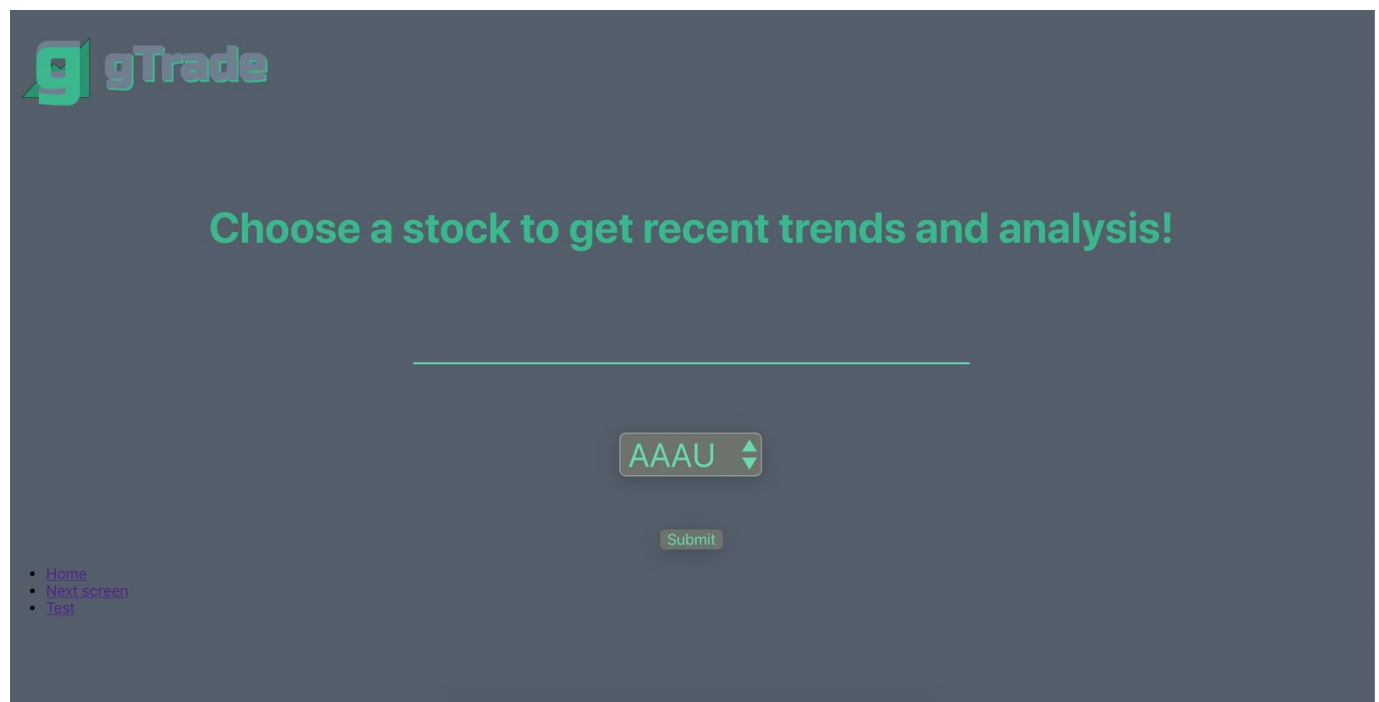# gTrade User Manual

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Abstract: Our product, gTrade, is a stock market trend analyzer, where the user selects a stock they want to research before they buy, that is, research the general positive or negative sentiment on said stock. gTrade will give that information to the user

When the user opens up the gTrade web app, they are greeted with the menu below:

Here the user can use find a stock using the search bar or the drop down menu. As the user types in a stock that they want, the drop down menu will slowly change and populate itself with values related to what the user typed in. The search bar returns ticker symbols in the dropdown menu given a ticker symbol or the actual stock name in the search bar.

Here is an example:

Let's say the user wanted to find the status of the stock Facebook (FB). They could type in "fb" or "Facebook" to get to that stock.

Choose a stock to get recent trends and analysis!

fb

FBGX

Submit

Choose a stock to get recent trends and analysis!

