Meliora

Good Today, Better Tomorrow

Product Backlog

Team 9

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Problem Statement:

In the midst of a pandemic where people are navigating through constant challenges, mental health has become a major concern. People often find it hard to react appropriately when in an ethical situation or act professionally when in a distressing circumstance. Meliora is a web application that helps users share their thoughts and experiences by creating social posts describing their experiences, thereby promoting positivity and good values. Although there are other emotional healing apps in the market like Vent and Therapy Buddy, our app is unique in its ability to connect individuals with their community by allowing users to react to the posts made by others and follow inspiring individuals in the community. Meliora will also have other features like mental health resources, motivational quotes, and the ability to flag offensive posts.

Background Info:

Audience
A positive mindset is a universal goal for many and cannot be limited to one demographic. People seeking to improve their emotional intelligence by reading, reacting, and sharing various experiences from their past are our primary target audience. Through Meliora, users will be able to post journal entries of their past experiences on dealing with mental health struggles, relationships, and other such emotional problems. In addition, users will also be able to read others' posts and respond to them. This will be accomplished by using social features like public/anonymous posts and following other users.

Similar Platforms
Vent is a similar platform that allows people to release their day to day emotions with others. Rather than using favorite or like buttons, users can respond to posts with personable actions, like giving a "hug." Vent also makes it simple to quickly provide their audience with their day to day emotions. Therapy Buddy also has a similar idea in mind, as the app allows users to record their takeaways from therapy sessions and write down thoughts before their next session.

Limitations

While existing products like Vent and Therapy Buddy aim to improve mental intelligence, one of the major limitations is that users cannot share their thoughts and experiences and expect to hear positive feedback. Mainstream apps like these do not aim to filter out negative feedback/comments, and they do not necessarily encourage a positive mindset to the original

blogger. Additionally, these apps do not allow users to communicate with their communities. Our app, Meliora, aims to reach a global audience and motivate positive dialog.

Functional Requirements:

Functional Requirements	
ID	**User Story**
1 - Account Registration	
1.1	As a user, I would like to be able to create an account with Meliora so that I can access all its features.
1.2	As a user, I would like to reset the password to my account so that I can always have access to Meliora and its features.
1.3	As an admin, I would like to display an error message if at least one of the user's credentials already exists in the database when creating an account.
1.4	As an admin, I would like to ensure that only users that are successfully signed up and logged in can access the features of Meliora.
1.5	As an admin, I would like to display an error message if at least one of the user's credentials are incorrect.
1.6	As a user, I would like to login to my account using my username/email and password.
1.7	As a user, I would like to receive an email reminder if I have not posted anything within a week of signing up (if time allows).
2 - Navigation Bar	
2.1	As a user, I would like to see a navbar containing links on each webpage of the application.
2.2	As a user, I would like to view a sign up and login button in the landing page.
2.3	As a user, I would like to view a log out button on every page except the landing page.

2.4	As a user, I would like to view my profile and profile settings from the header.
2.5	As a user, I would like to have an option of creating a new post from the header.
2.6	As a user, I would like to see the logo of the app on the header, clicking on which leads me back to the home page.
2.7	As a user, I would like to have an option of viewing my recent notifications on the header.
3 - Home Page	
3.1	As a user, I would like to view the landing page to understand more about the features of Meliora.
3.2	As a user, I would like to see a motivational quote whenever I access the app.
3.3	As a user, I would like to see a list of dynamic categories that describe the common mental health topics (relationships, grief, stress, etc) tagged by users in their posts as stated in user story 4.9.
3.4	As a user, I would like to see a trending posts section that displays the most popular posts of the week based on the total number of reactions (reactions defined in 4.1).
3.5	As a user, I would like to follow/unfollow other user profiles in Meliora through their profile or the homepage.
3.6	As a user, I would like to follow/unfollow multiple categories through the homepage.
3.7	As a user, I would like to see a "from people you follow" section that displays the posts made by people that I follow.
3.8	As a user, I would like to see a favorite categories section that displays the posts within the categories that I follow.
3.9	As a user, I would like to be able to show/hide the details of a post like comments, reactions, etc.
3.10	As a user, I would like to be able to sort posts in the home page or in a category by number of likes or number of comments.

