

# Group Project Proposal

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## **Project Title:**

- Finance Data App

## **Team Members:**

- Andrew, Jasmine, Michael

## **Project Description:**

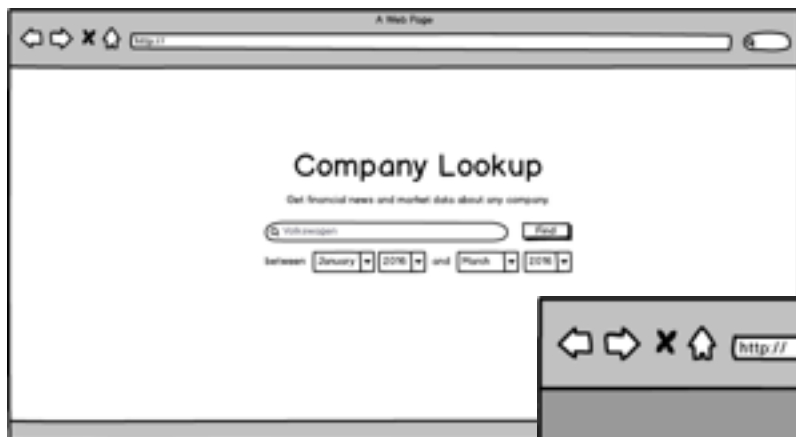
- Display side-by-side stock performance and news articles about any company within a set timeframe

## **APIs to be used:**

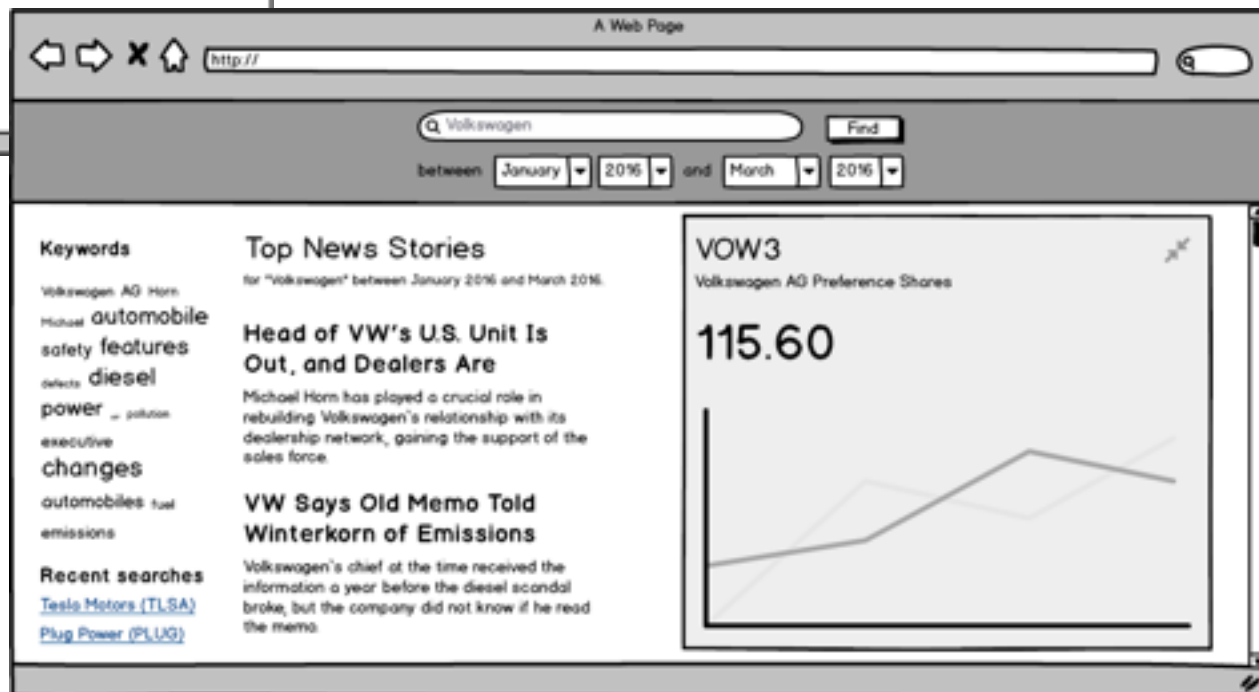
- NYT Article Search API  
[http://developer.nytimes.com/docs/read/article\\_search\\_api\\_v2](http://developer.nytimes.com/docs/read/article_search_api_v2)
- Barchart OnDemand Financial Data API  
<http://www.barchartondemand.com/api.php>
- Stock Symbol Lookup API  
<http://d.yimg.com/aq/autoc?query=&region=US&lang=en-US>

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## Initial Mockup:



1. Landing page with search bar
2. Search bar moves to top
3. Display top news stories
4. Display stock data
5. Show keywords and recent searches



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## Tasks:

- Landing page with search bar (HTML/CSS/JS)
- Top news stories (API)
- Keywords sidebar (API)
- Stock data and charts (API)
- Recent/favorite searches (Firebase)

## Role Breakdown:

- TBD

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## Tasks Breakdown:

### 1. Get user inputs:

- String ("Company Name") **\*required**
- Start date **\*optional**
- End date **\*optional**

### 2. Look up stock symbol:

- <http://d.yimg.com/aq/autoc?query=ford&region=US&lang=en-US>
- If returns only 1 result, get name and stock symbol to search
- If returns more than 1 result, list out top 5 results and let user pick 1; get name and symbol to search

### 3. Search financial data:

- <http://www.barchartondemand.com/api/getHistory>
- <http://marketdata.websol.barchart.com/getHistory.json?key=9701a0bf851cecad546f285b4bd6b584&symbol=IBM&type=daily&startDate=20140101000000&endDate=20150101000000>
- <http://barchartondemand.com/api/getQuote>
- <http://marketdata.websol.barchart.com/getQuote.json?key=9701a0bf851cecad546f285b4bd6b584&symbols=IBM>
- If no dates, use getQuote to get name, current price, % change, etc.
- If have dates, determine type (daily, weekly, monthly, etc.) based on difference of dates; use getHistory to get price values at interval of type, and calculate % change during time period
- Plot out values based on interval of type and display in a chart
- Reference for chart: <https://gionkunz.github.io/chartist-js/examples.html>

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## Tasks Breakdown (con't):

### 4. Search NYT Article:

- <http://developer.nytimes.com/io-docs>
- `http://api.nytimes.com/svc/search/v2/articlesearch.json?q=volkswagen&begin_date=20140101&end_date=20150101&api-key=sample-key`
- Returns max limit of 10 results
- Get headline, byline, snippet, keywords, etc.

### 5. Display recent searches:

- Use Firebase to store recent searches by company name and stock symbol
- Rank by most searched

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A Web Page

http://

## Company Lookup

Get financial news and market data about any company.

between   and

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