

Cole Griffith

CS 360

Final Report

Algo Trader

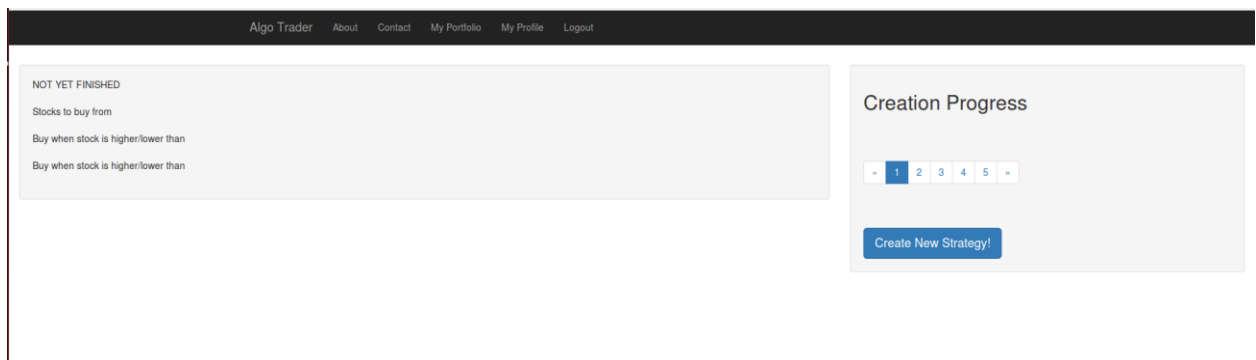
Introduction:

I did this project by myself and so all contributions here are mine. I was not able to get the project working on a hosted site. If you download the github code the code should run on localhost, port 5000. The program is written in flask and can be run with the command `./run.py`. The Github is located here <https://github.com/griff9/Algo-Trader>.

Actual Report:

- **Description and Functionality:** The purpose of the website is to allow users to create algorithms that would automatically buy and sell stocks. That was never actually finished. See Figure 1.

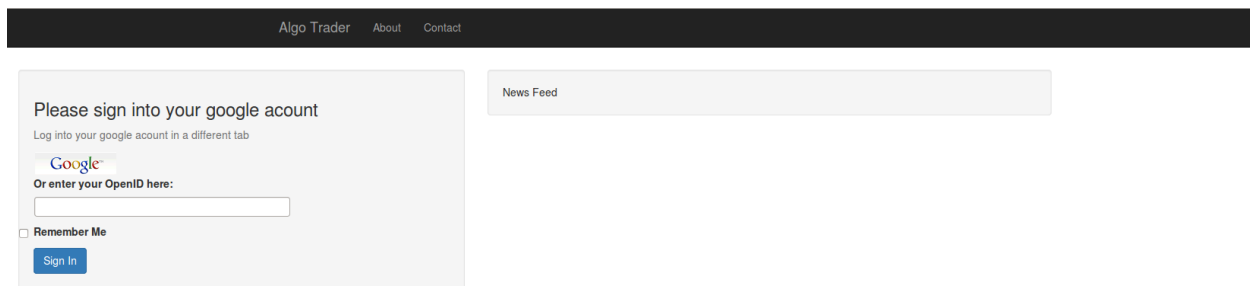
FIG 1.



This is what the website currently does:

