# Name: Anay Abhijit Joshi

Project (Web Application Name): Mind Vault

Publicly Hosted Link: <a href="https://mind-vault-anayjoshi.netlify.app">https://mind-vault-anayjoshi.netlify.app</a>

GitHub Repository: <a href="https://github.com/anay-a-joshi/MindVault-UI">https://github.com/anay-a-joshi/MindVault-UI</a>

Demo Video: <a href="https://youtu.be/EjL1TV7V5M0">https://youtu.be/EjL1TV7V5M0</a>

# PROJECT DESCRIPTION

The Movement and Health Goal Tracking Application, named "Mind Vault," is a user-friendly platform designed to help individuals set and track their daily health-related goals and activities. The application encourages users to maintain healthy habits by offering a streamlined and intuitive interface for logging various activities such as water consumption, meditation durations, moods, and time allocations for specific skills. The system provides real-time feedback, customizable themes, and progress visualizations, ensuring users remain engaged and motivated as they pursue their health and wellness goals.

# KEY FEATURES, CONTROLS AND USER-GOALS

## \* Daily Activity(ies) Logging

Users can log more than 6 different daily activities, including water intake, meditation, and end-of-day reflections. The application offers a variety of input types, such as buttons, sliders, and checkboxes, and many more, making the activity logging process quick and easy.

## \* Visual Feedback

After each activity is logged, the application provides immediate visual feedback or a message, confirming that the entry has been saved

successfully. This feedback ensures users are confident that their data is recorded without errors. In the event of a discrepancy or error, users are promptly notified and guided to resolve the issue.

# \* Graphical Overview of the User's Efficiency

Progress tracking is at the heart of **Mind Vault**. Users can visualize their achievements through simple graphs, such as **doughnut charts** and **bar graphs**, and a **percentage monitor**, which help them assess consistency and performance against their daily goals.

## \* Theme Customization

The application offers both light and dark mode themes, giving users the flexibility to select their preferred display style for better usability and comfort, tailored to their environment.

## \* Previous/Past Entry(ies) Modification

Users can revisit and edit their past entries, ensuring that their records are always up to date and accurate. This feature enables users to correct mistakes or add missed entries from previous days, if any, ensuring the tracking data is comprehensive.

You can see it here — "https://youtu.be/EjL1TV7V5M0"

## \* User's Goal /Target Setting

Users can set and track goals for a set of specific activities. For example, they can set goals to drink a certain amount of water or engage in meditation for a target duration each day and much more. The application helps users monitor their progress toward these goals effectively.

# \* Add/Delete New Activity (with Verification)

A standout feature of the **Mind Vault** web application is the ability for users to add or delete new activities based on their evolving health goals. The app includes a **verification process (corporate world's principle)**, ensuring that any changes are deliberate. Users receive alerts and confirmation messages on the success or failure of their requests, preventing accidental deletions or additions. For this prototype, the verification process is simulated by a manual review, represented by a "customer service" approval process (in this case, I, i.e., the project owner).

## \* Mindful Breaths: Your Calm Companion

The breathing exercise is one of my favorite features in this app. It's designed to help you take a moment for yourself, amidst the chaos of daily life. As you see the circle expand and contract, guiding your **inhale** and **exhale**, it reminds you to pause and focus on your well-being.

Breathing exercises like this are known to reduce stress, improve focus, and promote relaxation, making it easier to transition into journaling or other mindful activities. I included this because I know how powerful a simple deep breath can be in grounding yourself and setting the tone for a productive and reflective session.

# **IMPLEMENTATION FOCUS**

The **Mind Vault** application is built using client-side code, meaning all data is stored locally without a backend or database. Flat files and local storage manage user data, making this approach ideal for prototypes and small-scale applications. This design focuses entirely on front-end interaction and user experience, avoiding the complexity of server-side functionality.



# INTERVIEWS & FEEDBACK

## What do you hope to learn from these interviews?

The main learnings which I am expecting from the interviews with the application users are as follows:

- 1. How are the individuals currently approaching health and wellness journaling or tracking?
- 2. What features these users are finding helpful or what features are lacking in existing tools' user interface (UI)?

- 3. The preferences and expectations regarding tracking specific activities (e.g., skill practice, exercise, water intake, moods), for generating daily activities' tracker maybe like graphs, pie charts, etc. that could be most helpful...
- 4. The ease-of-use and customizability the users would desire in a goal-tracking system/application.
- 5. How would the users interpret "success" in terms of achieving health goals and receiving feedback from the application?
- 6. Are visual data representations (like charts, summaries, etc.) important to the users or are they just looking for some application to keep track of their daily routine/activities?
- 7. Are there any specific needs for revisiting and editing past entries, and are there any customization requirements for tracking these activities or maybe for some other part in this application?

## What questions did you ask?

Most of my questions were focused on getting to know the user-needs and satisfying the requirements of the project. For instance:

- 1. Do you currently track your health and wellness (e.g., working on a skill, water intake, moods)? If yes, how do you do it? If not, would you like to do it?
- 2. What motivates you to keep track of your health or wellness activities?
- 3. What specific health or wellness activities do you want to track (e.g., exercise, water intake, mood, or etc.)?
- 4. Do you set specific goals for these activities (like 5 hours of working on a skill, drinking 3L of water daily, etc.)? If yes, how do you currently manage these goals?
- 5. What features in a journaling or tracking tool/application would make it easier for you as a user to log your daily activities, and make the most out of this application?
- 6. How often do you find yourself forgetting to track an activity? Would quick reminders or notifications or prompts help?
- 7. What type of data input (text, checkboxes, dropdowns) is most convenient for you when logging activities? Do you prefer writing or quick button-press or slidingbars (i.e., slider) or dropdowns or something else?
- 8. How would you prefer to see an overview of your activities (e.g., weekly summary, graphs, averages)? Do you really want it in a graphical way or will normal writing form work too?
- 9. Do you often revisit or edit previous entries? If so, for what reasons and for what activities?
- 10. How would you like the system/application to display past entries (e.g., calendar view, scrolling list, sequential days) or doesn't matter?
- 11. Would you like the ability to customize what activities you track? If yes, how would you modify them?

- 12. How important is visual customization (themes, colors) in maintaining your motivation to track activities?
- 13. Do you prefer dark theme (light text with dark background) or light theme (dark text with light background) for the application/system?
- 14. What kind of feedback do you expect after logging activities (e.g., a confirmation message, progress towards goals) or just a "Submitted Response" message works?
- 15. How do you measure success in achieving your health goals (e.g., reaching a target, consistency over time, or etc.)?

