## What is the Purpose of your Website?

The purpose of my website is to allow young adults who are curious about the stock market to be able to visualize how their assumptions about each stock will affect the price valuation of the stock.

## What Information do you Convey with your Website?

I am showing the daily price points with a candlestick chart and a price line that demonstrates correlation of a user’s assumptions to the expected market price of the company.

## How is it Interesting and Engaging?

I believe it is interesting and engaging because the user gets a direct feedback on what they are changing. The direct response makes it easy for the user to learn how each assumption will affect the market price.

## Who is the Target Audience?

The target audience is young adults who are just getting to know the stock market. This is because the potential next steps of this website is to use these assumptions, along with line item assumptions, to build a simple DCF fundamental analysis for publicly traded companies.

## The interaction you implemented?

I created a couple sliders that are indicative of different assumptions the user may have on a specific stock or the market in general. By dragging these sliders to different value points, the user is able to see a how the horizontal value line on the stock chart will change.

To reproduce, you should be on the analysis page, with a stock selected, then you click on the slider bars to drag and release.

Furthermore, I also made a search bar that will allow user to filter through tickers via regex.

## Describe the External Tool you used

* React
* I chose to use react because it allows me to easily create component classes which is highly reusable, which makes this project much more scalable if I do choose to work on this more, outside this class. Furthermore, I am able to pass in states and props to different classes so different pages are able to easily control other pages.
* I built the website through react, and also utilized some other libraries that are react compatible, such as react-stockcharts. React-stockcharts allowed me to feed in price data, and get a stock chart of my choice.
* It adds to my website because rebuilding a candlestick chart would be like reinventing a wheel. Being able to use a customizable library allows me to build on top of the candlestick chart, such as adding an interactive line that will show the user price movements.

## Describe How you iterated from hw7

From Hw7, I added a search option, such that the user is able to do the same thing on multiple publicly traded companies. I also decided to completely change the color schema, because I felt that it is necessary to follow some of the stock market traditions, such as the red and green, thus a lighter color scheme was a better fit.

## Challenges encountered

A couple challenges I faced were, how to use regex to properly filter through different tickers. Other problems were learning react as a whole because there are many moving parts that I had to be aware of. However, I thought that overcoming these challenges opened my horizon to a wide range of possibilities because these JS libraries are able to help us scale and accomplish much grander tasks.

https://d-wang98.github.io/hw8/