Modus.ai

Sprint 1 Planning

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Sprint Overview

During this sprint, we hope to accomplish some of the fundamental functionality of our web app. This includes creating the web server, a basic layout of the most important web pages, creating the ML engine, and developing mood scoring and encryption algorithms. Some parts of this sprint would also go into researching encryption techniques, NLP analysis, and data visualization. We will spend time making these systems robust so that we may build upon them by adding database layers, adding more functionality, and making the web-app multi-user in general in the coming sprints.

Scrum Master: Manan Bhatia

Scrum Meetings: WF 9:00 am

Risks & Challenges

The risks and challenges we will run into are the potential setbacks due to the learning curves and the research that will accompany our project. These tasks will take the majority of our time, therefore they may hinder our progress for future sprints. Furthermore, some of the challenges we might encounter are connecting the different layers of the website such as UI, database, and the machine learning component, and how they will work together. We need to ensure that our encryption algorithm is strong and can keep the user data secure. Most importantly, we need to develop and implement a robust algorithm that can accurately and efficiently translate the output from our ML engine into intuitive data charts.

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Current Sprint Detail

User Story 1:
As a user, I would like to easily navigate to the FAQs section.

#	Description	Estimated Time	Owner
1	Create Mock UI of FAQs	1 Hr	Jisoo
2	Create HTML outline of page	3 Hr	Nikita
3	Add FAQ page to navbar	1 Hr	Nikita
4	Add basic CSS styling	2 Hr	Nikita
5	Testing/ Debugging navigation	1 Hr	Nikita

Acceptance Criteria:

- Given that the FAQs button in the navbar is pressed, the user should be directed to an FAQs page with its basic layout in place.
- Given that the FAQs page is correctly laid out, the user will be able to have a strong understanding on how to utilize *Modus.ai*.
- Given that the FAQs page is complete, the user will be able to navigate to different pages in accordance to the FAQ descriptions.

User Story 2:
As a user, I would like to easily navigate to the journal entry page on the website.

#	Description	Estimated Time	Owner
1	Create Mock UI of Journal Entry Page	2 Hr	Angela
2	Create HTML outline of page	3 Hr	Angela
3	Add Journal Entry page to navbar	2 Hr	Angela
4	Add basic CSS styling	3 Hr	Angela

Acceptance Criteria:

- Given that the Create Journal Entry button in the navbar is pressed, the user should be directed to a blank Journal Entry page.
- Given that the Journal Entry page is correctly laid out, when the user clicks on a new journal entry, the user will be able to create a new journal entry.
- Given that the Journal Entry page is correctly laid out, when the user clicks on an existing journal, they are directed to the journal page to have a better look of it.

User Story 3:
As a user, I would like to create a journal entry page to write my entries.

#	Description	Estimated Time	Owner
1	Add text editing toolbar	1 hr	Nikita
2	Add submit button	1 hr	Nikita
3	Add save button	1 hr	Nikita
4	Add large text box to page	1 hr	Nikita
5	Develop unit tests to test out the submit/ save button	3 hr	Nikita

Acceptance Criteria:

- Given that the Journal Entry page's text editing toolbar works, the user should be able to change the color of text, font of text, and style of text that they write.
- Given that the Journal Entry page's large text box works, the user should be able to write as much as they would like in that particular journal entry.
- Given that the save button is pressed, the user's most recently saved journal entry should be saved in the journal database.
- Given that the save button is pressed, the user should still be able to edit their journal entry.
- Given that the submit button is pressed, the user's submitted journal entry should be saved in the journal database.
- Given that the submit button is pressed, the user's journal entry mood analysis should be generated and saved in the journal database.
- Given that the submit button is pressed, that journal entry's mood analysis should be displayed on the mood analysis page that the user is redirected to upon submitting their entry.

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User Story 4:
As a user, I would like to have generic text editing options available to me (i.e. font size, font style, alignment, highlight, font color, writing from left to right or right to left, bullets).