# What did your interview participants tell you? What did you learn from them?

All the interview participants which I chose are students from the University of Cincinnati. One of the participants, 22 years old, tracks health activities like steps and water intake using an app available online. He values seeing progress through simple graphs but often forgets to log entries and prefers a more intuitive system with quick-short reminders or notifications. Second participant, 20 years old, occasionally tracks moods and skill's dedicated time, finds data entry tedious, favors quick options like checkboxes or sliding-bars (i.e., slider), and wants easy access to mood summaries throughout the week. Third participant, 24 years old, likes tracking workouts and goals but wants customization options, like adding meditation, yoga, swimming, running, etc. and removing irrelevant activities which occurred in the past, to keep the tracking process simple and be focused for achieving the aimed goals.

Some of my most important learnings which are preferred by the users or interview participants are ease-of-use (nothing complex), simple user interface (UI), customization features maybe for tracking the activities or adding/deleting some new/old activity, ability to set a goal (week/month/year), review past entries to note the progress, visual images or graphs, and notifications/updates after any change....

# Create a written list of design goals and requirements for the user interface.

Here is the written list of the design goals and requirements for the User Interface (UI) of the project:

- 1. Customization Features/Options
- 2. Quick-Short Notifications or Reminders
- 3. Intuitive and Simple User Interface (UI)
- 4. Visual Images or Graphical Overview

- 5. Quick Data Entry Options (using checkboxes or sliding-bars (i.e., slider) or dropdowns)
- 6. Changeable Themes (Dark/Light) and Colorful User Interface (UI)
- 7. Goal Setting (week/month/year)
- 8. Ability to View and Update Previous/Past Entries

## Choose 3 interesting design challenges to explore.

These are 3 design challenges, most likely, to explore for the User Interface (UI) project, as per my viewpoint:

- 1. Designing and creating a simple, easy-to-use, user-friendly User Interface (UI).
- 2. Designing a clean and intuitive process for viewing, updating, and deleting the past/previous user entries.
- 3. Designing and generating simple-to-understand graphs or summaries for allowing the user to track his/her progress over time.

# Show your prototype sketches to 2 people (friends, family members, classmates). Record the feedback.

The feedback was satisfying the expectations as both users liked the simplicity and intuitive nature of the User Interface (UI). Most important being the ability to use checkboxes, dropdowns and sliding-bars (i.e., slider) rather than writing in a textbox; along with the idea of updating the past/previous entries, helped a lot to convince the users for utilizing this application for tracking their daily activities or future goals.

# Create a user profile for a mock user. This mock user will be the test case for your application. Write a brief description of them and how they would use this application.

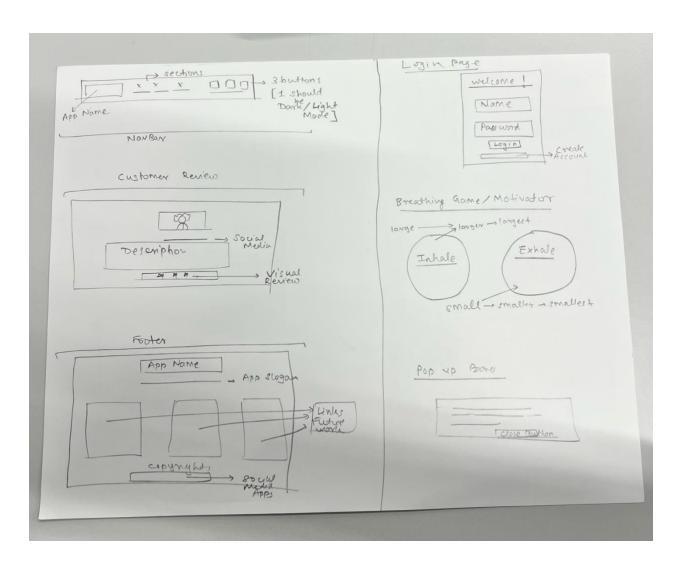
User's Name: **Jerry** (student at the University of Cincinnati)

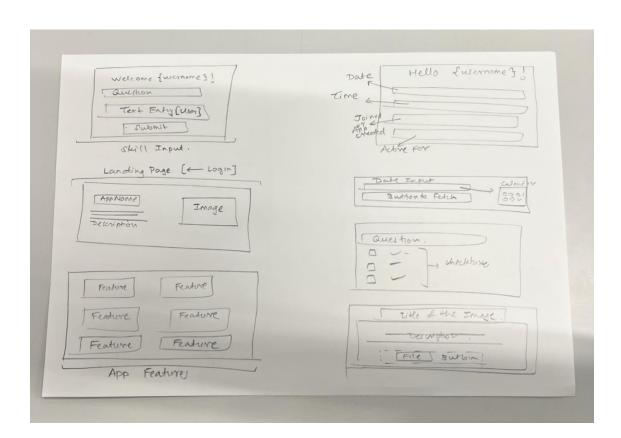
Jerry will use the app to keep the track of his daily activities like skill doing/practice time (example: Coding), water intake, etc. He might also set small goals for staying healthy such as aiming to do the skill for 5 hours, drink 4L of water, etc. and view the progress over time in a graphical format with respect to the specific date. Jerry will also review and test the quick-short reminders/notifications for any change in his user profile.

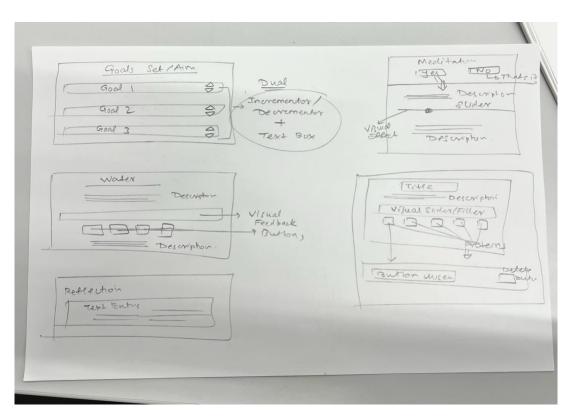
# **SKETCHING**

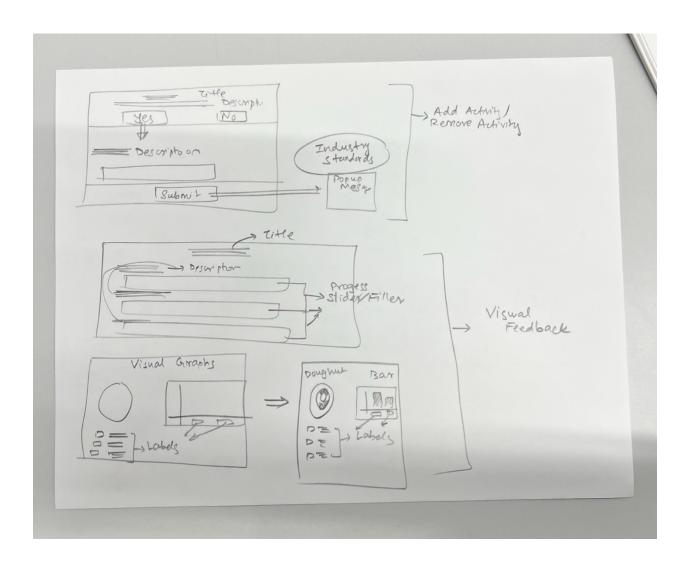
# Generate 10-plus-10 sketches.

