

Team 8 Product Backlog



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Problem Statement

Personal finance tools are very segmented and can be difficult to navigate. We want to create an easy-to-use tool which allows the user to track various aspects of personal finance. This will be different from existing or similar services due to its navigable UI as well as its combination of existing services into one application. It will also attempt to further the public's financial literacy through the use of pictorial representations and other devices to help those who may not understand financial terms used in other, similar products.

Background Information

Audience

Our audience is a young adult demographic who is interested in making better informed investment decisions. Many young adults are starting to do more research before making decisions about how to invest their money. We want to create a platform that caters to those people and provides them with new insights that they wouldn't find from their usual sources.

Similar Platforms

Many financial tools such as Mint and Robinhood are very segmented and sometimes difficult for a novice user to navigate. Our app will be a combination of elements from these platforms and also be much easier to use in order to fix the issues that some of these platforms have of being difficult to understand for beginner users.

Limitations

Limitations in this software may be related to direct integration with bank accounts or investing tools. Since we have not built up credibility, our application will be limited in these features due to our initial lack of user base.

Requirements Backlog

Functional

1. As a user, I would like to be able to register for an account.
2. As a user, I would like to be able to login to my account.
3. As a user, I would like to be able to reset my password if I forget it.
4. As a user, I would like to be able to search for a stock
5. As a user, I would like to be able to view information about a stock
6. As a user, I would like to be able to get personalized financial budgeting information
7. As a user, I would like to be able to save the stocks I'd like to watch so that I can quickly access the stocks that I have interest in.
8. As a user, I would like to be able to have a dashboard of all of my personal finances.
9. As a user, I would like to be able to share stocks with another user.
10. As a user, I would like a graphical representation of stock prices and how they are changing over time.
11. As a user, I would like a list of the top 5-10 stocks that increased most in value on a day-to-day basis
12. As a user, I would like to be able to simulate stock investments so I can see how much net gain or loss I would incur before investing in the actual market
13. As a user, I would like to be able to view personalized advice on how to manage my money so that I can make informed decisions.
14. As a user, I would like to be able to change the time frame on stocks I'm viewing
15. As a user, I would like to be able to compare one stocks data to another's
16. As a user, I would like to be able to view a stock's volume
17. As a user, I would like to be able to view a stock's volatility
18. As a user, I would like to be able to view a stock's trend/range
19. As a user, I would like to be able to view breakout boundaries on the stock's graph
20. As a user, I would like to be able to create a monthly budget
21. As a user, I would like to be able to add income to my finances so that I can manage my budget effectively.
22. As a user, I would like to be able to add expenses to my finances so that I can manage my budget effectively.
23. As a user, I would like to be able to view the website on my phone and have it format correctly so that I can view my information from multiple devices
24. As a user, I would like to be able to view predictions of a stock's future price so that I can better make buying and selling decisions
25. As a user, I would like to receive recommendations on what stocks to buy and sell
26. As a user, I would like to be able to be educated on how to create a budget so that I can make more responsible decisions in my daily life

27. As a user, I would like to keep track of my actual spending as compared to my projected budget plan
28. As a user, I would like a monthly analysis of where I am spending the most money (food, transportation, rent, etc.)
29. As a user, I would like my password to be encrypted so that any chance of my information being compromised is minimized
30. As a user, I would like to be able to share my budget plan with other users
31. As a user, I would like to view commonly used budgets from other users
32. As a user, I would like the application to have an easily navigatable UI
33. As a user, I would like the application to be aesthetically pleasing
34. As a user, I would like to receive email or text notifications when the stocks I am following increase or decrease in price beyond a certain threshold
35. As a user, I would like to be able to add a profile picture
36. As a user, I would like to be able to edit my personal information
37. As a user, I would like to be able to change my associated email address
38. As a user, I would like to be able to share my stocks to social media outlets
39. As a user, I would like to be able to sign in with my social media accounts so that I can have other ways of creating an account
40. As a user, I would like to view my overall financial summary so that I can track my budgeting more closely
41. As a user, I would like to change the timeframe over which my financial summary applies so that I can track the effectiveness of changes I am making
42. As a user, I would like to be able to get help on how to use specific features of the app.
43. As a user, I would like to be able to switch between a dark mode and a light mode so that I will be able to have an easier viewing experience if I am used to dark mode or light mode
44. As a user, I would like to be able to use the application on a smartphone
45. As a user, I would like to be able to use the application on a tablet
46. As a user, I would like to be able to learn more about cryptocurrency so that I can understand different aspects of the financial markets
47. As a user, I would like to be able to view a cryptocurrency's current price
48. As a user I would like to view the exchange rate between various currencies so that I can better estimate the financial impact of certain purchases
49. As a user, I would like to be informed of the risks involved in financial investments so that I can make informed decisions.
50. As a user, I would like to be educated on risk management for investing so that I can make safer decisions
51. As a user, I would like to be educated on common stock trend graphs so that I can make more informed decisions
52. As a user, I would like to be educated on building a strong stock portfolio so that I can make more informed purchases
53. As a user, I would like to generate a savable document of my finances so that I can access the information offline

54. As a user, I would like to email a document containing my finances so that I can move my information

Nonfunctional

Architecture:

We plan to develop the application with an independent backend and frontend. This will allow us to divide the work much easier, as there will be a finite amount of endpoints between the frontend and backend. The backend will follow REST API principles and will be written in Javascript using the Express.js framework built upon Node.js.

The frontend will be built using the React library for Javascript, and will use requests to connect with the API. We will be able to reuse the backend in this way so if we want to develop an iOS app, it will just need to connect with the backend and we will not need to rewrite code for the backend.

Usability is a key component of our application. We want to present financial tools in a way that is easy for the user to navigate and understand. This may include graphs and pictorials to visualize budgeting or stock prices, as well as simple explanations or suggestions on financial literacy topics.

Performance:

We plan to have a 500ms response time for navigating the website. The website will be up 24/7, and should be able to handle at minimum 100 users simultaneously.

Security:

Security is very important for Finex as Users will be uploading sensitive and private information related to personal finances. Users should only be able to view information connected to the account which they have securely logged into. User passwords and usernames should be encrypted before being stored in our system. We will use SHA-256 to securely hash and store passwords. RSA encryption will be used to communicate with the user.

Hosting/Deployment:

Both the front end and back end will be deployed onto Google Cloud.