

smallcase Portfolio Creator

Task

A tool to create a portfolio from a pool of stocks and do some basic analysis

Basics

The tool lets the user pick stocks (preferably as drag and drop cards) from a pool which shows the price and add to the portfolio.

The stock gets added with 1 share, this is an editable field, which affects other components on the page.

Calculations

Net Worth - A panel shows the net worth of the portfolio - This is the sum of all stock prices multiplied by the number of shares held.

$$\text{Net Worth} = \text{Sum}(\text{Stock Price} * \text{Shares Held})$$

Weightage - The table should show the weightage of every stock in the portfolio. The weightage is the contribution of that stock to the net worth.

$$\text{Weightage} = (\text{Stock Price} * \text{Shares Held}) / \text{Net Worth}$$

P/E (Price to Earnings ratio) is an important field to consider while analyzing stocks . The P/E for the portfolio can be calculated as the total amount divided by the total earnings of the portfolio.

The total earnings are simply the sum of earnings of the individual stocks. This is the EPS (Earnings per Share) multiplied by the number of shares held

$$\text{Portfolio P/E} = \text{Net Worth} / \text{Sum}(\text{Stock EPS} * \text{Shares Held})$$

Graph - The graph of the total price over time. Using the historical prices provided in the data file, you can compute the historical amount per date.

$$\text{Net Worth}[\text{date}] = \text{Sum}(\text{Stock Price}[\text{date}] * \text{Shares Held})$$

To plot this graph, you can use any charting library, check out d3 or amcharts if you don't have any preference.

Additional Info

Data - You'll find data attached for 20 stocks, you can parse this file into an in memory object if you want.

The JSON structure is as follows {

```
"price": {  
<StockId>: Number  
  
, "eps": {  
  
<StockId>: Number },  
  
"historical": { <StockId>:{  
  
}}  
  
}
```

Design - Here is the link to the design on **zeplin** - zpl.io/ZYv3z0. You have been invited to zeplin on the shared email id. You would need to create an account and access the design layout.

We give importance to pixel perfection and eye to details w.r.t. design. Zeplin helps you with most of the CSS you would need. However, modularity/reusability of the CSS should be taken into account. Also avoid using any CSS framework like Bootstrap, Foundation etc. Feel free to use your creativity for to improve interactions.

For the behaviour, you can use one of the mentioned - **vanilla JS, Angular 1x, React**. Here again, modularity and code reusability should be taken care of.

Ping us anytime if you need anything :)