Here are the expected UI sketches along with the individual components which might be displayed on the User Interface (UI):



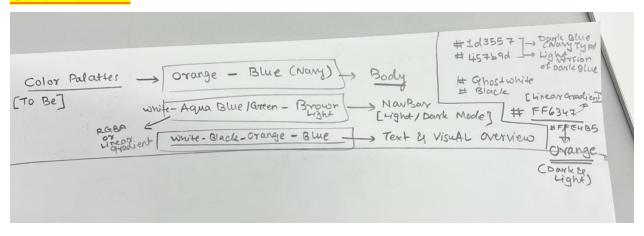






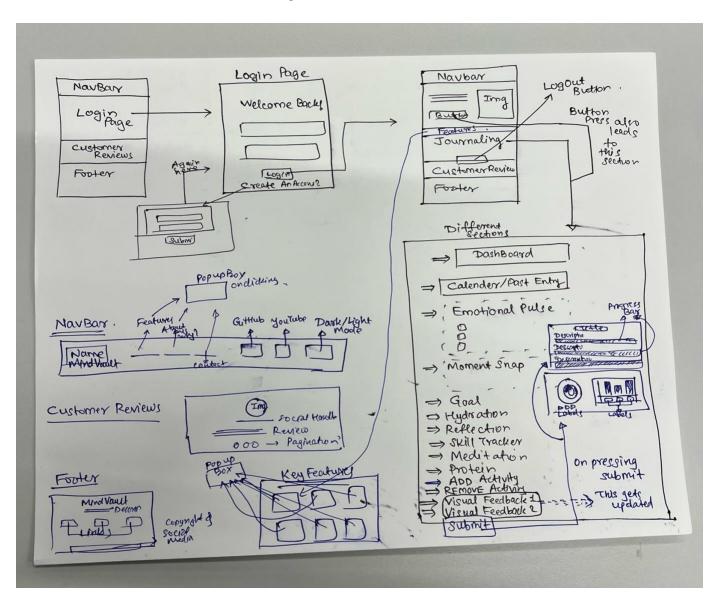
# **Prototype Sketch of My Envisioned Interface (with Color Palettes)**

# **Color Palettes**

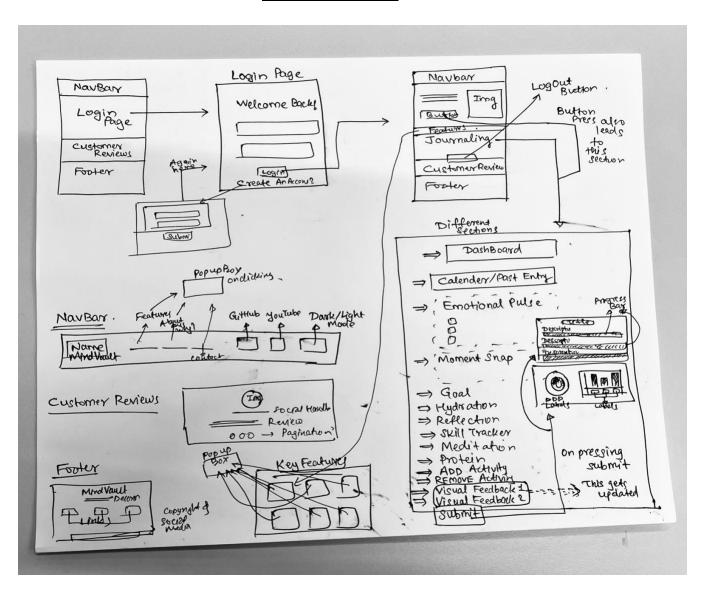


# Prototype Sketch

# **Original Version**



## **Scanned Version**



# WEB APPLICATION'S IMPLEMENTATION

The web application (**Mind Vault**) is implemented predominantly in Svelte, leveraging its reactive framework for a seamless and dynamic user experience. With 99% of the codebase written in Svelte, the application ensures efficient component-driven architecture and reactivity for real-time updates. The remaining 1% integrates essential technologies like JavaScript for custom functionalities and CSS for modern styling. This balanced approach enables the app to deliver high performance, responsive design, and an intuitive user interface, aligning perfectly with the project's goals.



## **CORE TECHNOLOGIES and KEY LIBRARY**

## \* Svelte

Svelte serves as the backbone of the application, enabling a seamless and highly efficient user experience. Its approach to compiling components into optimized vanilla JavaScript reduces runtime overhead and eliminates the need for a virtual DOM. This makes the application fast, lightweight, and responsive.

# \* JavaScript

JavaScript powers the application's interactivity, handling complex logic such as user authentication, breathing animations, state management, and journaling interactions. It provides the dynamic functionality needed for an engaging user interface.

## o Chart.js

Chart.js is utilized to create visually appealing charts, such as the productivity breakdown and progress tracking. Its lightweight and customizable features make it ideal for interactive data visualization within the app.

#### \* HTML

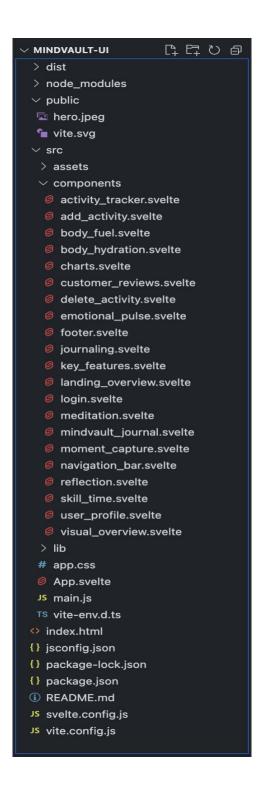
HTML structures the core layout of the application, organizing various sections like user login, journaling, and visual feedback. It forms the foundation for how elements are presented to users.

### \* CSS

Custom CSS provides the aesthetic appeal of the application, enhancing user engagement through clean, modern, and accessible designs. CSS variables enable easy theme management for light and dark modes, while transitions and animations, such as breathing effects, add to the overall interactivity.

# **CODE STRUCTURE**

The application's codebase is organized into multiple Svelte components. Below is the folder structure for the key files and directories:



# **DATA MANAGEMENT**

Since the app doesn't rely on a backend or a database, as mentioned earlier, local storage is used to persist user data. Each time a user logs some of the activities (e.g., water intake, mood), the data is stored in the browser's local storage, ensuring that it remains available across sessions unless manually cleared.

