Team 39 - Product Backlog

Mohana Barve, Tanay Gondil, Arjav Seshachalam, Elliot Smith, Jason Yang

Problem Statement

Retail investors often need help to share ideas and effectively diversify their portfolios. Our solution aims to simplify this by showcasing the true depth of diversification across various layers, such as regions and industries. Users will gain insights into the performance of specific regions or industries within their portfolio, identifying strengths and weaknesses. This comprehensive view empowers investors to make more informed decisions and optimize their strategies accordingly while having the ability to share their ideas with others.

Background Info:

Audience

Retail investors often lack knowledge about the true diversification of their portfolios and may struggle to find a community to discuss their ideas. Our product not only simplifies the process of sharing portfolio holdings with friends and family but also provides users with valuable insights into the composition of their portfolios. By enhancing transparency and understanding, our solution empowers our targeted users - retail investors - to make more informed decisions about their investments.

Similar Platforms

So there are a few platforms such as StockTwits, which is like Twitter but geared towards the stock market. Another platform is Commonstock which is a platform where users can share and gain insights about investments, but outside of those, there aren't very many. There aren't any free tools available to analyze existing portfolios and give insights.

Limitations

The biggest limitation of the platforms that already exist, like StockTwits, they all have an overwhelming amount of information and conflicting opinions on every one of their stocks, which makes it challenging for users to understand what is happening and make decisions. Because of this, users may experience decision paralysis, leading to bad investment choices and missed opportunities.

Although they all have a form of discussion, they lack the features to analyze the user's individual needs - in our case we will also give personalized diversification insights to the user based on their individual portfolio. A lot of other sites only have simple follow strategy if you would like to follow someone but we help offer various levels of trust.

Functional Requirements:

1. As a user, I would like to be able to create an account.
2. As a user, I would like to be able to login and manage my account.
3. As a user, I would like to reset my password or access my username via email if I forget it.

4. As a user, I would like to message other users if I want to talk to them privately.
5. As a user, I would like to make, edit, view, or delete posts to share any news that interests me.
6. As a user, I would like to see my portfolio in a visually pleasing manner with charts and graphs so that I can analyze my portfolio better.
7. As a user, I would like to "friend" others to form connections with them.
8. As a user, I would like to see my friends' portfolio information so I can gain insight into what to invest in.
9. As a user, I would like to adjust what other users can see about my portfolio so that I can protect specific information.
10. As a user, I would like to report posts and users that are harmful to the platform.
11. As a user, I would like to see recommended users to friends based on prior connections and interests.
12. As a user, I would like to see a notification of friend requests through email.
13. As a user, I would like to see a notification of the daily summary to be informed of my investments.
14. As a user, I would like to see a notification of messages sent to me so I can respond.
15. As a user, I would like to see profit/loss of my investments by year/month/day to see my progress over time.
16. As a user, I would like to see a homepage for when I use the website.
17. As a user, I would like to like and comment on posts to share my insights.
18. As a user, I would like to share posts I find interesting on other social media.
19. As a user, I would like to search company stocks by their Tickers (for example, Microsoft is denoted as MSFT).
20. As a user, I would like to see the financial data on the company's stock.
21. As a user, I would like to create a watchlist of stocks I am interested in.
22. As a user, I would like to have the ability to limit who can view my watchlist based on friend trust level.
23. As a user, I would like to be notified if a friend creates or shares a watchlist.
24. As a user, I would like to set my friends to different levels of trust so that they can see varying levels of information about my portfolio.
25. As a user, I would like to create group chats to form groups that share a common interest.
26. As a user, I would like to be given general diversification insights based on my portfolio.
27. As a user, I would like to create or edit my profile page so others can know more about me.
28. As a user, I would like to set/adjust my profile picture so others can identify who I am easily.
29. As a user, I would like to view other's profile pages if they interest me.
30. As a user, I would like to view someone else's post history to see what they posted.
31. As a user, I would like to share posts others make with my friends (message within the website).
32. As a user, I would like to view my daily progress on a calendar so I can see my earnings (History of PnL).

33. As a user, I would like to change the email, username, or password of my account once I'm logged in to keep my account safe.
34. As a user, I would like to delete my account along with all my stored information to prevent my information from being accessed if I don't want to use the social media anymore.
35. As a user, I would like to start polls to see what others think.
36. As a user, I would like to see the results of the poll once it ends via a notification to my email.
37. As a user, I would like to change what notifications I receive in my email to reduce the clutter.
38. As a user, for any stock of interest, I would like to have the ability to either predict bullish (the stock will go up) or bearish (the stock will go down) for the day.
39. As a user, I would like to see my history of predictions and the accuracy of my predictions.
40. As a user, I would like to compare the accuracy of predictions between my friends and me every week.
41. As a user, I would like to see a performance of my watchlists for comparison every week.
42. As a user, I would like to see the history of polls I've voted on.
43. As a user, I would like to have a tier system for different friend levels where the tiers will be set so that friends can see varying levels of my portfolio information
44. As a user, I would like to have an easier way to move my friends within different tiers.
45. As a user, I would like to have a page where I can view a list of all the friends for each tier.
46. If time permits, as a user, I would like to be able to sort posts I make, polls I participate in, and my friends by newest to oldest and vice versa.

Non-Functional Requirements:

Architecture and Performance

The website's frontend will be developed using React JS and the backend will be developed using Node JS. We will be utilizing MongoDB as our main database to store relevant user information. Using the same language for the front and back end will make it easier for us to understand and keep updated on the progress. Ideally, the system should respond to any user action under 200 ms to ensure a smooth user experience. The platform should also be able to handle at least 1000 users without significant performance degradation.

Security

Since our social media will contain users' sensitive information such as user account information and brokerage information, security will be crucial. We plan on storing this information on MongoDB which has security features in place. As a feature of the platform, data stored on MongoDB Atlas are encrypted automatically on the cloud level. As an additional measure of security, when users create their account, they will have to verify their account via email.

Usability

The website will showcase a streamlined UI/UX design, guaranteeing seamless functionality. Users will experience smooth transitions between webpages, facilitating easy access to brokerage accounts, social connections, and post sharing on a unified platform. Intuitive navigation ensures users can effortlessly engage with these diverse features without any confusion.