# The Stock Monitor

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### Description

The Stock Monitor is a website that helps investors find information about companies — such as company description, stock price over time, address, etc. — using the company's ticker/symbol.

Using the watchlist feature, you can save and keep track of your favorite stocks.

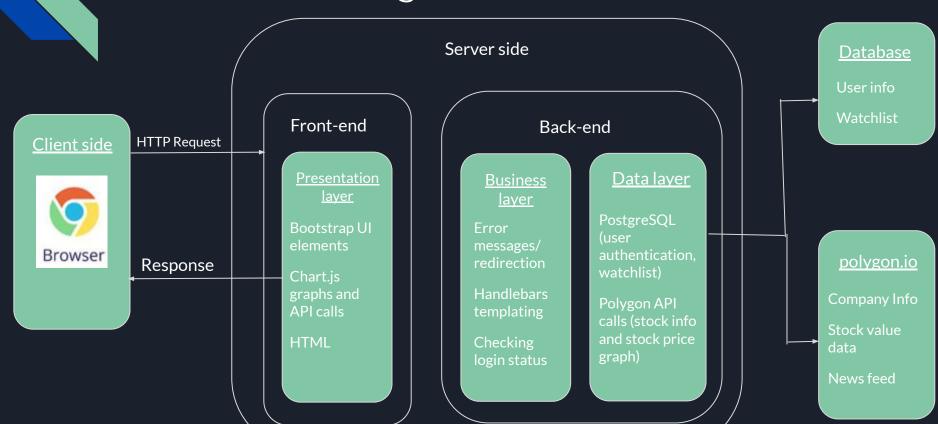
Furthermore, the news feed allows you to stay up-to-date on company news in real-time.

### Tools used

#### With a rating on a scale of 1-5:

- **Project tracker:** Github Projects (3)
- **Version control:** Github/Git (1)
- **Communication:** Discord (5)
- **Database:** PostgreSQL (4)
- **IDE:** VS Code (5)
- **UI libraries**: Handlebars (4), Bootstrap (4), Chart.js (3)
- **Server:** Node.js/Express (4)
- **External API:** Polygon (5)
- Deployed on: Docker (3)/Render (5)
- **Methodology:** Agile (4)

## Architecture Diagram



### Challenges

- 1. API
  - a. 5 calls per minute
    - i. Almost made the switch to Yahoo Finance Library
  - b. Difficulty understanding their documentation
    - i. Didn't understand how to make the calls
  - c. Paywalled for real time data
  - d. Displaying information the right way was difficult
    - i. Chunking for the homepage carousel
- 2. Database
  - a. Difficulties with making the favorite button
- 3. Graphs
  - a. Getting the data from the server to the client when API key has to be hidden
- 4. Code Management
  - a. Git branching, merging headaches
  - All working on the same file (index.js)
  - c. Gave up and copy/pasted code into main branch

## Future Scope/Enhancements

#### Same day data

a. Currently the data is 1 day behind, and because of this, it limits the potential of the website. Has to be implemented before the transaction system..

#### 2. Transaction system

a. Pseudo currency so the user can trade without having to use personal money. Has to be implemented after same day data so the trading can be as accurate as possible.

#### 3. Link to buy certain stock

a. If the user actually wants to invest in the stock and not their pseudo portfolio, then the about page of the stock could have a link to a trading platform, Robinhood or TD Ameritrade, about the stock.

#### 4. Interactive graphs

a. Can alter the dates for the graph to show certain trends within the market.

## Demo Time

# Any Questions?