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

<u>Our Project</u>: The Guac Fund

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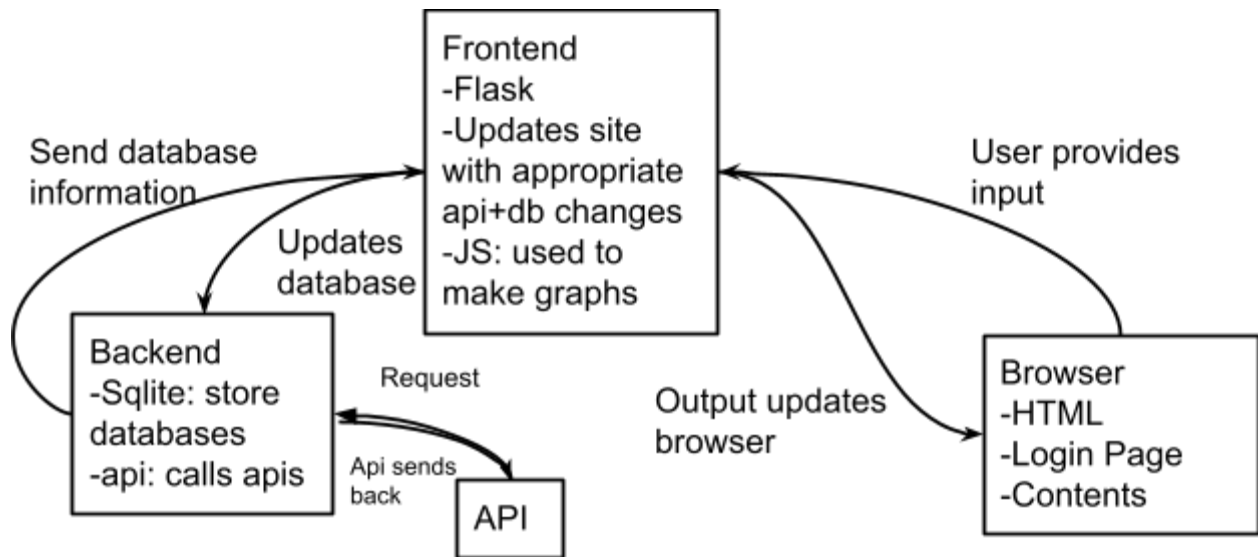https://www.kaggle.com/datasets/timmate/avocado-prices-2020

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, and another tab will allow the user to pick a stock and compare the two prices with graphs. 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.

<u>Program List</u>

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

<u>Component Map</u>

Frontend
-Flask
-Updates site with appropriate api+db changes
-JS: used to make graphs

Send database information

Updates database

User provides input

Backend
-Sqlite: store databases
-api: calls apis

Request

Api sends back

API

Output updates browser

Browser
-HTML
-Login Page
-Contents

Database Organization

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.
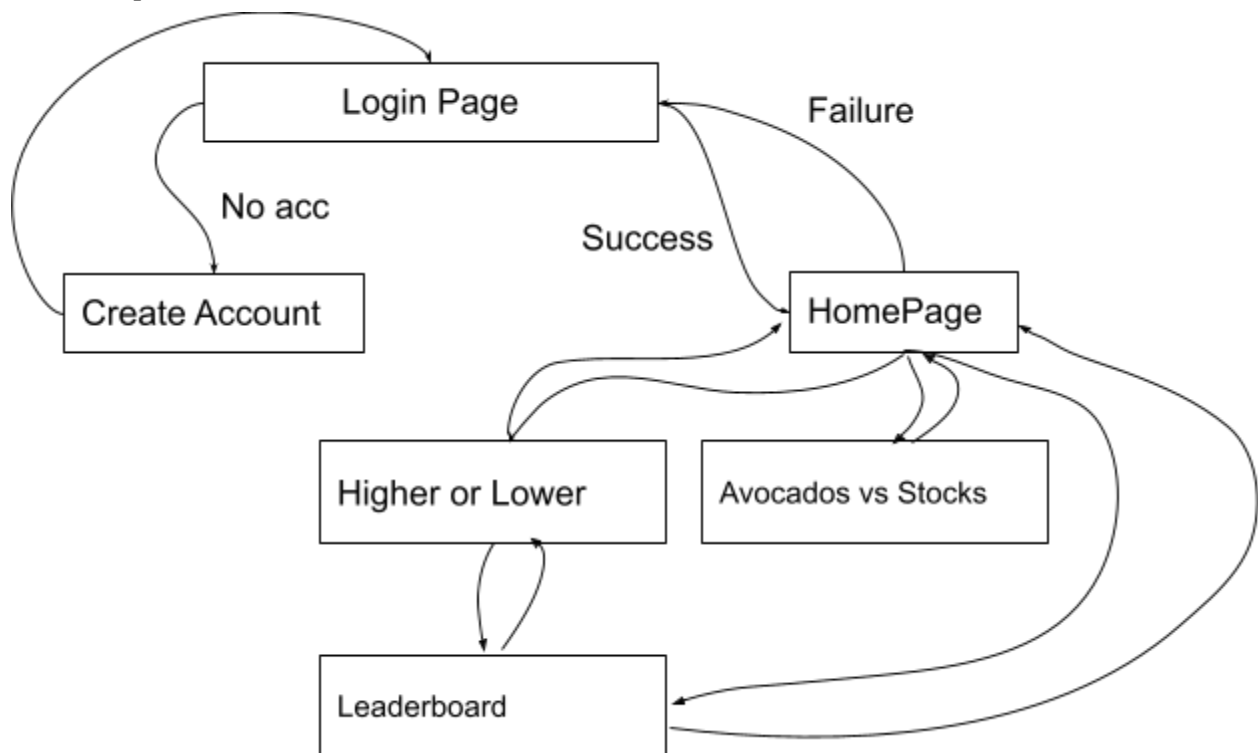
Authentication

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	

Database

Date	Average Price	Total Volume	Small	Medium	Large	Total Bags Sold	Small bags	Medium bags	Large bags

01/21/20										

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 of avocado prices on top of a stock

Stretch Goals:
- 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

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

FEF Features Why and How?
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?