

# Report

## COP290 A1 subtask 2

### Objective:

This subtask is aimed at creating the user interface. We needed to develop the user interface for the following features:

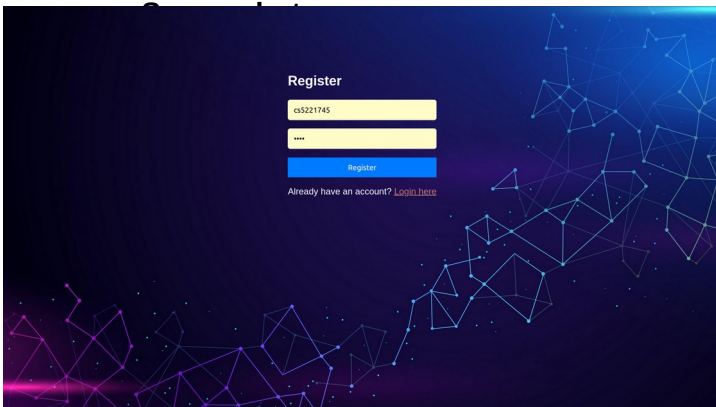
1. Plot the graph of a given stock on a defined time scale (daily, weekly etc)
2. Plot multiple stocks on the same graph to visually compare the prices.
3. Apply technical filters to get a list of stocks passing the filters (P/E ratio, average price etc.)

### Key design decisions:

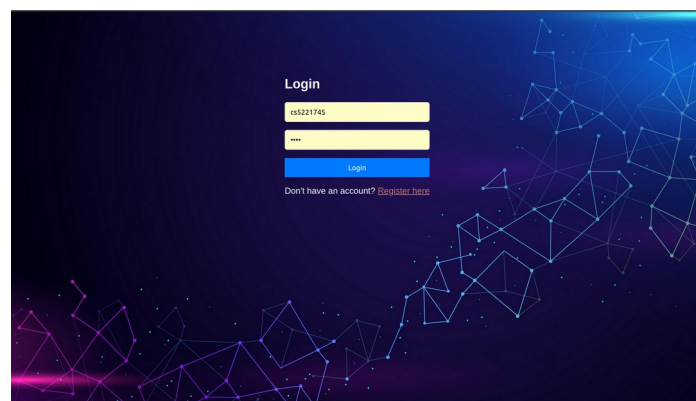
- We used yahoo finance to get the stock data and plotly library in javascript to plot the graph
- User can choose a single or multiple stocks to plot
- He can also choose what features of the stock to plot (opening ,closing ,low ,high). If the user selects all the options the view of the graph changes from line to candlestick
- There is a filter option to choose the value on the basis of which to filter the stocks and there is also a option to enter the filter value
- The user can choose the basis on which to plot the stock(daily, monthly, weekly etc.) and also enter the duration for which to plot the stock

### Tradeoffs and Difficulties faced

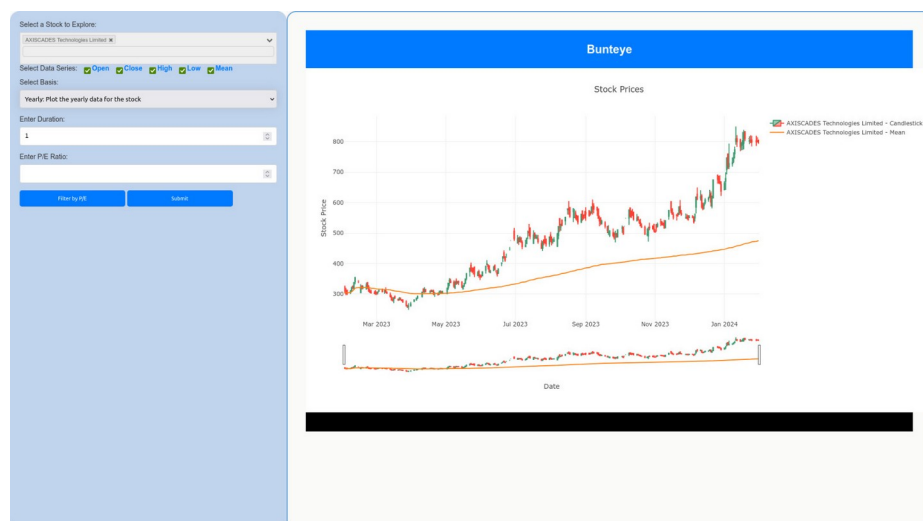
- Jugaad data cannot be used due to conflicting requirements with flask so we are using yahoo finance to get the stock data which offers the data only upto the previous day.
- To filter the data based on p/e ratio we use the data already stored on the in a file to filter the stocks. So the filter is based on old data we also have provided a button to update the filter data to latest stock data. Such a design decision is taken because to fetch the data of all the stocks it takes time (approximately 10 minutes) so to make the filter ready the site will have to load for that time which does not seem appropriate.



Register page



Login page



main page