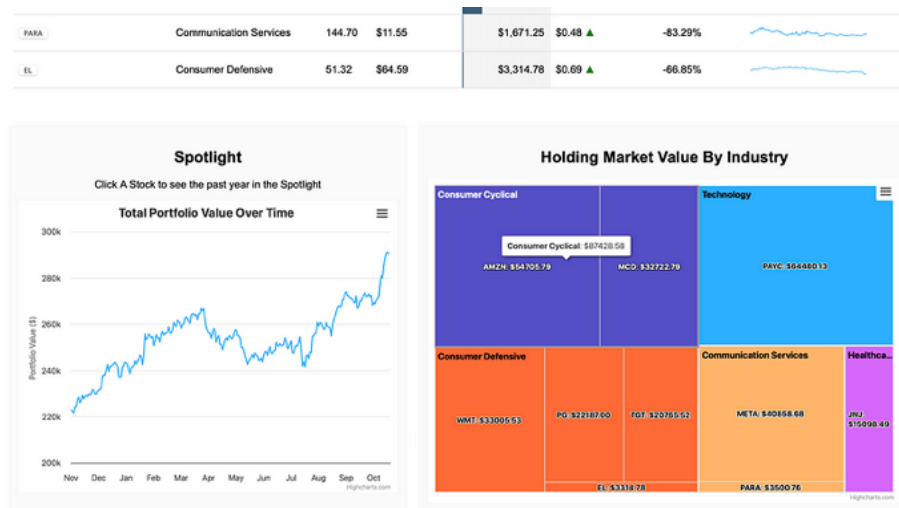


Dashboard Redesign: Enhancing Portfolio Visualizations for Impact and Clarity

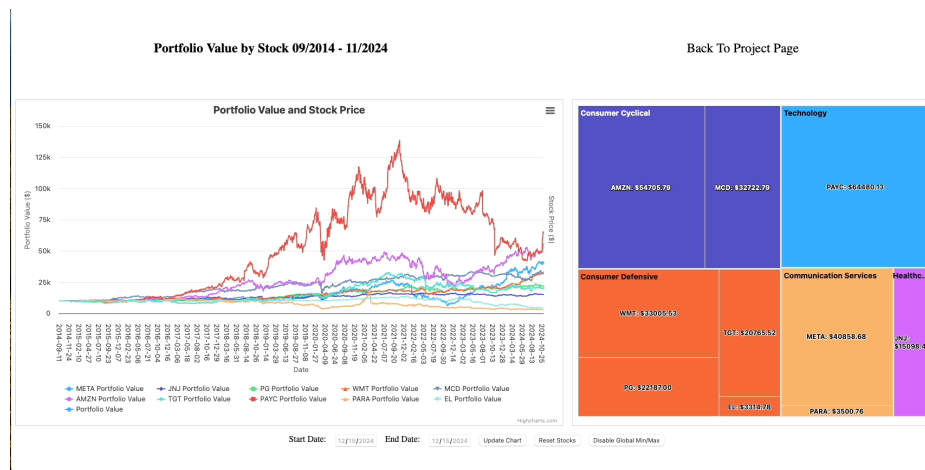


[Click Here To View the Live Dashboard!](#)

When designing data visualizations, ‘good’ and ‘great’ are often separated by the subtle design choices. For the last open skill assignment I wanted to dive into the javascript libraries behind many python visualizations. I decided to use this opportunity to further another project I’ve been working on, visualizing the results from a simulated portfolio. The goal to create a dashboard allowing users to analyze portfolio performance and industry distribution, but the initial design wasn't quite as polished as I wanted. The data was there but the delivery could be clearer and more engaging.

The goal of this redesign was to further the dashboard creating a professional tool to analyze holdings, balancing functionality and aesthetics. This post will walk you through the process and evolution of the project from the initial design to the improvements and principals that guided them.

