

# Modus.ai

## **Team 23 - Product Backlog**

*Rashmi Ananth, Manan Bhatia, Nikita Finchenko,  
Angela Kim, Jisoo Kim, Mihira Krishnaswamy*

# Modus.ai

## Problem Statement

Mental health problems are on the rise among several individuals in today's society. Quite often, these problems occur when individuals repress their emotions or are unable to fully understand them. They can benefit from tools that help facilitate the silos between their moods and the comprehension of their emotions. As a result, they can lead healthier lives by learning and understanding patterns within their moods.

*Modus.ai* uses journal entries instead of a set of static questions to analyze the user's mood. This sets us apart from pre-existing apps by enhancing user autonomy and ensuring additional personalization.

## Background Information

Mental health is one of the most common problems in young adults. In a lot of these cases, it is observed that problems arise when people are either unable to understand their feelings or are not sure where to find appropriate resources to get help. *Modus.ai* aims to tackle both of these issues as described in later sections.

## Domain and Target Users

Our domains are *Natural Language Processing (sentiment analysis)*, and *Health and Fitness (mental health)*. Our target users would include young adults who struggle with mental health and any adults who want to save and browse through their work/writing digitally at any time.

## Similar Platforms and their Limitations

While there aren't any commercially available apps or tools like *Modus.ai*, there are apps that attempt to do some sort of simple sentiment analysis on text. Apps such as *Watson Tone Analyzer*, *Brand24*, and *OpenText* that analyze sentences and check if they convey positive or negative emotions. *Modus.ai* is different from those apps as it analyzes journal entries for various emotions and keeps track of them to help the user understand their mental health progress. We address the limitations of these pre-existing apps in the following ways:

- Mood analysis is not tailored to the user- we address this limitation by using NLP algorithms to analyze exactly what the user has written instead of using a pre-existing set of questions.

# Modus.ai

- Mood analysis is rudimentary- most of the apps out there are only able to provide a binary analysis text. *"Is the sentence positive or negative?" "Is the emotion conveyed happy or sad?"*. With *Modus.ai*, we aim to provide a detailed description of the multitude of emotions expressed in each piece of text or journal entry.
- Don't go beyond mood analysis- we address this limitation by providing appropriate mental health resources to the user.

## 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.
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 to easily navigate to the FAQs section.
11. 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.
12. As a user, I would like to easily navigate to the journal entry page on the website.
13. As a user, I would like to create a journal entry page to write my entries.
14. 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).
15. As a user, I would like to have a text editing box for a title and another one to write my journal entry.
16. As a user, I would like to save each journal entry by title and date of creation.
17. As a user, I would like to edit and modify my journal entries.

# Modus.ai

18. As a user, I would like the option to save my journal entries as PDF files.
19. As a user, I would like to delete a journal entry.
20. As a user, I would like to view all my journal entries in one location.
21. As a user, I would like my previous journal entries to be sorted by date.
22. As a user, I would like to search for a journal entry by date or title.
23. As a user, I would like to organize my journals into folders and other forms of organization.
24. As a user, I would like my journal entries to be encrypted for privacy reasons.
25. As a user, I would like to easily navigate to the mood analysis section.
26. As a user, I would like to see the analysis of individual journal entries.
27. As a user, I would like to see a fairly accurate analysis of my journal entries.
28. As a user, I would like my journal entries to be analyzed by an NLP algorithm that is trained on relevant, unbiased data.
29. As a user, I would like to see my mood analysis on individual days.
30. As a user, I would like to see a high-level (overall) analysis of my mood.
31. 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.
32. 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.
33. 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.
34. As a user, I would like to view a dashboard that contains the metrics to display my mood analysis.
35. As a user, I would like to easily navigate to the resources section.
36. As a user, I would like to be provided appropriate resources or actions I could take based on the results of my mood analysis.
37. As a user, I would like to use keyboard shortcuts for editing journal entries.
38. As a user, I would like to add friends with a Modus.ai account.
39. As a user, I would like to create journals with friends for real-time collaboration.
40. 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.
41. As a new user, I would like to have a walkthrough of the entire platform. (If time allows)

# Modus.ai

- 42. As a user, I would like to have the contact information for the company and be able to contact them anytime with phone number and email. (If time allows)
- 43. As a user, I would like a *Help* section with video tutorials of each feature. (If time allows)
- 44. 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)
- 45. As a user, I would like to use emojis and choose from a selection of icons in my journal entry. (If time allows)
- 46. 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)
- 47. 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)
- 48. As a user, I would like to export, share, and save my mood analyses. (If time allows)
- 49. 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  $\leq 5$  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 (Google Chrome, Firefox, Internet Explorer, etc).
- 7. As a user, I would like to use the application concurrently with 1000 distinct users.

# Modus.ai

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)