

# Frontend Team

## Week 7



Group Members:

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# About this week



- Chart improvements
- Language options
- Developments on:
  - Financials, News
  - Markets, Overview
- Business Logic Progress

# Data Visualization

## Progress

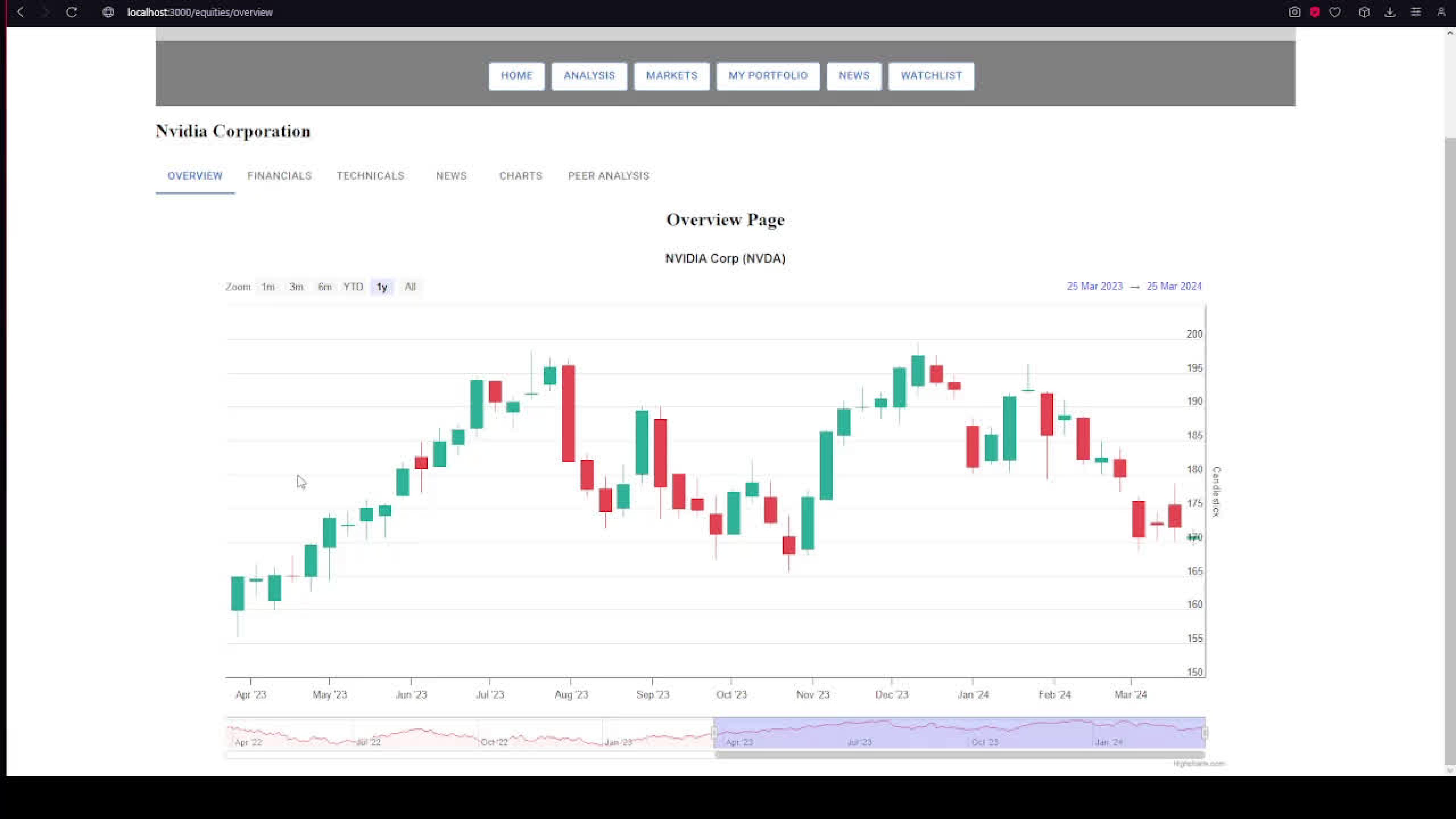
- From now on, Graph Component could be called by two different ways:
    - For Overview Page the Graph can only show the main Stock data
    - For Charts Page the Graph can display all the selected indicators together with the main Stock data
  - Multiselect dropdown menu for the indicators is implemented. User can select 4 different indicators maximum at single time. Limit will be increased until noticeable performance drop.
- 
- ```
<Graph />  
<Graph graphLightMode={graphLightMode}  
selectedIndicatorsList={selectedIndicatorsList}  
viewMode={viewMode} />
```
- Volume, RSI, Balance of Power (BOP) and Momentum (MOM) are available at the moment.