Original Design



Original Design

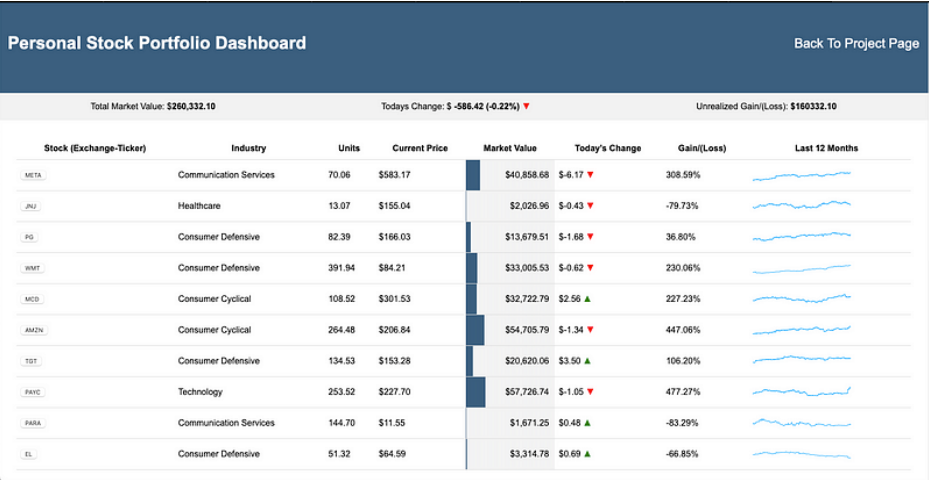
In creating the original dashboard the main focus was how I could convey portfolio performance and industry distribution. This was my first time creating visualizations with Highcharts and my javascript was admittedly rusty. This meant much of my time was focusing on experimenting with Highcharts and what freedoms I had now being able to manipulate elements directly with javascript.

Pain Points

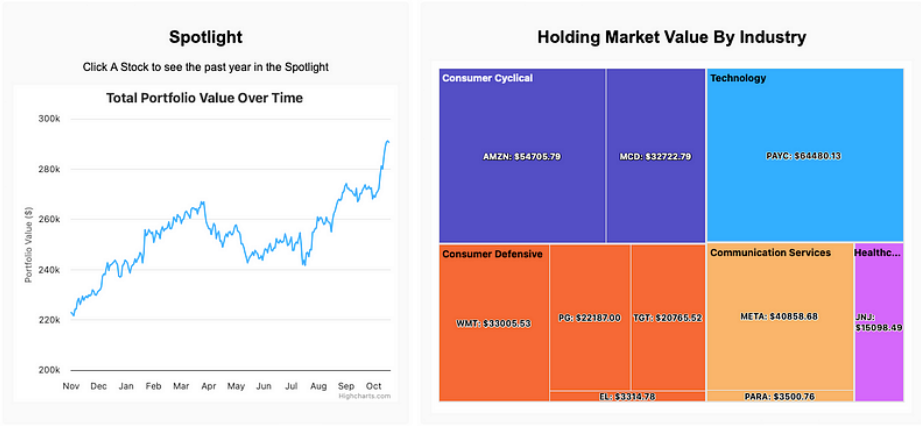
- **Dashboard Cohesion:** The initial design isn't much of a dashboard with graphs looking unfinished and cluttered. Placement leaves much to be desired with graphs sitting next to each other and ugly controls at the bottom.
- **Interaction:** There is actually interactions in a few places with the controls at the bottom to choose windows and scaling. There is also the ability to select a specific stock with the tree-map but both instances of interaction are unclear and would likely get overlooked. These interactions are also clunky taking away from the overall look of the dashboard.
- **Presentation of Data:** The line graph doesn't convey portfolio performance very well with too many stocks appearing at once making it almost impossible to extract insights.

- **Overall Design Appeal:** To be bleak the dashboard is ugly with to many colors and an overall cluttered appearance.

Redesign



Redesigned Dashboard(Top Half)



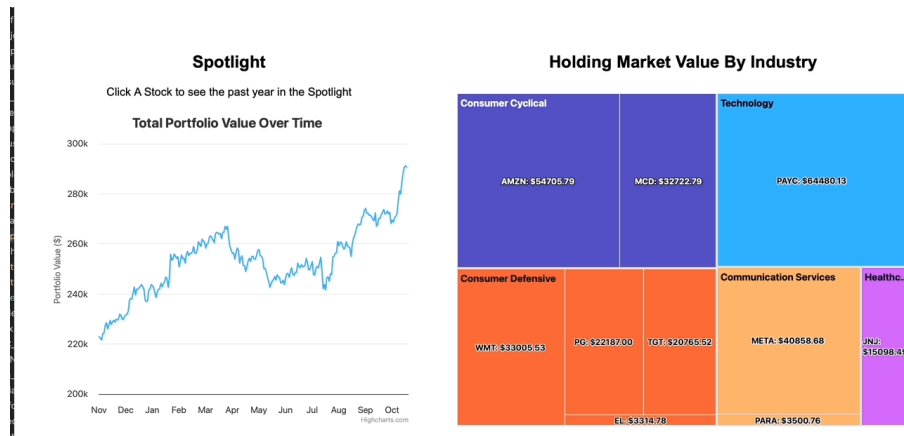
Redesigned Dashboard(Bottom Half)

