

# Task

Design and implement a react webpage using the data given for a specific identifier. There are 3 main parts of the data:

1. Market Data
2. Company Info
3. News

Using these 3 parts you are tasked to design and implement a Webpage, correctly visualizing these three data segments.

The following is the breakdown of the data segments:

# Market Data

This is the time Series OHLC (Open, high, low, close) data of the specific Identifier. An identifier can represent any stock.   
The data format is:

{  
 "success": "true",  
 "data": {  
 "2022-12-30": {  
 "last price": 1604,  
 "volume": 8894545421,  
 "bid": 1598.5,  
 "ask": 1606.5,  
 "high": 1621,  
 "open": 1621,  
 "low": 1598.5  
 }  
 }  
}

The data is ordered by the date in this format, you will be supplied with a years worth of market data for a specific stock.

# Company Information

This is the information about the company. It outlines the sectors of the company and the identifiers used.

The data format is

{

"ticker\_bbg": "ABC US Equity",

"company\_name": "Alphabet Stock",

"currency": "USD",

"datetime": 1689833779,

"gics1": "Information Technology",

"gics2": "IT Services",

"gics3": "Software & Services",

"gics4": "IT Consulting & Other Services",

"market\_cap\_usd": 124181755958.04999,

"ticker\_ric": "ABC"

}

* Note: GICS represents the sectors of the stock.

# News

This covers the data about the stock, specifically news about the stock.

Data type : Dict<str, str>[] (An array of dictionaries (maps) The keys would be the same for each entry.)

**There maybe more than 10 news brokers, depending on the instrument.**

The data would look something like:

[

{

"uid": "news\_alert 1",

"bloomberg": "ABC US Equity",

"date": "2023-08-17",

"news\_type": {

"Breaking": 0,

“General”: 0,

},

"region": "United States",

"news\_broker": "Bloomberg News",

"reporter": "Alan Smith",

"news\_content": "ABC Group files for Bankruptcy",

“side” : “Buy”  
 },

…...,

]

# Requirements:

The data for this will be given to you in three separate json files. Assuming that this data would be received using 3 asynchronous api calls,(you would have to use static data, but asynchronously load the three separate components) visualize these three segments of data using 3 different components in the same page.

The Market data must be visualized in a chart displaying candlesticks, where hovering over them, we can see the corresponding OHLC data of that candlestick. The chart should be able to display the “side” of the news on a specific date, if there is more than one news then should show two different signals. The signals (Buy/ Sell) should be distinguishable conveniently. It is up to you to find a suitable way to display the signals.

For the chart, have Toggle buttons that allow the user to select which news\_brokers signal they would like to see on the chart.

For reference you can look at: [IBM 140.66 ▲ +0.01% (tradingview.com)](https://www.tradingview.com/chart/?symbol=IBM)

The news and company info should be visualized in 2 different components, the former being displayed in a Tabular format, preferably using ag grid [Data Grid: AG Grid: High-Performance React Grid, Angular Grid, JavaScript Grid (ag-grid.com)](https://www.ag-grid.com/)

The company info can be displayed however you prefer.

# Marking points:

1. Visual appearance of the data. Visualize the data by keeping in mind that a trader can look at the data conveniently.
2. Coding Practice. Once you submit the code we will go through the code and inspect it for coding practices followed. More marks for better coding practices.
3. Number of requirements satisfied for this.
4. Additional features as you deem necessary.
5. The uploaded repository has a satisfactory READme.md file, detailing key features and outlining any additional features implemented.

# Submission:

Upload your code to a public GitHub repository and send the link of the repository including a screen-recording of the features in the webpage.

Contact:

If you have any questions regarding the task and would like to clarify something, please send an email to : Mohammed Azim ([mohammed.azim@a-s-capital.com)](mailto:mohammed.azim@a-s-capital.com)

# Deadline:

This task is designed to test your thought process and skills in designing and processing data. You have 7 days to complete this task.

Additional Material Links:

[Next.js by Vercel - The React Framework (nextjs.org)](https://nextjs.org/)

[Data Grid: AG Grid: High-Performance React Grid, Angular Grid, JavaScript Grid (ag-grid.com)](https://www.ag-grid.com/)

[tradingview/lightweight-charts: Performant financial charts built with HTML5 canvas (github.com)](https://github.com/tradingview/lightweight-charts)

[React Radio Group component - Material UI (mui.com)](https://mui.com/material-ui/react-radio-button/)

You can choose other frameworks but NextJs and Ag-grid would be preferable.

Good Luck! :)