# Progress

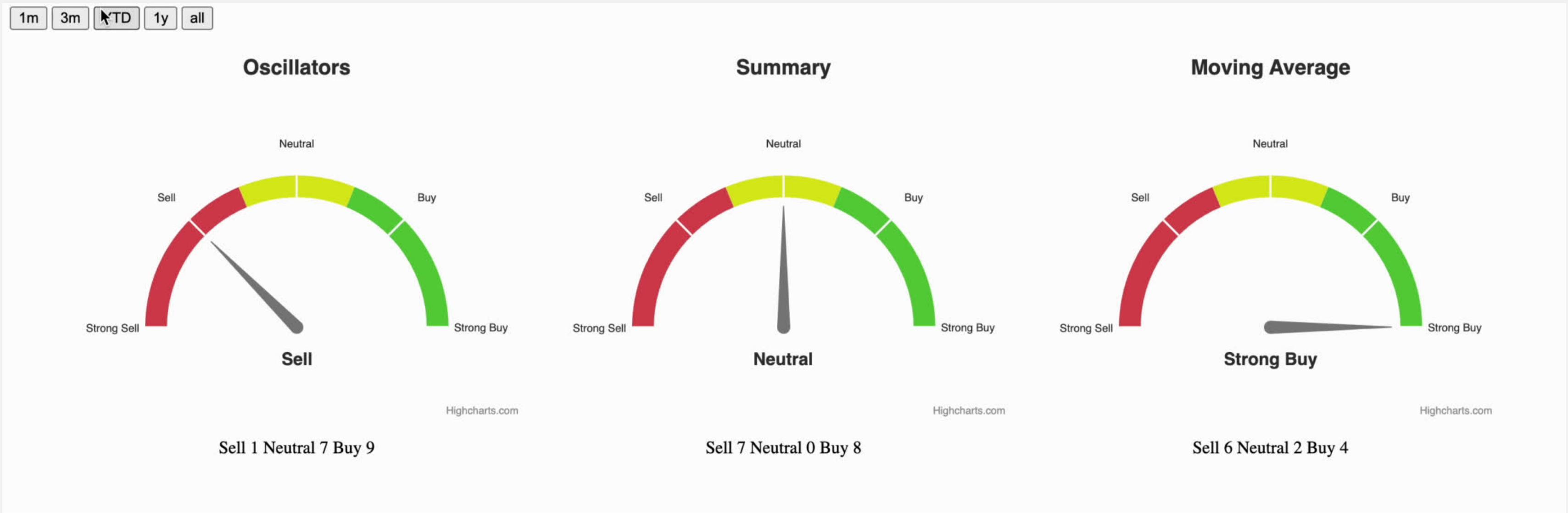
- The style of tooltips that appear when hovered on the graph is improved.
- Some of the loops and repetitive code are reduced and now the code will handle new indicators easier.
- On dropdown menu, users will see more understandable names for indicators but on the background Graph component will use technical names. Ex: RSI => Relative Strength Index

# Roadmap

- Was able to use Backend Team's API and receive responses however integrating the API to the Graph is the task.
- Start adding new indicators on the main graph. Ex: MA, with day options?
- Check how to implement the toolbar.



