

Design Choices

- Gather data that satisfies the constraints of the assignment .
 - <https://www.kaggle.com/borismarjanovic/price-volume-data-for-all-us-stocks-etfs>
- Convert CSV to JSON format by using Python. I changed the order of the columns in the CSV so that only relevant information remained.
- Load the JSON data into webpage with the d3.json module. Convert strings of dates to Javascript date objects, and the value of the stocks to numbers.
- Add the X and Y axis to the canvas.
- Added the labels to the X axis (years) and Y axis (price in dollars). Also added the title, source, context and footer to the canvas.
- The X domain uses the time scale. With this scale type I was able to show the abbreviated month of the selected year.
- First create a basic line chart that doesn't look very nice, but shows the data correctly.
- Map data to each stock symbol. This is for drawing multiple lines in an easier way.
- Once the data was mapped, the scale and proportions where right, I went and tried to create an interactive crosshair on my own. Despite my intentions, this did not work. Ultimately I found an example online that I used to base my solution on.
- The used color scheme is just the default d3 colors. I thought it was unnecessary to change them, because I thought this was looking fine by default.
- The background color is "whitesmoke" that is in good contrast with the other colors and does not cause any eyestrain quickly.
- Hereafter, I centered the graph and all the horizontal text on the webpage.
- By trial and error I was able to get the value from an drop down menu that is present within the DOM. Based on the selected value from the drop down, the updateChart function is called. This function updates the lines and the x and y axis.
- Finally I animated the chart a little bit. When updating the data, the line use a transition and the text right from the stock symbol lines also.
- Wrapping up, I changed my error function within d3.json to show an error message on the webpage to the user when the dataset could not be loaded.