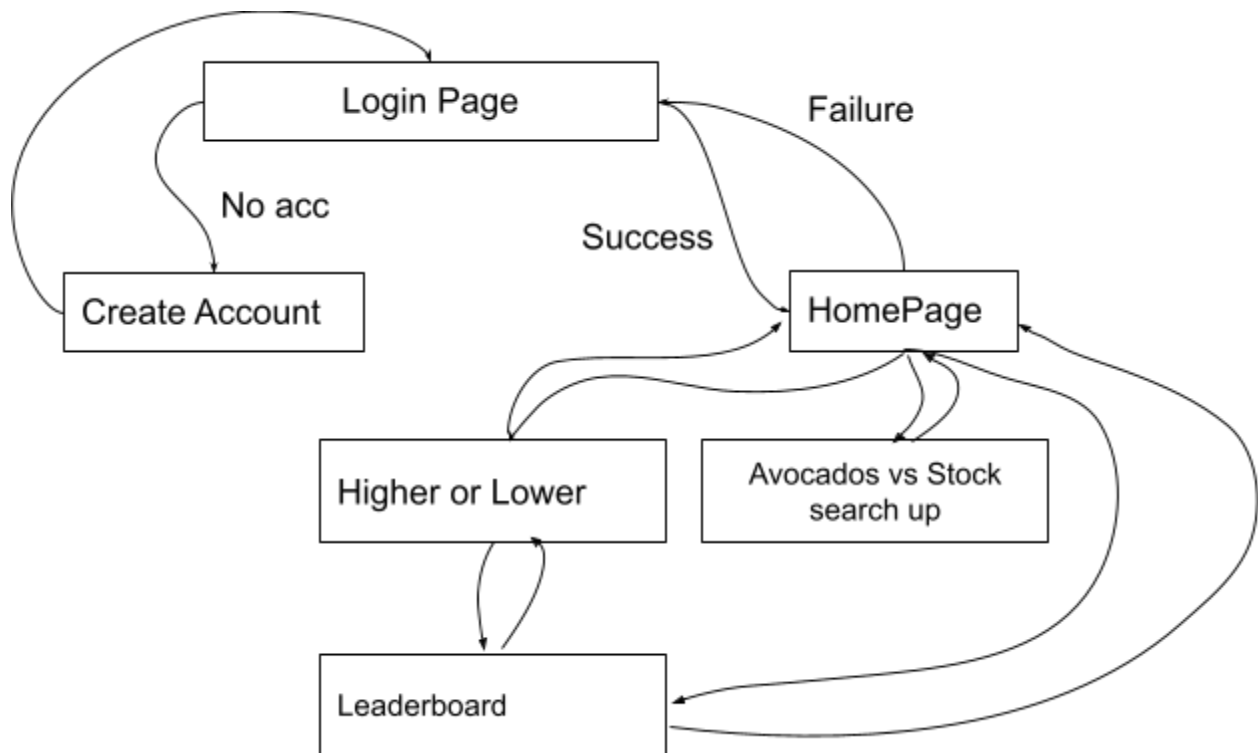
Authentication

Username	Password	Wins	Losses	Five most recent searches
devo1	hehehaha	1	2	House, stock A, stock B, stock C, stock D, stock E
devo3	gabagoo	4	1	Stock 1, stock 2

Database (parsed from dataset for quicker/easier calls)

Date	Average Pric	Total Volu	Small	Medium	Large	Total Bags	Small bags	Medium bags	Large bags	XL bags

	e	me				Sold				
2015 -01- 04	1.50	4000 0	1000	3000 0	9000	1000 0	3333	3333	3333	1

Site Map (Front-end)

Assignments to Members
Marc:
   - PM
   - APIs
Kevin:
   - Front End (FEF, CSS, JS graphs)
Gordon:
   - SQLite
Faiza:
   - Flask

MVP:
   - Account login system in place
   - Basic higher or lower game that works
   - Be able to create at least a line graph (price over time) of
     avocado prices on top of a stock

<u>Stretch Goals</u>:
- More data to compare against and not just stocks
  - Ex: real estate prices, cryptocurrency, etc
  - Other produce
- Avocado-based stats
  - Price of avocado toast, guacamole
- Avocado market share pie chart
  - Small, medium, large

<u>API Section</u>:
https://github.com/stuy-softdev/notes-and-code/blob/main/api_kb/411_on_AlpacaMarketData.md

<u>FEF Features Why and How?</u>
Why:
- Bootstrap is easier to work with & looks cleaner.
- Bootstrap containers improve responsiveness and user experience
- Foundation is difficult to work with

How:
- Containers to make sure everything is neatly organized in accordance with screen size
- Forms to accept user input for the graphs:
  - From what date do we start comparing
  - To what asset do we compare to?