# Guage Charts for Technicals Page



# API & Formula

## Oscillator & MA Data

```
{  
  time: "Daily",  
  "oscillators": {  
    "buy": 5,  
    "sell": 3,  
    "neutral": 2  
  },  
  "movingAverages": {  
    "buy": 6,  
    "sell": 2,  
    "neutral": 2  
  }  
}
```

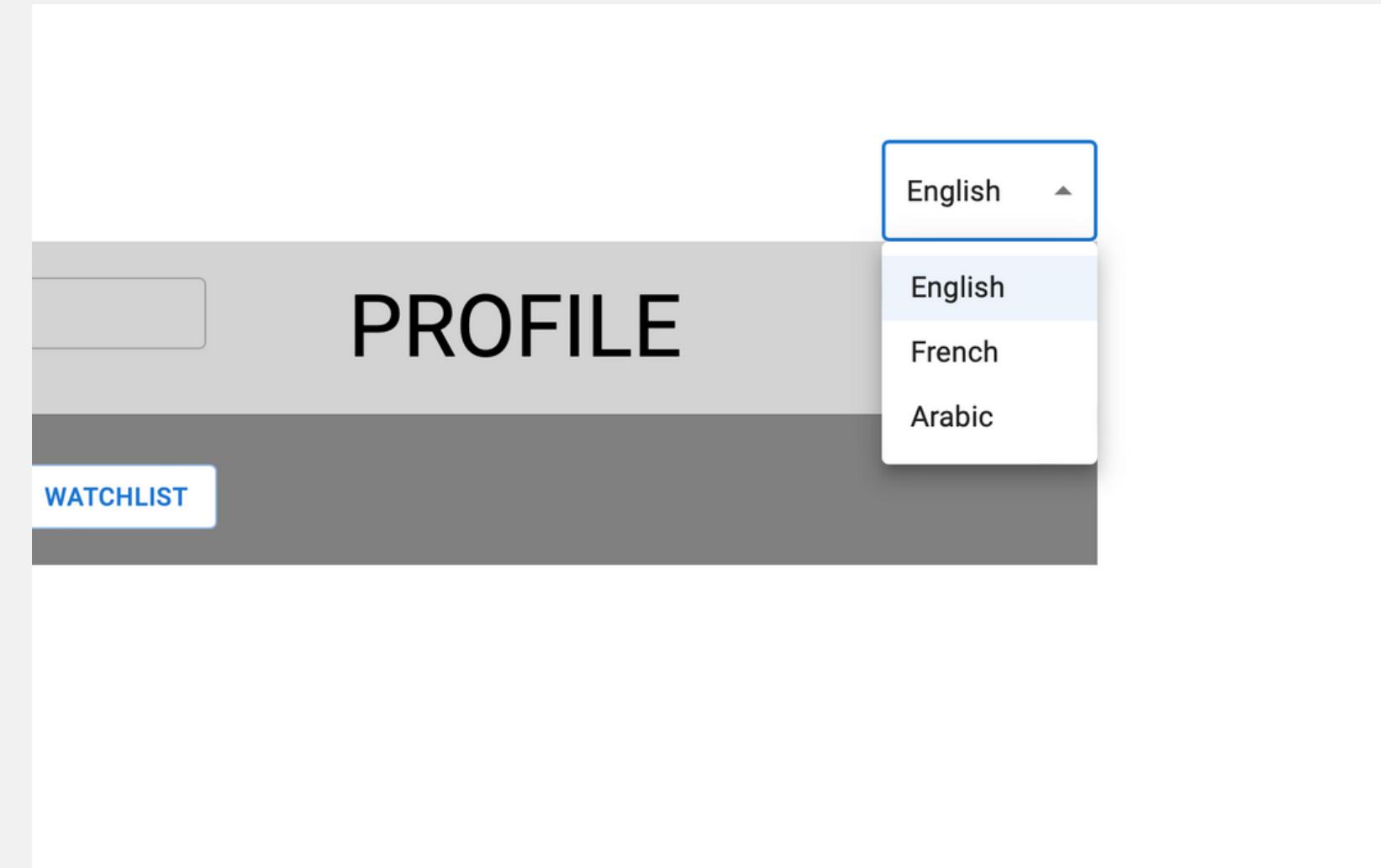
## Decision Formula

Strong Buy:	$8 \leqslant \text{Buy} - \text{Sell} < 50$
Buy:	$2 < \text{Buy} - \text{Sell} \leqslant 8$
Neutral:	$-2 \leqslant \text{Buy} - \text{Sell} \leqslant 2$
Sell:	$-8 < \text{Buy} - \text{Sell} \leqslant -2$
Strong Sell:	$-50 < \text{Buy} - \text{Sell} \leqslant -8$

## Summary Chart Data

Summary Buy = Oscillators Buy + MA Buy  
Summary Neutral = Oscillators Neutral + MA Neutral  
Summary Sell = Oscillators Sell + MA Sell





fr.json

src > translations > fr.json > ...

