



Meliora

Good Today, Better Tomorrow

CS 407 - Software Engineering Senior Project

Sprint 2 Planning Document

Team 9

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Sprint Overview

We have selected 16 user stories that aim to have most of the posting and commenting features done for this app. This will include allowing users to comment on others posts, react with emojis, turn off commenting, see total reaction counts, and more. By the end of the sprint, we also aim to allow users to follow/unfollow other users, make their profile private/public, bookmark relevant posts, block/unblock people, etc. Lastly, we will also add some administrative features such as a backdoor into the app to review delinquent posts and decide if they belong on our platform. Our goal as a team is to finish all main functionality of the *Meliora* app so that next sprints, features such as notifications, sharing profile, posting with images, and etc.

Scrum Master: Dithi Saxena

Meeting Schedule: Monday/Tuesday/Wednesday | 8 PM EST | Zoom

Additional meetings as necessary

Risks and Challenges:

While we have a well-planned sprint with clear objectives, we are expecting some challenges. Firstly, we expect challenges in merging our code base together, as many of the user stories revolve around the same component and multiple people will be working on it. For example, commenting/reacting posts user stories have four different people working on it, and if we do work together, there could be risk of messing up code when merging. Also, since we will be implementing the main functionality of the web app in this sprint, it is important that everyone is careful in the work that they do as the next sprint will be heavily dependent on the functionality of this sprint.

Current Sprint Detail

User Story #1 - 5.1

As a user, I would like to quickly access helpline information (such as suicide, ptsd, etc.) through the mental health resources page.

#	Description	Estimated Time	Owner
1	Research mental health resources and helpline numbers	4 hrs	Abhishek
2	Design UI for <i>Meliora</i> 's mental health resources page	3 hrs	Abhishek
3	Implement UI for <i>Meliora</i> 's mental health resources page	7 hrs	Abhishek
4	Debug and Test UI for mental health resources page	1 hr	Abhishek
Total Hours		15 hrs	

Acceptance criteria

- Given that a user visits the *Meliora* homepage, when they click the “Reach Out For Help” button, then the mental health resources page should be displayed.
- Given that a user needs mental health help, when they visit the mental health resources page, then the hotline numbers, emails, and websites for suicide related concerns should be displayed.
- Given that a user needs mental health help, when they visit the mental health resources page, then the hotline numbers, emails, and websites for domestic violence related concerns should be displayed.
- Given that a user needs mental health help, when they visit the mental health resources page, then the hotline numbers, emails, and websites for child abuse related concerns should be displayed.
- Given that a user needs mental health help, when they visit the mental health resources page, then the hotline numbers, emails, and websites for alcohol abuse related concerns should be displayed.

User Story #2 - 6.4

As a user, I would like to view the total number of reactions that my posts have received.

#	Description	Estimated Time	Owner
1	Implement UI in profile page describing total reactions	3 hrs	Abhishek
2	Create backend route to retrieve total reactions	3 hrs	Xavier
3	Retrieve total reaction information from backend route	2 hrs	Abhishek
4	Update UI based on the retrieved information	2 hrs	Abhishek
5	Debug and Test	1 hr	Abhishek
Total Hours		11 hrs	

Acceptance criteria

- Given the user has made no posts, when they visit their profile page, then the numbers of hearts, smiley faces, and thumbs up symbols should be displayed as the string "--".
- Given the user has made at least one post but has no reactions in any of their posts, when they visit their profile page, then the numbers of hearts, smiley faces, and thumbs up symbols should be displayed as 0.
- Given the user has made at least one post and has reactions made to their posts, when they visit their profile page, then the numbers of hearts, smiley faces, and thumbs up symbols should be displayed correctly as retrieved from the database.
- Given the user has made at least one post and when another new reaction is added to one of their posts, when they visit their profile page, then the numbers of hearts, smiley faces, or thumbs up symbols should be increased by 1 respectively.

User Story #3 - 4.7

As a user, I would like to record my location in my post.

