no-stall-GICS — Christopher Liu, Ivan Mijacika, Shyne Choi, Gavin McGinley SoftDev
P01 — [ArRESTed Development]
[2022-01-03]

Title/Description of Project

<u>no-stall-GICS</u> stock re-collection will find and gather information about a company so that a user can understand more before making decisions on purchasing stocks of that company.

Program Components

Landing Page

A landing page for new users. A brief description of what the app does should be included along with directions on how to use the search function.

Ticker Symbol Lookup

This should take a search query and use the Yahoo Finance API to return a list of potential ticker symbols that match the company specified as a list of links to the associated /stock/<symbol> page.

Stock Information Consolidation

This should return various information about the given company in a digestible format.

- 1. This should include stock prices and other market data (provided by Styvio) as well as a summary. Styvio also provides overall public sentiment analysis for a company and predictions about the direction of the stock price (bullish/bearish), which should also be included.
- 2. Background of the company (provided by the MediaWiki API for Wikipedia).
- 3. [If Time Permits] A line chart should display price information (we could make tabs for different time periods like day, week, month, 3 months, 6 months, year, 5 years, all time) using something like Pyplot.

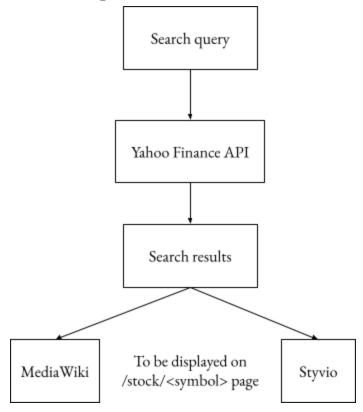
User Registration and Logins [If Time Permits]

Registration and logins for user accounts, using SQLite3 as a database. Users will have a unique username and passwords will be hashed with the SHA-512 hash function.

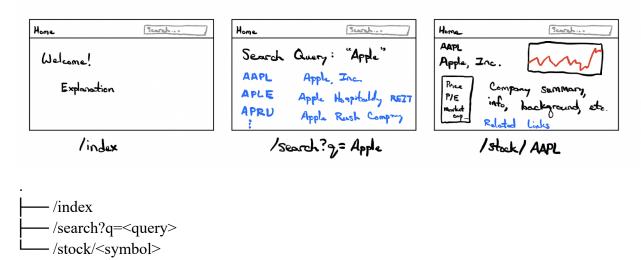
Favoriting [If Time Permits]

Individual users should be able to star/favorite certain stocks to appear in a "favorites" drop-down menu. The home page could also be customized for individual users to contain key information about favorited stocks.

Relationship between Components



Site Map



Tasks

Shyne

- PM responsibilities
- Ticker Symbol Lookup

Christopher

- Bootstrap/Front-end design
- Styvio data

Ivan

- MediaWiki summaries
- Front-end design

Gavin (possible limited computer access)

• Items marked [If Time Permits].

APIs

- 1) Styvio
- 2) MediaWiki
- 3) Yahoo Finance API

Front-end Framework

We plan to use <u>Bootstrap</u>, as it's generally more smooth and the customization is more easily done. The stock information page that is returned after a successful search displays quite a lot of content, so Bootstrap's containers would be great for organizing all of it.

Target "Ship Date"

2022-01-03 08:00 EST

Other Notes

Accounts/Saved Info if time remaining afterwards

- Maybe recently searched/viewed stocks

Database Organization [If Time Permits]

Username [text]	Password [text]	Favorites [blob]
"user"	"pass"	[AAA, BBB]

Ticker Symbol	MediaWiki	Styvio