💡 Click here to ask Blackbox to help you code faster

```
1 {  
2     "greeting": "Bonjour, Monde !",  
3     "buttonLabel": "Cliquez moi",  
4     "profile.label": "Profil",  
5     "homepage.title": "Page d'accueil",  
6     "news.page.title": "Actualités",  
7     "watchlist.page.title": "Liste de surveillance",  
8     "portfolio.page.title": "Portefeuille",  
9     "analysis.page.title": "Analyse",  
10    "markets.page.title": "Marchés",  
11    "logo.label": "LOGO ICI"  
12 }  
13 |
```

# Page d'accueil

French ▾

LOGO ICI

Profil

PAGE D'ACCUEIL ANALYSE MARCHÉS PORTEFEUILLE ACTUALITÉS  
LISTE DE SURVEILLANCE

Page d'accueil

# Home

English ▾

LOGO HERE

Profile

HOME ANALYSIS MARKETS PORTFOLIO NEWS WATCHLIST

Home

```
        },
        {
            path: "/equities/peer-analysis",
            element: <EquitiesPeerAnalysisPage />,
        },
        [
            {
                path: "/equities/charts",
                element: <EquitiesChartsPage />,
            },
        ],
    },
];
}

const router = createBrowserRouter(routes);

return (
    <IntlProvider locale={locale} messages={messages}>
        <Provider store={store}>
            <RouterProvider router={router} />
        </Provider>
    </IntlProvider>
);
}
```

```
const HomePage = () => {
    return (
        <Box sx={{ textAlign: "center" }}>
            <h2>
                <FormattedMessage id="homepage.title" />
            </h2>
        </Box>
    );
};
```

```
import LocaleContext from '@/LocaleContext';

const LocaleProvider = ({ children }) => {
  const [locale, setLocale] = useState('en');

  return (
    <LocaleContext.Provider value={{ locale, setLocale }}>
      {children}
    </LocaleContext.Provider>
  );
};

const getMessages = (locale) => {
  switch (locale) {
    case 'fr':
      return import('./translations/fr.json');
    case 'en':
    default:
      return import('./translations/en.json');
  }
};
```

```
130
131 ReactDOM.createRoot(document.getElementById("root")).render(
132   <React.StrictMode>
133     <LocaleProvider>
134       <App />
135     </LocaleProvider>
136   </React.StrictMode>
137 );
```

# Financials

---

## Dividends Page

Parameter	Value
Dividend Payout Ratio	0.50
Dividend per Share (DPS)	\$1.20
Dividend Declaration Date	2023-01-15
Ex-Dividend Date	2023-02-01
Last Split Factor	2:1
Forward Annual Dividend Rate	\$2.40
Forward Annual Dividend Yield	4.5%

# Statements Page

## Income Statements

Parameter	Value
Revenue	\$1,000,000
Cost of Goods Sold	\$400,000
Gross Profit	\$600,000
Operating Expenses	\$200,000
Research & Development	\$50,000
Marketing & Sales	\$100,000
General & Administrative	\$50,000
Operating Income	\$400,000

## Balance Sheet

Parameter	Value
Assets	\$2,000,000
Current Assets	\$1,000,000
Cash & Equivalents	\$500,000
Accounts Receivable	\$200,000
Inventory	\$300,000
Long-term Assets	\$1,000,000
Property, Plant & Equipment	\$800,000
Intangible Assets	\$200,000

```
/* Balance Sheet Table */
<Box>
  <Typography variant="h4">Balance Sheet</Typography>
  <TableContainer component={Paper}>
    <Table>
      <TableHead>
        <TableRow>
          <TableCell>Parameter</TableCell>
          <TableCell>Value</TableCell>
        </TableRow>
      </TableHead>
      <TableBody>
        {balanceSheetData.map((row) => (
          <TableRow key={row.name}>
            <TableCell>{row.name}</TableCell>
            <TableCell>{row.value}</TableCell>
          </TableRow>
        ))}
      </TableBody>
    </Table>
  </TableContainer>
</Box>
```

localhost:3000/equities/financials/statements

Current Liabilities \$500,000  
Accounts Payable \$200,000  
Short-term Debt \$300,000  
Long-term Liabilities \$500,000  
Equity \$1,000,000