3.11	As a user, I would like to be able to filter posts based on their location (if time allows).

4 - Posts	
4.1	As a user, I would like to react to other people's posts with positive emojis (hearts, smiley faces, thumbs up, etc.).
4.2	As a user, I would like to be able to leave comments on others' posts.
4.3	As a user, I would like to be able to restrict my post to where other users cannot post comments on it.
4.4	As a user, I would like to be able to post anonymously.
4.5	As a user, I would like to be able to delete my posts.
4.6	As a user, I would like to be able to make drafts for my posts (if time allows).
4.7	As a user, I would like to record my location in my post (if time allows).
4.8	As a user, I would like to bookmark posts that I would like to view at a later time.
4.9	As a user, I would like to tag each post with an existing category.
4.10	As a user, I would like to create a category that is relevant to my post if one does not exist already.
4.11	As a user, I would like to share posts on social media applications (if time persists).
4.12	As a user, I would like to be able to see my word count while writing my posts.
4.13	As a user, I would like to be able to hide my posts from the public eye, to where only I can see them.
4.14	As a user, I would like to upload an image with my post (if time allows).

5 - Mental Health Resources	
5.1	As a user, I would like to quickly access helpline information (such as suicide, ptsd, etc.) through the mental health resources page.
6 - Profile	
6.1	As a user, I would like to easily access an editable settings page.
6.2	As a user, I would like to describe a short bio about myself in the profile page.
6.3	As a user, I would like to know the number of posts that I have made in total.
6.4	As a user, I would like to view the total number of reactions that my posts have received.
6.5	As a user, I would like to share my profile online by generating a public url in the profile page.
6.6	As a user, I would like to view another user's profile with their public information.
6.7	As a user, I would like to be able to see my bookmarked posts.
6.8	As a user, I would like to upload a profile picture for others to see (if time persists).
7 - Notifications	
7.1	As a user, I would like to see all of my recent notifications in the navigation bar.
8 - Settings	
8.1	As a user, I would like to change my password once logged in.
8.2	As a user, I would like the option to sign out of my account.
8.3	As a user, I would like to view the web app in dark mode.

8.4	As a user, I would like to be able to delete my account.
8.5	As a user, I would like to be able to change my notification preferences and settings.
8.6	As a user, I would like the option to block or unblock another user.
8.7	As a user, I would like to have the option to make my profile private or public.
9 - Maintenance	
9.1	As a user, I would like to be able to flag harmful/vulgar/offensive posts.
9.2	As an admin, I would like a special backdoor to the app for various maintenance.
9.3	As an admin, I would like to be able to see posts that have multiple flags in order to review them.
9.4	As an admin, I would like to be able to decide whether multi-flagged posts belong on our app and handle them as such.
Total User Stories	**60**

Non-Functional Requirements:

Architecture and Performance
Our application would be made robust and efficient so that all of the UI elements load within 100 ms, thereby giving the users a fast and easy user experience. Angular is composed of all the components from an MVC app, and therefore, our app will be implemented in one repository. Netlify, our primary mode of deployment, has the ability to mitigate Distributed Denial of Service (DDoS) attacks, which ensure that our app's performance is not degraded.

Security
Our backend will include the salting and hashing of various sensitive user information prior to sending it to the database or sending it to the front end. This information may include passwords, date of birth, age, and other such credentials. We also plan to restrict the access of

each user so that they may only edit or retrieve their own information.

Usability

Our web app will be deployed to the internet, making it available for the general public. By using Bootstrap, our web app is dynamically sized, ensuring a reliable user experience regardless of the type of device being used. Our developers will follow industry best-practices when designing the front-end, making Meliora one of the easiest and most-user friendly apps that are currently in the market. Navigating through each major section of the application like posting and creating an account will be made effortless by displaying the links on the navbar.

Scalability

By using Angular/Bootstrap for the frontend, Meliora's components can be built to scale automatically. In addition, MongoDB clusters have been developed to scale easily as more entries are added. Since we are using MongoDB as our database, Meliora will be able to accommodate several thousands of users at ease. Finally, by using Netlify as our primary deployment tool, the traffic to our web application is load balanced, reducing the latency experienced by end-users.

Hosting/Deployment

Throughout this semester, we plan to use Git as our version control and GitHub to host our codebase. Upon passing all tests, new versions of our web app will be deployed onto a server. For the purposes of our app, we will be using Netlify for hosting and deployment. This will provide a robust and effective method of hosting our app for our users. To address any issues that arise during development, we plan on using tools such as Postman to help solve such issues.