#	Description	Estimated Time	Owner
1	Update new posts UI to include the location component	2 hrs	Abhishek
2	Retrieve user location using the Google Maps API	5 hrs	Abhishek
3	Display retrieved location in UI	2 hrs	Abhishek
4	Update post backend route to include location	5 hrs	Xavier
5	Debug and Test	1 hr	Abhishek
Total Hours		15 hrs	

Acceptance criteria

- Given the user visits the posts page to create a new post, when they click the “Record Location” button, then their respective location should be displayed within the new post.
- Given the user visits the posts page to create a new post, when they click the “Remove Location” button, then their respective location should be hidden within the new post.
- Given the user clicks the “Record Location” button, when the API returns an empty object, then the user’s location should be displayed as “Unknown” in the post.

User Story #4 - 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.

#	Description	Estimated Time	Owner
1	Design hide component UI	2 hrs	Abhishek
2	Implement hide component UI in homepage	4 hrs	Abhishek
3	Create backend route to handle hidden posts	3 hrs	Xavier
4	Debug and Test	1 hr	Abhishek
Total Hours		10 hrs	

Acceptance criteria

- Given the user has logged in, when they visit the homepage, then the “make private” button should be displayed below each post the user created.
- Given the user has logged in, when they visit the homepage, then there should be no “make private” button for posts created by other users.
- Given the user visits the homepage, when they click the “make private” button, then the respective post should not be displayed in another user's homepage.
- Given the user visits the homepage, when they do not click the “make private” button, then the respective post should still be visible for other users of *Meliora*.

User Story #5 - 4.3

As a user, I would like to be able to restrict my post to where other users cannot post comments on it.

#	Description	Estimated Time	Owner
1	Design UI to allow users to turn off commenting.	4 hrs	Dithi
2	Save commenting preference for posts in the backend.	3 hrs	Xavier
3	Implement UI so that other user's cannot comment on the user's post when commenting is turned off.	3 hrs	Garrett
4	Debug and test.	1 hr	Dithi
Total Hours		11 hrs	

Acceptance criteria

- Given the user is on the create posts when creating posts, then the user should be given an option to turn off commenting.
- Given the user has turned off commenting when creating a post, then other users should not be able to comment on the post.
- Given the user has turned on commenting when creating a post, then other users should be able to comment on the post.

User Story #6 - 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.

#	Description	Estimated Time	Owner
1	Build UI to view a list of common and popular categories among the users of the app.	5 hr	Vidit
2	Build a backend API to return the most popular categories among users.	5 hr	Vidit
3	Debug and Test backend functionality	1 hr	Vidit
Total Hours		11 hrs	

Acceptance criteria

- Given that the UI is built, the users should be able to see the list of most common and popular categories among the users of the app along with a little background image.
- Given that the backend API is built and working, it should return the list of categories and their pictures appropriately according to a particular metric to sort categories by popularity.
- Given that the backend API is set up, it should be thoroughly tested for robustness and efficiency.

User Story #7 - 4.2

As a user, I would like to be able to leave comments on others' posts.

#	Description	Estimated Time	Owner
1	Design a comment section UI for posts	3 hrs	Vidit
2	Implement a comment model on the backend	3 hrs	Vidit
3	Implement an add and delete comment endpoint on the backend	4 hrs	Garrett
4	Update UI to dynamically display comments on posts	4 hrs	Garrett
5	Debug and test	1 hr	Garrett
Total Hours		15 hrs	

Acceptance criteria

- Given a user is viewing a post, when clicking the comments button, a page displaying the post and comments should be displayed
- Given a post has a comment, when viewing the comment section, the author of the comment and its content should be displayed.
- Given user X has posted a comment on User Y's post, when viewing the comment section, both user X and user Y should have the option to delete the comment.

User Story #8 - 4.12

As a user, I would like to be able to see my word count while writing posts.