## Cash Flow

Parameter	Value
Operating Activities	\$400,000
Net Income	\$250,000
Depreciation & Amortization	\$50,000
Changes in Working Capital	\$100,000
Investing Activities	-\$200,000
Total Cash Flow	\$150,000

```
<Box mt={2}>
  <Typography variant="h4">Cash Flow</Typography>
  <TableContainer component={Paper}>
    <Table>
      <TableHead>
        <TableRow>
          <TableCell>Parameter</TableCell>
          <TableCell>Value</TableCell>
        </TableRow>
      </TableHead>
      <TableBody>
        {cashFlowData.map((row) => (
          <TableRow key={row.name}>
            <TableCell>{row.name}</TableCell>
            <TableCell>{row.value}</TableCell>
          </TableRow>
        ))}
      </TableBody>
    </Table>
  </TableContainer>
</Box>
</Box>
</TabsLayout>
```

# News Page with API

It was created by dynamically pulling the page listing new news about companies directly via the "news API" without communicating with the backend.



Pagination parts were done. It pulls a certain number of data via API in each query.

localhost:3000/news



HOME

ANALYSIS

MARKETS

MY PORTFOLIO

NEWS

WATCHLIST

STATISTICS

## Companies News

[Nvidia](#)[Apple Inc.](#)[Amazon.com Inc.](#)[Tesla, Inc.](#)[Microsoft Corporation](#)[Alphabet Inc. \(Google\)](#)[Facebook Inc.](#)[Alibaba Group Holding Limited](#)[Johnson & Johnson](#)[Visa Inc.](#)

# Improvements on Markets Page

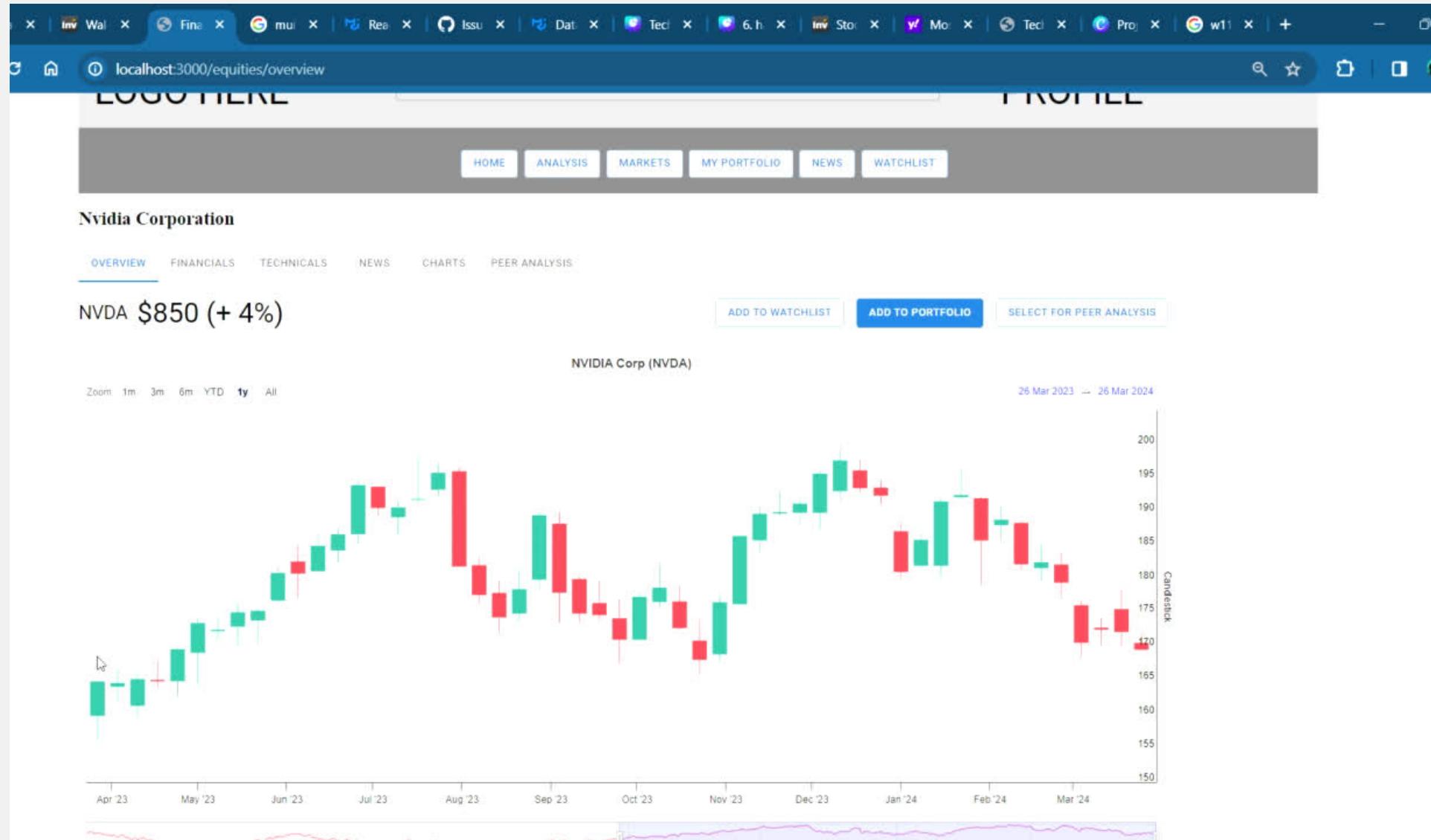
- Dropdown menu for country and indice selection
- Add to watchlist, portfolio buttons

```
<Select
  value={selectedCountry}
  onChange={handleChange}
  sx={{ float: 'up', marginTop: '1rem', marginBottom: '1rem', minWidth: 120 }}
  displayEmpty
  inputProps={{ 'aria-label': 'Without label' }}>
  <MenuItem value="">Select a Country</MenuItem>
  <MenuItem value="USA">United States</MenuItem>
  <MenuItem value="CAN">Canada</MenuItem>
  <MenuItem value="UK">United Kingdom</MenuItem>
  <MenuItem value="FRA">France</MenuItem>
  <MenuItem value="GER">Germany</MenuItem>
  {/* Add more countries as needed */}
</Select>
```

