**Trendr - Product Backlog**

**Problem Statement:**

Trying to predict the stock market has been attempted many times to varying degrees of success. One way of predicting stock market trends is to predict the general public’s opinion on the future of a particular stock. This has become easier with the advent of social media. Trendr will attempt to measure the level of attention stocks are getting on platforms such as Facebook, Twitter, and Reddit. Trendr will then interpret the data gathered and create a feed for the user, alerting them if one of their “watched” stocks is currently trending. In addition, the homepage of Trendr will provide users with a basic feed of the most volatile stocks of the day.

**Background Information:**

**Targeted Users:**

This product is for individuals who are interested in the stock market and are looking for a way to stay informed about the attention that stocks are receiving on social media. It is particularly useful for those who want to use social media sentiment as a way to make more informed investment decisions.

**Similar Products:**

Currently, there are many platforms that allow users to look at stock data as well as a chart of the stock’s price over time such as Yahoo Finance. Additionally, there is a tool called SocialSentiment.io that plots the public opinion of a given stock over time based on posts on Reddit and Twitter.

**Limitations of Existing Products:**

The limitation of a product such as Yahoo Finance is that it does not refer to social media posts to make a trend analysis. Instead it looks solely at patterns in the stock price chart. The main limitations of a product such as SocialSentiment.io include that it only checks posts from Reddit and Twitter (omitting other potentially useful social networks) and there is a high price tag associated with the tool ($80/month) with an extremely bare-bones free version.

**Backlog:**

**\*Trendr score refers to a stock’s overall positivity and attention at the current time.**

**Functional**

1. As a user, I would like to be able to register specific stocks for tracking.
2. As a user, I would like my chosen stocks to be displayed on the homepage of the site.
3. As a user, I would like to be able to create an account on Trendr with email and password.
4. As a user, I would like to be able to reset my password with Email
5. As a user, I would like to be able to reset my password with SMS
6. As a user, I would like to be able to secure my account with two factor email authorization.
7. As a user, I would like to be able to secure my account with two factor sms authorization.
8. As a user, I would like to edit which stocks I currently am tracking.
9. As a user, I would like to reorganize my front-page by determining a priority order of tracked stocks.
10. As a user, I would like to be able to switch between light and dark mode.
11. As a user, I would like to be able to read a quick summary of how a stock’s Trendr score is determined.
12. As a user, I would like to view the Trendr scores of the stocks I’ve set to be tracked.
13. As a user, I would like to view stocks based on industry (tech, food, etc)
14. As a user, I would like to view the change in a stock’s Trendr score over a specified amount of time.
15. As a user, I would like to view a stock’s individual attention score.
16. As a user, I would like to view the change in stock’s individual attention score over a specified amount of time.
17. As a user, I would like to view a stock’s individual positivity score.
18. As a user, I would like to view the change in stock’s positivity score over a specified amount of time.
19. As a user, I would like to be notified about big changes in Trendr score of my stocks through email.
20. As a user, I would like to be notified about big changes in Trendr score of my stocks through SMS.
21. As a user, I would like to view the highest increases in Trendr scores over all stocks tracked by Trendr.
22. As a user, I would like to view the highest decreases in Trendr scores over all stocks tracked by Trendr.
23. As a user, I would like to view the highest increases in attention score.
24. As a user, I would like to view the highest decreases in attention score.
25. As a user, I would like to track the top 10 crypto investments Trendr score
26. As a user, I would like to view a graph of the Trendr score for each of the top 10 cryptocurrencies
27. As a user, I would like to view graphs generated by Trendr of a specified stock’s change in Trendr score over time.
28. As a user, I would like to be able to zoom into a graph to see smaller timespans of a stock’s Trendr score
29. As a user, I would like to be able to zoom out of a graph to see larger timespans of a stocks Trendr score
30. As a user, I would like to enable and disable SMS and Email notifications for specified tracked stocks.
31. As a user, I would like to be able to export the information from my tracked stocks.
32. As a user, I would like to be able to share a URL to a specified stock’s Trendr page.
33. As a user, I would like to view a stock’s individual Facebook Trendr score.
34. As a user, I would like to view a stock’s individual Twitter Trendr score.
35. As a user, I would like to view a stock’s individual Reddit Trendr score.
36. As a user, I would like to view a sample of a popular post for a given stock (and whether it was classified as negative or positive).
37. As a user, I would like to be able to click the popular post and be redirected to the source of the post (Twitter, Facebook, or Reddit).
38. As a user, I would like to view percentage change in a stock’s Trendr score.
39. As a user, I would like to upload a csv of my portfolio’s stock positions (sourced from a brokerage such as Schwab, Fidelity, etc) to automatically populate my watchlist.
40. As a user, I would like to be able to remove a stock from my watchlist.
41. As a user, I would like to see the current price of a given stock.
42. As a user, I would like to see the day gain/loss of a given stock.
43. As a user, I would like to see the day’s price chart for a given stock.
44. As a user, I would like to see the current price of all of the stocks in my watchlist displayed on the dashboard.
45. As a user, I would like to see the day gain/loss of all of the stocks in my watchlist displayed on the dashboard.
46. As a user, I would like to be able to add friends
47. As a user, I would like to be able to remove friends
48. As a user, I would like to share my portfolio of tracked stocks with a generated URL
49. As a user, I would like to be able to see the stocks my friends are interested in
50. As a user, I would like to be able to add a profile picture
51. As a user, I would like to add a bio to my profile so others can learn more about me

**Non-Functional**

**Response Time**

Updates from the server should be processed in real time without having to refresh the app. Under normal internet conditions, responses from the server with graphing information, Trendr Scores, and stock/crypto updates should take less than 500 ms.

**Scalability**

Server loads should be managed quickly by a server that can scale up in the future. Initially, our web app should be able to support 100 users simultaneously with no visible interference in performance.

**User Experience**

The User Interface should be easy and simple to use. The interface will use basic UX design principles. The app will be consistent and easy to learn, as well as be accessible for all types of users, stock experts and beginners.

**Security**

Sensitive user data including password and certain portfolio information should be protected from 3rd party access.

**Correctness of Trendr Score**

It is important that the calculated Trendr score accurately represents the