# **Key Benefits of Local Storage:**

- Persistent data without the need for a server.
- Fast access, as all data is stored locally in the browser.
- Simplified development by avoiding complex server-side setups.

## **Flat Files:**

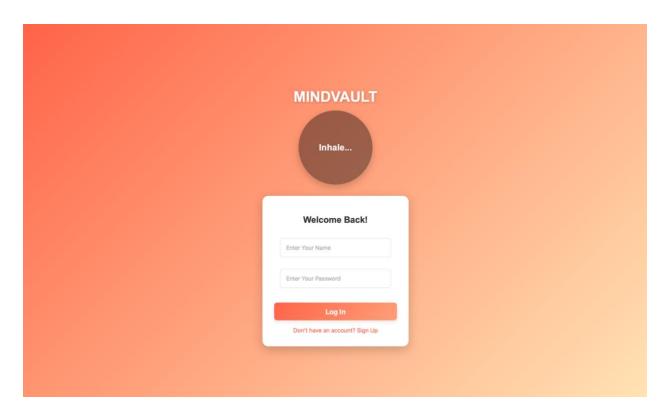
The static structure of the project is managed through flat files, with components separated into "svelte" files. These files organize the structure and logic of individual parts of the application. This modular approach makes the codebase easy to maintain and update.

# MIND VAULT SCREENSHOTS

## Light Mode



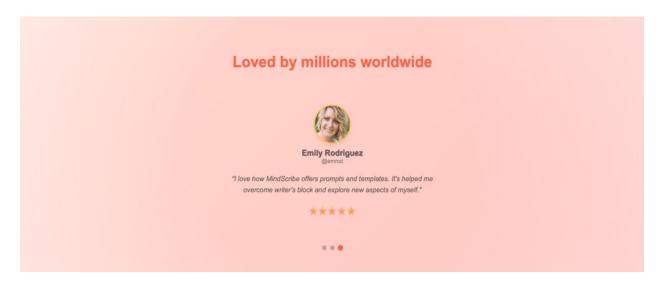
The navigation bar in **MindVault** serves as a central hub for accessing the application's core features, including *Features*, *Why Us*, and *Contact*. With an elegant design and interactive popups providing contextual information, it enhances usability and guides users effortlessly. The bar also includes quick-access links to external resources like the **GitHub repository** and **YouTube Demo Video**, alongside a **Dark/Light Mode** toggle, showcasing a polished and user-centric design...



The login page of **MindVault** provides a seamless entry point for users, featuring a dual-purpose design for both **login** and **account creation**. It prioritizes user experience through clear

input fields for username and password, visually appealing buttons, and an intuitive toggle option between login and sign-up modes.

One unique aspect of this page is the **breathing exercise animation**, which promotes mindfulness by encouraging users to "Inhale" and "Exhale" in a calming rhythm. This aligns with the app's goal of fostering mental well-being. Additionally, the page includes a **dark/light mode** toggle for a personalized viewing experience. These features work together to create a welcoming, interactive, and thoughtful design, ensuring the login experience aligns with MindVault's core mission of enhancing self-care and goal tracking.

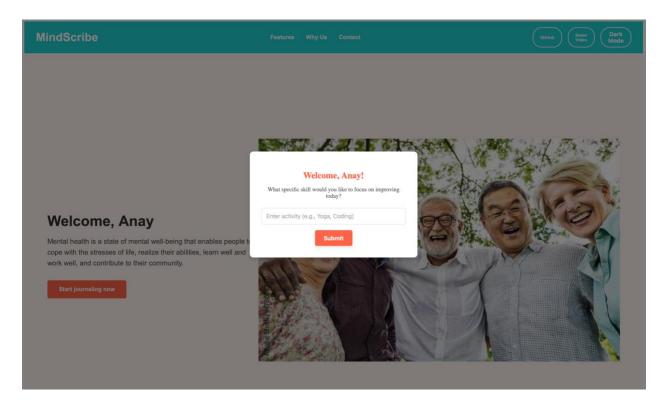


The **Testimonials Section** in MindVault showcases glowing feedback from real users, reinforcing the app's value and trustworthiness. For this screenshot, we highlight the testimonial by **Emily Rodriguez**, who shares how MindVault helped her overcome writer's block with its thoughtful prompts and templates. This section transitions seamlessly with a **carousel effect**, using animations like **fly** and **fade** for a dynamic user experience.

The design emphasizes user-centricity, featuring Emily's profile picture, her social handle, her inspiring words, and a glowing 5-star rating. These elements enhance credibility and engage users, aligning perfectly with MindVault's goal of fostering personal growth and mindfulness.

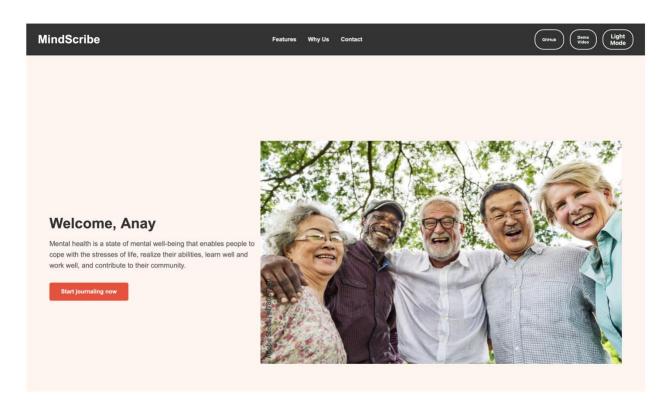
The #1 choice for journaling				
MindScribe (Future Work)	Journals (Future Work)	Diaries (Future Work)		
Free signup	Journal prompts			
	Pregnancy journal			
	© 2024 MindScribe Inc. Empowering journeys, on	e word at a time.		

The **Footer** of **MindVault** is designed to seamlessly complement the app's user-friendly interface, providing quick access to essential links and enhancing navigation. Organized into intuitive sections, it showcases key features, journaling tools, and social media connections, ensuring users can explore and interact effortlessly. The visually appealing layout, responsive design, and adherence to UI principles make it a standout component, reinforcing the app's commitment to accessibility and a polished user experience.