As stated in the introduction the focus of this redesign was to create a professional looking dashboard allowing users to see the performance and distribution of their stock portfolio's. Creating more visually appealing and intuitive components was at the forefront of my mind throughout the creating this dashboard. Seen above is the dashboard as it would be on the website, with a table showing individual holdings and key statistics. Below that is sections

for total holdings broken down by industry and a spotlight section which defaults to total portfolio value over time, but can be used to see individual stock movements.

Revised Components

- **Depth of Information Presented:** To enhance the depth, I added a detailed breakdown of portfolio movements by stock using a table. This table provides a granular view of individual stock performance while maintaining an overview of the portfolio's aggregate statistics through headers. This redesign allows users to extract both high-level and detailed insights seamlessly.
- **Interaction:** The addition of the spotlight allows users to see a specific stock's performance over the past year in contrast to the original showing all stocks over the past 10 years. Allowing the user to see one stock takes away the visual overload that the previous dashboard had.
- **Visual Encodings:** Adding in things such as directional and colored tickers allow for easy interpretation of stock movements at first glance. The bar within market value also allows users a quick and intuitive way to compare portfolio holdings. The decision to only add this to daily movement also creates a more uniform look while not cluttering the table with too many arrows.
- **Styling and Aesthetics:** The cleaned up layout, font, spacing and annotations are all clean adding to the visual appeal of the dashboard. Taking away distracting elements like the key and focusing on spacing and alignment makes the dashboard more polished.



Key TakeAways

As I revised and redesigned my dashboard, I realized that creating effective visualizations goes beyond just displaying data. It requires a thoughtful balance of design, analysis, and user experience. This course has taught me invaluable lessons that will undoubtedly shape how I approach visualizations in the future.

Here are three of the most important takeaways from the course, each demonstrated through improvements in my redesigned dashboard.

1. Clear and Intuitive Design Components

A great visualization should clearly communicate information, minimizing confusion while maximizing insight. Throughout this course, we've emphasized that clarity stems from a concise design, reduced clutter, and effective visual encodings.

In my redesign, I focused on improving the layout to establish a stronger visual hierarchy. Elements like arrows in the data table provide immediate cues, allowing users to intuitively see daily movements. By integrating these small but impactful changes, the dashboard now has a professional and polished appearance, enabling users to focus on gaining insights without distractions.

2. Interaction Enhances User Engagement

Thoughtful interaction transforms charts from static visuals into tools for exploration. One of the key redesigns in my project was the

introduction of the ‘Spotlight’ feature, which allows users to zoom into the past year’s performance of a specific stock. This allows users to access detailed information when they need it, without being overwhelmed initially.

Similarly, interactive tooltips provide additional context on hover, enhancing the depth of insights while keeping the dashboard clean. I also purposely reduced some interaction’s such as keeping the table’s charts static. By balancing interactivity with simplicity, the redesigned dashboard offers both flexibility and clarity, empowering users to explore their portfolio dynamically.

3. Context is Key to Driving Insights

Even the cleanest and most well-designed visuals can fall short without context to guide the user. Throughout this course, we’ve explored the importance of adding thoughtful annotations to create compelling, story-driven visualizations. This was an area I struggled with previously, particularly in balancing clarity while still avoiding visual clutter.

In my redesign, I added context through dynamic headers and table comparisons.

- The ‘Today’s Change’ column provides immediate context on daily stock movements.
- The ‘Unrealized Gain/Loss’ header summarizes portfolio performance at a high level, enabling users to extract key takeaways without analyzing individual stocks.

These elements help transform the dashboard from merely presenting data to telling a story.

By focusing on clear design, engaging interactivity, and meaningful context, this redesign demonstrates how thoughtful visualizations can elevate user understanding and create a more intuitive, professional dashboard. These principles will continue to guide me as I tackle future visualization challenges.