<input type="checkbox"/>	Symbol	Name	Last	Change	Change (%)	Volume
<input type="checkbox"/>	NVDA	<a href="#">Nvidia</a>	100	-20	-0.71%	15600
<input type="checkbox"/>	AAPL	<a href="#">Apple Inc.</a>	150	5	+0.03%	25000
<input type="checkbox"/>	AMZN	<a href="#">Amazon.com Inc.</a>	3200	-15	-0.47%	18000
<input type="checkbox"/>	TSLA	<a href="#">Tesla, Inc.</a>	800	30	+0.15%	35000
<input type="checkbox"/>	MSFT	<a href="#">Microsoft Corporation</a>	250	10	+0.04%	20000
<input type="checkbox"/>	GOOGLE	<a href="#">Alphabet Inc. (Google)</a>	2000	-25	-1.25%	22000
<input type="checkbox"/>	META	<a href="#">Facebook, Inc.</a>	300	-7	-0.36%	18000
<input type="checkbox"/>	BABA	<a href="#">Alibaba Group Holding Limited</a>	200	8	+0.60%	28000
<input type="checkbox"/>	JNJ	<a href="#">Johnson &amp; Johnson</a>	170	-3	-0.02%	15000
<input type="checkbox"/>	...	...	...	...	...	...

[ADD TO WATCHLIST](#) [ADD TO PORTFOLIO](#)

# Overview page structured



- Brief tables for moving averages and financials
- Buttons to add to watchlist, portfolio and peer analysis

# Business Logic Progress

- Last week we were able to functionalize the endpoints that were ready but we could not be able to test it.
- This week we were able to test 7 different endpoints that were available and useful in swagger doc.
- Axios library is used to make http requests. Response is returned from the action then the state is mutated.

# Testing Backend Endpoints

- To be able to test the backend routes we ran the backend app in local.
- I created a test page in frontend and call the action. Without a problem I was able to fetch data from the backend and render it on screen.

# Testing Screen Recording

