Team top_HATS Taylor Wong, Samantha Ngo, Adam Abbas, Holden Higgins Project STOK Design Doc

What is our project?

STOK is a stock market simulation game based on real-time stock prices. In order to play the simulation, a user must create an account. To start a game, they begin by choosing their difficulty which adjusts their starting balance accordingly. Based on how much money they have, they will be able to look up and purchase stocks to add to their portfolio or sell stocks in their portfolio. Only a user's last three transactions will be saved. The top ten users with the highest balances per level will be displayed on a leaderboard visible to all users and updated after every transaction. Once a game is started, it must be continued unless a user chooses to end the game. Then, their account is reset and they are able to start a new game with a new difficulty.

Once the simulation is implemented, STOK hopes to grow to be more of a social media platform, where one can visit their friends' pages, and check what stocks they're working with as well as how they're doing on the market. On your feed, you may like or dislike friends' activity (buying/selling) indicating approval of their purchase.

Tasks

FRONT END

- Taylor Wong(aka Taytay the PM)
 - o Bootstrap, CSS, jinja
 - HTML pages
 - Work on front-end app.py

BACK END

- Samantha Ngo(aka NGO)
 - o Accounts
 - Leaderboard
 - Work on front-end app.py
- Adam Abbas(A^2 1 [arm]
 - o APIs
 - AlphaVantage
 - Do the bulk of the stock work
 - News
 - Mechanics
 - Keeping track of transaction history
 - Filler Boi help other members in need aka Red Cross but for code
- Holden Higgins(aka H^2)
 - Databases
 - Transaction history
 - Mechanics
 - User Transactions and Updates
 - Filler Boi pt. 2- help other members in need aka Red Cross but for code (lots of debugging)

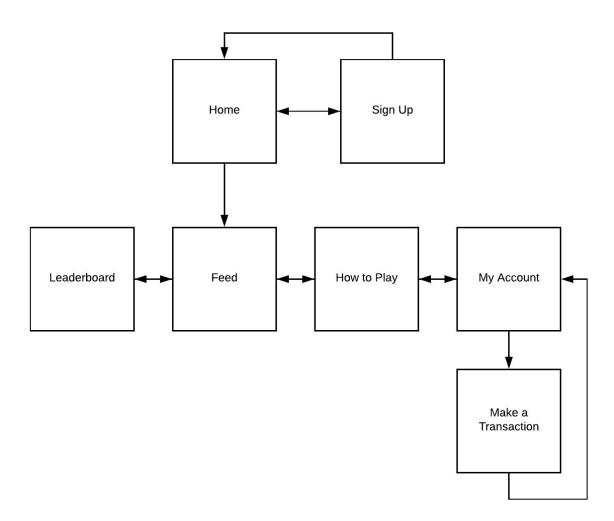
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IF TIME

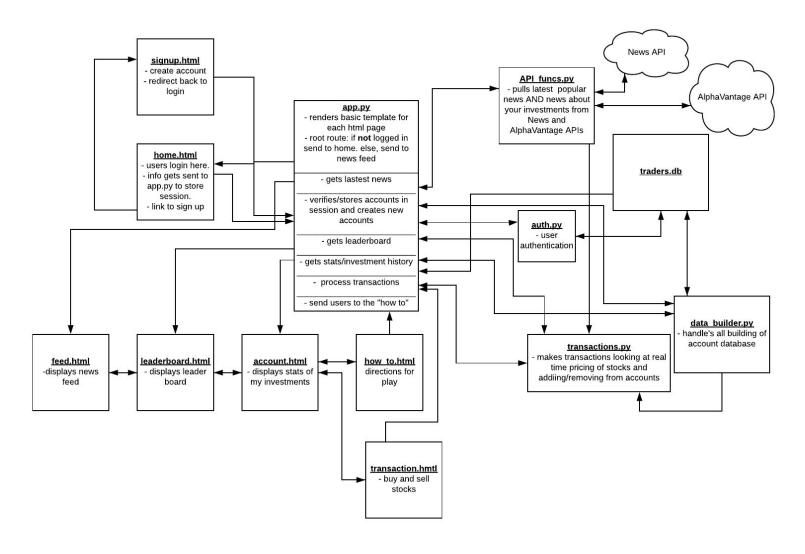
- Search users by username
 - Can see their last three transactions
 - Maybe be able to "friend" them
- Social Media
 - Adding friends

- o Seeing friends' investments, liking/disliking
- o Group investments
- Search/Track stocks to display on your feed (Keep up to date yuh)
- Game history keep track of what games you played previously and how much you made

Site Map



Component Map



Database Schema

id	password	name	balance	friends	holdings	transactions	picture
"twong7"	#hashed	"Taylor"	100,000.00	N/A	GOOG	10	1
"aabbas"	dehsah#	"Adam"	50.00	N/A	AABA	5	5