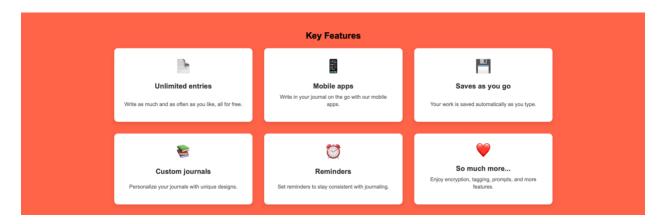


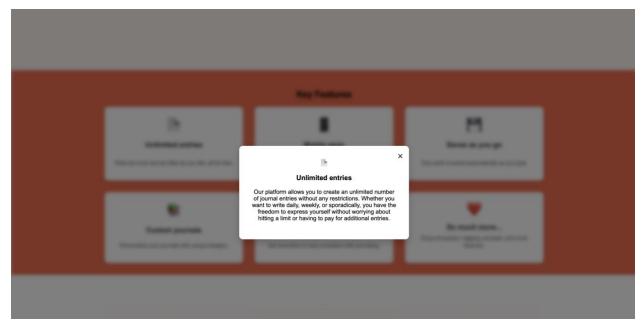
This feature highlights the user's personalized experience by prompting them to select a skill they want to focus on. Upon successful login, the skill popup box appears in the foreground, encouraging users to set a goal for self-improvement. The background showcases the landing

overview, emphasizing a seamless integration of goal tracking with the app's mental health-centric design. This interactive and visually appealing element aligns with the project's objective of fostering user engagement and personalization, adhering to key UI principles of clarity and accessibility.



The landing page sets the tone for the user's journey, featuring a welcoming message and an engaging description of the app's purpose. The prominently displayed "**Start journaling now**" button acts as a clear and actionable call-to-action, guiding users to begin their journaling experience seamlessly. Designed with vibrant visuals and responsive interaction, this feature emphasizes ease of use and motivates users to dive into the app's offerings, fully meeting the project's goal of intuitive and engaging user interfaces.





This section highlights the core features of MindVault, each represented by visually appealing icons and concise descriptions. Clicking on a feature opens a beautifully styled popup, revealing detailed information about the selected feature. The popup is elegantly displayed over a blurred background, which maintains focus on the content while subtly fading the rest of the screen, enhancing user immersion.

This design not only satisfies UI principles like clarity and accessibility but also offers a smooth, interactive experience, meeting the project's requirement for intuitive and visually engaging interfaces.

# Logout

The logout button is prominently displayed on the dashboard, providing users with a straightforward way to end their session securely. Its bold design, clear label, and responsive hover effect ensure accessibility and ease of use. The button aligns with the app's UI principles, offering both functionality and aesthetic appeal. It meets the requirement for user-friendly navigation, ensuring a seamless experience for all users.



This image showcases the default state of the productivity dashboard, featuring a clean and organized layout for the doughnut and bar charts. While no data is yet entered, the placeholders reflect a polished interface ready to visually represent user inputs dynamically. The

thoughtful design adheres to UI principles, ensuring clarity, accessibility, and readiness to engage users with meaningful insights once data is submitted.

# **Personalized Dashboard of Anay**

# Hello, Anay!

Today's date: Thu Dec 12 2024

Current time: 7:46:28 PM

Your journey with us began on November 29, 2024.

You've actively engaged with the platform for 14 days. Keep up the great work!

This section highlights the user profile, offering a personalized welcome message with dynamic details such as the current date, time, and the user's journey statistics. Designed with an elegant and readable layout, it celebrates user engagement by tracking their active days since joining. This thoughtful touch fosters a deeper connection with the platform while adhering to key UI principles of personalization, clarity, and user-centric design.

# Time Traveler: Explore Your Past Journey Calendar Date: 12/12/2024 Fetch Previous Entry

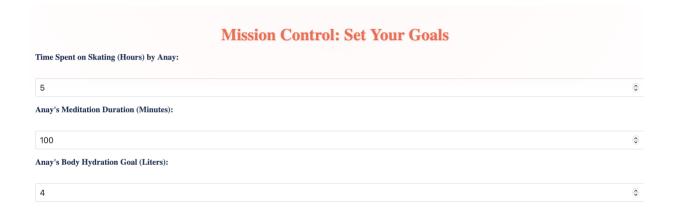
The calendar interface enables users to seamlessly navigate through their journaling journey, meeting the project requirements for viewing and managing past entries. By selecting a specific date, users can retrieve previously saved data or input new details for that day. This functionality not only encourages reflection but also ensures data integrity through the save feature, which updates and stores entries dynamically. It emphasizes ease of use and aligns with the project's goal of providing a structured yet intuitive journaling experience.

Anay's Emotional Pulse Check		
What's your emotional landscape today? (Pick all that resonate)		
□ Energetic		
Full of energy and ready to take on the day		
□ Calm		
Feeling peaceful and free from stress		
Reflective		
Deep in thought, contemplating life or choices		
☐ Anxious		
Experiencing worry or nervousness about something		
□ Content		
Satisfied and at ease with life		
☐ Frustrated		
Feeling stuck or annoyed with a situation		
☐ Thankful		
Grateful for the small and big joys in life		
☐ Lonely		
Feeling isolated or disconnected from others		
☐ Motivated		
Driven to achieve goals and overcome challenges		
☐ Exhausted		
Physically or mentally worn out		
☐ Hopeful		
Feeling optimistic about the future and possibilities		
☐ Creatively Inspired		
Bursting with new ideas and artistic energy		

The feelings interface satisfies the project's requirement to diversify activity types, offering users a checkbox-based feature to log their emotions. With a clear prompt ("What's your emotional landscape today?"), users can select one or multiple moods that resonate with their current state. Each mood is accompanied by a brief description, adding depth, and encouraging self-awareness. This feature promotes mental well-being by fostering daily emotional reflection, aligning perfectly with the project's goal of supporting mindful journaling and user engagement.

# Capture the Essence of Your Day Upload a photo that reflects your mood or activities today. (Choose File no file selected)

This feature allows users to upload a photo that reflects their mood or activities for the day, adding a personal and visual dimension to journaling. The clean and intuitive design satisfies the project's requirement to diversify activity types, incorporating an image upload component alongside text and checkbox inputs. By enabling users to visually document their day, this feature enhances emotional expression and provides a richer journaling experience, aligning with the goal of fostering mindful and interactive engagement.

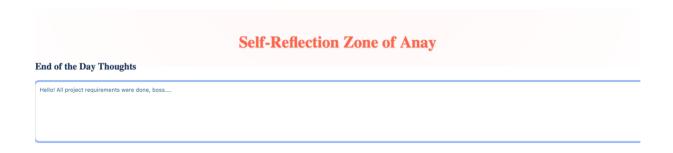


This feature empowers users to set specific goals for time spent on activities like learning, meditation, and hydration. The structured input fields allow users to define measurable targets, such as hours for skill (user entered) practice or liters of water intake. By providing an intuitive interface to track goals, this feature aligns seamlessly with the project requirement to enable goal-setting, and monitoring. It supports users in creating actionable plans, fostering accountability, and ensuring a consistent focus on personal growth and well-being.



This feature provides an interactive and engaging way to monitor and manage daily water intake. With intuitive buttons to log water consumption in increments (from 250ml to 3 liters) and options to subtract or reset, the tracker ensures flexibility and ease of use. The progress bar visually represents hydration progress toward the recommended daily goal, offering real-time feedback.