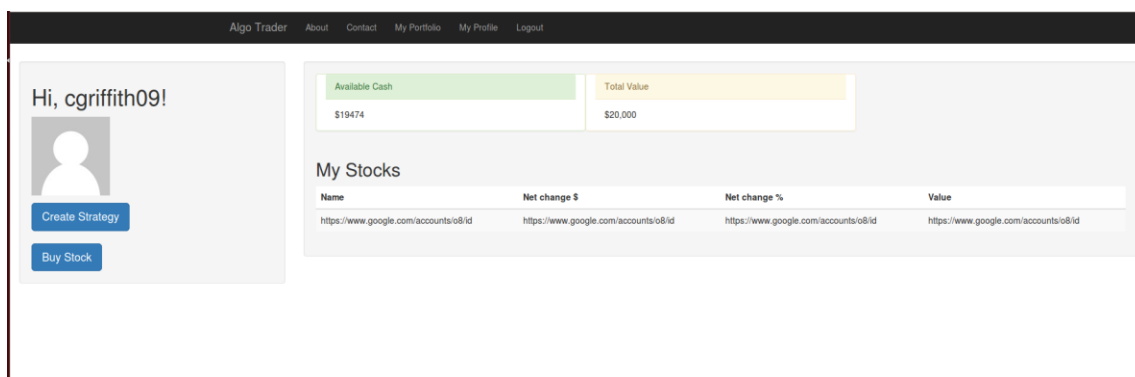
1. Users must log in through via a google opened account (If it throws an error try logging into gmail in a different tab first). See Figure 2.

FIG 2.



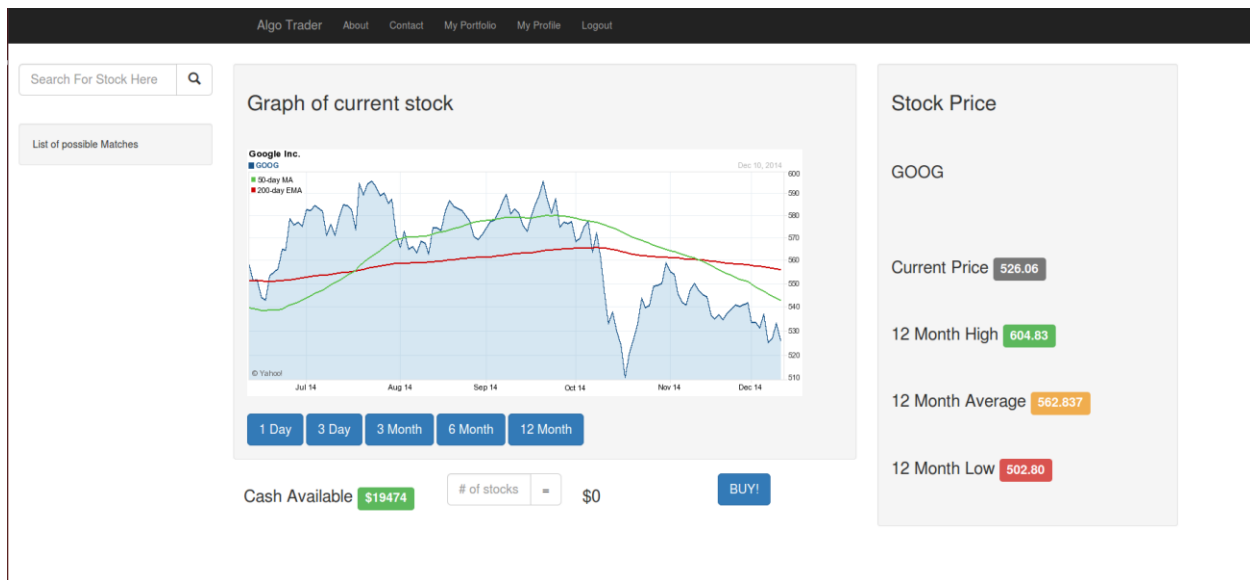
2. A first time user is then given \$20,000 dollars of fake money to begin buying stocks. All users are taken to their portfolio page. See Figure 3.

FIG 3.