#	Description	Estimated Time	Owner
1	Design UI to count input words from create post textbox.	4 hrs	Dithi
2	Implement UI to display dynamically changing word count while the user is typing.	4 hrs	Dithi
3	Debug and test	1 hr	Dithi
Total Hours		9 hrs	

Acceptance criteria

- Given the user is on the homepage of the app, when the user chooses to create a post, then they should see the post section with the number “0” on the bottom left initialized for the word count.
- Given the user is creating a post, when the user starts typing, then they should see the word count being updated live while they are typing.
- Given the user is creating a post, when they finish typing their post, then they should see the word count with the total amount of words for the post.

User Story #9 - 4.8, 6.7

As a user, I would like to be able to see my bookmarked posts.

#	Description	Estimated Time	Owner
1	Implement UI to bookmark a post.	4 hrs	Dithi
2	Implement backend to save bookmarked posts.	4 hrs	Xavier
3	Update UI to see all bookmarked posts for users.	4 hrs	Garrett
4	Debug and test	1 hr	Dithi
Total Hours		13 hrs	

Acceptance criteria

- Given the user is on the homepage, when the user sees a post they want to bookmark, they can click the bookmark icon to bookmark that post.
- Given the user is any page of the meliora web app, when they select their username from the navigation bar, then they can select the tab “Bookmarked Posts.”
- Given the user is on the “Bookmarked Posts” page of the web app, when they bookmark posts, then they can see all their bookmarked posts here.
- Given the user is on the “Bookmarked Posts” page of the web app, when they would like to unbookmark a post, they can deselect the bookmark icon and it will no longer show up on this page.

User Story #10 - 3.5, 3.7

As a user, I would like to follow/unfollow other user profiles in Meliora through their profile or the homepage and see their posts in a “from people you follow” section.

#	Description	Estimated Time	Owner
1	Design UI for following/unfollowing on the profile page	4 hrs	Dithi
2	Implement backend endpoints to follow or unfollow another user	4 hrs	Garrett
3	Implement backend endpoint to retrieve posts from list of users that current user follows	4 hrs	Garrett
4	Modify user’s “from people you follow” section to display posts from people user follows	4 hrs	Garrett
5	Debug and test	1 hr	Garrett
Total Hours		17 hrs	

Acceptance criteria

- Given a user is logged in, when viewing another user’s profile they are not following, the option to follow should be displayed.
- Given a user is logged in, when viewing another user’s profile they are following, the option to unfollow should be displayed
- Given user X is following user Y, when viewing the “from people you follow” section, recent posts by user Y will be displayed on user X’s feed.
- Given user X unfollows user Y, when viewing the “from people you follow” section, user Y’s posts will no longer be visible on user X’s feed.

User Story #11 - 8.6

As a user, I would like the option to block or unblock another user.

#	Description	Estimated Time	Owner
1	Design UI to allow User X to block/unblock User Y.	4 hrs	Dithi
2	Save block preference in the database cluster.	2 hrs	Xavier
3	Implement UI functionality so that User Y can't access User X's profile	3 hrs	Garrett
4	Debug and test	1 hr	Dithi
Total Hours		10 hrs	

Acceptance criteria

- Given the user is on another user's profile page, when they select the three dots on the other user's profile page, then they can choose to block or unblock the user.
- Given that User X has blocked User Y when logged in on the app, then User Y should not be able to find User X's profile page.
- Given that User X has blocked User Y when logged in on the app, then User X should no longer see User Y's posts on their feed.
- Given that User X has blocked User Y when logged in on the app, then User Y should no longer see User X's posts on their feed.
- Given that User X has unblocked User Y, then User Y should be able to find User X's profile page and User X should be able to see User Y's posts on their feed.

User Story #12 - 8.7

As a user, I would like to have the option to make my profile private or public.

#	Description	Estimated Time	Owner
1	Implement UI to allow users to choose private or public on the settings page.	4 hrs	Dithi
2	Implement backend functionality to update user's privacy preference.	3 hrs	Xavier
3	After changing privacy preference, update the UI so that user's not following a private account can't see user details.	4 hrs	Garrett
4	Debug and test	1 hr	Dithi
Total Hours		12 hrs	

Acceptance criteria

- Given the user is logged in on the app, when the user goes to the settings page, they should see an option to make their account private.
- Given the user is on the settings page, when the user selects to make their profile private, then other user's not following this private account will not be able to see a user's posts.
- Given the user is on the settings page, when the user deselects making their profile private, then other user's not following this private account will be able to see this user's posts.