✓ FBGX
FBND
FBT
BELFB
CFB
CFBI
CFBK
EFBI
FB
FBIO

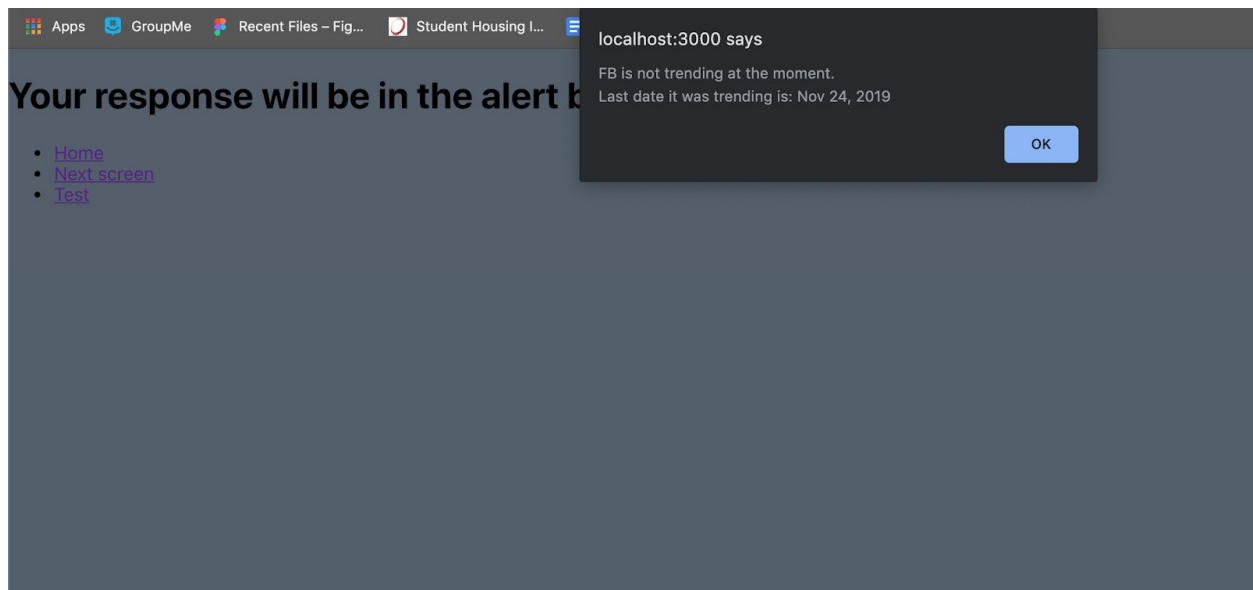## Choose a stock to get recent trends and analysis!
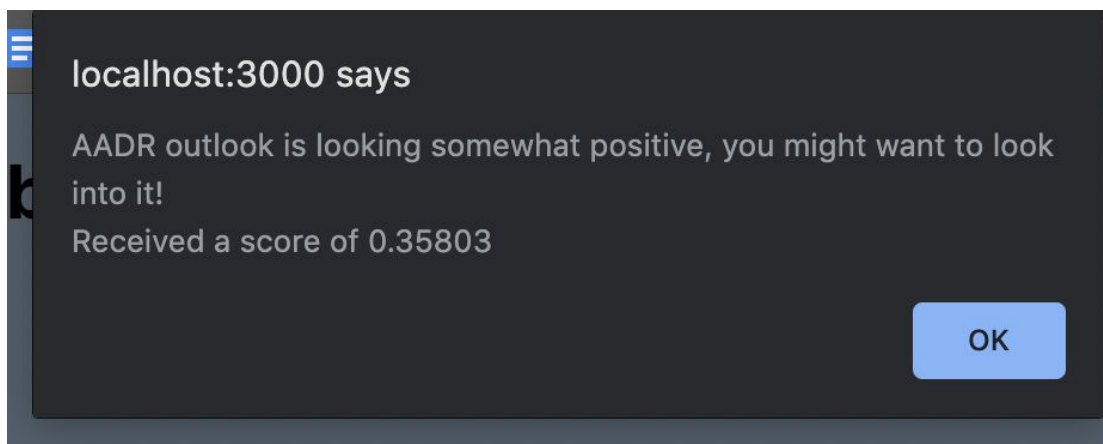
face

FB

Submit

Then when the user clicks submit they are brought to the Data screen where the program will call our gTrade API, where that API calls the Google Trends API to see if the stock is trending, then if it is, it will get all the recent news using a News API. Then the news body of each article will be placed into IBM's natural language processing (NLP) API to get the sentiment of each article. Each sentiment is averaged and then is presented to the user as shown below.

Since Facebook is not trending currently (12/1/2019), the alert box indicates as such. But it also says that the last date it was trending.

Let's look at an example where a stock was trending:
AdvisorShares (AADR) is a company that is currently trending (12/1/2019) and here is the message our app gives on it.

localhost:3000 says

AADR outlook is looking somewhat positive, you might want to look
into it!
Received a score of 0.35803

OK

As you can see, since the stock is trending, it presents a semi-custom message
about that stock based on the score given (0.35803). That score is an accumulation of
many different news articles that the natural language processor has analyzed. The
larger the number, the better the outlook. The smaller the number, the worse the
outlook. Since this one is close to .5, it received a positive message.

Your response will be in the alert box above!

- Home
- Next screen
- Test

The links below the alert box allow you to go back to the homepage, go to the
data presentation screen (current page), and run the test suite.

Test Suite

When you click on the *Test* link you are greeted with the screen below.

Check the console for test results

- [Home](#)
- [Next screen](#)
- [Test](#)

When you go to the developer tools to on your respective browser (Chrome preferable), you will see a list of tests that were made to the gTrade API to verify the connection with various url paths. Here is what the output should look like below.

```
TEST: React App has good connection to API — PASSED                              Test.js:32
TEST: API /trends/apple returns data — PASSED                                    Test.js:64
TEST: API /links/apple returns data — PASSED                                     Test.js:99
TEST: API /trend returns data — PASSED                                           Test.js:49
TEST: API /complete/trends/apple returns data — PASSED                           Test.js:113
⊗ Failed to load resource: the server responded with a status of 503 (Service Unavailable)  apple:1
TEST: API /sentiment/apple returns data — PASSED                                 Test.js:88
>
```

The *Failed to load resource* line is a default message that doesn't affect the functionality of the web app.

Conclusion

If you come across any trouble with our app that we may not have covered or if you have suggestions for features to add to it, you can contact us at support@gtrade.com. Thank you for using our product!