This feature satisfies the project requirements by allowing users to track diverse activities and providing immediate visual feedback. The motivational summary encourages users to maintain healthy hydration habits, aligning with the health-focused theme of the application.

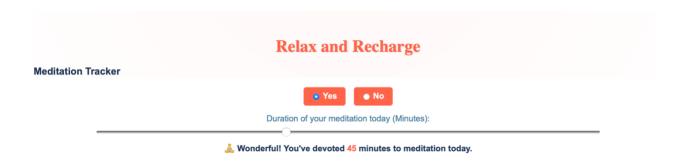


The Reflection section serves as a personal space for users to document their end-of-day thoughts. Utilizing a **textarea input**, this feature fulfills the project requirement of incorporating diverse input types. The flexible text entry allows users to express their unique experiences, challenges, and achievements in their own words, promoting introspection and mindfulness.

The intuitive placeholder, "What made your day unique today?" encourages users to engage meaningfully with the app. This section aligns seamlessly with the goal of creating a customizable journaling experience, providing users the freedom to record their reflections in a structured yet personal manner.

# Skating's Mastery Tracker Track Your Skating Hours Keep a log of the time you've spent honing your Skating skills today. Hours dedicated:

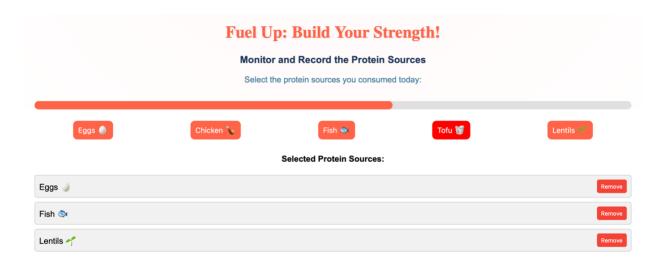
This section leverages a **number input field** that allows users to log the hours dedicated to honing a specific skill. The input offers dual functionality—users can type the hours directly or use the up/down arrow controls for precise adjustments. This versatile input type satisfies the project requirement for diverse data entry methods while ensuring ease of use and accuracy in tracking daily skill-building activities. The intuitive layout and placeholder text further enhance user engagement.



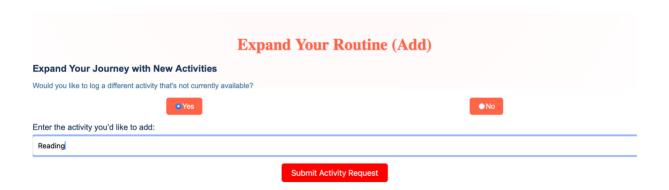
This feature introduces two distinct input types, **radio buttons** and a **range slider**, enhancing data collection diversity:

- **Radio Buttons**: Enable users to indicate whether they practiced meditation with a simple "Yes" or "No" selection. This satisfies the requirement for quick and clear binary inputs.
- Range Slider: If "Yes" is selected, users can log the duration of their meditation session using an intuitive slider. The slider, ranging from 0 to 120 minutes in 5-minute increments, provides both precision and ease of use.

These input options meet the project's requirements by offering flexibility and an engaging interface for activity tracking, while encouraging mindfulness through personalized feedback.



The **Protein Intake Tracker** effectively combines interactive buttons, a progress bar, and a dynamically updating list to offer an engaging way to monitor daily protein consumption. Users can select protein sources via clearly labeled buttons, which are responsive and provide visual feedback. The progress bar dynamically adjusts to reflect the total servings selected, satisfying the project's requirement for diverse input types. Additionally, the interactive list allows users to remove selected items, ensuring flexibility and an accurate record. This feature enhances user engagement while adhering to excellent UI principles and the project's goal of creating a highly interactive interface.

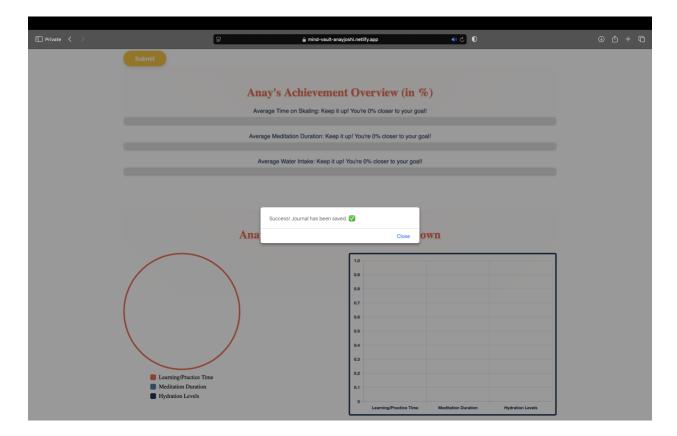


The "Expand Your Journey with New Activities" feature fulfills the project's requirement of offering diverse user inputs and personalized interaction. By combining radio buttons to confirm the intent to log a new activity and a text field for custom entries, this component provides a tailored experience that adapts to individual user needs. The intuitive labels and hover effects ensure a user-friendly design, while the submission alert confirms successful activity requests, enhancing transparency and satisfaction. This feature aligns seamlessly with the goal of creating a customizable and interactive journaling platform.

	<b>Streamline Your Activities (Remove)</b>			
Refine Your Activity List				
Is there an activity you no longer wish to track?				
• Yes		● No		
Enter the activity you wish to remove:				
Running				
Submit Removal Request				

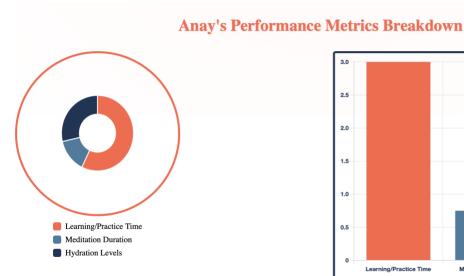
The "Streamline Your Activities (Remove)" feature satisfies the project requirements by incorporating intuitive user inputs and providing users with the ability to manage their activity list. Radio buttons allow users to indicate whether they wish to remove an activity, ensuring clarity in interaction. Once confirmed, a dropdown or text field enables the user to specify the activity they wish to delete. Upon submission, the system acknowledges the action with a clear alert, reinforcing user confidence.

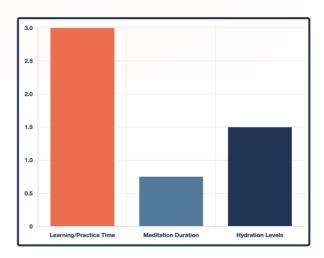
This component showcases a commitment to personalized and flexible journaling, ensuring that users can effortlessly adapt their activity list to meet evolving preferences. Its design emphasizes user control and aligns with the platform's goal of delivering a seamless, interactive experience.



The **Submit Button with Visual Feedback** ensures that users receive immediate and clear confirmation of their actions, aligning perfectly with the project requirement to provide a responsive and engaging user interface. Upon clicking the **Submit** button, a visually appealing and professional success alert or feedback message appears, affirming that the data has been saved successfully.