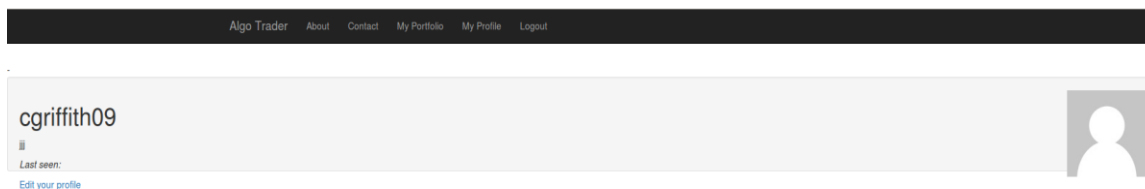
3. Clicking on the buy stocks button takes you to another page where stocks can be bought by specifying the amount wanted in the bottom middle part of the screen. You have to know the exact stock symbol for the stock you want to buy. See Figures 3 and 4. The information for all the stocks is pulled from Yahoo Finance using a
4. When you look up a new stock from this page, a graph of the stock is generated along with the current stock price, its year high, year low, etc... See Figure 4.

FIG 4.



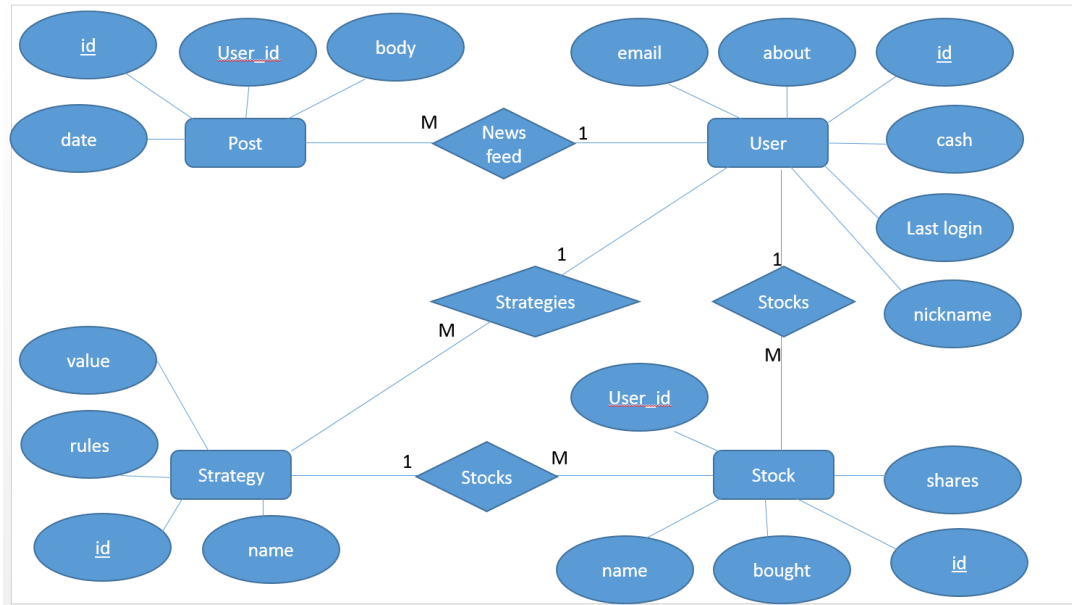
5. The navigation bar successfully directs you to the page it indicates. The about and contact page really just contain filler information. The profile page allows you to add information and change your username.

FIG 5.



- **Database Schema:** Data is stored in a **SQLITE** database on the server-side. There are currently 4 tables.
 1. Users: Users and their information
 2. Stocks: currently owned stocks
 3. Strategies: group of stocks bought and sold by certain rules
 4. Post: Will be used later for admins to post news items inside the news feed

FIG 6.



- **Future Work:** There is a lot left to be done on this project.
 1. For starters the strategies or algorithms for automatically buying and selling stocks were never completed.
 2. The login page needs to be fixed to be much simpler, much more direct and include a way to authenticate users through both Google and Facebook.
 3. The about page needs additional information and I need to make an about video.
 4. The database needs to be reworked a little bit.
 5. The news feed next to the login is not yet up and running (In fact that will require an entire admin user account to be set up).
 6. Looking up stocks needs to be fixed so that you can search and select from close matches.
 7. Additionally, I was never able to get the website hosted. I tried several different options and tried for a very long time, but I just couldn't get it working.

