PNoteworthy

Team 8 - Project Backlog

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Problem Statement:

As popular and ubiquitous as social media has become, sites like Twitter and Facebook have only yet managed to cultivate social microcosms based solely on their respective websites. Internet communities are therefore locked into a small variety of the most popular social platforms in order to properly thrive. Our project aims to redefine what social media looks like, breaking through the barriers currently present in social media applications, and turning the Internet into a canvas for social activity.

Background Information:

Audience

Many people both young and old interact with social media. A lot of social media sites have curated specific audiences given the strengths and weaknesses of the particular platform they provide. We believe Noteworthy has something to offer for every social media user, as it is not limited by a centralized platform. We will be targeting the demographics in which social media activity is the highest, which ranges from teens to middle-aged adults.

Similar Applications

Various social media applications exist such as Twitter and Facebook. These applications allow people to connect with each other in a unique way through their site as a central hub. Twitter mainly relies on short messages called "tweets" to communicate to a friend network while Facebook mainly uses photos, videos, and other forms of media to communicate with friends.

Limitations

While many of the existing social media applications are widely used and achieve their intended purpose, the main limitation is that every social interaction must be on their site. We believe that the concept of social media can grow outwards of these individual applications and spread throughout the internet. While other preexisting applications are confined to their central hub, being able to have these social interactions on any website can create a truly unique and diverse social network. The problem with this implementation is that we're limited to whatever functionality the browser can provide.

Functional Requirements:

- 1. As a user, I would like to be able to register for a Noteworthy account.
- 2. As a user, I would like to be able to login and manage my Noteworthy account.
- 3. If time permits: as a user, I would like to be able to login to my Noteworthy account through Google.
- 4. As a developer, I would like to hash the passwords for better security.
- 5. As a user, I would like to be able to logout of my Noteworthy account.
- 6. As a user, I would like to be able to delete my Noteworthy account and its data.
- As a user, I would like all of my data on my friends' accounts to be deleted when I delete my account.
- 8. As a user, I would like my password to be reset if I forget it.
- 9. As a user, I would like to be able to create notes on a website in my browser
- 10. As a user, I would like to be able to delete my notes
- 11. As a user, I would like to be able to place created notes at a specific location on a website
- 12. As a user, I would like to be able to access all of my notes

- 13. As a user, I would like to be sent to the specific website my note is on when it is clicked
- 14. As a user, I would like to be sent to the specific location of a note link on a website
- 15. As a user, I would like to make my notes public or private
- 16. As a user, I would like to be able to form note collections
- 17. As a user, I would like to make my note collections public or private
- 18. As a user, I would like to be able to delete my note collections
- 19. As a user, I would like to be able to find and add friends
- 20. As a user, I would like to be able to remove friends
- 21. As a user, I would like to be able to see my friends' public notes
- 22. As a user, I would like to be able to see my friends' notes on websites
- 23. As a user, I would like to be able to react to my friends' notes (like, dislike, etc.)
- 24. As a user, I would like to comment on my friends' notes
- 25. As a user, I would like to form friend groups
- 26. As a user, I would like to rename my friend groups
- 27. As a user, I would like to add and delete collections from my friend groups
- 28. As a user, I would like to join other public groups
- 29. As a user, I would like to request to join private groups
- 30. As a user, I would like to be able to accept requests to join my private groups
- 31. As a user, I would like to be able to remove people from my groups
- 32. As a user, I would like to be able to delete my groups
- 33. As a user, I would like to be able to sort my notes (by date, name, website, etc.)
- 34. As a user, I would like to be able to toggle note visibility on and off
- 35. As a developer, I would like the extension to connect to the same database as the central website.
- 36. As a user, I would like to login once and have access to both the central site and the extension.
- 37. As a developer, I would like to be able to send data from the central site to a user's email.
- 38. As a user, I would like to be able to receive notifications by email.
- 39. As a user, I would like to enable/disable email notifications.
- 40. As a user, I would like to be able to have a nearly equivalent experience with the web app on my mobile device as my PC.

Non-Functional Requirements:

Architecture and Performance

The back end will use Python's Flask framework to set up a RESTful API. It will also use psycopg to converse with a PostgreSQL database.

The front end will be developed using the React framework. Data will be received by making calls to the backend's API.

We'll be using tools like Lighthouse to evaluate the performance of our application, as well as improve its expandability and optimize for search engine traffic. We want to take all possible measures during the development of our application to ensure that Noteworthy is as light and efficient as possible, building solid groundwork upon which we can easily expand the code base.

Security

We are not hosting any strictly sensitive information (such as health or financial), but security measures for basic threats such as SQL injection can be handled through Python's psycopg library. Given that we are a social media service, we also need to be mindful of data privacy and protection. Users will be given the option to make notes for private groups, so we will need to create a system for protecting that data for the user.

The code we write will also account for any scenario the user could encounter and therefore prevent the user from accidentally messing with their data or the data of other users through misinputs.

Usability

The most important part of the project is the central location where users can view and group their own notes as well as stay connected to their friends. This central hub must be designed to make it easy for users to stay organized and keep track of all of the notes that are available to them to view. A friend's

page will look similar to the user's home page except only public notes will be available to see. Instead of editing functions on a friends' page, liking and comment features will be enabled.

The extension will make it easy for users to add notes to web pages and view any of their friend's public notes on web pages. The user interface will be designed to make it easy for users to view all notes in a way that doesn't take up too much space on any specific web page. Friends' notes will have a slightly different look from the user's notes as to distinguish who left each note.

We will also, should time permit, attempt to stick to the Web Content Accessibility Guidelines (WCAG) 2 with things such as having text alternatives for non-text content and allowing for text resizing without content disruption.

Hosting/Deployment

The backend and frontend servers will be separated and thus will be able to be updated individually. We will host both the backend and frontend servers on an AWS EC2 instance.