

CSCI 3308 project

Who:

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Title:

StockInsights

Description:

The team will create a website that will attempt to give insight into S&P 500 stock trends (by analyzing fundamentals) so that they can be more informed when making investing decisions.

Vision Statement:

A service to inform millennials about an investing strategy by interpreting and visualizing market data.

Motivation:

We want to learn to use api's and web development fundamentals. We're also interested in working with large datasets to visualize data.

Risks:

We all lack experience with web development so we are unsure whether we have a reasonable goal and will be capable of learning the skills necessary to build the vision within the limited timeframe.

Mitigation Strategy:

We'll be using the AGILE development process so we plan to fail quickly and reassess our goals. We also have access to a lot of resources to learn the skills necessary rapidly.

VCS:

Github

List of Requirements:

User Requirements			
ID	Description	Agile Sizing	Priority
US-0	As a user I want to access top company stocks so that I can analyze them.	13	High
US-1	As a user I want to know which stock is rising so that I know what to buy.	8	Medium

Functional Requirements			
ID	Description	Agile Sizing	Priority
FR-0	As a developer I want to access the quandl API so that I can get the data I want	13	High
FR-1	As a developer I want to be able to parse the API data so I provide value	8	Medium
FR-2	As a developer I want to create a relational database based off the dataset so that I can work with the data and display it easily	8	Medium

Non-Functional Requirements:			
ID	Description	Agile Sizing	Priority
NFR-0	As a developer I do not want to spend money on this project	1	High
NFR-1	As a developer I want to minimize the complexity by using a simple backend.	4	High

Methodology:

AGILE

Project Tracking Software:

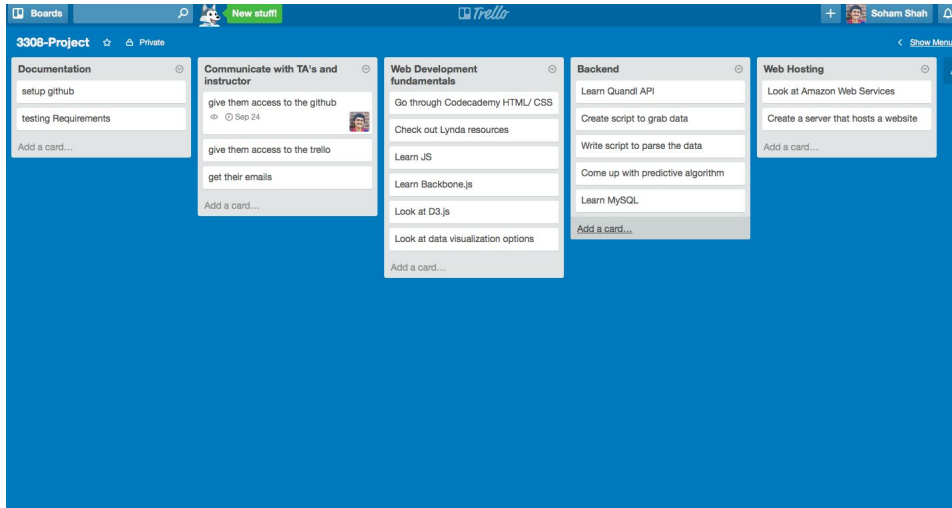
Trello

<https://trello.com/b/Lyux3Cda/3308-project>

Project Plan:

Pair program

Meet two times a week



Market Analysis:

Target Market:

The target market for this service is millennials, specifically 18-34 year olds. They are highly educated (compared to previous generations) but have little direct exposure to the stock market. The market segment is 75.3 million people. And, that number is only growing as more children reach adulthood (soon this generation will outnumber the baby boomers). This means we have a significant user base that we can target. An additional benefit is that as they have grown up with technology they will not be opposed to getting investment advice from an algorithm based website.

Profile of Competitors:

The financial technology sector is a very popular emerging sector of the technology sphere. There are numerous startups that are oriented towards breaking down traditional barriers of entry so that people with access to less resources can get the access to high quality financial resources. There are many budgeting tools like Personal Finance, YNAB, and Mint. These tools attempt to help people manage their finances. Tools like Betterment and Wealthfront help people make investment decisions by creating portfolios of index funds for them. The largest competitor would be Intuit which has a highly regarded brand name and runs one of the most popular products in the category - Mint. They currently serve over 2 million customers. In the investing sphere, both Wealthfront and Betterment have over \$1 billion in Assets Under Management. Also, the competition is increasingly difficult given the low barriers to entry. Both Charles Schwab and Vanguard Group have created competing products to try and get a piece of the "fintech" market.

Competitive Advantage:

Our competitive advantage in this sphere is that our product will only distribute information. It is easy for us to operate at loss considering there is very little expenses to running the website. Simple advertisements would be an easy way to monetize the site and more than recuperate the losses of web hosting. A significant point is that this isn't a zero sum game. Our service can operate as a compliment to the other investing services as a more intuitive approach tailored to millennials for organizing and viewing data. This way we can offer a different perspective from the incumbent players. And still carry out our vision