

**GitHub Repo:** <https://github.com/aanchalaich/PUI-Final-Project>

**GitHub Pages:** <https://aanchalaich.github.io/PUI-Final-Project/homePage.html>

## **Part 1**

For people that are new to the stock market, investing, and the finance industry it can be very overwhelming with all the numbers and data points. It can also feel as though they are at a disadvantage when other people have years of experience, knowledge, and much more advanced resources. However, investing is important and everyone should know the basics of what it is about. The purpose of my website is to give a walkthrough tutorial of the Yahoo Finance website, specifically the most important parts that one should look out for. This is targeted towards beginner investors who may be overwhelmed with investing at first and are looking for an easy way to get started.

My website highlights 4 different pages of the Yahoo Finance website (Profile, Summary, Financials, Analysis) and for each one walks through what it is, why it's important, key data points you can get from it, and how this can be applied through a case study. I only include the most important pages and data points of the website- essentially, simplifying it down so it's easier to learn and digest for those that are new to the stock market. I make use of animations, smooth scrolling, clear arrows that facilitate clear transitions from one part to the next, buttons, and visuals/graphs to make this engaging. The target audience is people who want to get started with investing but don't know what resources to turn to.

## **Part 2**

Here is a broken down list of interactions by page:

### **Home:**

- The homepage is broken down into three sections aligned vertically on the page. After the first two sections, users can either scroll down or click the arrow to smooth scroll to the next section.

- The last section allows the user to click on the yellow words to either go to the tutorial section of my website or skip to a specific content page

### **Tutorial:**

- The tutorial page of my website is broken down into 4 sections aligned vertically. The layout mirrors the layout of the 4 content pages exactly, to give users an idea of how to interact with the rest of the website.
- For each section, there is an arrow at the bottom that users can use to smooth scroll down to the next section.
- The third section is an interactive section with buttons that the user can click on. The buttons are meant to change the image above it.
- The last section allows the user to click on the yellow words to either go to the tutorial section of my website or skip to a specific content page.

### **Content Pages (4 in total):**

- The 4 content pages (profile, summary, financials, analysis) are laid out exactly the same way as the Tutorial page, this time with information.
- For each section, there is an arrow at the bottom that users can use to scroll down to the next section.
- The third section is an interactive section with buttons that the user can click on. The buttons here represent actual information - users can click on the buttons to change the image above and learn more about it (ex. If a user clicks "price," this section will show a description of what price means)
- The last section changes upon button presses as well - but this time, produces a graph of the data point the user clicked on in the case of Amazon (ex. If a user clicks "price," this section will show a price graph of Amazon)

## **Part 3**

- **Name of tool: Bootstrap**
  - **Why I used it:** I used Bootstrap to handle the responsiveness of my web tool. I used Bootstrap because it is an industry standard for this, and the class names and gridding system it implements makes sense to me.

- **How I used it:** I used Bootstrap to come up with the main grid of my design, by making use of its 'row' and 'col' classes and 12 box system.
- **What it adds to my website:** Bootstraps adds a clean layout and good responsiveness to my website.
- **Name of tool: MDBootstrap**
  - **Why I used it:** I used MD Bootstrap to have animations in my website. I chose MDBootstrap because I wanted my website to be engaging in terms of transitions and animations, and wanted a tool that was already built for Bootstrap.
  - **How I used it:** MDBootstrap has many different animation styles already built in, that you can use by just adding a specific word or phrase to class names. I used it for fade ins and smooth scrolling.
  - **What it adds to my website:** I think MDBootstrap makes my website more polished and interesting to interact with, rather than just having it be static HTML pages.
- **Name of tool: D3.js**
  - **Why I used it:** I used D3.js to make the graphs and charts for the Amazon case study portion of my website. I wanted to include graphs in my website because visualization of financial data is such a key part in stock analysis.
  - **How I used it:** My website has a portion that applies the data points they learn about to a case study of Amazon. For each of the financial data concepts, I used the corresponding values of Amazon to make various types of graphs illustrating key points and analyses.
  - **What it adds to my website:** I think using D3 for visuals added real-world context to some of the concepts I talked about, and it's helpful for visual learners so they can grasp the main ideas as well.

## Part 4

My first idea that I implemented in my HW7 prototypes was a tool that would allow users to search for a stock and use an API to pull the data and visualize it. However, this proved to be difficult because the only APIs I could use were server side, so they would not work in the browser unless I learned how to use many

different libraries. Thus, I changed my tool to make it more 'static' in content, and used different libraries to make it engaging in appearance.

## **Part 5**

One challenge I experienced was using D3.js. This library is very difficult to use, and I had to refer to lots of online tutorials and examples to start to get a grasp for how it works. I also found it challenging to make my website responsive. Bootstrap took care of the basics, but I had to modify some of the classes myself to make it work better.