#	Description	Estimated Time	Owner
1	Create HTML outline of the page	3 Hr	Angela
2	Research and incorporate text editing library	5 Hr	Angela
3	Check if it works and fix any bugs that can come with the text editing box	3 Hr	Angela
4	Make the text box so the user can write and edit on it	2 Hr	Angela

Acceptance Criteria:

- Given that the text changes immediately, when the user clicks on the text editing button, the text should be edited accordingly to the button
- Given that the cursor can click on the text editing box, when the user clicks anywhere in the text box, the user is able to easily navigate through the text editing box to edit anywhere.
- Given that the text editing box can add tables, graphs, and images, when the user clicks on the insert button, they should be able to insert tables, graphs, and images.

User Story 5:
As a user, I would like to have a text editing box for a title and another one to write my journal entry.

#	Description	Estimated Time	Owner
1	Create Mock UI of the text editing page and the navigation	1 Hr	Angela
2	Create HTML outline of the page with the two boxes and be able to navigate between the boxes	3 Hr	Angela

3	Styling with CSS of the page according to the Mock UI	3 Hr	Angela
4	Make sure the user can go to the previous or next page through the back button and next button	1 Hr	Angela

Acceptance Criteria:

- Given that the cursor can click on the text editing box, when the user clicks either the title box or the entry box, the user is able to easily navigate between the title box and journal entry box.
- Given that the pages are set up, when the user clicks on a different page, it is navigated into the corresponding page.
- Given that the back button or next button is clickable, when the user clicks on the button, they are able to go to either the previous page or the next page according to the button they pressed.

User Story 6:

As a user, I would like to view all my journal entries in one location.

#	Description	Estimated Time	Owner
1	Create Mock UI of the Library	2 Hr	Jisoo
2	Create the outline of the page using HTML	3 Hr	Nikita
3	Ensure that the user can add a new journal entry	2 Hr	Nikita
4	Ensure the user can delete journal entries	2 Hr	Nikita
5	Ensure the user can edit the journal entry if they have not submitted the entry	2 Hr	Nikita
6	Create sorting algorithms	6 Hr	Rashmi (3) Mihira (3)
7	Debug/ Test all sorting algorithms	4 Hr	Mihira

Acceptance Criteria:

- Given that the “Library” page has been set up correctly, the user will be able to view all of his/ her journal entries.
- Given that the “Library” page functions correctly, the user will be able to delete/ edit individual journal entries.
- Given that the sorting algorithms work correctly, the user will be able to sort and view his/ her journal entries by date and title alphabetically.

User Story 7:
As a user, I would like my journal entries to be encrypted for privacy reasons.

#	Description	Estimated Time	Owner
1	Research and develop a custom encryption algorithm for text entries	5 Hr	Manan
2	Implement encryption algorithm in Python	6 Hr	Manan
3	Connect encryption services to ML Engine + UI buttons	4 Hr	Mihira
3	Create unit test(s) to test and debug the algorithm	8 Hr	Manan (6), Mihira (2)

Acceptance Criteria:

- Given that the algorithm works as intended, when the user submits the textual entries, it should not be visible as plain text (human-readable) in the database.
- Given that the algorithm is functional, when the users submit their entries, the output of the algorithm will be unique for each entry.
- Given that the decryption is functional, the ML Engine should be able to correctly decrypt the text it receives before analyzing the text.

User Story 8:
As a user, I would like to easily navigate to the mood analysis section.

#	Description	Estimated Time	Owner
1	Create Mock UI of the Nav Bar	1 Hr	Jisoo
2	Create Nav Bar and route to Mood Analysis page	3 Hr	Jisoo

3	CSS Styling	2 Hr	Jisoo
4	Test/ debug different components of the Web page with multiple inputs	2 Hr	Jisoo

Acceptance Criteria:

- Given that the Nav Bar is correctly set up, when the user clicks on the “Mood Analysis” icon, it will lead them to the “Mood Analysis” page.
- Given that the Nav Bar is correctly set up, the user will be able to access the Nav Bar, therefore the mood analysis section, from all pages.
- Given that the mood analysis section is routed with other pages correctly, the user can also access the mood analysis page from other pages as well.

User Story 9:

As a user, I would like my journal entries to be analyzed by an NLP algorithm that is trained on relevant, unbiased data.