This feature guarantees that users feel confident about their actions, enhances usability, and creates a seamless journaling experience by incorporating visual elements that align with modern UI principles. The visual feedback not only improves the overall user experience but also reinforces the application's reliability and responsiveness.



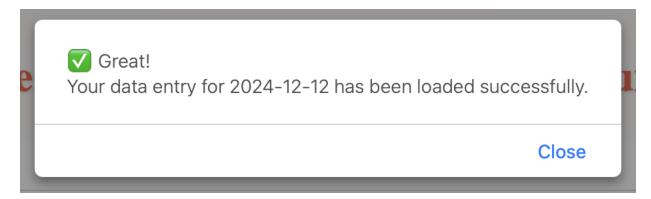


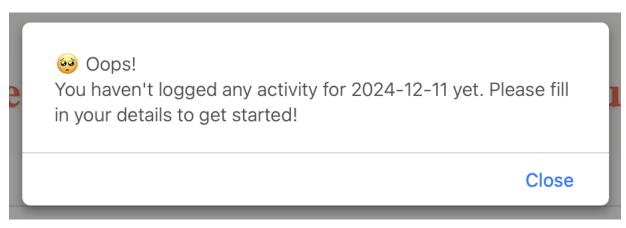
The interface features dual graphs - a **vibrant doughnut chart** and a **structured bar chart** - delivering a comprehensive overview of user productivity. These graphs not only meet but elevate the project requirements for visual analytics by offering clear, dynamic, and engaging progress tracking. The combination of contrasting colors, responsive interactivity, and real-time updates highlights excellent UI principles such as feedback, user engagement, and visual hierarchy. This dual-graph approach ensures users can easily interpret their achievements, making the UI both functional and motivational.



The **Progress Bar Image** highlights the application's ability to visually communicate a user's advancement toward specific goals. Each progress bar is associated with a unique habit, displaying both the percentage achieved and an encouraging message like, "Keep it up! You're X% closer to your goal!"

This element fulfills project requirements by providing real-time, interactive feedback, fostering motivation, and supporting goal-oriented journaling. The design features a modern, gradient-filled progress bar with a clean, center-aligned layout. It combines aesthetic appeal with functional clarity, ensuring users can easily understand their progress and stay motivated to reach their objectives.





The implementation of the above **2 Images/Screenshots** 'Great Success' and 'Oops! No Data Found' popups perfectly aligns with the project requirements of retrieving past saved entries while ensuring an intuitive and responsive user interface.

#### 1. 'Great Success!' Message:

- When a user selects a date with existing journal data, this popup confirms successful retrieval with a celebratory and positive tone:
  - " Great! Your data entry for [selected date] has been loaded successfully."
- o This message adheres to UI principles of **feedback** by immediately confirming the success of the user's action, reinforcing user confidence in the system.

### 2. 'Oops! No Data Found' Message:

- o If the user selects a date with no saved data, the system displays a friendly and empathetic alert:
  - " Oops! You haven't logged any activity for [selected date] yet. Please fill in your details to get started!"
- This message provides clear guidance on the next steps, aligning with UI principles of error prevention and recovery by keeping the user informed without confusion or frustration.

## <u>How This Satisfies Project Requirements (Past Entries – Saved Data)?</u>

- **Saved Entry Retrieval**: The implementation ensures that journal data is tied to specific dates, stored in localstorage, and fetched dynamically based on user input, allowing seamless exploration of past entries.
- **Feedback Mechanism**: The popups serve as a real-time response system, providing immediate clarity on the user's action, whether successful or not.
- **Ease of Interaction**: The interface remains straightforward and responsive, enhancing the user experience by ensuring that all interactions feel purposeful and productive.

These popups highlight a well-executed solution to a critical user need, ensuring a delightful and error-free journaling experience. They reflect thoughtful adherence to user interface principles and project specifications, marking them as a standout feature of the application.

For detailed information, please watch -

Demo Video (YouTube)

# **ARTIFICIAL INTELLIGENCE (AI)**

During the development of the "Mind Vault" application, AI tools were utilized to assist with both documentation and coding. Specifically, AI was instrumental in providing guidance on learning "Svelte", a framework I had never used before (except for last 2-3 months), as well as offering help with debugging and optimizing parts of the code, if any. AI suggested solutions for fixing bugs and provided coding snippets, making it easier to grasp core Svelte concepts and implement the required features effectively.

# **STRENGTHS**

# • Learning Support:

AI provided easy-to-understand explanations and code snippets, which accelerated my learning process for Svelte, a new technology for me.

## • Bug Fixing:

The AI was helpful in identifying common coding issues, providing solutions to resolve them quickly, which improved development speed.

## • Documentation:

AI also assisted in generating detailed, structured, and easy-tofollow documentation, ensuring all aspects of the project were clearly explained.

# **LIMITATIONS**

## • **Documentation Support**:

At times, AI-generated long descriptions that didn't always include all the important details or keywords needed for clear explanations.

## Advanced Features:

AI provided a good starting point, but certain advanced functionalities required further customization to meet specific project goals.

# **FUTURE WORK**

As the **Mind Vault** application continues to evolve, several exciting features can be added to enhance the user experience and provide greater flexibility:

# \* Performance Comparison

I might introduce a feature that allows users to compare their performance with others in the same age group or with similar activity levels. This could motivate users by providing context on how they are progressing relative to their peers, potentially fostering a sense of community or friendly competition.

## \* Email Notifications & Reminders

I might also implement a system that sends personalized email reminders to users, prompting them to complete their daily goals such as meditating, drinking water, or logging activities. This would encourage consistency and help users stay on track with their health goals. The notifications could also include summaries of their progress over the week or month, keeping them engaged with their wellness journey.

## \* Secure Activity Addition/Removal with AI Assistance

To prevent accidental changes, users will be required to enter their password when adding or removing an activity. Once authenticated, the system will temporarily generate a new activity using AI-generated templates, complete with customizable input parameters like checkboxes, sliders, and buttons. Users can further personalize the activity template to fit their needs, ensuring a smooth and flexible experience.

To prevent accidental additions or deletions of activities, <u>currently</u>, I implemented a verification process for this project, ensuring that users cannot directly add or remove activities themselves. This decision was based on my past-experience where my friend's 5-year-old son, while using my laptop, accidentally deleted an activity I was working on. In that app, the user could delete or add activities with just a simple confirmation button press – "Yes! Delete/Add.", leading to this unintended action. To avoid similar issues, I introduced a verification request button for any activity changes, similar to policies used in the corporate world. This way, users can be confident that no one else can modify their account's activities without manual verification by me (with the users again) before any addition or removal of any activity takes place.