User Story #13 - 4.1

As a user, I would like to react to other people's posts with positive emojis (hearts, smiley faces, thumbs up, etc.).

#	Description	Estimated Time	Owner
1	Implement UI to allow users to react to posts with emojis.	5 hrs	Dithi
2	Implement backend functionality to save these emoji reactions.	5 hrs	Xavier
3	Update UI to show count for emojis when user's react.	4 hrs	Garrett
4	Debug and test	1 hr	Dithi
Total Hours		15 hrs	

Acceptance criteria

- Given the user is on their homepage when the user is logged in, the user should have the option to react to other people's posts with positive emojis (hearts, smiley faces, thumbs ups, etc.).
- Given the user is on their homepage when the user is logged in, when the user would like to unreact to a post, they can unclick their emoji reaction.
- Given the user is on their homepage when the user is logged in, when their own posts receive reactions, they should see an updated count of emoji reactions to their posts.

User Story #14 - 3.6

As a user, I would like to follow/unfollow multiple categories through the homepage.

#	Description	Estimated Time	Owner
1	Implement UI for following/unfollowing categories	2 hrs	Vidit
2	Add backend endpoints to follow and unfollow a category	3 hrs	Vidit
3	Update the UI when a user follows a new category	3 hrs	Vidit
4	Debug and test	1 hr	Dithi
Total Hours		9 hrs	

Acceptance criteria

- Given a user does not follow any categories, when viewing the homepage, the list of default suggest categories will be displayed with the option to follow them
- Given a user has followed a category, when viewing their feed, posts from the followed category will be displayed
- Given a user is following a category, when viewing the category, the option to unfollow the category should be available

User Story #15 - 4.9

As a user, I would like to tag each post with an existing category.

#	Description	Estimated Time	Owner
1	Update UI in post creation form to allow for category tagging from a fixed set of categories.	4 hrs	Vidit
2	Add category support in backend	3 hrs	Vidit
3	Update Post UI to dynamically display the category	2 hrs	Vidit
4	Debug and test	1 hr	Vidit
Total Hours		10 hrs	

Acceptance criteria

- Given a user is logged in, when creating a post, the option to tag the post with an existing category from a fixed set of categories should be available.
- Given a user is following a category or user, when viewing a post, the category (if any) should be displayed in the Post UI
- Given a user is following category X, when a post is tagged with category X, the post will appear in the user's feed.

User Story #16 - 9.2, 9.3, 9.4

As an admin, I would like a backdoor into the app to review delinquent posts and decide if they belong on our platform.

#	Description	Estimated Time	Owner
1	Implement backdoor UI for admins to sign in with a special credential	5 hrs	Vidit
2	Implement a special backend route for admins to be created.	4 hrs	Xavier
3	Implement a special backend route to get delinquent posts for review.	4 hrs	Xavier
4	Implement a special backend route to clear flags from a post.	2 hrs	Xavier
5	Write tests for backdoor functionality.	4 hrs	Xavier
Total Hours		19 hrs	

Acceptance criteria

- Given a user is logged in, when they are marked as an admin in the database, they can click a special button to review delinquent posts.
- Given one of the product owners have determined a user to be an admin, when we choose to give them admin status, then the product owners can change one of the users database attributes to identify them as an admin.
- Given a user is logged in as an admin, when they go to review delinquent posts (orders that have more than 5 flags), then they can remove them from the app if necessary or clear their flags.

Individual Team Member Hour Totals

Team Member	Total Hours
Dithi Saxena	40 hrs
Xavier Madera	42 hrs
Abhishek Gunasekar	40 hrs
Garrett Lee	40 hrs
Vidit Shah	40 hrs

Remaining Backlog

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. VS / XM
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. - A.G.
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 profile 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.
Remaining User Stories	16