#	Description	Estimated Time	Owner
1	Research and test out various NLP packages using a variety of textual input in Python	10 Hr	Mihira (6) Rashmi (4)
2	Implement appropriate libraries as part of the ML Engine	6 Hr	Mihira (3) Rashmi (3)
3	Connect the ML Engine to the UI Pre-Processing Engine by creating an API	6 Hr	Mihira (3) Rashmi(3)
4	Create unit tests and test/debug verify the output of the ML Engine	10 Hr	Mihira (5) Rashmi(5)

Acceptance Criteria:

- Given the NLP algorithm works as expected, the user will be able to receive an accurate analysis of their mood.
- Given that the NLP algorithm is well-trained, it should give a unique analysis for each unique journal entry.

- Given the NLP algorithm is consistent, the user should get the same analysis for the same entry every time.

User Story 10:
As a user, I would like to see a high-level (overall) analysis of my mood.

#	Description	Estimated Time	Owner
1	Specify attributes and components the user would like to see	2 Hr	Jisoo
2	Create Mock UI of “Mood Analysis” page	3 Hr	Jisoo
3	Using HTML, create outline of the page	4 Hr	Jisoo
4	Develop ways to display visualizations of the data from the ML Engine	8 Hr	Manan (5), Jisoo (3)
5	Using HTML, create data visualizations for the mood analysis	3 Hr	Jisoo
6	CSS styling	2 Hr	Jisoo
7	Design algorithm to translate mood scores from the NLP engine to an intuitive output	8 Hr	Manan, Nikita
8	Implement the algorithm in Python	3 Hr	Manan
9	Create unit tests to test/debug the consistency of the translation algorithm	4 Hr	Mihira
10	Test/ debug data visualizations are accurate	5 Hr	Jisoo (2) Nikita (3)

Acceptance Criteria:

- Given that the “Mood Analysis” page is set up correctly, the user is able to have a high level of an analysis of their mood according to their journal entry.
- Given that the “Mood Analysis” page is set up correctly, the user will be able to have data visualizations to see trends of his/ her progress.
- Given that the ML engine functions correctly, the scoring or translation to the UI graphs algorithm will be consistent and correct.

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User Story 11: As a user, I would like to view a welcome dashboard page.

#	Description	Estimated Time	Owner
1	Create a UI panel that is able to display a welcome page for the user along with links to other pages	2.5 Hr	Jisoo
2	Create a button that creates a new journal entry	1 hour	Nikita
3	Connect to mood analysis UI page to display metrics in a user-friendly manner	1 hour	Nikita

Acceptance Criteria:

- Given the UI for the welcome dashboard is implemented correctly, the user should be able to scroll down the page and access all necessary tabs to be able to gain a summary of their results and the welcome webpage.
- Given the button to create a new journal is implemented correctly, the user should be able to click the button and be redirected to a completely new journal entry.
- Given the UI for the welcome dashboard is implemented correctly, the user should be able to navigate to other tabs on the webpage.

User Story 12: As a user, I would like to easily navigate to the mental health resources section.

#	Description	Estimated Time	Owner
1	Create a UI panel that is able to display the resources section of the webpage	2.5 hours	Nikita

2	Create an algorithm that maps the output of the metrics to the resources that would be most suitable for the user (recommender system)	8 hours	Rashmi
3	Debug and test the algorithm for accuracy and robustness	5 hours	Rashmi
4	Connect the resources to UI that displays all of the resources available for the user	2 hours	Manan

Acceptance Criteria:

- Given that the UI panel for resources is implemented correctly, a user should be able to easily scroll up and down the panel if necessary to view all resources
- Given the links to all of the resources are implemented correctly, a user should be able to click on any one of the links and be redirected to the correct address. These links should be updated often if necessary.
- Given the algorithm to suggest resources is accurate, the user should be shown a summary of all of the resources in the resource catalog that may be best suitable for them in relation to their analyses outputs.
- Given that all of the resources are implemented correctly when a user clicks on a resource, a popup should be displayed and include a summary of the resource and how to use the resource (as needed).
- Given the UI (specifically the toolbar) is implemented correctly, the user should be able to to easily navigate to the resource section regardless of where they are in the webpage.