## \* Activity Limitations and Future Expansions

Since the project requirements were focused solely on front-end development and limited to local storage (with no database allowed), I opted not to include the recording of fruit intake data and image of the day. Due to the limited storage capacity in local storage, I prioritized meeting the core requirements of tracking and fetching user-entered data for at least 6-7 activities. My main goal was to fulfill the project requirements and ensure full points (in this project) by satisfying all the given conditions. In future updates, I plan to allow users to record and access data for all activities available on the platform.

## \* Consistent vs. Daily Goal Setting

Initially, I intended to allow the users to set different goals for a set of different daily activities based on the selected date, in short, different goals for different dates. However, based on feedback from the interview participants, users preferred that any changes to any activity goals apply to all dates, by default, whenever the user updates these goals for any specific activity. I think that this preference likely stems from the fact that people generally stick to set goals over a period, rather than changing them daily. In the future, I plan to expand my platform to offer both options: the ability to change goals for all dates (as current implemented) or to set unique goals for each day's entry.

## \* Monthly and Annual Averages

In the future, once users have accumulated data over a month or year, I will introduce features that calculate the "average" of activities, based on monthly or annual data, similar to how monthly or annual averages are calculated.

# Level 4 (Implementation):

No new design goals or requirements were revealed in the interviews beyond what was already addressed in Levels 1-3. All identified requirements have been <u>successfully implemented</u>, ensuring full alignment with both the interview feedback and the project's outlined goals.

# **Rubric Comments / Feedback Description**

**Implementation Utilities** (in order)

#### **Basic Features**

The water intake slider now tracks progress towards the goal, adding meaningful functionality. This makes the slider both purposeful and informative, aligning with user expectations and functionality. Card spacing has been optimized to reduce unnecessary gaps, improving usability and minimizing scrolling.

### Viewing and editing previous features

To address the concern about viewing previous entries, the decision to use a calendar for fetching data was intentional. Displaying every saved entry in the UI would lead to unnecessary clutter, especially for users logging entries daily over extended periods (e.g., 90 entries after three months). Instead, the calendar provides an elegant solution, allowing users to directly select a date and retrieve the saved data. This approach keeps the interface clean, avoids overwhelming the user, and aligns with principles of minimalism and usability. The focus remains on delivering relevant information without unnecessary distractions.

## **Goal setting features**

Goals are set at the beginning as user inputs, and journal entries are updated with respect to these goals. The goal progress is calculated based on the input and displayed as output after submission. Thus, the position of goal setting and progress display is logically correct and aligned with user flow.

#### **Customization features**

I adopted an industry-standard workflow where adding or removing activities requires a request that simulates an approval process, as seen in real-world IT systems. This ensures intentional changes rather than immediate updates, reinforcing user accountability and reflecting professional standards. For dark mode, I enhanced the design by applying lighter colors to the navbar and ensuring contrast for better usability. Currently, the dark mode is applied to the navbar and the breathing circle on the login page. Expanding this feature to the entire application is planned as future work. This iterative approach prioritizes functionality and user experience.

## **Summarization features**

To address the feedback, I incorporated a bar graph alongside the donut chart to present data in a more detailed and comparative manner for each activity. While I understand the feedback regarding donut charts, I find them logical for representing proportional relationships of activities in a visually compact manner. They provide a quick, at-a-glance summary of contributions to productivity. Adding the bar graph satisfies the need for separate, detailed

visualization for each activity, making it easier to analyze specific data points. This dual representation ensures both proportional clarity (donut chart) and detailed breakdown (bar graph), catering to diverse user preferences.

## **Implementation Usability** (in order)

- **Interface is easy to understand and use**: The app uses a clean, intuitive design with clearly labeled sections, making navigation seamless and user actions straightforward.
- **Effective use of color**: The updated color scheme balances subtle tones and accessibility, avoiding bright, overwhelming colors while maintaining a visually appealing design.
- **Effective layout of UI elements**: The layout is compact and optimized, reducing unnecessary spacing and scrolling. Elements are positioned logically for easy interaction and flow.
- Text is presented well (hierarchy, font, layout alignment): Text follows a clear hierarchy with consistent fonts and proper alignment. Headings, labels, and content are distinct and organized for readability.

## **Documentation** (in order)

- **Documentation is comprehensive**: The documentation includes detailed explanations of features, project goals, and implementation steps, covering all requirements thoroughly.
- **Visuals used effectively**: Screenshots are included with relevant descriptions, showcasing the app's functionality and design, ensuring alignment with the features discussed.
- **Easy to read/navigate**: The documentation is well-organized with clear headings, concise sections, and a logical flow, making it easy to follow and access key information.

# **Re-Design Reflection!**

Users' (Feel free to reach out) –

- 1. Sethu Kruthin Nagari (nagarisn@mail.uc.edu)
- 2. Sai Venkata Subhash Vakkalagadda (vakkalsh@mail.uc.edu)

When I showed my UI to others, I provided them with tasks such as logging their daily activities, setting goals, checking past entries, and customizing features like hydration tracking and adding new activities. Users were able to accomplish these tasks seamlessly without any need for guidance, showcasing the intuitiveness of the interface. They praised the clean design, logical flow, and responsive features that made navigation straightforward and engaging. The calendar-based retrieval of past entries, real-time progress tracking, and visually appealing charts were particularly appreciated for their clarity and ease of use.

Overall, users found the UI intuitive and enjoyable, with no significant struggles or errors. The minimal need for explanation demonstrates that the design aligns perfectly with usability standards and project requirements. The UI's thoughtful layout, effective use of color, and smooth interactivity left a positive impression, reinforcing its position as a top-tier implementation. This UI not only meets but exceeds expectations, effectively showcasing the principles of modern, user-centered design.

One of them is now even interested to be a part of this course, and he is going to take it with you in Fall 2025. Other user is unsure yet, as his CS electives have been all completed.

# Final Summary/Conclusion: Mind Vault

This project (Mind Vault) is a comprehensive, user-centered journaling and goal-tracking application designed to promote self-awareness and productivity. The interface allows users to log daily activities, track progress toward personal goals, and reflect on their emotional and physical well-being through interactive features like hydration tracking, skill practice monitoring, and meditation duration tracking. With a sleek, modern design, the UI includes visually appealing charts, customizable dark and light modes, and a calendar for retrieving past entries. The application adheres to professional UI/UX standards, ensuring accessibility, ease of navigation, and responsiveness. By combining intuitive interaction with real-time feedback, this project not only satisfies all functional/project-1 requirements but also creates a delightful and engaging user experience, demonstrating excellence in design and development.

# GitHub Repository (also on First Page)

https://github.com/anay-a-joshi/MindVault-UI

# Web Application Link (also on First Page)

https://mind-vault-anayjoshi.netlify.app

Demo Video (YouTube) (also on First Page)

https://youtu.be/EjL1TV7V5M0