Remaining Backlog

Functional Requirements

1. As a user, I would like to register for a *Modus.ai* account with my email address.
2. As a user, I would like the option to create a *Modus.ai* account with my existing *Google* or *Facebook* account.
3. As a user, I would like to have the ability to log in/ log out from my account.
4. As a user, I would like to have an option to stay signed in.

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5. As a user, I would like to reset my password if necessary.
6. As a user, I would like the option to create a profile on Modus.ai including adding a profile picture.
7. As a user, I would like to edit and customize my profile.
8. As a user, I would like to change between Light and Dark themes for the UI.
9. As a user, I would like the option to delete my account.
10. As a user, I would like the FAQs section to direct me to correctly use the app, as well as explain how the mood analysis is done.
11. As a user, I would like to save each journal entry by title and date of creation.
12. As a user, I would like to edit and modify my journal entries.
13. As a user, I would like the option to save my journal entries as PDF files.
14. As a user, I would like to delete a journal entry.
15. As a user, I would like my previous journal entries to be sorted by date.
16. As a user, I would like to search for a journal entry by date or title.
17. As a user, I would like to organize my journals into folders and other forms of organization.
18. As a user, I would like to see the analysis of individual journal entries.
19. As a user, I would like to see my mood analysis on individual days.
20. As a user, I would like to see an analysis of arbitrary journal entries that I choose, such as journal entries in specific folders and subfolders.
21. As a user, I would like to see my mental health progress over a defined period of time to see how my mood changes over time.
22. As a user, I would like to dive deeper into my analysis and take a look at the specificities of my mood/emotions per journal entry.
23. As a user, I would like to be provided appropriate resources or actions I could take based on the results of my mood analysis.
24. As a user, I would like to use keyboard shortcuts for editing journal entries.
25. As a user, I would like to add friends with a Modus.ai account.
26. As a user, I would like to create journals with friends for real-time collaboration.
27. As a user, I would like to provide feedback to *Modus.ai*, including but not limited to providing suggestions for new features and reporting bugs.
28. As a new user, I would like to have a walkthrough of the entire platform. (If time allows)
29. As a user, I would like to have the contact information for the company and be able to contact them anytime with a phone number and email. (If time allows)
30. As a user, I would like a *Help* section with video tutorials of each feature. (If time allows)
31. As a user, I would like to add customization to my journal entries, such as images [jpg, gifs, and png] and links. (If time allows)

32. As a user, I would like to use emojis and choose from a selection of icons in my journal entry. (If time allows)
33. As a user, I would like to have my journals updated in real-time, so my respective analysis can be as accurate as possible with regards to the current time. (If time allows)
34. As a user, I would like to see how my results compare to people of the same age, gender, or people with similar attributes. (If time allows)
35. As a user, I would like to export, share, and save my mood analyses.
36. As a user, I would like to utilize integrated additional platforms and applications in a similar domain to make the most of my results and gain a more extensive analysis of myself and my mood. (If time allows)

Non-Functional Requirements

1. As a user, I would like to access my account and journal information 99% of the time, so I don't have to wait to write down my thoughts or resort to another application.
2. As a user, I would like to have all of my past and present journals saved and easily accessible whenever I would like to see them.
3. As a user, I would like the application to handle 1,000 simultaneous requests from various users without sacrificing the program performance.
4. As a user, I would like to wait <= 5 seconds from the time I log in to my account to the time I can access my dashboards and journals.
5. As a user, I would like my analytics to be somewhat obfuscated so that others would not be able to look into my personal information and results.
6. As a user, I would like to run the web application easily on all OS and all web browsers (Safari, Google Chrome, Firefox, etc).
7. As a user, I would like to use the application concurrently with 1000 distinct users.
8. As a user from a non-English-speaking background, I would like to use all of the features of Modus.ai and obtain similar analytical results as my English-speaking counterparts.
9. As a user, I would like to be logged out of the application after a period of inactivity to protect my privacy.
10. As a user, I would like to have an additional layer of security to personal information or my profile to prevent security threats from accessing personal information. (If time allows).